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Ten interviews with minor league baseball players were conducted to determine whether they utilized task, ego, or both goal orientations. Goal shifting, goal setting, and situational influences were also examined. The players reported a moderate to high task combined with moderate to high ego goal orientations. They also reported setting general and specific process, performance, and outcome goals. Their achievement goals shifted according to maturity, level in professional baseball, performance, and time in season. They reported the climate within the minor league to be task-involving. The climate shifted based on level in professional baseball, and performance. However, they reported that the climate within the minor league had little influence on them.

ACHIEVEMENT-GOAL PROFILES AMONG ELITE BASEBALL PLAYERS

By

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CHAPTER I

INTRODUCTION AND LITERATURE REVIEW

"Coaches need not be told the importance of motivation, nor is it a revelation that motivation is a complex topic. Some coaches believe motivation is too complex to be understood, or if it is understood it remains impossible to motivate people" (Martens, 1987, p. 15).

Martens (1987) contends that motivation is complex and that we oversimplify it by adopting one approach for all athletes. A plethora of research has attempted to answer such difficult questions as. 'How do coaches optimally motivate athletes'? Each player brings unique individual characteristics to the team, and yet the different situations they encounter also affect their motivation. Should coaches encourage comparisons to others, or should they emphasize individual improvements? Or, depending upon the situation could a combination of both types of strategies be optimal?

Goals can be defined as cognitive representations of what one hopes to accomplish, and it has been proposed that goal-oriented behavior is the defining feature of motivation (Dweck, 1986). For this reason, achievement goal theory has become one of the most common theoretical approaches to studying athletes' achievement motivation both in sport and physical activity (Nicholls, 1989; White, 1998). Social cognitive theories explain motivational patterns as a product of how individuals define success. Moreover, achievement goal theories within this framework propose that individuals

define and demonstrate competence in achievement settings (e.g., sport or physical activities) in relation to two goals: task and ego goals.

Nicholls (1984, 1989) extended Atkinson's theory of motivation, and proposed that differences in behavior, affect and cognitions in achieving situations depend on individual differences and situational variables. Achievement goal theory states that individual differences and situations interact to impact the individual achievement goal adopted and the resulting state or behavior patterns.

This theory predicts direct links between the goal orientations (task/ego) and perceptions of ability or demonstrating competence (Nicholls, 1989). The goal one adopts is defined as behavior directed at developing or demonstrating high ability rather than low ability. Ability can be conceptualized in two ways. First, ability can be judged in reference to one's past performance. This emphasis on improving oneself based on self-referenced standards is labeled a task orientation. Second, ability can be judged as a capacity relative to others. This emphasis on proving oneself and evaluations based on normative standards is labeled an ego orientation.

Nicholls' work focused on the developmental stages of children learning to distinguish between ability, effort, task difficulty, and luck (Nicholls & Miller, 1983, 1984). This research suggests that depending upon the achievement situation, children can conceptualize ability in two different manners. First, they can conceptualize ability as effort, which was determined to be an undifferentiated conception of ability. This individual simply equates effort or ability with trying hard, learning, and understanding something more fully, and is associated with a task goal perspective (Nicholls, 1989).

Second, ability is conceptualized as a capacity independent of effort, which is a differentiated conception of ability associated with an ego goal perspective.

Task and ego goal orientations represent an individual's dispositional goal orientation. An individual who adopts a task goal orientation aims to gain knowledge or master a skill and makes evaluations based on self-based standards. An example is the athlete who consistently misses the inside pitches and sets the pitching machine to practice hitting this pitch. An individual who adopts an ego goal orientation aims to demonstrate competence relative to others, such as the athlete whose sole concern is his/her earned run average (*ERA*) relative to other pitchers. Achievement goal theory states that different patterns of adaptive or maladaptive behaviors will result depending upon whether one is predominantly task or ego oriented (Barron & Harackiewicz, 2001). These patterns have been repeatedly studied in classroom and sport environments, both of which are considered achievement settings.

Achievement goal theory holds that task and ego goal orientations are orthogonal (Nicholls, 1989). In other words, an athlete can identify with varying degrees of each goal. An athlete can be high task/high ego, high task/low ego, low task/high ego, or low task/low ego. Athletes can be "high" in both task and ego orientations, "low" in both goal orientations, or high in one and low in the other (e.g., Fox, Goudas, Biddle, Duda, & Armstrong, 1994).

Achievement goal researchers have used a variety of labels to distinguish between these two main types of goals. For example, a task goal has been called a mastery goal (Ames & Archer, 1988), learning goal (Dweck & Leggett, 1988), and intrinsic goal

(Pintrich & Garcia, 1991). An ego goal has been called a performance goal (Ames & Archer, 1988) and extrinsic goal (Pintrich & Garcia, 1991). Following the convention of Duda (1989) task and ego goal orientations will be used as labels throughout this study.

Early Achievement-Goal Research in the Classroom

Early achievement goal research began in classroom settings (e.g., Ames & Archer, 1988), and suggested that students who reported a task goal orientation were more likely to exhibit adaptive learning patterns. For example, students endorsing task goal orientations have been found to choose more challenging tasks, persist in the face of difficulty, use deeper processing strategies, and view errors as informational as opposed to failure (Ames & Archer, 1988).

In contrast, students identifying with an ego goal orientation demonstrate maladaptive learning patterns, such as selecting easier tasks, expressing frustration when the demands of the task are incongruent with their abilities, and attributing errors as failure (Elliot & Dweck, 1988; Meece, Blumenfeld, & Hoyle, 1988; Nolen, 1988).

Early Research in Sport

The conclusions were similar when this line of research was extended to an athletic setting. A predominant task orientation has been found to relate to greater enjoyment, less boredom, intrinsic interest, increased task persistence, lower anxiety; and better overall performance. Similar behaviors have also been found for a predominant ego orientation when the individual reports high perceptions of ability. In contrast, someone with a predominant ego orientation views success as achieved primarily by

being gifted with high ability (Duda, Fox, Biddle, & Armstrong, 1992; Newton & Duda, 1993).

Thus, the initial conclusions from goal research suggested that optimal motivation was promoted by encouraging the adoption of task goal orientation and minimizing the adoption of ego goal orientations. This dichotomous approach to studying achievement goals conflicts with what Nicholls (1989) originally proposed. In fact, to date the orthogonal nature (termed goal profiles by researchers) of achievement goals has been relatively understudied (Hodge & Petlichkoff, 2000).

Achievement Goal Profiles

Achievement goal theory offers few predictions of achievement-related behaviors when individuals have a mixed profile of both goal orientations (e.g., high in one, low in one, or some combination of the two). Researchers have clearly shown that task and ego goal orientations have different cognitive, behavioral, and motivational implications (Duda, Fox, Biddle, & Armstrong, 1992; Newton & Duda, 1993). Given that they have such different implications when examined independently, their combined impact (i.e., goal profile) might be different than the independent effects (Hodge & Petlichkoff, 2000). Therefore, the combined effect should be further investigated.

An early study of 115 boys and 116 girls involved in a longitudinal project, examined the motivational consequences of different task and ego combinations (Fox et. al., 1994). The researcher created four groups based on mean splits on the task and ego scales of Task and Ego Orientation in Sport Questionnaire, consisting of low task/low ego, low task/high ego, high task/low ego, and high task/high ego. The results suggested

that the high/high group was the most motivated, and the low/low was the least motivated when measured on sport enjoyment and perceived sport competence. These results contributed to the existing research on achievement goal theory in considering the combined effects of both task and ego goal orientations, but are limited by the statistical technique that created an arbitrary median average to create the groups.

Another study examined the combined effect of task and ego orientations on perceptions of parent-initiated motivational climate and competitive trait anxiety (White, 1998). 279 male and female adolescents competing in organized sports were examined. Again four groups (high task/ high ego, high task/low ego, low task/high ego, and low task/low ego) were created using median splits. This study concluded that high task/low ego participants perceived that both their parents valued a climate where success involved little effort. This group perceived their fathers to be the cause of competitive trait anxiety, and they experienced the highest levels of competitive trait anxiety. In the high task/high ego group, participants felt their fathers emphasized a climate where success was linked to low levels of effort, and mothers were perceived to cause worry. This group also believed that both parents valued learning and enjoyment. Lastly, the low task/low ego group reported a fear of making mistakes learning new physical skills because of their mother. This study again illustrated that ego orientation may supplement a task orientation, but was also limited in that mean splits were used to create the high/low groupings.

A qualitative investigation of eight male rugby players under 21 considered the combined effect of Achievement Goal Profiles (Tod & Hodge, 2001). Interviews were

conducted three times across a six-month span. The participants were presented with four moral dilemmas and were asked to respond to open-ended questions with regard to their moral reasoning and achievement goals. Moral reasoning was characterized by the individual's concern for the people involved in the dilemma. This study found that achievement goal profiles and situational factors influenced the level of moral reasoning used. They found that individuals whose goal profiles were dominated by ego orientation used less mature levels of moral reasoning. Individuals whose goal profile consisted of a combination of task and ego goal orientations tended to use more mature levels of moral reasoning. For example, they showed more concern for others in the moral dilemmas presented.

Lastly, Hodge and Petlichkoff (2000) considered Achievement Goal Profiles when studying 257 rugby players' perceived ability, competence, and self-concept of physical ability. The researchers also aimed to compare cluster analysis with the mean-split procedure for examining goal profiles. Cluster analysis allowed groups that were low, moderate, and high-task and ego to emerge. This study revealed that cluster 4 (low ego/moderate-task) reported significantly lower levels of perceived rugby ability/competence. Cluster 3 (high-ego/moderate-task) scored highest on all three dependent measures. This study added a significant contribution to achievement goal research. By comparing cluster analysis and mean splits, these researchers were able to take a holistic approach to study goal profiles. In addition, the results of this study suggested, in contrast with previous findings, that achieving a complementary balance of

moderate to high levels of *both* task and ego orientations will yield the most adaptive motivational patterns (Hodge & Petlichkoff, 2000).

Perceived Motivational Climate

Perceived motivational climate (or situational goal structure) can account for variability related to achievement goals (or dispositional goal structure) (Ames, 1992; Seifriz, Duda, & Chi, 1992). Similar to achievement goals, the athlete can perceive the climate to be task-involving or ego-involving. In a task climate, athletes perceive the coach reinforces improvement, effort, and cooperation and believes that each team member contributes to the team's efforts. In an ego climate, athletes perceive the coach reinforces athletes' attention and recognition with high ability, competition within the team, and punishment of mistakes (Newton & Duda, 1999).

Research suggests that promoting a task climate is related to greater team satisfaction (Walling, Duda, & Chi, 1993) and enjoyment (Seifriz, Duda, & Chi, 1992). Promoting an ego climate is related to performance worry (Walling, Duda, & Chi, 1993), self-reported boredom (Treasure & Roberts, 1994), and low self-efficacy (Nicholls, 1989). It is important to note that these effects were found in subjects with low perception of their own ability. Therefore, performers who doubt their abilities were likely to feel highly anxious, believe they are not able to cope, and refuse to try when involved in situations that emphasize winning.

