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Is Achievement Motivation in Basketball Games Affected by Team or Individual Competitive Situations in Elementary Physical Education Classes?

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Is achievement motivation in basketball games affected by team or
individual competitive situations in elementary physical education classes?
(TITLE)

BY

Adam C. Lane

1970 -

THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF

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IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY
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1999

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I HEREBY RECOMMEND THIS THESIS BE ACCEPTED AS FULFILLING
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ABSTRACT

This study examined the relationship between skill, setting and gender. There were three main purposes for conducting this study. The first was to determine whether a child's achievement motivation changes when participating in a team setting compared to an individual setting. The second purpose was to determine and compare any differences between boys' and girls' achievement motivation, in both team and individual settings, and thirdly, to determine and compare any differences between the achievement motivation of high-skilled and low-skilled children, in both team and individual settings. Subjects were administered the Sport Orientation Questionnaire, (Gill and Deeter, 1988), which assesses competitiveness, win-orientation and goal-orientation. Subjects in this study included a total of 117, (70 female, 47 male), 5th and 6th grade students at Jefferson Elementary School in Charleston, Illinois. Participants were categorized into high and low skill ability, (66 high skilled and 51 low skilled participants). Each student completed the Sport Orientation Questionnaire twice, once for team setting and once for individual setting. Students completed the SOQ, referring to feelings about team basketball competition, after four classes involving five-on-five basketball games. Students completed the SOQ a second time after four classes, which were structured on one-on-one competition. In regards to the primary hypothesis, it was determined that a child's achievement motivation does change when participating in a team setting compared to an individual setting. Results using a 3 way MANOVA indicated six significant differences: 1. Boys are more competitive than girls. 2. High-skilled children are more competitive than low-skilled children. 3. High-skilled children prefer to compete in an individual setting while low-skilled children prefer to compete in a team

setting. 4. Both genders and skill levels have a stronger desire to win in a team setting compared to an individual setting. 5. Low-skilled children possess a higher motive to accomplish personal goals in a team setting compared to an individual setting. 6. High-skill participants possess a higher motive to achieve personal goals than low-skilled participants.

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CHAPTER I

INTRODUCTION

Not everyone approaches an achievement situation with the same enthusiasm. Some individuals possess an abundance of motivation to enter an achievement situation, while others hate the thought of entering an achievement situation. Examples of different levels of motivation are seen in daily physical education classes. Two boys approach a basketball game, one boy happily joins in and becomes active in team selection, competition, skill development, and socialization while the other boy drops out and fears participation. Individual differences in achievement motivation are easily observed, and the investigation of individual differences in achievement orientation should provide direction in developing achievement motivation (Gill et al., 1988).

The study of maximizing motivation has long been a major research concern (Duda et al., 1992; Ntoumanis & Biddle, 1998; Seifriz et al., 1992). Understanding why individuals differ in their approach to an achievement situation and knowing what he/she expects to gain from the situation will help teachers and coaches provide positive experiences for everyone. Nicholls (1984; 1989) stated that people identify with two goal perspectives, task-orientation and ego-orientation and that these perspectives influence how individuals explain ability, judge performance, and define success (Nicholls, 1984, 1989). Task-oriented individuals tend to perceive ability as a function of personal improvement as opposed to how others perform, where as, ego-oriented individuals tend to judge success by comparing their ability with the performance of others (Nicholls, 1984, 1989).

Gill and Deeter (1988) developed The Sport Orientation Questionnaire, which measures achievement motivation through three subscales; competitiveness, which is a disposition to strive for satisfaction; win-orientation, which is associated with ego-oriented individuals and their focus on outcome; and goal-orientation, which is associated with task-oriented individuals and their desire to work hard and achieve goals (Gill & Deeter, 1988).

Regardless of the activity, individuals in a physical education class perform in two different settings, a team setting, or an individual setting. The Sport Orientation Questionnaire determines which setting provides for higher achievement motivation and if the setting will influence a certain goal orientation. A child may choose one orientation over another based on the setting and what is emphasized, skill development or victories. Children are more likely to be enthusiastic about participating in achievement-related activities when they find these activities enjoyable and absorbing. The present research suggests that fostering a task-oriented interpretation of success would provide for a more satisfying experience and prolonged involvement in sport (Duda, et al., 1992, Vlachopoulos, Biddle, & Fox, 1996.)

Purpose of Study

There were three main purposes for conducting this study. The first was to determine whether a child's achievement motivation changes when participating in a team setting compared to an individual setting. Achievement motivation was measured through three sub-scales on the Sport Orientation Questionnaire (Gill & Deeter, 1988); competitiveness, win-orientation, and goal-orientation. The second purpose was to

determine and compare any differences between boys' and girls' achievement motivation, in both team and individual settings, and thirdly, to determine and compare any differences between the achievement motivation of high-skilled and low-skilled children, in both team and individual settings.

Importance of the Study

Nicholls (1984, 1989) stated that individuals identify with two independent goal perspectives, a task-orientation or an ego-orientation. It has also been shown that learning environments also can be task or ego-oriented (Ames & Archer, 1988; Ntoumanis & Biddle, 1998; Seifriz et al., 1992). A task-oriented environment, which emphasizes skill development, would encourage an individual to strive for personal goals. An ego-oriented environment, which emphasizes final win/loss outcomes, would encourage an individual to strive for focusing on outcome. The type of setting in which an individual performs may be as important as the type of orientation the individual possesses. In physical education, individuals participate in two types of settings, a team setting or an individual setting. This study was designed to determine which setting influences which type of orientation, and if there is any difference in achievement motivation between the two settings.

Participants for this study ranged between ten and twelve years of age. No data has been collected from children ages 10-12 regarding goal orientations and how both children and goal orientations are affected by different settings. Once a child reaches the age of eleven or twelve, they exhibit either a task or ego-orientation, depending on the situation at hand (Duda, 1987; Nicholls, 1984). Situations are characterized by the type of environment the individual is exposed to during physical activity and whether personal

performance or final outcomes are emphasized. Knowing how a certain performance setting can influence orientations at this age level, teachers and coaches can influence children to possess an orientation that will provide a positive, enjoyable experience.

Individuals in this study were classified as male or female and high-skill ability or low-skill ability. Motor ability and gender may interact with the performance setting and influence levels of achievement motivation. An individual's performance goal and expectations are two factors that determine why or how a person enters an achievement situation (Ames & Archer, 1988; Nicholls, 1984, 1989). Duda (1989) stated that an individual's goals and expectations are consistent with his or her views about achievement activity and type of orientations. With this understanding, teachers and coaches can provide positive experiences involving physical activity to the whole student population. These positive experiences will help increase an individual's achievement motivation, which will hopefully lead to an active lifestyle. As professionals, we play a significant role in providing climates that will enhance achievement motivation and allow for individuals to develop a positive attitude toward physical activity..

Hypothesis

There were several hypotheses within this study. Specifically, these hypotheses were:

1. Males will score higher than females on the sub-scales of competitiveness and win-orientation, regardless of competitive settings.
2. Females will score higher than males on the sub-scale of goal-orientation, regardless of competitive settings.
3. Higher skilled individuals will score higher than low skilled individuals on all three Sport Orientation Questionnaire sub-scales.

4. Competitiveness will be the most significant orientation difference between males and females, and high skill – low skill individuals
5. Individuals in a team setting will score higher in win-orientation and competitiveness, while individuals in an individual setting will score higher in goal-orientation.