Moreover, Newton and Duda's (1999) research further supported these findings. They examined the possible interactions between perceptions of motivational climate, goal orientations, and perceived ability among junior female volleyball players (N=385).

Through a series of survey assessments, motivational climate was the strongest predictor of enjoyment/interest and pressure/tension while goal orientation was the strongest predictor of effort/importance. This is a poignant finding because it suggests that the climate that the coaches create and others involved in the sport environment may have more of a significant impact than achievement goals on motivating athletes.

A study of 91 Norwegian participants in the Winter Olympic Games in Lillehammer examined the relationship between motivational climate, perceived ability, and sources of distress (Pensgard & Roberts, 2000). Investigators found that a performance climate (ego-involving) was a significant predictor of high total distress. The athletes with lower perceptions of ability reported their coach to be more of a source of distress than did the athletes with higher perceptions of ability. The athletes that perceived the coach to be promoting a mastery climate (task-involving), did not report their coach to be a source of stress. Initially these findings support the early conclusions that a task-involving climate is best, and coaches should strive to create such an environment that emphasizes learning from one's mistakes, personal skill mastery, and the importance of effort. Researchers suggest that more research is needed to determine in which situations and climate are most appropriate. It is also important to consider that the Olympic games themselves are a stressful environment because they are perceived to include novelty (e.g., an athlete's first trip to the Olympics), predictability (e.g., the athletes know there will be increased press coverage), and event uncertainty (e.g., who wins the medal). It would be important to replicate this study in other areas of elite sport.

For example, do these findings hold true in all areas of elite sport (i.e., practice, competition, championship games, and the Olympics)?

A study of 141 elite female handball players revealed different findings when considering coach satisfaction and performance improvement (Balaguer, et. al., 2002). Questionnaires were administered regarding the athletes' goal orientations, climate, and interest. This study found that when athletes reported a task-goal orientation and perceived the climate to be task-involving, they held more positive views of their own performance improvement and more positive views regarding the coach. Those athletes that reported perceiving the climate to be ego-involving were less satisfied with the coach overall, but they were satisfied with the team's competitive results. These results indicate that promoting a task-involving climate is important, but an ego-involving climate may be appropriate under certain circumstances. It is also important to note that this study found that the perceived climate was a stronger indicator of perceptions of improvement. Therefore, this again reinforces the strength of the motivational climate to impact the sport experience of elite athletes.

For athletes who adopt a task goal orientation, regardless of their perceived competence, a task climate leads to adaptive behaviors (Nicholls, 1989). For athletes adopt a task goal orientation with high-perceived competence, should experience adaptive outcomes from involvement in either task or ego climates. In addition, athletes who report adopting an ego goal orientation with high-perceived ability, adaptive outcomes should result from involvement in a task or ego climate. Only an ego-oriented athlete with low-perceived ability will exhibit maladaptive outcomes in an ego climate

(Nicholls, 1984, 1989). Therefore, perceived ability may be the critical factor in determining motivational outcomes.

Limitations in Current Research/Multiple Goal Approach

Researchers are beginning to critique the conceptual and measurement issues around achievement goal research. First, Nicholls' (1989) theory suggests that achievement goals are orthogonal, meaning athletes can adopt task and ego goals to varying degrees. They can be high on one or the other, high on both, or low on both. This conflicts with Dweck's (1986) dichotomy of achievement goals, which suggests that if individuals are high in task orientation, they must be low on ego. It is possible that goal involvement can be adopted independently, combined, and experienced simultaneously (Harwood, Hardy, & Swain, 2001). Intuitively it would seem logical that to succeed an athlete must master the fundamentals of the game, but ultimately be judged when their skills are demonstrated relative to those of an opponent. Unfortunately, few studies have investigated the combined effect of high task and high ego goal orientations that would support the suggested orthogonal nature of goal orientations.

If differentiation between ability and effort is a developmental process, once everyone reached a certain age they would be ego-oriented (Harwood, Hardy & Swain, 2001). Once children reach age 12, they begin to understand that increased effort will not always result in increased success. Harwood and Hardy (2000) feel that this cognitive developmental process is irreversible. Therefore, differentiation between ability and effort may not be the underpinning that supports achievement goal theory.

In addition, researchers are questioning whether these goals hold different meaning in a sport context versus an educational setting. From a sport-performance perspective, there is a difference in defining task goal orientation as learning or working hard, and defining it in terms of mastery, improvement, or personal progress. For the sport context, the latter terms may be more appropriate indicators of competence from a self-referenced perspective (Harwood & Hardy, 2000).

There is no evidence that ego orientations alone have maladpative consequences. The evidence shows that high ego orientations combined with low perceptions of ability may have serious motivational consequences (Hardy, Jones, & Gould, 1996). Presumably elite performers have high perceived ability. Therefore, further investigations are needed to study the possible positive motivational outcomes of those with both high task and ego goals with a high level of perceived ability.

In addition, it is believed by researchers and practitioners that elite athletes are often high in both goal orientations, but there is little evidence of this (Hardy, Jones, & Gould, 1996; Pensgaard & Roberts, 2000). Furthermore, there is no evidence as to the perceptions of these athletes regarding their sport environment and sport experience. Pensgaard and Roberts (2000) believe that when athletes are high in both goal orientations, the impact of the climate may increase further.

This leads to Harwood and Hardy's (2000) call for further clarification of the ego goal construct. First they label one possible type of ego goal, self-referenced ego orientation. This type of goal would be focused on adequacy of personal ability associated with level of current skill. An example of this would be a baseball player's

goal to increase his batting average 15 points. The next type of goal is labeled norm-referenced ego goals. This type of goal is conceived of as demonstrating ability relative to the ability of others. An example of this would be if a baseball player was focused on having the highest batting average in the division.

In addition, other researchers have called for a distinction between ego-approach and ego-avoidance goals. This contrasts the traditional normative goal theory, by making a distinction between these two orientations. Recently researchers have suggested that there are fundamental differences between ego-approach (demonstrating ability) and ego-avoidance (avoiding demonstrating the lack of ability) goals. Furthermore, ego-approach goals have been associated with adaptive outcomes such as achievement (Elliot, 1999), and ego-avoidance goals have been associated with maladaptive outcomes (Elliot, 1997). Ego-approach goals have yielded positive outcomes such as performance attainment that may be relevant to sport (Tanaka & Yamauchi, 2000). Performance enhancement in competitive situations may be salient at different times for athletes. For example, some athletes may focus on individual improvements during practice, and switch to a more competitive focus during games. It is also possible that the competitive nature inherent in sport may drive the individual improvements in practice, and thus serve as the impetus for adopting both types of goals. In addition, a number of studies have found ego goals in general (not yet distinguishing between ego-approach or ego-avoidance) to be associated with positive outcomes such as academic self-efficacy, course grades, and test scores (Bouffard et al., 1995). Therefore further clarification is necessary in this line of research.

Although Barron and Harackiewicz (2001) did not deny the adaptive effects of adopting a task goal orientation, they too questioned the conclusion that ego goal orientations have only maladaptive effects. They noted that early goal research was limited in testing the potential benefits of multiple goal pursuit. For example, in experimental studies, participants were told to adopt either a task or ego goal orientations. Although task-only conditions were linked to more adaptive outcomes than ego-only conditions, early research failed to test a condition in which both goals were assigned. In correlational studies, participants were asked to report the extent to which they pursued each type of goal. However, early correlational studies frequently failed to adopt a strategy such as multiple regression that permitted a test of the independent and interactive effects of task and ego goal orientation. Instead many studies simply looked at bivariate correlations between individual goals and outcomes. In fact, rather than finding task and ego goal orientations to be negatively correlated (which would suggest that individuals adopt one type of goal or the other), correlational investigations have consistently found that task and ego goal orientations are uncorrelated or even positively correlated (see Harackiewicz, Barron, & Elliot, 1998 for review). Therefore it is critical to test for the independent and joint effects of task and ego goal orientations.

Moreover, as is the case in many areas, the research in achievement goal orientation is rarely longitudinal in nature. It has been customary for researchers to administer surveys at one time during the season, and draw conclusions based on one sample of data. It may be necessary to sample athletes at the beginning of the season, during their season, and at the end to allow for goal changes or a shift in personally

adopted goals. This would in turn facilitate a better understanding of the interaction between the changing sport environment and the athlete's personally adopted goals. This has been termed the shifting hypothesis (Barron & Harackiewicz, 2001).

Barron and Harackiewicz (2001) argue that, even with adopting the proper research design and data analytic procedures, there still are a number of different patterns of evidence that may reveal how pursuing multiple goals could yield more positive effects than just pursuing a task goal. Specifically, they argue that four different hypotheses should be tested before multiple goal benefits can be ruled out. An *additive goal hypothesis* proposes that task and ego goal orientations each have independent, positive effects on obtaining a particular achievement outcome. Statistically, this would be supported if positive main effects were found for both task and ego goal orientations on a single outcome measure. An *interactive goal hypothesis* proposes that, regardless of their independent effects, task and ego goal orientations interact, so that the individual who is high in task and high in ego is particularly best off. Statistically, this would be supported if a positive task goal and ego goal orientations interaction was found on a single outcome measure. The next two hypotheses are more complex. A *specialized goal hypothesis* proposes that, rather than promoting the same achievement outcomes, task and ego goal orientations have specialized effects on different outcomes. This can only be revealed when researchers assess multiple outcomes. Statistically, this would be found by obtaining a positive main effect for a task goal orientation on one outcome (e.g., enjoyment in the activity) and a positive main effect for an ego goal orientation on a different outcome (e.g., performance in the activity). Finally, a *selective goal hypothesis*

proposes that different achievement goals may be better suited for different types of situations, and individuals that can selectively shift between goal orientations depending on the situation may be at an advantage. In other words, when individuals have an option of pursuing multiple goals, they can better negotiate their achievement experiences by focusing on the achievement goal that is most appropriate at that particular time.

Certainly a number of scenarios can be generated to suggest why focusing on one type of achievement goal (rather than multiple goals) could fall short and not optimally motivate an individual. For example in a classroom situation, a task-oriented student may place little emphasis on their grades and how they rank compared to other students. Unfortunately, many educational settings (e.g., colleges and universities) admit students based on normative standards, such as grades and class rank. An ego-oriented student who was motivated to do well compared to their classmates may get into the college of their choice, but may not be well prepared for taking college courses because they used more superficial learning strategies. Similarly, in an athletic situation, an athlete that is task-oriented and only focuses on their skill development may be missing the inherent competitive nature of sport. An ego-oriented athlete that does not focus on skill development may face frustration when their skill level is incongruent with the demands of the sport.

Thus, rather than exclusively focusing on a task goal orientation and the task perspective, some researchers consider that optimal motivation may stem from the multiple goal perspective (Barron & Harackiewicz, 2001). For example, Hom, Duda, and Miller (1993) did a correlational study of young athletes attending basketball camp.

Participants completed a questionnaire assessing their goal orientations, beliefs about success, perceived ability, and satisfaction and enjoyment. It was found that the athletes who adopted both goals reported more enjoyment with basketball and perceived their ability in the activity to be greater than those who adopted only one goal.

Further research reinforced these findings. Steinberg (2000) did an experimental study of college students enrolled in an introductory golf class at a university. The conditions in this study were experimentally manipulated by putting students in one of four groups: mastery-only, competitive-only, mastery-competitive (multiple goal), or no goal group. Students were taught to play putting games that would improve their putting abilities, and they were assigned goals. The mastery-only group was given a self-improvement goal of improving by 5% each week on certain tasks. The competitive-only group was instructed to win 50% of the games. The mastery-competitive group was instructed to attain one self-improvement goal (to improve by 5%) and one competitive goal (to win 50% of the games), and the no goal group was given a list of 15 items associated with golf that they were to try to accomplish. This study found that students that were in the mastery-competitive group (the multiple goal group) practiced golf twice as much outside of class compared to the other groups, and that they reported more enjoyment and effort.

Currently researchers are asking practical questions that can be studied and applied in the field. Instead of forcing athletes into binaries that do not capture the complexities of a sport environment, it is necessary to take a more multifaceted approach to studying a complex phenomenon such as motivation. The typical "goal orientation"

approach has focused on task and ego goal orientations separately to define success in sport (Duda & Nicholls, 1992; Roberts, Treasure, & Balague, 1998). Contemporary social-cognitive theorists are considering the possibility of different motivational patterns emerging from athletes who report a combination of task and ego goal combinations. For example, Hodge and Petlichokoff (2000) suggest that future achievement-goal research should investigate the *complementary* nature of goal-orientation profiles (i.e., a bandwidth of task/ego orientation overlap). This approach differs from the traditional investigation of the adaptive and maladaptive nature of task and ego-goal orientations separately. Hardy (1996) suggests that instead of asking whether a task-involving climate produces more adaptive outcomes than an ego-involving climate, researchers should seek answers to more complex questions. If situational influences are stronger than dispositional influences, researchers need a greater depth of understanding of the impact differing circumstances have on an athlete and his/her performance.

To date researchers have encouraged coaches to always promote a task goal orientation and minimize ego involvement. The current limitations suggest that we may not fully understand the extent to which successful athletes utilize the ego involvement that is so readily promoted in our outcome-oriented society. Researchers and practitioners have assumed that elite athletes are high in both goal orientations and have high perceptions of ability, but there is little evidence to support this (Hardy, Jones, & Gould, 1996; Pensgaard & Roberts, 2000). In addition, it is interesting to note that fewer studies have investigated the effects of elite performers' dispositional and situational goal effects.

The purpose of the current study is to investigate whether elite baseball players use both task and ego-goal orientations. Several subquestions will be investigated: do achievement goal orientations translate into goal setting, how and when do achievement goals shift during a season, and what precipitates an athlete's shifts in achievement goals? In addition, the influence of the perceived motivational climate and shifts in climate will be considered.

CHAPTER II

METHOD

The purpose of the present research was to examine whether elite baseball players utilize task, ego, or some combination of both goal orientations. Subquestions were also examined; do the players' achievement goals translate into goal setting, and what precipitates a shift or change in achievement goals? The influence of the motivational climate was also considered. This study consists of two assessment waves of data collection. Semi-structured interviews and survey data were gathered to develop a profile regarding the goals athletes adopt and what influences changes in these goals.

The current framework builds from the conceptual frameworks of Nicholls (1989) and Duda (1992) to critically analyze how elite performers use goal orientations, and to explore the combination of both goal orientations.

Participants

In this study ten elite baseball players received surveys and participated in semi-structured interviews over the course of four months. The players were pre-selected based on level of performance. Each baseball player played at the minor league level or higher. Therefore, "elite" is operationalized in terms of performance level.

Access was gained through a mutual friend who has prior experience playing with each participant at the college level. Each player agreed to participate in the study, and compensation (goal setting and performance routine handouts) was provided. The

compensation and member check were mailed to each participant after the interview was completed.

Research Design

The current study is a mixed method design, using semi-structured interviews and questionnaires. A plethora of research has been conducted on achievement goals, and prominent researchers are still critiquing widely accepted constructs. Few studies have considered goal profiles among elite athletes. Unfortunately researchers have not employed different methods for researching Achievement Goal Theory. Few studies have used qualitative methods to investigate Nicholls (1984; 1989) and Duda (1992) conceptual framework. Asking a "how" question guides the methods to investigate an athlete's experience from their perspective. Therefore, it is appropriate to seek answers to the research questions through a mixed-method design because interviews provid in-depth rich data to answer questions about motivation that are multifaceted. Qualitative inquiry is appropriate when conducting this investigation because methods should be driven by the research questions (Janesick, 2000).

The conceptual framework of this study builds from Nicholls (1984 & 1989) and Duda's (1992) work which state that an individual's goal orientation represents reasons for approaching, experiencing, and reacting to achievement situations. This study also extends that framework by considering the limitations of the ego goal construct (Barron & Harackiewicz, 2001; Harwood, Hardy & Swain, 2000). Nicholls (1989) initially proposed that achievement goals were orthogonal. For example, an athlete could be high

in both, low in both, or high in one and low in the other. The present study considers this possibility. The influence of the perceived climate is also considered.

A paradigm is a set of principles or set of beliefs the researcher uses to conduct qualitative inquiry (Denzin et., al, 2000). The current study will focus on analyzing the findings using constructivism theory. The constructivist adopts relativist ontology to produce or reconstruct our current understanding of the social world (Denzin et. al., 2000). This paradigm fits the conceptual framework discussed in the current study because we lack an understanding of the complexities of how athletes use these personally adopted goals and the extent of influence that the environment has on their goals. This paradigm also recognizes multiple realities that create the social world. The existing research conducted on participation in sport may not accurately represent the experiences of those participating in elite sport. Lastly, the Achievement Goal Profiles have been understudied, and the "realities" or experiences of elite baseball players may differ from other populations.

Data Collection

In the first assessment wave athletes were mailed a packet of materials (See Appendix A-G) including; a consent form, an introduction to the study, Task Ego Orientation in Sport Questionnaire (*TEOSQ*), Perceived Climate measure, and Intrinsic Motivation Inventory *(IMI*). The second assessment wave consisted of semi-structured telephone interviews.

The purpose of collecting the questionnaire data was to gather descriptive data to create a profile for each player. In addition, the *Intrinsic Motivation Inventory* served as

outcome data. The questionnaire data was averaged and each players' respective scores were compared to their interview data.

A 14-item achievement goal questionnaire designed to assess athletes' self-reported adoption of ego, task, or both goals in their sport will be used. The measure was adapted from the *Task and Ego Orientation Sport Questionnaire* (TEOSQ) (See Appendix D). The questionnaire has been found to have acceptable reliability for task (r=.79) and ego (r=. 81) goal orientations (Duda, 1989: Duda, Duda, Olson, & Templin, 1991). The questions have been adapted to fit the current focus on baseball. For example the item that reads, "I feel most successful when I have the fastest times, most points, most runs," was adapted to fit this population, "I feel the successful when I have the most run/hits."

Perceived Climate

Participants responded to a 20-item questionnaire, *Perceived Motivational Climate in Sport Questionnaire* (See Appendix E). This measure assesses the extent to which participants perceive the climate to be promoting task and/or ego involvement. Participants indicated how true each statement is from 1 (strongly disagree) to 5 (strongly agree). This measure has demonstrated adequate reliability: task (alpha=.80-.81) and ego (alpha=.73-.84) (Seifriz, Duda, & Chi, 1992).

Intrinsic Motivation Inventory

The 14-item *Intrinsic Motivation Inventory* (*IMI*) assesses the extent to which the participants enjoy, feel competent, and put forth effort in baseball. Participants indicated how true each statement is from 1 (strongly disagree) to 7 (strongly agree). Again, this

scale demonstrated adequate reliability: effort (alpha=.91), enjoyment (alpha=.88), and competence (alpha=.86) (McAuley & Duncan, 1989).

The questionnaire data was used to create a profile (compilation of means representative of descriptive data) for each participant. While commonalities were examined, these data assisted in interpreting the interview data as well. This may also support the possibility of interactive effects between task and ego goals. In addition, the questionnaire data assisted in determining whether these elite players had a high perception of ability and determining their level of enjoyment, effort, and perceived competence in baseball.

Interview

The present study investigated Achievement Goal Theory from the perspective of elite athletes through semi-structured telephone interviews, and the majority of the results were drawn from the interview data. The interviews provided in depth rich data regarding the players' achievement goal orientations, goal setting practices, and perceptions of motivational climate.

Athletes participated in phone interviews that focused on their personally adopted achievement goals (See Appendix G). The specific research questions were adapted into interview format as follows: Are elite baseball players adopting a combination of task and ego-goal orientations? Do these achievement goals change or shift? Do their achievement goals translate into goal setting? Lastly, what situational influences have on an athlete's achievement goals and does the perceived climate shift or change?

It should be noted that no specific hypotheses are proposed or tested. Instead the development and interpretation of the goal profiles addressed the research questions.

Pilot Work

The interview guide was piloted with two individuals who have performed at an elite level. The first individual was a pitcher in a prestigious baseball league in the Northeast, who is now the volunteer assistant baseball coach at a Division I college. The second player was a minor league pitcher. The pilot interviews were used to refine the interview protocol to best fit the research questions of interest.

Very few changes were made to the interview protocol. One of the 10 participants who had agreed to partake in the interview was unable to complete the second wave of data collection. The second pilot interview data were included in the results because he fit the inclusion criteria, and very few changes were made within the interview protocol. Therefore, he was asked the same questions as the other participants. The first pilot interview was not included because he played for a prestigious league in the Northeast, and he did not fit the inclusion criteria. He had not pitched at the minor league level.

Procedure

Data collection took place over the course of four months and two assessment waves. In the first wave the participants were contacted by a mutual friend, and each player agreed to participate in the study. Next, the primary investigator contacted the players and obtained their mailing addressed to send them the packet of materials (See Appendix A-G). After the packets were mailed (including envelopes and postage to

return) and the consent form mailed back to the investigator, the second wave of data collection took place. At that time the investigator scheduled a convenient time to conduct the semi-structured phone interviews (See Appendix F).

Once the interviews were completed they were transcribed verbatim. The players were then mailed their transcription to provide time to make any changes or provide additional information (member check). Lastly, after the transcriptions were coded (see data analysis) a reliability check was performed.

Data Analysis

The questionnaire data helped create a profile for each player. For each questionnaire a mean for each of the constructs were calculated, and the player's scores for each construct were used to develop a profile. For example, each player had an average score for perceived ability, task goal orientation, ego goal orientation, task-involving climate, ego-involving climate, effort, enjoyment, and competence. These scores were then compared to the interview responses. Most players' scores were consistent with their interview responses, but a few differed from what they indicated in the interviews.