Delimitations

This study was delimited in the following ways. The study was conducted during physical education classes at Jefferson Elementary School in Charleston, Illinois. The Charleston community does not attract people from various ethnic backgrounds, therefore the majority are Caucasian. The participants in this study were 117 fifth and sixth grade students, ranging from ten to twelve years of age. The participants consisted of forty-seven males, seventy females and were divided into sixty-six high-skilled and fifty-one low-skilled individuals. Participants were not aware of their skill classification. All the individuals participated in the class activities, but only those individuals returning a signed permission form were used as subjects for this study.

Limitations

Possible limitations to this study included grouping of participants and whom each individual was matched against when participating. During team basketball competition the teams consisted of both males and females, and were assigned by the instructor. During the individual basketball competition, the participants had the choice to challenge whoever they wanted, as long as they were of the same gender. To add variety, each student could not play the same person more than once. Regardless of the setting, team or individual, a student's actions and thoughts may differ depending on the opponent against whom the individual is matched. For example, a child may react differently when

matched with a close friend as opposed to a member of the opposite sex or stranger.

Each student participated in the team competitive setting first followed by the individual competitive setting. The feelings established during the team competitive setting may have affected results from the individual competitive setting.

Assumptions

For the purpose of this study, the following assumptions were made:

The subjects answered all questions honestly and to the best of their knowledge, the subjects understood how to fill out the questionnaire properly and the subjects understood the meaning of all vocabulary used in the questionnaire.

Definition of Terms

1. Achievement Motivation: An athlete's predisposition to approach or avoid a competitive situation.
2. Achievement Situation: A condition or expectation that one's performance will be subject to evaluation.
3. Task-Orientation: The tendency to perceive success as a function of personal ability and improvement as opposed to how others perform.
4. Ego-Orientation: The tendency to view success relative to the performance of others.
5. Motive to achieve success: An athlete's intrinsic motivation and self-confidence to engage in an interesting and exciting activity.
6. Perceived Ability: The self perception of how well an individual can perform a motor task.
7. Sport Orientation Questionnaire: A multi-dimensional questionnaire that measures achievement motivation through three sub-scales; competitiveness, win-orientation,

and goal-orientation (Gill & Deeter, 1988). The following three definitions pertain to the sub-scales on the Sport Orientation Questionnaire.

8. Competitiveness: A disposition to strive for satisfaction when making comparisons with some standard of excellence in the presence of evaluative others in sport.
9. Win-Oriented: The desire to win interpersonal competitive sporting events.
10. Goal-Oriented: The desire to reach personal goals in sport.

CHAPTER II.

REVIEW OF RELATED LITERATURE

Introduction

Several boys are asked to play a competitive game of basketball. One might set a personal performance goal, another might challenge a friend, or just play to satisfy the coach, and yet another might drop out after a few minutes. Some children eagerly approach all competitive challenges; others play to reach personal goals, while others dread the thought of being involved in a competitive situation. There seem to be divisions between children's motivation levels toward activities, whether the child is in a physical education class, a structured sporting event, an athletic practice, or unstructured play. These differences in behavior toward participation reflect individual differences in achievement motivation.

Individual differences in achievement motivation are easily observed, and the investigation of individual differences in achievement orientation should provide direction in controlling achievement motivation (Gill, et. al., 1988). Identifying individual differences in achievement motivation has been a major research interest in sport psychology (Duda, 1989; Nicholls, 1984; Nicholls, et. al., 1989; White & Duda, 1994). There are influencing factors that lead to different levels of achievement motivation. This study will examine the two perspectives individuals prefer, task-orientation and ego-orientation, along with the individual's level of competitiveness.

Numerous individual factors that contribute to different levels of motivation such as gender, skill level, and the competitive setting have been compared (Gill, 1988; Seifriz, et. al., 1991). Gill (1988) investigated the motivational levels of males and

females as they participated in both a competitive setting and non-competitive setting. Males reported higher motivation levels in competitive settings than females. However, females were as likely as males to participate in a non-competitive sports setting (Gill, 1988).

Seifriz, et. al. (1991) investigated the relationship of perceived motivational climates to intrinsic motivation in male high school basketball players. A higher level of intrinsic motivation was detected in participants performing in a task-oriented setting compared to an ego-oriented setting. High levels of intrinsic motivation and enjoyment can occur easily in both high and low performance settings (Seifriz, et. al., 1991). Environmental factors such as goal setting, reinforcement and evaluation techniques also play a role in what motivates individuals. These factors can explain goal-orientation, win-orientation and competitiveness, which affect achievement motivation.

Achievement Motivation

Achievement motivation is the drive to experience pride in accomplishment or to strive for success in varied achievement situations (Atkinson, 1974). Achievement motivation was classified by Murray (1938) as a personality disposition, with the need to achieve as the desire to accomplish something difficult. It is the individual's drive to master, manipulate or organize physical objects, human beings, or ideas and to do this as rapidly and as independently as possible. The individual will attempt to overcome obstacles and attain a high standard, to excel one's self, and to rival and surpass others. In doing so the individual increases self-confidence by the successful exercise of talent (Murray, 1938). Understanding individuals and their achievement motivation level can help the student and teacher/coach better control the situation with which they are faced.

If a student's achievement motivation is directed toward personal goals then the instructor should direct feedback toward specific skill improvement, such as dribbling, passing, and shooting.

The topic of maximizing motivation has long been a major concern of many researchers (Duda, et. al. 1992; Ntoumanis & Biddle, 1998; Seifrez, et. al., 1992). Understanding an individual's level of achievement orientation will help to explain how he/she will approach an achievement situation. The goal in achievement settings is to demonstrate high ability level and achieve some type of success. In an achievement situation an individual expects his/her ability, performance, and success to be evaluated. People have different meanings and criteria when determining level of ability, performance and success. Hard work, effort and mastery of a skill may define success for some individuals, while others require scoring more points or defeating an opponent to experience success. The reason an individual enters an achievement situation depends on personal outcomes and the individual's purpose for being in the situation (Duda, et al. 1995).

There are three theories that have evolved within sport psychology to explain achievement motivation; attribution theory, achievement goal theory and need achievement theory. Attribution theory, originated by Heider (1958), focuses on what people contribute their successes and failures to (Weinberg & Gould, 1995). There are three basic categories that are possible explanations for successes and failures - stability, causality and controllability. In physical education class a student succeeds in a basketball game and he/she can contribute this success to: 1) A stable factor (ability), an unstable factor (good luck); 2) An internal cause (hard work), an external cause

(opponent's low skill ability) or 3) A controllable factor (strategy) or an uncontrollable factor (the opponent's work ethic). Physical Education teachers can assist in maintaining student motivational levels by monitoring student explanations for success and failure, and by teaching students to re-attribute negative attributions when appropriate.

The Achievement Goal Theory focuses on achievement goals as a way for understanding achievement motivation levels (Duda, 1987; Nicholss, 1984). To understand someone's motivation, it must be understood what success and failure mean to that person (Weinber & Gould, 1995). In physical education class Tony practices his basketball skills because he wants to win prizes and be the best player in the school. He has adopted an outcome goal orientation, where he focuses on comparing his abilities to the abilities of his classmates. Jason practices his basketball skills because he wants to improve his shooting percentage and ball handling. He has adopted a task goal orientation, where the focus is on improving his skills compared to past efforts. A task-orientation is most beneficial for the development of a positive self-image and demonstrate high perceived competence (Nicholls, 1984; Roberts, 1992). Physical educators can monitor and adjust goal orientations to assure a positive experience for all participants.