The interviews were audio taped and transcribed verbatim by the primary researcher. The transcriptions were then coded by separating each player's responses. For example, when asked how they define success many players felt that winning was success in baseball. Therefore, the initial code to that response would be winning. Then each question was separated, and each players' responses to the same questions were grouped together. Summary themes were then constructed by grouping initial codes

together that were similar. For example, when asked if their goals shifted or changed some players reported that they shifted more toward a task goal orientation when they were not performing well and another player reported a shift toward an ego goal orientation when a record was about to be broken. These initial codes were then grouped into a summary theme of performance that illustrates when players may shift or change their focus.

An external collaborator assisted the investigator in performing a reliability check of the coding system. The collaborator was provided the initial codes for each question and asked to place them into summary themes. Preconceived categories were provided for the achievement goal questions, goal setting, and perceived climate questions. For the shifting questions categories were not determined prior to coding. An agreement of 91% was reached. Disagreement between the investigator and collaborator, were discussed with reasoning for the initial codes, and resolved.

Member Check

After the interviews were completed and transcribed they were mailed back to each player for a member check. The players were provided their exact responses to each question, and instructed to read their responses and feel free to change and or add to any of their answers. Postage was provided for players to mail the changes back, and compensation was also mailed with the transcripts. As compensation, players received goal setting guidelines and worksheets, and materials to assist in creating a pre-performance routine.

Journal

A journal was kept to document the process and help the investigator reflect upon thoughts when expanding notes. The journal also helped to identify bias that may interfere when interpreting the social world (Janesick, 2000). For example, the investigator does not believe that elite athletes can perform at a high level without ego goals being salient, but did not want to bias the study by specifically looking for adaptive outcomes of ego goals. This journal may keep the investigator aware of expectations that may affect coding the data. In each journal entry the investigator responded to specific predetermined questions: What did I expect to hear from this respondent? Did I hear anything different? What did I learn from this interview? The last section of the journal entry served as a free write to expanding the interview notes.

CHAPTER III

RESULTS

The purpose of the current study was to investigate elite baseball players' achievement goal orientations. More specifically, when defining success in baseball it was of interest whether the players adopted a task, ego, or multiple goal orientation. Moreover, how they were using these goal orientations in terms of goal setting was considered. The second research question was if these players' goal orientations shifted or changed, and if so what precipitated these changes. The influence of the motivational climate within the minor league was also discussed. The sample consisted of 10 interviews. Each participant has played minor league baseball or is currently involved in the minor league system. One of the original pilot interviews was included because very few changes were made to the interview protocol, the pilot participant met the inclusion criterion, and one of the original participants was unable to continue with the second wave of data collection. Their individual responses to each question were coded as the initial coding. The initial codes were quotes that explicitly answered the question. Then, similarities across players were identified, and summary themes were created by grouping initial codes together to answer the research questions. Additional questionnaire data were gathered to provide a profile for each player on achievement goal orientations, perception of climate, and effort, enjoyment, and perceived competence in

baseball. In addition, the questionnaire data helped determine the participants' perception of ability, level of enjoyment, effort, and perceived competence in baseball.

Each interview was transcribed verbatim, and profiles were created for each player. The profile consisted of the player's mean scores on the questionnaires and their initial responses to the questions. Then summary themes were created by grouping similar initial codes. Each player reported adopting some combination of both task and ego goal orientations. They provided detailed responses as to how they use their goal orientations to set either general, process, performance, or outcome goals for practice and games. Their goal orientations do shift depending upon what level professionally they are playing, performance, and time during the season.

Group Profile

Table 1. Descriptive Data for Group Profile

ID	Age	Pos.	Ability	Task	Ego	Task *	Ego *	Effort	Enjoy	Com
P1	24	P	5.0	7.0	2.1	4.8	3.3	7.0	6.7	6.5
P2	27	C	4.2	4.8	3.2	3.0	4.2	6.7	4.7	5.2
P3	27	C	4.2	6.7	3.8	4.8	4.0	7.0	6.7	6.5
P4	24	P	4.0	6.2	4.4	4.6	4.3	6.2	5.5	6.4
P5	25	P	4.7	5.7	3.8	4.8	3.6	6.5	5.7	5.6
P6	23	OF	3.5	5.7	6.0	4.7	3.4	6.7	6.5	6.8
P7	26	IF	4.2	6.5	3.5	4.5	3.4	7.0	7.0	6.8

P8	22	OF	3.5	5.8	6.8	4.3	3.6	7.0	6.5	6.0
P9	24	P	3.5	6.1	2.5	3.3	3.7	7.0	5.7	6.0
P10	27	IF	3.8	5.8	4.1	2.8	1.8	6.5	6.5	5.2

* Climate

The mean age for the participants in the sample was 24.6 with a range of 22-27. The players are all Caucasian, and the sample included four pitchers, three outfielders, one catcher, and two infielders. Eight players are currently playing in the minor leagues ranging from high A to AAA ball. Two players play for an independent league, which is independent of the minor league system, but geared toward promoting the players back onto a minor league team. Seven players reported that their parents introduced baseball to them, and nine players reported that they began playing baseball as early as four or five-years old.

Prior to the interview participants completed surveys including background information, the TEOSQ, the Perceived Motivational Climate Questionnaire, and the Effort, Enjoyment, and Competence Inventory. The participants had an average of 4.25 on the items that represented perceived ability. The possible range of scores is 1 (weak/low) to 5 (excellent/top). With the Task and Ego Orientation in Sport Questionnaire (TEOSQ), the group mean was 6.06 on the items that represent task orientation and an average of 3.95 on the items that represent ego orientation. The possible range of scores is 1 (representing strongly disagree) to 7 (strongly agree). On the Perceived Motivational Climate Inventory the group had an average of 4.05 for the items that represent a task-involving climate and an average of 3.53 for the items that

represent an ego-involving climate. The possible range of scores is 1(strongly disagree) to 5 (strongly agree). Lastly, for the Effort, Enjoyment, and Competence Inventory the group scores were an average of 6.57 for the items that represent effort, an average of 6.2 for the items that represent enjoyment, and an average of 6.11 for the items that represent competence. The possible range of scores is 1 (strongly disagree) to 7 (strongly agree). These scores suggest that this sample has a high perceived ability. They reported a high task goal orientation and a moderate ego goal orientation. They perceived their sport environment to be highly task-involving and moderately ego-involving. Lastly, they reported putting forth significant effort, enjoyment, and perceived competence in baseball.

Player Profiles

P1, the second pilot interview, is 24 years old and pitched for a minor league team. He had 5-6 years of experience in baseball after high school, and he scored an average of 5 on a scale measuring perceptions of ability. On the TEOSQ he scored an average of 7 on the items that represented task orientation and 2.14 on the items that represent ego orientation. On the Perceived Motivational Climate Inventory he scored an average of 4.8 on the items that represent a task-involving climate and an average of 3.3 on the items that represent an ego-involving atmosphere. Lastly, on the Effort, Enjoyment, and Competence Inventory he scored an average of 7 on the items that represent effort, an average of 6.75 on the items that represent enjoyment, and an average of 6.5 on the items that represent competence. This suggests P1 has a high task and a low ego orientation with a high perceived ability. He perceives his sport environment to

be slightly more task-involving than ego-involving, and he puts forth significant effort, enjoys baseball, and perceives himself to be highly competent.

When asked how he defined success,

> …Getting the most out of your talent… never letting myself fall short of… the goals that I set, …a lot of folks say winning's not everything, but I'm one of those people that say that winning is everything because that's what you play the game for, and that's why you keep score,… but I think being successful is just… every time you go out the practice field or in a game you know you give your very very best.

P1 did not feel that his definition of success had changed from when he was younger to playing professional baseball.

He reported setting performance goals, "I wanted to beat that particular hitter. My goals was to just not let anyone on base…not make any mental mistakes."

P1 reported adopting both task and ego goals. He discussed winning being the reason you keep score in the game, but when asked directly on which achievement goals he focused on, he reported focusing more on task goals. He felt that ego goals were a given and would take care of themselves if task goals were adopted. He reported a high tendency to focus on task goals and a moderate to high focus on ego goals.

When asked whether his focus shifts from task goals to ego goals, he reported that in practice he focuses on task goals, and when it's game time he shifts more toward an ego goal orientation.

P1 described the motivational climate on his team to be task-involving, and it shifted more toward ego-involving at game time, "When I went into game it was outperforming. I think that's kind of um where you definitely should shift."

P2 is a 27-year old catcher in AA minor league baseball. He has played nine years of baseball beyond high school and scored an average of 4.25 on a scale rating his perceived abilities in baseball. On the TEOSQ questionnaire he scored an average of 4.85 on the items that represent a task goal orientation and an average of 3.23 on the items that represent an ego goal orientation. On the Perceived Motivational Climate questionnaire he scored an average of 3 on the items that represent a task-involving climate and an average of 4.2 on the items that represent an ego-involving environment. Lastly, on the effort, enjoyment, and competence questionnaire he scored an average of 6.75 on the items that represent effort, an average of 4.75 on the items that represent enjoyment, and an average of 5.2 on the items that represent competence. This suggests that P2 adopts a slightly higher task orientation than ego orientation, and he perceives his sport environment to be slightly more ego-involving than task-involving. He puts forth effort, enjoys baseball, and perceives himself to be competent.

He defined success in baseball by what his team did offensively. If they hit the ball hard three out of four times he felt that was successful, and his definition of success has changed from his participation in youth sport to elite sport. In youth the outcome was more important than how he reached that outcome.

P2 did not feel that he set goals, and explained that in baseball there are many circumstances that cannot be controlled.

> You find out that there are so many circumstances that you can't control. So if you set goals like that and you don't achieve them you may be doing everything you can; you may be just as successful as you were the previous year, but you don't have the

numbers to back it up.

He reported that he adopts both task and ego goals with a high tendency to focus on task goals and a moderate tendency to focus on ego goals. He then elaborated that in order to achieve his goal of outperforming competitors he must work on his individual skills.

> …You've got to develop, you've got to get better, but also you've got to… beat out the other guy who's beside, of you and the guy's who's behind you, or whatever, or they're going to be taking your job.

P2 indicated that his focus shifted as he moved from college to minor league baseball. In college winning or ego goals were more important, and once he got to the minor leagues self improvement or task goals became more salient. In addition, he offered that there is a shift toward ego goals when players know that someone will be promoted to the big leagues.

> When I like when I first started playing, even when I first went to college, it was probably more initially to outperform the other person. Then as I got older it was more to self improve and improve my skills.
>
> You realize there's a good chance that me or this other guy is going to go up. So, you have your coach comparing you to this guy, that's when you start comparing yourself.

This player also reported the motivational climate to be task-involving, and he described circumstances that precipitate shifts in climate to a more task-involving atmosphere, "If he sees you're slacking… he sees your natural ability, and he thinks you maybe… you're just not working as hard."

To promote an ego-involving atmosphere when the team is not performing well, "The coaches do promote quite a bit especially if the team is struggling… then I think that is very much promoted or you're in a big play-off game or whatever."

P3 is a 27-year old catcher and plays AA minor league baseball. He has 9 years experience after high school and scored an average of 4.25 on perception of ability. On the TEOSQ he scored an average of 6.71 on the items that represent a task orientation and an average of 3.85 on the items that represent an ego orientation. On the Perceived Motivational Climate the respective means were 4.80 on the items that represent a task-involving atmosphere and 4 on the items that represent an ego-involving atmosphere. Lastly, on the Effort, Enjoyment, and Competence Inventory the respective means were 7 on the items that represented effort, 6.75 on the items that represented enjoyment, and 6.5 on the items that represent competence. This suggests that he is highly task oriented and moderately ego oriented. He perceived his sport environment to be task and ego-involving. Lastly, he puts forth significant effort, enjoys baseball, and feels competent in baseball.

He defined success as winning and putting his pitcher in position to win.

> When I think of success in baseball I think of personally being a catcher I was more concerned with winning. I was more concerned with helping my pitcher get through a game than I was actually worried about my own stats and different things.

He did not feel that his definition of success changed from youth to playing professionally. He felt it was fun to win and received a lot of publicity at a young age.

> When I was younger it was more of the pleasure type deal. I had more fun. I had a lot of success so at a younger age it was very addicting…I couldn't wait till the next game to do well again.

P3 reported focusing on both task and ego goals. He described them as going "hand and hand." He reported a moderate to high focus on task goals and a high focus on ego goals, "If you are to outperform somebody you have to work on your skills and set goals personal goals."

When asked if his focus on task goals shifted to ego goals he did not answer the question. P3 reported the climate shifting daily from batting practice emphasizing task goals to game time emphasizing ego goals.

> In batting practice they would work on individual skills. Then at night they would turn it on, and it was time to outperform the other team.

P4 is 24-year old pitcher and plays AA minor league baseball. He has played seven years after high school and scored an average of 4 on perception of ability. On the TEOSQ the respective means were 6.28 on the items that represent a task orientation and 4.43 on the items that represent an ego orientation. On the Perceived Motivational Climate the respective means were 4.60 on the items that represent a task-involving atmosphere and 4.30 on the items that represent an ego-involving atmosphere. Lastly, on the Effort, Enjoyment, and Competence Inventory the respective means were 6.25 on the items that represent effort, 5.5 on the items that represent enjoyment, and 6.40 on the items that represent competence. This suggests that he is highly task oriented and

moderately ego oriented. He perceives his sport environment to be both task and ego-involving. He puts forth significant effort, enjoys baseball, and feels competent.

He defined success in baseball as winning and he felt there had been no change from youth to professional baseball, "When I was younger success was winning the game, and even now to me success is helping your team win the ball game."

He did report that he does set general performance goals for himself during preseason, practice, and games.

> My off-season goal is to get in the best possible shape…and do as best I possibly can. My goal …from game to game is not to give up any earned runs. …Over the season I know that's virtually impossible. So… as individual goals… I like to have an ERA of 3 or below 2.5 if I can.

P4 used both task and ego goals as evidence in the following quote.

> Now if you hone that skill your pitching delivery and get a consistent tempo, get your release point down, then I think it's going to help you lead to more success because you are going to be able to throw more strikes and be able to attack hitters in a specific way. …They kind of go hand and hand because if you don't work on your skills you can't outperform your competitors.

He discussed the shift from task in pregame to ego at game time, "Pre-game my focus is on what do I need to do to make myself better right now. Once it's game time I focus more on outperforming my competition."

P4 reported that there was a shift in climate between levels of baseball. In college the climate was task-involving and in professional baseball it was more ego-involving.

> The lower level of professional baseball are geared toward getting the kids acclimated to the professional level and get them acclimated to….deal with the media. Once you move up to the higher ranks it's all about what have you done for me lately.

P5 is a 25-year old pitcher and plays for a Northeast Independent League with seven years experience after high school. He scored an average of 4.75 on perception of ability. On the *TEOSQ* his respective means were 5.71 on the items that represent task orientation 3.85 on the items that represent an ego orientation. On the Perceived Motivational Climate Inventory the means were 4.80 on the items that represent a task-involving atmosphere and 3.6 on the items that represent an ego-involving atmosphere. Lastly, on the Effort, Enjoyment, and Competence Inventory the respective means were an average of 6.5 on Effort, 5.75 on Enjoyment, and 5.6 on competence. This suggests that he is moderately task oriented and highly ego oriented with a high perception of ability. He perceives his sport environment to be more task-involving than ego-involving. Lastly, he puts forth effort, enjoys baseball, and feels competent.

He defined success in baseball as winning, and while his conceptualization of success did not change from youth to elite sport he did describe not taking losing well when he was younger, "When I was younger I wanted to win, and when we didn't win I cried."

This player reported setting specific performance goals in preseason, practice, and games.

> As a pitcher the stats are ERA, hits allowed, and walks stuff like that. Every time I go out to pitch I set a goal not to walk anybody. I also set a goal I want to have less hits than innings pitched. So say I go six innings I want to give up five or less hits, and if that happens then all should translate into a good outing.

He discussed adopting both task and ego goals. P4 reported a tendency to focus moderately on task goals and high on ego goals, "I set goals to outperform other people,

but I also set things that would make me better,… but because I think being better at that thing would help me outperform other people."

He felt that his focus would shift from a focus on task goals in the off-season toward ego goals during spring training and during the season because he was forced to compete for a position on the team, "Every spring training we were competing for a spot on a team and you had to perform."

P5 reported the motivational climate to be ego-involving with minor shifts toward task-involving when a player is about to move up a level. He also indicated that there is a shift in climate between the levels of professional baseball. In minor league the climate is task-involving. In independent baseball the climate is ego-involving.

> I'd say my coach this year..he was all about winning all year, but he also wanted us to get better because he wants us to do well and get picked up. This year it …was on outperforming others. With the Phillies it was more about…you wanted individual improvement.

P6 is a 23-year old outfielder and plays A in an Independent league. He has six years experience after high school and scored an average of 3.5 on perceptions of ability. On the TEOSQ his respective scores were 5.71 on the items that represent task orientation and 6 on the items that represent an ego orientation. On the Perceived Motivational Climate Inventory he scored 4.70 on the items that represent a task-involving atmosphere and 3.40 on the items that represent an ego-involving atmosphere. Lastly, on the Effort, Enjoyment, and Competence Inventory his respective means were 6.75 on effort, 6.5 on enjoyment, and 6.8 on competence. This suggests he is highly task

and ego oriented with a moderate perception of ability. He perceives sport environment to be slightly more task-involving than ego-involving. Lastly, he puts forth effort, enjoys baseball, and feels competent.

He defined success in baseball as working hard and numbers mattering. He felt a definite change from youth sport being "just a game" and around the age of 14 or 15 performance started to be an important factor.

> I guess you could put up the numbers. You know like if you go out today and I want to hit 300…. All you can do is work hard either way.
>
> When you're younger you just play cuz it's a game…. And then once you get to about fourteen or fifteen… some of them don't play no more cuz they are not good enough."

In general P6 discussed goals extending from high school through the minor leagues, "In the minors you don't really care about team. There's only one big goal… and that's to get to the major leagues.

He discussed focusing on task goals before the season, off-season, and shifting more towards ego goals at game time. He reported a high tendency to focus on task goals and a moderate focus on ego goals.

> Develop skills before the season, off-season, that's when you work on… getting better, during the season… you just go out there and take BP. Now game time,… I…just try to be successful.

P6 reported the motivational climate on his team to be task-involving, and he did not feel that there was any shift in climate.

P7 is a 26-year old infielder and has played A through AAA baseball in the minor leagues. He has 8 years experience after high school and he scored an average of 4.25 on perception of ability. His respective scores on the *TEOSQ* were 6.57 on the items that represent a task orientation and 3.57 on the items that represent an ego-orientation. On the Perceived Motivational Climate Inventory the respective scores were 4.50 on the items that represent a task-involving atmosphere and 3.40 on the items that represent an ego-involving atmosphere. Lastly, on the Effort, Enjoyment, and Competence Inventory his respective scores were 7.0 on the items that represent effort, 7 on the items that represent enjoyment, and 6.8 on the items that represent competence. This suggests he is highly task oriented and moderately ego oriented with a high perceived ability. He perceives his sport environment to be slightly more task-involving than ego-involving. Lastly, he puts forth effort, enjoys baseball, and feels competent.

He defined success in baseball as giving 100% and playing hard. He suggested that when he was younger he did not cope well with losing, and he felt he was more focused on the outcome of the game in youth baseball.

> Success…for me personally, it's just going on the field and playing as hard as I can play every day.
>
> When you're younger… you take it more to heart. It seems like it would be the other way around, but I remember… I'd cry if I didn't get a hit.

He did not feel that he needed to set goals. He conceptualizes goal setting as possibly "setting the bar too low."

> If I set goals then I get caught up in that,… in trying to reach that instead of… just playing the game and… letting that take care of itself…. In other words I don't want to set a bar for myself.

P7 discussed adopting both task and ego goals with a high tendency to focus on task goals and a low tendency to focus on ego goals.

> There's always that little… thing in the back of your head where… this guy's pretty good… I got to pick my game up… but for me personally it's never that's all I think about. I might try to make myself better and work on what I have to do.

He did not feel there was a distinct shift from focusing on task goals to ego goals.

P7 reported his coach promoting both a task-involving and an ego-involving climate. He discussed a shift toward more of an ego-involving climate when the team is struggling, "Little of both…we want to win…you know he pushes both ways."

P8 is a 22-year old outfielder and has four years experience after high school. He scored an average of 3.5 on perceived ability. His respective means on the TEOSQ were 5.86 on the items that represent a task orientation and 6.86 on the items that represent an ego orientation. On the Perceived Motivational Climate the respective means were 4.30 on the items that represent a task-involving atmosphere and 3.60 on the items that represent an ego-involving atmosphere. Lastly, on the Effort, Enjoyment, and Competence Inventory the respective means were 7.0 on the items that represent effort, 6.5 on the items that represent enjoyment, and 6.0 on the items that represent competence. This suggests he is highly task and ego oriented with a moderate

perception of ability. He perceives his sport environment to be slightly more task-involving than ego-involving. He puts forth effort, enjoys baseball, and feels competent.

He defined success in baseball in terms of his personal numbers or performance and in his team winning. He also discussed his tendency to take losing harder when he was younger, and he felt there was a shift or focus on the team winning in college than in the pros.

> You can look at it as personal success whether that be hitting 300, hitting 30 homeruns, or you can look at it from a team aspect which you definitely see more in a college game, and that's… winning, whether it be the College World Series the Major League World Series.

He reported setting specific performance goals for preseason, practice, and games.

> I wanted to hit over 15 homeruns… to play in over 100 games. I wanted to hit over 300, or actually 280 to 300, and I wanted to improve my strike zone discipline.

P8 discussed adopting both task and ego goals with a high tendency to focus on task goals and a moderate tendency to focus on ego goals.