The Need Achievement Theory, developed by Atkinson (1974) and McClelland (1961), focuses on the integration of both personal and situational factors as predictors of achievement motivation (Weinberg & Gould 1995). Personal factors refer to one's motives to achieve success and avoid failure. John will not enter a basketball game if his chances of failing and suffering from humiliation are stronger than his chances of succeeding and being rewarded. Situational factors refer to whom one competes against

and the level of difficulty for the task at hand. John is a good foul shooter and a terrible ball handler. He would feel motivated to challenge a student of the same ability level to a shooting contest compared to a dribbling race. Physical educators can control the performance setting and skill level of difficulty in making sure the odds of succeeding are higher than the odds of failing.

Task and Ego-Orientation

Research shows that people identify with two independent goal perspectives. One is a task-orientation; the other is the ego-orientation (Nicholls, 1984, 1989). These two goal perspectives are what influence how individuals explain ability, judge performance, and define success. Past research with American students, ranging from early elementary grades through college, support existence of a task and ego-orientations (Nicholls et al., 1985, 1989, 1990; Thorkildsen, 1988). Individuals are motivated based on their expectations of what they can do, as well as the consequences they perceive for their actions.

A task-orientation is associated with a mastery goal-orientation, while an ego-orientation is associated with a win-orientation. If an individual perceives his/her success due to superior ability, then this individual would approach an achievement situation to receive recognition for winning or performing better than others in the class, and is win-oriented. In contrast, if an individual is concerned with learning and performance improvements then he/she would participate for skill development and social interaction, and is goal-oriented (White & Duda, 1994). These dispositional goal perspectives are independent and not related in a bipolar fashion. It is therefore possible for an individual to have a dominant orientation or to be high or low in both (Duda et al, 1992).

An individual with a task-orientation has an interest in the activity for its own sake and the individual's actions are directed toward achieving mastery, learning, and perfecting the task at hand (Nicholls, 1984, 1989). Task-oriented individuals judge their previous ability based on their past levels of performance, and they feel successful when developing skills, learning new skills, and demonstrating mastery of a task. This is a self-referenced assessment (Fox, et al., 1992; Vlachoulos et al., 1996). An individual with an ego-orientation directs his/her actions toward exceeding the performance of others and is focused on outcome. This individual is focused more on social comparison, and success is when one's own performance exceeds that of others on a normatively challenging task (Duda, 1989; Ntoumanis & Biddle, 1998). An individual with this type of orientation would be more concerned with the final outcome of the game than improvement of physical skills.

An individual who perceives achievement strivings as a means to an end would concentrate on the final outcome of the activity and expect to gain wealth and status from the activity. On the other hand, an individual who perceives achievement strivings as an end to a mean would focus more on social skills, learning and mastering the skills at hand. When an individual is ego-oriented, achievement strivings are experienced as a means to an end. A task-oriented individual's achievement strivings are experienced more as an end to a means (Duda et al. 1992; Ommundsen & Roberts, 1996).

The goals an individual establishes have a drastic effect on the quality of motivational level, which affects behavioral, cognitive, and affective outcomes. The influence of situational variables and personal disposition differences on goal perspectives are involved with whether an individual's goals will be related to a task or ego orientation

(Duda & Nicholls, 1992; Nicholls, 1989; Thorkildsen, 1988). The physical educator can control situational variables and influence goal orientations through various forms of feedback and knowing which behaviors are associated with each goal orientation. Task orientation is associated with adaptive motivational patterns, such as challenge seeking, use of effective strategies and the use of high effort. Ego-orientation is associated with maladaptive motivational patterns, such as, lack of effort, lack of persistence, and selection of inappropriate task (Seifriz, et al., 1992; Vlachopoulos, et. al., 1996).

Task and ego goal orientations have been shown to predict beliefs about the causes for success in physical activity, views about the purposes of physical activity involvement, and motives for participation. Duda (1989) examined the relationship between an athlete's goal perspective and the perceived purpose of sport, among male and female high school athletes. White and Duda (1994) studied male and female youth, high school, intercollegiate, and recreational sports participants finding similar results to Duda's (1989) results which found ego-oriented individuals tended to emphasize competition and recognition as reasons for participation, while task-oriented individuals tended to stress the participation motives of skill development and general fitness. If professionals understand what outcomes an individual is hoping to achieve, coaches and teachers can better cater to children's performance needs and help them achieve.

Part of understanding an individual's achievement motivation is in knowing what that individual expects to gain from his/her experience. Task and ego-oriented individuals have different reasons for entering an achievement setting and they also have different beliefs toward what they should gain or learn, as an outcome, from the physical education class or athletic event. Athletes high in task orientation tend to believe that

sports should teach people the value of trying one's best, cooperating with others, following the rules and being a good sport (Duda, 1989; Duda, et al., 1992; Ommundsen & Roberts, 1996; Swain, 1996). An individual with task-orientation would expect physical activity to provide practice for being honest, respectful and prove your behaviors make you a good citizen. Through sport participation, these individuals would expect to gain self-esteem, while adapting and maintaining a desire for sports and exercise that will provide a physically active lifestyle (Duda, 1989; Ommundsen & Roberts, 1996).

An ego-oriented goal perspective would expect to gain recognition, social status and a sense of self-importance. Ego-oriented individuals would compete for the sole purpose of gaining a prize or some type of reward for participating. To show the ability to attain superiority among others is also very important. Knowing what a person expects to gain from physical activity improves the ability of the teacher/coach to provide a positive experience for everyone.

Competitiveness

The level of competitiveness an individual possesses is also an orientation factor when determining an individual's achievement level. Competitiveness is defined as a disposition to strive for satisfaction when making comparisons with some standard of excellence in the presence of evaluative others in sport (Martens & Gill, 1976).

Competitiveness is a strong influence on an individual's choice to enter a competitive sport situation. Athletes who are highly motivated or competitive are more likely to play hard and rarely admit to defeat (Gill, 1986; Lock & Latham, 1985). Platow and Shave (1995) examined levels of cooperation and competition in high school and university

athletes and determined that individuals with high competitive social values scored higher on overall achievement motivation.

The goal orientation an individual possesses does determine their competitiveness. Individuals with a high ego orientation and those who have perceptions of low competence are thought to be more susceptible to the stress and anxiety of competition. Winning and losing in sport are highly unstable and have relatively uncontrollable objective demands and, thus can create negative affective states in athletes (Roberts, 1992). Individuals possessing task orientation are usually not susceptible to competitive anxiety, because they have internal standards of performance and the outcome they strive for is subjective and relatively controllable (Roberts, 1992).

The relationship between cooperative and competitive values and achievement motivation is another area that has been studied and can help the individual gain positive competitive experiences (Knight & Dubro, 1984; Platow & Shave, 1995). Children with competitive social values scored higher in achievement motivation than children with cooperative social values, but only in the absence of moderate to high levels of affiliation motivation, which is defined as the desire to “enjoyably cooperate” or enjoy working with others toward a specific goal (Murray, 1938).

It can be concluded that win or goal-oriented individuals who strive for personal improvement might have to adapt competitive strategies to attain their goals. An individual who strives to improve at a skill will need a certain level of competitiveness to perform at a higher level. Thus, when developing work and educational settings, for example, emphasis on creating goal structures that include competitive motivational orientations may be necessary to the goal of successful task mastery and work

performance (Aronson, et al., 1978). As mentioned above, mastery relates to an individual's desire to partake in tasks that are challenging and difficult, and work performance relates to an individual's enjoyment of hard work.

Age

A major factor associated with achievement motivation is the way an individual perceives his/her own ability. Perceived ability refers to an individual's self-confidence regarding successful performance of a skill (Poole et al., 1996). Perceived ability has been shown to change with age (Nicholls, 1984; Poole et al., 1996; White & Duda, 1994).

Young children judge their ability based on past performance. At a later age, ability is judged relative to the performance of others. From the age of two to six a child's perceived ability is based on how well he/she performed the skill last time. If a child notices a performance improvement from one attempt to another, he/she assumes ability has improved and that success is taking place (Duda, 1987; Nicholls, 1984). This process is related to a task or performance-oriented individual. Once a child reaches the age of six or seven, the child judges their performance against the performance of others in the class. No longer is it enough to perform the task better than the last time, the child must now perform the task better than the other children in the class (Duda, 1987; Nicholls, 1984). This process is related to an ego or win-oriented individual.

A child's ability to match perceived ability and actual performance increases with age and is fairly equal at the age of six or seven (Poole et al., 1996). Children at this age begin a transition from reliance on adult feedback to a comparison of skills with classmates or friends as a main criteria for judging their ability. As children develop, their achievement motivation and goal orientations go from a task-orientation to an ego-

orientation, but as they mature as athletes they integrate these orientations. There is a greater emphasis on performance outcomes and evaluation as the child progresses through the school system.

The age level targeted in the present study is between ten and twelve. Once a child reaches the age of eleven or twelve, they may exhibit either a task or ego-orientation, depending on the situation at hand (Duda, 1987; Nicholls, 1984). Situation at hand refers to the type of activity being conducted, competitive or cooperative, and if feedback is directed toward skill development or final game results. Teachers and coaches can influence children to a great degree to possess either an ego or task-orientation. This age group has not been researched regarding orientation. It could prove to be a crucial time in the future development of the child.

Gender

Although more girls and women participate in sports today than ever before, males still predominate, and we often expect males to be more active participants and more avid competitors (Gill, 1988). Several researchers (Duda, 1989; Duda, et al., 1991; Gill, 1998; Gill, et al., 1991; Gill & Deeter, 1988; Kang, et al., 1992) concluded that males are more win-oriented and competitive than females, and females are more goal-oriented than males. Duda, et al., (1992) examined British boys and girls to determine the interrelationship between children's goal orientations and beliefs about success in sport, along with factors that determine enjoyment of sport activities. Duda (1992) indicated that the boys were more ego-oriented and reported greater positive attitude towards sport than the girls. Boys were more likely to believe that motivation, ability, and external factors result in sport success than girls (Duda, et al., 1992).

Gill (1988) investigated gender differences in competitive achievement orientation and sport participation in both male and female high school physical activity classes. All participants completed the Sport orientation Questionnaire, Work and Family Orientation Questionnaire and Sport Competition Anxiety Test. Results showed that males scored higher than females on competitiveness and win-orientation, but scored lower than females on goal-orientation. Findings also showed that males enter an achievement situation for the competitive sport where as females enter for the enjoyment of the sport (Gill, 1988).

A study done by White and Duda (1994), showed males are more ego-oriented and females more task-oriented across a large age range including youth, high school, inter collegiate, and recreational participants. Individual differences in goal perspectives were measured by administering the Task and Ego Orientation Questionnaire. While answering the 13 questions, subjects were requested to think of when they felt most successful in sport. It was found that males enjoy and have a greater desire to participate in competitive sports, while females show greater achievement motivation toward non-sport activities or cooperative games (White and Duda, 1994).

Skill Level

Research has shown a more thorough examination of elite athletes, or higher skilled individuals than lower skilled individuals. Some studies showed that athletes were higher than non-athletes on all three Sport Orientation Questionnaire (SOQ) scores, with competitiveness being the major discriminator (Gill, et al., 1988; Gill, et al., 1991). Gill, Dzewaltowski, and Deeter, (1988) studied high school and university students, specifically examining correlation's of SOQ scores to discriminate participants and non-

participants in competitiveness scores to be the strongest discriminator between competitive sport participants and non-participants. This is due to the increased confidence gained from properly performing various skills during competitive situations.

In another study conducted by Gill, (1988), it was established that athletes scored much higher than non-athletes on performance orientation and lower on outcome orientation. Athletes or highly skilled performers seem to score higher in goal-orientation and competitiveness, with win-orientation scores being similar. All of these studies determined that competitiveness was the major discriminator, meaning that there is a large difference between athletes and non-athletes with their desire to compete (Gill, 1988; Gill, et. al., 1988; Gill, et. al., 1991).

A major factor used to determine differences between high and low skilled athletes is their level of perceived ability. Perceived ability refers to an individual's self-confidence regarding successful performance of a skill (Poole, et al., 1996). Perceived ability affects motivation, in that children who are confident about their ability will choose to be more active, display greater effort, and most likely persist in sport and physical activities (Weiss, 1993). In the class setting it is usually found that the higher skilled individuals perceive their ability to be higher than lower skilled athletes do. This perception will allow higher skilled individuals to enter into an achievement situation with more confidence than lower skilled athletes.

Setting

While numerous research articles have examined goal orientations in physical activity, only during the last six years have researchers investigated the impact of different environmental settings and their impact on achievement motivation (Ntoumanis &

Biddle, 1998; Seifriz et al., 1992; Swain, 1996). When examining achievement motivation, the area of team and individual environmental settings has not been studied.

The type of setting in which an individual performs may be as important as the type of orientation the individual possesses. Learning environments also can be task or ego-oriented. A mastery climate would be associated with task-orientation, whereas, a performance orientation would be associated with ego-orientation (Ames & Archer, 1988; Ntoumanis & Biddle, 1998; Seifriz et al., 1992). Cry, (1996), mentioned that,

“Individuals who use effort as a criterion to judge their competence are more likely to select a sport climate which emphasizes and rewards effort. In contrast, athletes who value winning and inter-individual comparison will prefer to belong to sport teams which glorify winning and pay most attention to the stars” (Ntoumanis & Biddle, 1998).

Seifriz, Duda, and Chi, (1992), investigated the relationship of perceived motivation climate to intrinsic motivation and attributional beliefs in a sport setting, examining different high school basketball teams. Findings showed that players who perceived team climates that were characterized by a focus on personal improvement, trying one's best, and maximal participation, enjoyed playing basketball more. The experience was more enjoyable, allowing people to feel competent and personally successful, because determinants of achievement are self-referenced. These results suggest that a goal-oriented environment is more pleasing to individuals than a win-oriented environment. Goal-oriented environments are more conducive to people feeling competent and successful, because determinants of achievement are self-referenced and based on intrinsic, controllable factors (Ames & Archer, 1988; Duda, 1989; Seifriz et al., 1992), which results in an independently less stressful competitive environment. Individuals in a win-oriented environment may become frustrated and drop out of sport because

determinants of achievement are perceived as external factors that are determined by other individuals' performance (Ames & Archer, 1988; Seifriz et al., 1992).

Based on previous research, it is difficult to determine how individual goal-orientations will be affected from a team competitive setting to an individual competitive setting. Previous research has determined a goal-oriented environment will provide a more meaningful experience, encouraging personal success. Teachers and coaches can provide a positive environment that will involve all goal-orientations, resulting in a memorable and successful experience for students and athletes. Win-orientation would require that the performer must finish first in their group to demonstrate adequacy of his or her ability. This means that only one individual per group can experience success, while the others experience failure (Vlachopoulos et al., 1996). If a goal-oriented environment is provided, everyone can experience success because everyone has the ability to improve. If success is experienced from the child's involvement in physical activity during childhood, it is more likely he/she will lead a physically active adult lifestyle (Haywood, 1991). This is extremely important, because preparing youth for a physically active adulthood is one of the primary goals of physical education and sports programs, and understanding an individual's goal orientation will help us reach this goal.

Physical educators and coaches have the ability to cultivate a task-oriented environment and allow participants to recognize that physical activities should teach people to try their best, obey the rules and become model citizens (Duda, 1989). Participants can be taught how to feel successful and why to attribute their outcomes to reasons perceived as internal and controllable, allowing the individual to control their own destiny. If physical educators ensure that a motivational climate has been

established, than participants are provided with opportunities to derive positive affective experiences from physical activity.