> I definitely do both. I want to improve. You've got to improve in practice… it's hard to improve during a game. In a game you just have to compete…. I think improvement goals, but I also set achievement goal to outperform people… move up if I can.

He provided examples of what precipitated his shift from a focus on task goals to ego goals. During practice he would focus more on task goals and shift to ego goals during games. In addition, when there was going to be a move to the big leagues he felt that his focus would shift from task goals to ego goals.

> During batting practice I'd like to focus on my swing rather than where the ball goes or how far it goes, if it goes over the fence. I would like to improve my swing make it shorter, quicker, you know a better path to the ball. When in the game… I just… I want to battle this pitcher.
>
> I would put more focus on outperforming… when it comes down to moving up a level or making a team. You want to get better, but it's not going to help you move up. You might not get that long run chance.

P8 reported his coach promoting a consistent task-involving climate, "My coaches are very very fun to play with. They are supportive. They allowed us to have some freedom and play the game we wanted to play."

P9 is a 24-year old pitcher and plays AA baseball in the minor league. He has six years experience after high school and scored an average of 3.5 on perception of ability. His respective scores on the TEOSQ were an average of 6.14 on the items that represent a task orientation and 2.57 on the items that represent an ego orientation. On the Perceived Motivational Climate Inventory the respective means were 3.30 on the items that represent a task-involving atmosphere and 3.70 on the items that represent an ego-involving atmosphere. Lastly, on the Effort, Enjoyment, and Competence Inventory his respective means were 7.0 on the items that represent effort, 5.75 on the items that represent enjoyment, and 6.0 on the items that represent competence. This suggests that he is highly task oriented with a moderate perception of ability. He perceives his sport environment to be moderately task and ego-involving. Lastly, he puts forth effort, enjoys baseball, and feels competent.

He defined success in baseball as doing your job and putting the team in position to win. He felt that there was more pressure in professional baseball because of the job

uncertainty, "When younger you know you're on the team. In the pros you could be released anytime."

He reported setting specific preseason goals because he is never happy with an outing.

> It's important for myself to set goals. Without setting goals you really don't have anything to motivate you… I like to set goals for myself. I got in the habit of doing it in college, and it really helps to push myself. I'm never really happy with an outing even if I pitch well because I'm always… trying to achieve a certain goal,… I think that goals are very important, and they're important to me too. I do set myself goals before and during the season.

Player 9 discussed adopting both task and ego goals with a high tendency to focus on task goals and a high tendency to focus on ego goals.

> You're on a team and you try to win and everything, you know guy next to you is trying to beat you… and you know I think if you set your goal to where you're going to come to the field and work hard everyday then if it doesn't work out you can look back and say hey I didn't bust my butt….

His focus will shift back toward task goals when he is struggling or has a mechanical flaw in his pitching that he feels needs improvement.

> I was supposed to go out…there and our pitching coach said I want you to only… throw this pitch in this situation and if they hit it they hit it. There's always gonna be times where you go back to your skills and smooth things over and work on things.

P9 felt strongly that the coaches did not promote a task-involving or ego-involving climate.

P10 is a 27-year old infielder and plays for an Independent League in Professional Baseball. He has 10 years experience after high school and scored an average of 3.87 on perceived ability. His respective means on the TEOSQ were 5.86 on the items that represent a task orientation and 4.14 on the items that represent an ego orientation. On the Perceived Motivational Climate Inventory his respective scores were 2.80 on the items that represent a task-involving atmosphere and 1.80 on the items that represent an ego-involving atmosphere. Lastly, on the Effort, Enjoyment, and Competence Inventory his respective scores were 6.50 on the items that represent effort, 6.50 on the items that represent enjoyment, and 5.20 on the items that represent competence. This suggests he is highly task and ego oriented with a moderate perceived ability. He felt his sport environment to be neither task or ego-involving. He puts forth effort, enjoys baseball, and feels competent.

He defined success in baseball as winning. His definition of success changed throughout his progression through professional baseball. In the minor league he felt the focus was more on his individual improvement; once he was promoted to the big leagues it was more about winning.

> First of all… you'd like to be on a winning team to begin with. At times it makes the season it's a lot more fun as far as you personally and as a team if you're on a winning team.

> Professional baseball is a little bit different. They're all about the winning, can their teams win championships,… in proball and minor league ball uh it's a little more individualized as far as dealing with the team cuz your goal is just to move up to the next level.

He set general goals as opposed to specific goal setting.

> I have always just tried to have my goals at the beginning of the season, and then I just work everyday trying to accomplish them, but I was more of a general goal person not a specific person that wrote down very specific goals each season or each week even.

Player 10 also reported adopting both task and ego goals with a high focus on task goals and a moderate focus on ego goals. He discussed feeling like he was not "blessed with incredible skills," that he focused more on his individual improvement, "So I wasn't really blessed with incredible skills. I was certainly conscious of what everyone was doing, but it wasn't I was more worried about myself."

He discussed significant shifting depending upon the coaching staff, being compared to other players statistically, and setting league records. While the climate of the minor leagues is to improve and develop players, their goals can change more toward ego goals when they are compared to what others are doing in the league. In addition, when a player is trying to set a league record he may shift toward ego goals.

> That can possibly change over the year depending on personnel on the team…. You may look at what your stats are and then by comparison… you may set your goals just based on those that the stats of the other people, and that also helps to improve yourself,… when you are comparing you need to get better because these people are doing it… it changes… if someone is trying to set a record trying to outperform someone else in the league. That can change kind of in the middle near the end of the season.

Player 10 suggested that the climate can shift from ego involving toward task involving when a player is going to break a record to help that player achieve his goal.

> His… goals are winning, but he also likes to see personal successes so hopefully they can make a move out of that particular league… I think as an example this year… our catcher was going to break the team record for doubles and he kind of shifted his thought process a little bit to try to let that catcher beat that record.

Summary of Themes

The participants defined success in baseball in terms of outcome whether it be the team winning or their personal statistics. Two players suggested that giving 100% would indicate they were successful, but one of those players also reported winning as a means to determine his success. All ten players reported using some combination of both task and ego goal orientations. Seven players reported adopting both a high to moderate task and ego goal orientation. Two players reported that while they focus on both, they focus slightly more on task goals than ego goals. The players reported using process, performance, and outcome goals. Half of the players reported the motivational climate within minor league baseball to be task-involving. Dispositional and situational shifts in achievement goal orientations were present. Lastly, the players indicated that the environment created by their coaches did not influence their achievement goals.

The majority of the players reported adopting both a task and ego goal orientation. They suggested that they go hand in hand. If a player's focus is to improve and master his skills in baseball, that will lead to outperforming their opponents. This will result in that player being promoted to the major leagues. The minor league system is geared toward development and improving to advance players to major league baseball. For this reason outperforming teammates is also salient. Therefore, the players discussed

balancing their competitive nature between being compared to league statistics as well as the performance of their teammates.

Two players reported that task goals were their primary focus, but they always felt that ego goals are their secondary focus. These players want to be the best, but their everyday priority is developing and bettering themselves. They also indicated that a player can focus too much on ego goals and outperforming competitors. It is important to note that one player felt he was not "blessed with the same talent" as other players. Therefore, perception of ability is important when achieving a balance between the two goal orientations. As Nicholls (1984,1989) suggested ego goals can promote adaptive outcomes when players have a high perception of ability.

Eight out of ten players reported adopting general or specific goals in baseball. Only two players reported not setting goals. Preseason, practice, and game goals were evaluated. In preseason the majority of the players discussed having the goal to be promoted within the minor league with the goal to eventually play in major league baseball. Also, during preseason performance goals to improve were discussed. During practice the majority of the players reported setting process goals to prepare themselves for games and to work on mechanical flaws. Lastly, during games the players reported setting outcome and performance goals.

The climate in minor league baseball is more task-involving to develop major league quality players. Therefore, it is not surprising that many of the players reported a general goal to be promoted to a higher level within the minor league with the goal to eventually play in major league baseball. In addition, many players reported setting

performance goals. For example, one player reported setting goals to hit more than 15 homeruns, play in 100 or more games, and have a batting average higher than 300. Some of the other players reported unique responses such as focusing on working hard every day and staying healthy so that they can achieve optimal performance come game time.

In practice the majority of the players reported setting process goals to work on mechanical flaws. The pitchers discussed working on pitch location or improving something specific about a pitch in practice. For example, one pitcher discussed focusing on his delivery during practice. He would set a goal to keep every pitch below his catcher's mask. Other unique goals that players set were similar to preseason in that they worked hard and wanted to remain healthy.

In games half the players reported setting outcome goals to win and still reported setting performance goals. For example, one pitcher reported setting a goal for the game to throw six or more innings, give up three or less runs, and to win. This illustrates how a player's task and ego goal orientation can translate into both performance and outcome goals. Other players continued to report that they focus on playing hard during every game.

In summary, the players reported focusing on both task and ego goal orientations. They defined success in baseball in terms of the outcome of the game. When setting specific or general goals their task and ego goal orientations translated into process, performance, and outcome goals. In the preseason players wanted to be promoted, but they also focused primarily on developing and setting performance goals. In practice, they set more specific process goals to address mechanical flaws. Lastly, in games

players reported setting performance and outcome goals. With the goal to move up, the overall climate is to set process goals in practice that will help them improve to achieve the performance and outcome goals they set in games.

The players reported significant shifts between task and ego goal orientations as they matured or developed from youth to elite sport. First, when defining success in baseball three players felt that when they were younger they had a task focus that shifted toward an ego focus when they were older. Three players felt that they have always had an ego focus but when younger they had underdeveloped coping skills, and one player reported an ego focus when younger that shifted more toward task in elite sport.

First, three players reported a task focus that shifted to an ego focus when they advanced to elite sport. For example, one player reported that when he was younger he knew he had a place on the team. He perceived playing professionally as a job, from which he could be released at any time. This implies that performance becomes more important as players advance to professional baseball thus requiring more of an ego focus.

Next, three players reported underdeveloped coping skills in youth sport. They discussed their focus not shifting, but they coped with losing better as they progressed through baseball. One player said he would cry if he did not get a hit or if his team lost. It may be that as players develop and their perceptions of ability increase they cope better with losing and thus achieve a balance between task and ego goal orientations.

Lastly, one player reported a shift from an ego focus in youth to more of a task focus in the minor leagues. He discussed the point of the minors to be developing players

to get to major league baseball. Therefore, this shift may have been precipitated by the climate of the minors.

When players were asked when their focus shifted within the minor league their responses varied. Two players reported shifting from a task focus in the minor league to an ego focus when being promoted to the major league. One player reported shifting from a task focus to an ego focus when a league or team record was in jeopardy of being broken. One player reported focusing more on task when he was struggling or performing substandard. One player reported shifting more toward an ego focus in spring training because he had to compete with his teammates to earn a position on the team. Lastly, one player discussed his daily shift from a task focus in pre-game to an ego focus at game time. Therefore, maturity, level within professional baseball, performance, and time during the season may precipitate a shift in task and ego goal orientations.