CHAPTER III.

METHODOLOGY

This study examined achievement motivation through three sub-scales of the Sport Orientation Questionnaire (Gill & Deeter, 1988); competitiveness, win-orientation and goal-orientation, as a function of gender (boys and girls) and skill level (high and low) and setting (individual and team). This study also determined any motivational differences between boys and girls, and between high and low skill level students in both an individual setting and team setting.

Subjects

Subjects in this study included a total of 117 5th and 6th grade students at Jefferson Elementary School in Charleston, Illinois. There were 70 female students and 47 male students who participated in this study. The participants were categorized into high and low skill ability, consisting of 66 high skilled and 51 low skilled participants.

Instrument

Subjects were administered the Sport Orientation Questionnaire, developed by Gill and Deeter (1988). The Sport Orientation Questionnaire is a 25-item self-report instrument that is composed of three sub-scales measuring competitiveness (13 items) with a range of 65-13, win-orientation (6 items) with a range of 30-6, and goal-orientation (6 items) with a range of 30-6. The competitiveness sub-scale measures the desire to enter a competitive sport situation and strive for success. The win-orientation sub-scale measures the desire to win during a competitive situation and the goal-orientation sub-scale measures the extent to which one's motive is to accomplish personal goals in competition.

The participants answered each item based on a 5 point Likert Scale. The participants chose from this range of responses: “strongly agree = 5,” “slightly agree = 4,” “neither agree nor disagree = 3,” “slightly disagree = 2,” and “strongly disagree = 1.” To obtain the three sub-scores the responses were totaled as follows: competitiveness items were 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23 and 25. Win-orientation items were 2, 6, 10, 14, 18, and 22. Goal-orientation items were 4, 8, 12, 16, 20, and 24. Gill (personal interview, 1999) indicated that the Sport Orientation Questionnaire was appropriate for this age population.

A copy of the Sport Orientation Questionnaire was given to each class’s homeroom teacher for review, to assure the reading level and comprehension was appropriate for this age level. Each homeroom teacher reviewed the questionnaire and discussed with their class any vocabulary that might have been questionable. The classroom teachers also used various examples to explain the differences between the answers “strongly agree,” “slightly agree,” “neither agree nor disagree,” “slightly disagree,” and “strongly disagree.”

The overall factor of stability, reliability and validity evidence suggests that the Sport Orientation Questionnaire has been proven as a valuable measure for the investigation of competitiveness and achievement orientation in sport and exercise settings (Gill & Deeter, 1988). The three separate but related sub-scores also demonstrate high internal consistency and stability over time (Gill & Deeter, 1988). Internal consistency measures and test-retest correlations were calculated to determine reliability. The test retest correlations that established reliability were as follows; competitiveness $r = .89$, win-orientation $r = .82$ and goal-orientation $r = .73$. Correlations among SOQ and WOFO

(Work and Family Orientation Questionnaire) scores were examined to determine relationships and assess validity. Alpha coefficients for internal consistency results were competitiveness .95, win-orientation .86 and goal-orientation .80 (Gill & Deeter, 1988).

Procedures

Permission was obtained from the assistant superintendent of the Charleston Community School District (Appendix A) before any type of data collection was undertaken. A consent form, explaining the purpose of this study and procedures that would be taken, was sent home with each student (Appendix B). The letter had to be signed by a parent or guardian and then returned to the instructor.

Each student participating in the research study completed the Sport Orientation Questionnaire twice, once for team setting (Appendix C) and once for individual setting (Appendix D). The first assessment asked students to reflect on feelings associated with team competitive basketball and the second referred to feelings associated with individual, one-on-one competitive basketball. Before completing the questionnaire the first time the students participated in four thirty-five minute class periods involving a series of five-on-five competitive basketball games. At the end of the fourth class period the students completed the Sport Orientation Questionnaire, referring to their feelings about competing in team basketball for each question.

Before completing the questionnaire the second time the students participated in four thirty-five minute class periods involving a series of one-on-one competitive basketball games. At the end of the fourth class period the students again completed the Sport Orientation Questionnaire referring to their feelings about one-on-one competitive basketball games. All participants completed the Sport Orientation Questionnaire

reflecting on team competition after completing the first four thirty-five minute class periods and then all participants completed the (SOQ) referring to individual competition after the second four thirty-five minute class periods. This was to assure all participants were reflecting on the appropriate setting at the same time.

High skill ability and low skill ability were determined by a series of passing, shooting and dribbling skill tests. The three skill tests were graded on a scale of 4 to 1, with an overall average of 4 or 3 resulting in a high skill classification and an overall average of 1 or 2 resulting in a low skill classification.

During each skill test the student was given one point for effort and participation and one point for each of the three specific criteria evaluated by the instructor during performance of the skill. Points were awarded during the passing test for proper shuffling of the feet, arm force generated during the pass, and accuracy of location of the pass for retrieval. The shooting test was evaluated by foul shooting, which included the release of the ball, the arc of the ball and total number of shots made. The dribbling test was based on ball control using the finger tips, the ball bouncing at waist height and looking forward while dribbling. The skill assessment took place after one week of practicing the skills and one week before the students participated in competitive team settings.

Data Anylsis

Data from this study was analyzed using a 3 way MANOVA, consisting of two between subject factors, gender and skill level and one within factor, setting, which was both team and individual. The dependent variables in this analysis consisted of the three Sport Orientation Questionnaire sub-scores; competitiveness, win-orientation and goal-

orientation. Analysis for the three sub-scores, competitiveness, win-orientation and goal-orientation were run separately. The three independent variables in this analysis consisted of setting (individual or team), gender (male or female), and skill level (high or low).

CHAPTER IV.

RESULTS

The purpose of this study was to determine whether a child's achievement motivation changes when participating in a team setting compared to an individual setting and to determine and compare any significant differences in achievement motivation between gender and skill level in both team and individual settings.

Achievement motivation was measured using the Sport Orientation Questionnaire, which consists of three sub-scales, competitiveness, win-orientation and goal-orientation. The competitiveness sub-scale measures the desire to enter a competitive sport situation and strive for success. The win-orientation sub-scale measures the desire to win during a competitive situation and the goal-orientation sub-scale measures the extent to which one's motive is to accomplish personal goals in competition.

Demographic Data

The subjects in this study included 117 5th and 6th grade students at Jefferson Elementary School in Charleston, Illinois. There were 70 female students and 47 male students who participated in this study. The participants were categorized into high-skill ability (32 boys and 34 girls), and low-skill ability (16 boys and 35 girls).

Data Analysis

Data for this study was analyzed using a 3 way MANOVA, consisting of three dependent variables; competitiveness, win-orientation, goal-orientation and three independent variables; setting, gender, skill level. The alpha level for the results of this study is .10.

Competitiveness

Table 1 reveals the means and standard deviations of competitiveness scores for boys and girls in both team and individual settings, while Table 2 shows competitiveness scores of high and low ability students in the team and individual settings.

As stated, the first hypotheses was that boys would score higher than girls on the sub-scales of competitiveness and win-orientation, regardless of setting. Boys did score significantly higher on the competitiveness sub-scale in both team and individual settings (Table 3 & 4). The third hypothesis was that high-skilled individuals would score higher than low-skilled individuals on all three SOQ sub-scales. High-skilled subjects did score significantly higher than low-skilled subjects on the competitiveness sub-scale (Tables 3 & 4). The fourth hypothesis was that competitiveness would be the most significant orientation difference between boys and girls, and between high-skill and low-skill individuals. This hypothesis was confirmed as competitiveness did show a significant main effect for genders and skill levels (Tables 3 & 4). The fifth hypothesis was that participants in a team setting would score higher in competitiveness and win-orientation, while participants in an individual setting would score higher in goal-orientation. Participants in a team setting did not score significantly higher than participants in an individual setting on the competitiveness sub-scale (Table 3 & 4).

**Table 1. Means and Standard Deviations
of Competitiveness Scores According to Setting and Gender**

Gender	Setting	
	Team	Individual
Boys (n = 47)	M 53.53	55.09
	SD 7.66	8.70
Girls (n = 70)	M 50.63	47.81
	SD 9.06	11.13

**Table 2. Means and Standard Deviations
of Competitiveness Scores According to Setting and Skill Level**

Skill Level	Setting	
	Team	Individual
High (n =66)	M 54.18	56.27
	SD 7.95	6.78
Low (n = 51)	M 48.71	43.57
	SD 8.51	11.14

Results showed three significant differences among setting, gender and skill level.

Tables 3 and 4 show the MANOVA tests of significance for competitiveness.

First, high-skilled subjects (n = 66) scored higher on the competitiveness sub-scale than low-skilled subjects (n = 51), in both team and individual settings. Secondly, high-skilled subjects (n = 66) scored higher on competitiveness in an individual setting while low-skilled subjects (n = 51) scored higher on competitiveness in a team setting. Last,

boys (n = 47) scored significantly higher on the competitiveness sub-scale than girls (n = 70), in both team and individual settings.

Table 3. MANOVA Tests of Significance for Competitiveness

Tests of Between Subjects Effects					
Source of Variation	SS	DF	MS	F	f
Within Cells	11457.03	113	101.39		
Skill Level	3246.09	1	3246.09	32.02	* .000
Gender	598.03	1	598.03	5.90	* .017
Skill Level by Gender	76.85	1	76.85	.76	.386

(* Indicates a significant difference)

Table 4. MANOVA Tests of Significance for Competitiveness

Tests Involving "Setting" Within - Subjects Effect					
Source of Variation	SS	DF	MS	F	f
Within Cells	4744.53	113	41.99		
Setting	83.82	1	83.82	2.00	.160
Skill Level By Setting	575.22	1	575.22	13.70	* .000
Gender By Setting	91.43	1	91.43	2.18	.143
Skill Level By Gender By Setting	5.10	1	5.10	.12	.728

(* Indicates a significant difference)

Win-Orientation

The means and standard deviations of win-orientation scores are shown according to setting, gender, and skill level in Tables 5 and 6.

In reference to the first hypothesis that boys would score higher than girls on the sub-scales of competitiveness and win-orientation, regardless of setting, boys did not score significantly higher than girls on the win-orientation sub-scale for either setting (Table 7 & 8). The third hypothesis was that high-skilled individuals would score higher than low-skilled individuals on all three SOQ sub-scales. High-skilled subjects did score slightly higher on the win-orientation sub-scale in both team setting ($M = 17.86$, $sd = 5.65$) and individual setting ($M = 17.47$, $sd = 6.40$) compared to low-skilled subjects in a team setting ($M = 16.96$, $sd = 5.53$) and individual setting ($M = 14.37$, $sd = 5.71$). However this difference did not reach statistical significance (Tables 7 & 8). The fifth hypothesis was that students in a team setting would score higher in competitiveness and win-orientation, while students in an individual setting would score higher in goal-orientation. Participants in a team setting did score significantly higher than participants in an individual setting on the win-orientation sub-scale (Table 7 & 8).

**Table 5. Means and Standard Deviations
of Win-Orientation Scores According to Setting and Gender**

Gender	Setting	
	Team	Individual
Boys (n = 47)	M 17.87	16.87
	SD 5.93	6.24
Girls (n = 70)	M 17.20	15.61
	SD 5.39	6.30

**Table 6. Means and Standard Deviations
of Win-orientation Scores According to Setting and Skill Level**

Skill Level	Setting	
	Team	Individual
High (n = 66)	M 17.86	17.47
	SD 5.65	6.40
Low (n = 51)	M 16.96	14.37
	SD 5.53	5.71

Results showed one significant difference in win-orientation among setting, gender and skill level. Tables 7 and 8 show MANOVA tests of significance for win-orientation. Regardless of gender or skill level, subjects scored higher in a team setting than in an individual setting on the win-orientation sub-scale.

Table 7. MANOVA Tests of Significance for Win-Orientation

Tests Of Between-Subjects Effect					
Source of Variation	SS	DF	MS	F	f
Within Cells	5474.49	113	48.45		
Skill Level	114.36	1	114.36	2.36	.127
Gender	36.26	1	36.26	.75	.389
Skill Level by Gender	89.45	1	89.45	1.85	.177

Table 8. MANOVA Tests of Significance for Win-Orientation**Tests Involving “Setting” Within-Subjects Effect**

Source of Variation	SS	DF	MS	F	f
Within Cells	2325.37	113	20.58		
Setting	96.98	1	96.98	4.71	*.032
Skill Level By Setting	49.76	1	49.76	2.42	.123
Gender By Setting	.74	1	.74	.04	.850
Skill Level By Gender By Setting	5.59	1	5.59	.27	.603

(* Indicates a significant difference)

Goal –Orientation

The means and standard deviations of goal-orientation scores according to setting, gender and skill level are shown in Tables 9 and 10.

As stated, the second hypothesis was that girls will score higher than boys on the sub-scale of goal-orientation, regardless of competitive setting. Girls scored slightly higher on the goal-orientation sub-scale in a team setting ($M = 23.80$, $sd = 4.45$) compared to the boys in a team setting ($M = 23.70$, $sd = 5.19$) but the boys scored slightly higher in an individual setting ($M = 24.02$, $sd = 5.22$) compared to the girls in an individual setting ($M = 22.07$, $sd = 5.59$). However, none of these differences were statistically significant, therefore the hypothesis that girls would score higher than boys on goal-orientation in both settings was not supported.

The third hypothesis was that high-skilled individuals would score higher than low-skilled individuals on all three SOQ sub-scales. High-skilled individuals did not score

significantly higher than low-skilled individuals on the goal-orientation sub-scale (Tables 11 & 12). The fifth hypothesis was that students in a team setting would score higher in competitiveness and win-orientation, while students in an individual setting would score higher in goal-orientation. Students in an individual setting did not score significantly higher than students in a team setting on the goal-orientation sub-scale (Table 11 & 12).

**Table 9. Means and Standard Deviations
of Goal-Orientation Scores According to Setting and Gender**

Gender	Setting	
	Team	Individual
Boys (n = 47)	M 23.70	24.02
	SD 5.19	5.22
Girls (n = 70)	M 23.80	22.07
	SD 4.45	5.59

**Table 10. Means and Standard Deviations
of Goal-Orientation Scores According to Setting and Skill Level**

Skill Level	Setting	
	Team	Individual
High (n = 66)	M 23.91	24.14
	SD 4.93	5.41
Low (n = 51)	M 23.57	21.20
	SD 4.52	5.2

Results showed two significant differences among setting and skill level. Tables 11 and 12 show MANOVA tests of significance for goal-orientation. Low-skilled subjects scored higher in a team setting ($M = 23.57$, $sd = 4.52$) compared to an individual setting ($M = 21.20$, $sd = 5.22$) where high skilled students scored higher on goal-orientation in an individual setting. High-skilled subjects, regardless of gender, scored higher than low-skilled subjects on the goal-orientation sub-scale.