Half of the players indicated that the climate in minor league baseball was task-involving. Two players felt it to be ego-involving, and one player described the climate to be promoting both. The situational shifts that the players reported were similar to the dispositional shifts. Two players indicated that the climate shifted from ego-involving toward task-involving when a player is about to move up a level. Two players reported a shift in climate depending upon the level in professional baseball. They felt that the climate was task-involving in the minor league, ego-involving in an independent league, and also ego-involving in major league baseball. Two players described a daily shift in climate from task-involving at practice to ego-involving at games. Two shifts toward an ego-involving climate were reported. One player described a shift toward an ego-

involving climate when the team was not performing well, and the other player reported a shift toward and ego-involving climate when the team was putting forth less effort or "slacking off".

In summary, elite baseball players in the minor league reported adopting both task and ego goal orientations. These goal orientations translated into both general and specific goal setting including process, performance, and outcome goals. In addition, significant shifts in goal orientations may occur as players mature, the level within professional baseball, their performance, and the time of season. Lastly, the players identified the climate within the minor league to be task-involving. They reported shifts in climate are contingent upon the level within professional baseball and their performance.

When the member check was performed two players returned the transcriptions. The only changes that were made were grammatical errors.

CHAPTER IV

DISCUSSION

The purpose of this study was to explore the possibility of elite baseball players adopting and using both task and ego goal orientations. In addition, players' use of their goal orientations or whether they translated into goal setting was considered. The players were asked whether their goal orientations shifted or changed and if so what precipitated those shifts. Lastly, the situational influence and possible shift in climate in the minor league was examined.

All ten players discussed adopting some combination of task and ego goal orientations. Most players felt that a task and ego goal orientation go hand in hand, meaning they positively influence each other. They reported that focusing on individual improvement and developing will yield the end result of outperforming others. Two players reported a high focus on individual improvement and a low focus on outperforming others. These players felt that one could easily become consumed with outperforming others and elements of the game that are beyond their control. One of those two players had a lower perception of his abilities, and reported he was not given the same talent as other players. Therefore he felt he should focus more on task goals.

Half of the players reported setting general or specific goals. Most players stated that their goal in the preseason was to get picked up by a higher division within the minor league system or get promoted to the major league. They also focused on working hard,

adopting more task goal goals in preseason, and staying healthy. In practice, many players adopted process goals. They discussed practice not being practice. For example, practice in the minor league is very repetitive. If they focus on any improvement it would be in Batting Practice or when pitchers take the bullpen. The pitchers discussed working on mechanical flaws (when necessary) in the bullpen. One pitcher said when working on his release he may have the process goal of keeping the ball below the catcher's mask. Therefore, goals for practice were constructed based on what mechanical flaws were present at the time and changed when they experienced success in games.

During games, the players discussed setting performance and outcome goals. Some players wanted to get hits, throw six or more innings, have no walks, or have functional at bats. These performance goals translated into the main statistics used to evaluate players. Furthermore, half of the players said when it is game time they want to win. They felt that is why they play the game and why they keep score.

Next, there were significant shifts reported between task and ego goals. The players discussed shifts precipitated by maturity, level within professional baseball, performance, and time in season. Players reported defining success in terms of task goals when they were younger and shifting more toward ego goals as they developed. They also offered that ego goals become more important as they progress through professional baseball to keep their "job" as well as to be promoted within the system. Some players reported that they change their focus to concentrate more on task goals when they are not performing well. Lastly, some players discussed frequent changes on a daily basis shifting from task goals at practice to an ego focus at game time.

Lastly, the players reported the climate in minor league baseball to be task-involving, and shifts in climate were also discussed. Similar to the shifts discussed individually, the players felt that the climate shifted depending upon level within professional baseball, and performance.

The questionnaire data suggested that the players have a high perception of ability, report a high task goal orientation and a moderate ego goal orientation. In addition, the players reported adaptive outcomes associated with their achievement goal profile. They reported a high tendency to put forth effort, enjoy baseball, and feel competent. This supports the assumption made by researchers and practitioners that elite performers can and do utilize a combination of both task and ego goal orientations (Hardy, Jones, & Gould, 1996; Pensgaard & Roberts, 2000). Moreover, the players reported a high perception of ability, and this supports Nicholls (1984, 1989) in that ability is the critical factor coupled with achievement goals that will affect adaptive or maladaptive outcomes. If a player has a high perception of ability and adopts a predominantly task and ego goal orientation in a task or ego-involving climate than adaptive outcomes should result. It also provides evidence that elite performers have a high perception of ability (Hardy, Jones, & Gould, 1996). As suggested earlier instead of always promoting a task goal orientation researchers and practitioners should strive to identify and assist athletes in finding a balance of both task and ego goal orientations (Hodge & Petlichkoff, 2000). Although, support for the influence of the perceived motivational climate was not supported in the current study (Newton & Duda, 1999).

Lastly, support for Barron and Harackiewicz's (2001) shifting hypothesis was found. Players indicated shifts in both achievement goals and perceived motivational climate.

Practical Implications

The shifts reported may be salient for coaches, researchers, and practitioners. For example, if a coach observes a player and concludes he adopts task goals when struggling, but fails to consider his competitive spirit, he may promote a task-involving environment that will frustrate that player. These findings also suggest that coaches should get to know their players to fully understand their drive to succeed. Similarly, researchers could prematurely conclude that a task-involving climate should be solely promoted in elite sport if a sample were taken only at practice. These findings suggest that a player's focus may change from preseason to regular season as well as from A baseball to AA baseball. As a practitioner it is important to understand how the climate changes as players progress through professional sport and how this affects goal setting. For example, when setting goals with a professional athlete, it is important to understand how they balance both task and ego goal orientations and when their focus is likely to change. Athletes are more likely to resist goal setting if the same approach is used with every athlete at all levels within professional baseball.

In addition, the information that the players offered regarding maturity level from youth to elite sport could be utilized to help combat drop-out in sport. The players felt it is necessary to focus primarily on promoting a task goal orientation in youth sport. They also indicated that many of them did not have the coping skills to deal with losing. Therefore, parents and coaches who strive to not only promote a task-involving climate,

but also teach coping skills such as keeping it in perspective, may help young athletes remain engaged in sport.

Additional Information

Developing Elite Players. These players became involved in sport as young as four and experienced success at a young age. It is interesting that some players did not feel that their definition of success changed from youth to elite sport. What did change was their ability to cope with failure. This may provide support that the critical element in maintaining a balance between a task and ego goal orientation is perception of ability (Nichols, 1984 &1989). This would suggest that promoting a task-involving climate may be critical in youth sport.

When asked what they felt important to focus on to develop elite players most of the players responded that a task-involving climate would promote adaptive outcomes. They felt that introducing the element of competition and outcome at age 13 or 14, around middle school or high school age would be appropriate developmentally. In addition, each of the players in this sample reported a moderate to high perception of their abilities. This may have been higher if the investigator had instructed the pitchers to not answer the question about offense because the pitchers reported that they did not hit, and thus they reported a slightly lower perception of ability.

Atmosphere within the Minors. Each player explained that the goal of the minor league is to develop players to move up a level and eventually get promoted to the major leagues. Therefore, the atmosphere of the league itself is task-involving. However, the players also discussed competition within the team. Essentially their teammates are their

competition when getting promoted. In fact, when the investigator asked them questions about outperforming others it became apparent that teammates came to mind before their opponents. Therefore, when working with a team it may be important to consider the atmosphere of the organization (e.g., recreational sports vs. competitive sports) and the atmosphere within the team.

TEOSQ. The group means on the TEOSQ were moderate to high on both task and ego goal orientations. Most of the respondents defined success in one of two forms of winning. They discussed adopting both task and ego goal orientations, and yet their scores on the ego goal construct were usually lower than the task construct. In fact, when defining success most players reported winning first. In addition, most of the players reported a moderate to high focus on both task and ego goal orientations during the interview. One explanation for this regards the inclusion of two ego items (i.e., I am the only one who can do the skill, and Others mess up and I don't) that most all of the players disagreed with, thus lowering the average score. When the players were asked if they agreed with their scores they did, but this was inconsistent with their previous interview responses. They wavered and attempted to over explain. It is possible that they did not feel comfortable disagreeing with their scores on the TEOSQ.

Future Research. The current findings suggest that additional research with a multifaceted approach is warranted. As Hodge and Petlichkoff (2000) have suggested goal profiles should be investigated in other sports. Currently, collegiate golf classes, youth basketball players, adolescents, and rugby players have been considered. Researchers further suggest an examination across women and men's sports, varieties of

sport (i.e., elite, recreational, and novice), and other areas of physical activity. As opposed to the dichotomous approach, future research should continue to pursue the "bandwidth of complementary overlap" (Hodge & Petlichkoff, 2000). In addition, the shifting hypothesis should be explored further. Achievement goal researchers should pursue longitudinal studies to examine the extent to which achievement goals and climate shift.

Strengths. The methodology of the current study assumed a multifaceted approach to investigating achievement motivation. Questionnaires were administered and followed-up by interviews.

In addition, a member check was performed. The entire transcript was mailed back to each participant. They were instructed to read and make any changes they felt necessary. There was also additional space provided if they wanted to elaborate on any responses. This was an attempt to portray each players' profile as accurately as possible.

Lastly, much of the research in achievement motivation has focused on participation in sport and youth sport (Hardy, Jones, & Gould, 1996). The current study examined a population within elite sport as well as considered the combined effect of both task and ego goal orientations.

Limitations. All of the participants were white males who played at the same university in college. As with most qualitative studies the findings are not generalized beyond the sample. Therefore, while the purpose was to examine a different population, elite athletes, findings cannot be generalized to other elite sport performers. In addition, on the background questionnaire four questions regarding perceived ability were

provided. The sample consisted of four pitchers, and one of those questions, 'How would you rate your abilities offensively?' did not apply. Therefore, this dropped their overall average for perception of ability. The instructions should have indicated prompted them to answer only the questions that applied. There is no evidence to suggest that each player read the transcription mailed to them. It could have been required confirmation of receiving the member check or required it mailed back even without corrections prior to sending compensation. Lastly, the conclusions on the players' achievement goals shifting are limited. Interviews require players to recall information rather than using an instrument to support their recollections. Future research could replicate these findings by administering the *TEOSQ* at different times during the season.

In summary, referring back to Marten's quote, motivation is complex and multidimensional. The optimal balance adopted by elite athletes may differ from the optimal balance adopted by individuals participating in recreational sports. Researchers should pursue achievement goal profiling across sports, gender, and performance level, and researchers may need to reexamine the adaptive motivational patterns an ego goal orientation may promote when accompanied by a high perception of ability and a task goal orientation.

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Appendix A

Consent Form

Consent Form

You have agreed to partake in a project that will address the goals of elite baseball players and the factors that influence your goals. You have been asked to participate because you have played at a level higher than college baseball.

You understand that your participation in this project involves completing 4 questionnaires (requiring about 20 minutes) and a phone interview (requiring no more than an hour). The first questionnaire requests background and performance information. The second questionnaire involves your goals toward performance in baseball. The last questionnaire involves your perceptions about the influence that different situations and factors have on your goals. This study will contribute to the completion of researcher's Jennifer A. Thomas Master's Thesis.

You understand that your participation will be for research purposes only. You also understand that you will not be exposed to any psychological or physical harm. The investigator hopes that you will benefit from this opportunity by offering your experiences in sport for the purpose of research. The results of this study will be provided to you once completed. You understand that all results are completely confidential; all responses will be coded by a random subject number so that your name can be separated from your responses to ensure anonymity, and they will later be matched to the interviews with the same code. You understand that once the data has been entered into a file the consent form and your answers will be separated and stored in a locked file for up to two years, then they will be destroyed.

You further understand that your participation is entirely voluntary, you may quit at any time, that the researcher will answer any questions about this project, and that you may contact the principal coordinator Jennifer Ann Thomas (540-421-9596) for further information. Your participation is completely voluntary, and you can withdraw at any point without consequences of any kind. For questions regarding the rights of research participants, you may contact Mr. Eric Allen at 336-256-1482. Please sign this consent form and mail back to the researcher with the completed questionnaires.

You have read the above description and understand what is being requested of you as a participant in this study. You freely consent to participate.

Participant's Name (Please Print)_____ Date_____

Participant's Signature _____

Name of Researcher Jennifer Ann Thomas Date_____

Signature of Researcher_____

Appendix B
Introduction to the Study

Introduction to the Current Study

First, I would like to sincerely thank you for agreeing to participate in this study. I understand that your time is valuable, and you are busy this time of year. This study will focus on what type of goals elite baseball and softball players use, why they use them, and when they may change. Getting more specific, we will talk in your interview about what type of specific goals you may set for yourself at different times of the season, for practice, for games, and for games you view to be important. Next, I will ask you to consider what types of situations or who may influence the goals you set.

I would appreciate if you would sign the consent form and fill out the questionnaires and mail them back to me when you receive this packet. The follow-up questionnaire should be filled out and mailed back after the interview has been conducted. This will allow you to fill in any information that may have come to mind after the interview. Postage is provided for all questionnaires.

Again, I thank you for taking the time to participate in this study and good luck with your season!

Appendix C
Demographic Questionnaire

Background Information

Name_____
Age_____ Race/Ethnic Identity _____
Where do you currently live? City_____ State_____
What team are you do you play for?_____ What level? _____
How many years have you played baseball beyond high school?____
What positions do you play?_____
What awards have you received in baseball?_____
What sports have you participated after high school, other than baseball?_____
Please estimate you current stats:
Batting average_____Fielding % _____ERA _____

Instructions: Please indicate how confident you are in your abilities by circling a response from 1to 5, with 1 representing not at all confident and 5 representing very confident.
How would you rate your abilities offensively?

1------ 2 ----- 3 ----- 4 ----- 5
weak/low average excellent/top

How would you rate your abilities defensively?

1 ----- 2 ----- 3 ----- 4 ----- 5
weak/low average excellent/top

How would you rate your abilities compared to your teammates?

1 ----- 2 ----- 3 ----- 4 ----- 5
weak/low average excellent/top

How would you rate your abilities compared to players in your league?

1 ----- 2 ----- 3 ----- 4 ------ 5
weak/low average excellent/top

Appendix D
TEOSQ

<u>Instructions</u>: Using the scale below circle the number ranging from 1 (strongly disagree) to 7 (strongly agree) that captures how much you agree or disagree with each item related the following statement:

I really feel successful in baseball when…

1. Something I learn makes me want to practice more. 1-----2-----3-----4-----5-----6-----7

2. I'm more skilled than other people. 1-----2-----3-----4-----5-----6-----7

3. A skill I learned really feels right. 1-----2-----3-----4-----5-----6-----7

4. Others mess up and I don't. 1-----2-----3-----4-----5-----6-----7

5. I do my very best. 1-----2-----3-----4-----5-----6-----7

6. I do better than others. 1-----2-----3-----4-----5-----6-----7

7. I do something I couldn't do before. 1-----2-----3-----4-----5-----6-----7

8. I beat others. 1-----2-----3-----4-----5-----6-----7

9. I learn a new skill by trying hard. 1-----2-----3-----4-----5-----6-----7

10. Others can't do as well as me. 1-----2-----3-----4-----5-----6-----7

11. I can keep practicing hard. 1-----2-----3-----4-----5-----6-----7

12. I'm the only one who can do the skill. 1-----2-----3-----4-----5-----6-----7

13. I get the knack of doing a new skill. 1-----2-----3-----4-----5-----6-----7

14. I have the most runs/hits. 1-----2-----3-----4-----5-----6-----7

Appendix E
Perceived Climate Questionnaire

<u>Instructions</u>: Now using a 1-5 scale, rate how strongly you agree or disagree that each of the following items are emphasized in your team environment.

In our team environment…

1. The coach focuses on skill improvement. 1-----2-----3-----4-----5

2. Out-performing others is important. 1-----2-----3-----4-----5

3. Players are punished for mistakes. 1-----2-----3-----4-----5

4. Trying hard is rewarded. 1-----2-----3-----4-----5

5. Players feel good when they do better than other players. 1-----2-----3-----4-----5

6. The coach pays the most attention to the most skilled players. 1-----2-----3-----4-----5

7. Doing better than others is important. 1-----2-----3-----4-----5

8. Each player's improvement is important. 1-----2-----3-----4-----5

9. Players try to learn new skills. 1-----2-----3-----4-----5

10. The coach favors some players. 1-----2-----3-----4-----5

11. Players are encouraged to outperform other players. 1-----2-----3-----4-----5

12. Players are encouraged to work on weaknesses. 1-----2-----3-----4-----5

13. Everyone wants to be the best. 1-----2-----3-----4-----5

14. Players are afraid to make mistakes. 1-----2-----3-----4-----5

15. Only a few can be the best. 1-----2-----3-----4-----5

16. The coaches want us to try new skills. 1-----2-----3-----4-----5

17. Players are encouraged to challenge themselves in their activities. 1---2---3---4---5

18. All players have an important role. 1-----2-----3-----4-----5

19. All players are made to feel apart of the team. 1-----2-----3-----4-----5

20. Only the most skilled players get noticed. 1-----2-----3-----4-----5

Appendix F
Intrinsic Motivation in Sport Questionnaire

Instruction: Indicate how true you feel each statement is from 1 (Strongly Disagree) to 7 (Strongly Agree).

1. I put a lot of effort into baseball.	1-----2-----3-----4-----5-----6-----7
2. I enjoy baseball very much.	1-----2-----3-----4-----5-----6-----7
3. I think I am pretty good at baseball.	1-----2-----3-----4-----5-----6-----7
4. It is important to me to do well in baseball.	1-----2-----3-----4-----5-----6-----7
5. Participating in baseball is fun.	1-----2-----3-----4-----5-----6-----7
6. I am very satisfied with my performance in baseball.	1-----2-----3-----4-----5-----6-----7
7. I tried very hard in baseball.	1-----2-----3-----4-----5-----6-----7
8. I would describe baseball as interesting.	1-----2-----3-----4-----5-----6-----7
9. After participating in baseball for awhile, I felt pretty confident.	1-----2-----3-----4-----5-----6-----7
10. I don't try very hard.	1-----2-----3-----4-----5-----6-----7
11. While playing baseball, I think about how much I enjoy it.	1-----2-----3-----4-----5-----6-----7
12. I am pretty skilled at baseball.	1-----2-----3-----4-----5-----6-----7
13. I am not very good at baseball.	1-----2-----3-----4-----5-----6-----7

Appendix G
Interview Guide

Interview Guide

First, before starting thank you for participating in this interview. Your responses will be kept confidential, and I just ask that you respond honestly to each question.

Warm up

How did you come to play baseball? Could you give me a brief history of you experiences in baseball to this point?

General Questions

1. How long have you been playing for this team?

2. How are you performing so far this season? Would you say your best possible season, about what you expect, below expectation?
*Probe-could you elaborate as to why you feel this way?

*Probe-how do you define success in baseball? How has this changed since you have come to play in the minor league?

Goals are something that you may or may not write down, but they are things you want to accomplish. This will then affect goals that you actually set for yourself in practice and games. Some elite athletes set goals and some don't. What about you-do you ever set any goals?(1)

3. Have you ever had a coach help you or your teammates formally set goals? If so can you tell me a little bit about how they did this and how it went?
*Probe-How did they help you? Did they encourage you to write them down? How often did he remind you of them?

*Probe-If not formally, have they ever encouraged you to set them at all?

4. What goals have you set for yourself so far this season?

5. What goals do you set for practice?

*Probe-How or when do you decide when your goals for practice need to change?

6. What goals do you set for games?

*Probe-Do you change your goals for games and practice and if so why?

7. What goals do you set for games that you may think are more important, for example play-off games?

In our research we find that athletes set goals where they focus on learning and developing skills, and others set goals to out perform their competitors. Some set one or the other, some set both, and some don't seem to do either What do you feel you do? (Setting up task and ego) (1)

8. Can you tell me a little about if and when you use these types of goals?
*Probe-If they only give one, ask if they use the other.
*Probe-Can you give me an example of when you would use this type of goal?

9. Researchers in our field are now looking at the possibility that athlete may use a combination of the two. For example, they are finding that some athletes will report a high tendency to focus on individual improvement and a moderate tendencies to out perform their competitors. There can be many different combinations. What do you think you do?

10. Do you think you have a tendency to have a high/moderate/or low focus on individual improvement and developing skills? How about high/moderate/or low focus on out performing your competitors? What combination do you think is ideal to be a successful baseball player and why?

11. Can you explain when your focus might shift form one to the other type, from improving skills to outperforming others?

12. On the questionnaire that you filled out, you scored a mean of _____ on the items that represent individual improvement, and a mean of _____ on the items that represent

outperforming competitors. This may suggest that you are more likely to focus on _____. Do you feel this is accurate?

Now we are going to shift gears a little bit. We have also found that the types of situations or environment an athlete is in will influence the types of goals they set. (2)

13. Can you tell me about what type of environment your coaches set?
*Probe-How does this affect the goals you set?

14. How do your teammates influence you?
*Probe-Do they set goals and if so how does this influence you?
*Probe-If they don't set goals, does their performance influence the goals you set?

15. How has your past sport experience influenced the goals you set?

16. Can you tell me about anyone else that has helped you or influences how you set goals?
*Probe-Is there anyone else that helps you set goals, for example a significant other, or in the past parents or siblings?

17. Is there anything else you would like to add about anyone or anything that influences how you set goals?

18. Does your coach shift or change his focus from developing and improving to outperforming others or is he one way all the time?

*Probe-what circumstances do you think a coach should promote focusing on developing and improving?
*Probe-what circumstances do you think a coach should promote focusing on outperforming others?

18. What do you think is important for players to focus on when they are younger to get to the point you are today?