Table 11. MANOVA Tests of Significance for Goal-Orientation

Tests of Between – Subjects Effects

Source of Variation	SS	DF	MS	F	f
Within Cells	3694.71	113	32.70		
Skill Level	110.42	1	110.42	3.38	*.069
Gender	18.22	1	18.22	.56	.457
Skill Level by Gender	.52	1	.52	.02	.900

(* Indicates a significant difference)

Table 12. MANOVA Tests of Significance for Goal-Orientation

Tests Involving “Setting” Within Subjects Effect

Source of Variation	SS	DF	MS	F	f
Within Cells	2122.80	113	18.79		
Setting	44.16	1	44.16	2.35	.128
Skill Level By Setting	68.18	1	68.18	3.63	*.059
Gender by Setting	26.99	1	26.99	1.44	.233
Skill Level By Gender By Setting	.86	1	.86	.05	.830

(* Indicates a significant difference)

Summary

The results for the first hypothesis, boys would score higher than girls on the sub-scales of competitiveness and win-orientation supported the hypothesis and were partially supported by the literature. Several researchers (Duda, 1989; Duda, et al., 1991; Gill, 1998; Gill, et al., 1991; Gill & Deeter, 1988; Kang, et al., 1992) concluded that males are more competitive than females, which supports the hypothesis in this study. These same researchers also concluded that males are more win-oriented than females, however, the results from this study do not support this finding.

The results regarding the second hypothesis, girls will score higher than boys on the sub-scale of goal-orientation, regardless of setting did not support the hypothesis and contradicted the literature. Several researchers (Duda, 1989; Duda, et al., 1991; Gill, 1998; Gill, et al., 1991; Gill & Deeter, 1988; Kang, et al., 1992) concluded that females are more goal-oriented than males, but results from this study did not parallel these previous conclusions. Girls did score slightly higher on the goal-orientation sub-scale in a team and individual setting. However, none of these differences was statistically significant.

The results for the third hypothesis, high-skilled individuals will score higher than low-skilled on all three SOQ sub-scales partially supported the hypothesis and were supported by the literature. Some studies showed that athletes were higher than non-athletes on all three SOQ sub-scales (Gill, et al., 1988; Gill, et al., 1991), which supports the results for competitiveness in this study but contradicts the previous results for goal and win-orientation. High-skilled subjects did score slightly higher on the win-

orientation sub-scale in both settings. However, the difference did not reach statistical significance.

The results for the fourth hypothesis, competitiveness would be the most significant orientation difference between boys and girls, and between high-skill and low-skill individuals, paralleled findings in previous studies. Some studies showed athletes were higher than non-athletes on all three SOQ scores, with competitiveness being the major discriminator (Gill, et al., 1988; Gill, et al., 1991). Several researchers (Duda, 1989; Duda, et al., 1991; Gill, 1998; Gill, et al., 1991; Gill & Deeter, 1988; Kang, et al., 1992) also concluded that males are more competitive than females.

The results for the fifth hypothesis, students in a team setting will score higher in competitiveness and win-orientation, while students in an individual setting will score higher in goal-orientation, has not been a common area of investigation. Only during the last six years have researchers investigated the impact of different environmental settings and their impact on achievement motivation (Ntoumanis & Biddle, 1998; Seifriz, et al., 1992; Swain, 1996). Learning environments can be win or goal-oriented, and results suggest that a goal-oriented environment is more pleasing to individuals than a win-oriented environment (Seifriz, et al., 1992). When examining achievement motivation, the area of team and individual environmental settings has not been studied, thus, the results from the present study cannot be compared to previous findings.

CHAPTER V.

DISCUSSION

Summary

In physical education, individuals participate in two types of settings, a team setting or an individual setting. The purpose of this study was to determine whether a child's achievement motivation changes when participating in a team setting compared to an individual setting and to determine and compare any significant differences in achievement motivation between gender and skill level in both settings.

Nicholls (1984; 1988) stated that people identify with two goal perspectives, task-orientation and ego-orientation. A task-orientation is associated with a goal-orientation, while an ego-orientation is associated with a win-orientation. If an individual perceives his/her success due to superior ability, then this individual would approach an achievement situation to receive recognition for winning or performing better than others in the class, and is win-orientated. In contrast, if an individual is concerned with learning and performance improvements he/she would participate for skill development and social interaction, and is goal-oriented (White & Duda, 1994).

In regards to the primary hypothesis, it was determined that a child's achievement motivation does change when participating in a team setting compared to an individual setting. Several hypotheses involving the three SOQ sub-scales were confirmed by significant differences.

The results of this study indicated six significant differences that should be considered by physical educators while planning and conducting class activities. First of all, high-skilled children are more competitive than low-skilled children regardless of

setting. This means that high-skilled children have a stronger desire to enter a competitive setting than low-skilled children. Teachers need to make sure grouping procedures allow for a high level of achievement motivation for all children. A possibility would include grouping children by skill level. Low-skilled children competing against individuals of the same ability allows for them to improve on certain skills and motor abilities together without being threatened by the superior ability of the higher skilled students. This experience may increase self-confidence and their desire to enter a competitive setting. Grouping by ability can eliminate any embarrassing defeats that may occur while competing against a higher skilled child. High-skilled children competing against others of the same ability will provide a greater challenge and desire to compete. Once skill levels become closely related the children could combine together and compete against other combined teams.

Secondly, high-skilled children have a stronger desire to compete in an individual setting while low-skilled children prefer to compete in a team setting. This may have occurred because high-skilled children can take control of a situation and demonstrate their high ability level without relying on other team members. High-skilled children usually possess a high level of self-confidence that allows them to perform skills in an individual setting without the fear of failure. Sometimes high-skilled children become frustrated in a team setting when trying to involve other team members. Low-skilled children may prefer a team setting because their performances can blend in with the performances of other team members. They may believe that a victory can not be accomplished based on their own skill level but working with other team members will build confidence that may produce a victory or less embarrassing experience. This does

not mean that high ability children should only participate in an individual setting and low-ability children should only compete in a team setting. Teachers need to structure a variety of both settings that provide comfort and increase motivation for both high and low-skilled children.

The third significant difference showed that boys are more competitive than girls in both team and individual settings. As stated by Gill, (1988) males are more active participants and avid competitors than females. When organizing class structure it is important to know that boys are more competitive than girls. Placing a group of boys against a group of girls in a competitive setting can lower achievement motivation and provide a negative experience for both genders. The results of this study suggest boys should compete against each other and girls compete against each other until confidence at performing the skills needed for a particular sport are established. Once skill ability and confidence are increased boys and girls could combine together and participate on the same team. When assigning teams there should be the same number of boys as girls on each team. This will provide comfort for each gender and allow for equal opportunity among all teams involved.

The fourth significant difference showed that both genders and skill-levels have a stronger desire to win in a team setting compared to an individual setting. When children are motivated to win, regardless of setting, they tend to exhibit poor sportsmanship, such as cheating and name calling (Simon, 1991). Teachers need to closely observe and correct any misbehavior that may take place during the activity. For children it is easier to experience the feelings and emotions that result from winning or losing when the team members have shared the same experiences and emotions.

The fifth significant difference showed that high-skill participants possess a higher motive to achieve personal goals than low-skilled participants, regardless of setting. This could be a result of the lower level of self-motivation, confidence or increased level of fear of failure that low-skilled children might possess. Since low-skilled children have a lower level of achievement motivation their fear of failing during a competitive setting is higher. This fear of failing leads to a lack of motivation to compete or strive to accomplish personal goals.

The last significant difference indicated that low-skilled children possess a higher motive to accomplish personal goals in a team setting compared to an individual setting. This could be a result of the same lower level of self-motivation or increased level of fear of failure that low-skilled children might possess. Since low-skilled children have a lower level of achievement motivation their fear of failing during an individual competitive setting is higher. Competing in a team setting to achieve personal goals allows comfort for the children because their performance is not isolated. Regardless of failing or succeeding at reaching personal goals, in a team setting the children are working together with team members to either celebrate their accomplishments or correct their mistakes. This provides an opportunity for the children to develop communication skills such as problem solving and leadership.

The type of setting in which an individual performs may be as important as the type of goal orientation the individual possesses. A task-oriented environment, which emphasizes skill development, would encourage an individual to strive for personal goals. An ego-oriented environment, which emphasizes final win/loss outcomes, would encourage an individual to strive for scoring more points. In physical education,

individuals participate in two types of settings, a team setting or an individual setting. This study determined that some changes in achievement motivation do occur when participating in a team setting compared to an individual setting and that changes also occur between gender and skill level in both settings. Teachers have the ability to learn what type of goal orientation each student possesses. By knowing students goal orientations teachers can take precautions in planning and establishing settings that will provide for positive experiences for all children. The teaching styles used and the activities planned must provide an environment that will raise the achievement levels of all children.

Directions For Future Study

The subjects in this study were limited to participating in each setting for four thirty-five minute periods. More time for the children to experience an individual and team setting before completing the questionnaire is recommended. This would allow for each student to mentally and physically adapt to the setting being experienced.

Secondly, the students had four thirty-five minute periods to practice such skills as dribbling, passing and shooting before they participated in the team and individual setting. Extended periods of practice time may have improved performance, which might affect the children's level of motivation when entering a competitive setting.

The third recommendation is to conduct this study using an activity other than basketball. Students' achievement motivation levels may change when participating in a series of different activities, all of which would be appropriate for both genders.

A fourth recommendation for a future investigation would be to match skill levels when competing in both team and individual settings. The students in this study were

matched by gender during the individual setting but not by skill level. Matching by skill ability may increase their desire to compete.

A fifth recommendation would be to use student's perceived ability as another dimension for a future investigation. An individual's perceived ability may alter their orientation.

A final recommendation would be to conduct similar studies with this age group but to use a larger group of participants from a different geographic area. The area in which the students live may affect the level of achievement motivation.

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APPENDIX A

CHARLESTON

Community Unit School District

District Administration Office

Phone: (217) 345-2106

410 West Polk Avenue, Charleston, IL 61920

Fax: (217) 345-8121

TO: BUILDING ADMINISTRATORS AND SECRETARIES

SUBJECT: DISTRIBUTION OF HANDOUTS

ORGANIZATION/ACTIVITY P.E. Task/Logo Orientation Survey
 NAME OF PUBLICATION Admission

APPROVED

- ☐ Place in office for pickup
☐ Distribute through classroom Grade(s) _____
☐ Building administrator's prerogative to distribute to interested staff
☐ Post in building

OTHER APPROVED INFORMATION FOR DISTRIBUTION

- ☐ For faculty lounge
☐ Representative will be contacting the building administrator. Participation is determined by the building principal.
☒ Permission to conduct survey providing the building administrator and teacher(s) involved are agreeable. All necessary documentation is on file with the Assistant Superintendent.

DENIED

Reason: _____



Jeannie Walters
 Assistant Superintendent
 Curriculum/Instruction

12-4-98
 Date

*This form must be presented, in person, at each attendance center where materials are to be distributed

APPENDIX B

Dear parent(s),

Hello, I am your son/daughter's physical education teacher at Jefferson Elementary School. I am also a graduate student at Eastern Illinois University. Upon completing my master's degree I must construct a thesis paper. This paper will include studies involving the students in my physical education classes. I plan to measure each student's level of task and ego orientation in two competitive settings; five-on-five basketball and one-on-one basketball.

A task-oriented individual directs their actions toward learning and perfecting the task at hand. They judge their previous ability based on their past level of performance. An ego-oriented individual directs their actions toward exceeding the performance of others. This individual's focus is toward social comparison.

I intend to use the Sport and Orientation Questionnaire in measuring each student's orientation level. A copy of this questionnaire will be distributed to each student. I will read each question and the students will answer the questions based on how they feel. This questionnaire's responses range from strongly agree to strongly disagree and include such questions as, "I am a determined competitor" and "I set goals when I compete."

I am asking for your permission to allow your son/daughter to participate in this research study. If you have any questions please call me at (217) 581-6923. These forms need to be returned by December 11th.

Thank You,

Adam Lane

_____ YES, my son/daughter may participate. _____
(parent signature)

_____ NO, my son/daughter may not participate. _____
(parent signature)

Please print your son or daughter's name. _____

Individual names and results will be kept confidential.

APPENDIX C

Sport Orientation Questionnaire – Form B (Team Competition)

The following statements describe reactions to sport situations. We want to know how you usually feel about sports and competition. Read each statement and circle the letter that indicates how much you agree or disagree with each statement on the scale: 5,4,3,2, or 1. There are no right or wrong answers; simply answer as you honestly feel. Do not spend too much time on any one statement.

Age _____

Male 1

Female 2

	Strongly agree	Slightly agree	Neither agree nor disagree	Slightly disagree	Strongly disagree
1. I am a determined competitor.	5	4	3	2	1
2. Winning is important.	5	4	3	2	1
3. I am a competitive person.	5	4	3	2	1
4. I set goals for myself when I compete	5	4	3	2	1
5. I try my hardest to win.	5	4	3	2	1
6. Scoring more points than my opponent is very important to me.	5	4	3	2	1
7. I look forward to competing	5	4	3	2	1
8. I am most competitive when I try to achieve personal goals.	5	4	3	2	1
9. I enjoy competing against others.	5	4	3	2	1
10. I hate to lose.	5	4	3	2	1
11. I thrive on competition.	5	4	3	2	1
12. I try my hardest when I have a specific goal.	5	4	3	2	1
13. My goal is to be the best athlete possible.	5	4	3	2	1

Form B (Team Competition)

	Strongly agree	Slightly agree	Neither agree nor disagree	Slightly agree	Strongly agree
14. The only time I am satisfied is when I win.	5	4	3	2	1
15. I want to be successful in sports.	5	4	3	2	1
16. Performing to the best of my ability is very important to me.	5	4	3	2	1
17. I work hard to be successful in sports.	5	4	3	2	1
18. Losing upsets me.	5	4	3	2	1
19. The best test of my ability is competing against others.	5	4	3	2	1
20. Reaching personal performance goals is very important to me.	5	4	3	2	1
21. I look forward to the opportunity to test my skills in competition.	5	4	3	2	1
22. I have the most fun when I win.	5	4	3	2	1
23. I perform my best when I am competing against an opponent.	5	4	3	2	1
24. The best way to determine my ability is to set a goal and try to reach it.	5	4	3	2	1
25. I want to be the best every time I compete.	5	4	3	2	1

APPENDIX D

Sport Orientation Questionnaire – Form A (Individual Competition)

The following statements describe reactions to sport situations. We want to know how you usually feel about sports and competition. Read each statement and circle the letter that indicates how much you agree or disagree with each statement on the scale: 5,4,3,2, or 1. There are no right or wrong answers; simply answer as you honestly feel. Do not spend too much time on any one statement.

Age _____

Male 1

Female 2

	Strongly agree	Slightly agree	Neither agree nor disagree	Slightly disagree	Strongly disagree
1. I am a determined competitor.	5	4	3	2	1
2. Winning is important.	5	4	3	2	1
3. I am a competitive person.	5	4	3	2	1
4. I set goals for myself when I compete	5	4	3	2	1
5. I try my hardest to win.	5	4	3	2	1
6. Scoring more points than my opponent is very important to me.	5	4	3	2	1
7. I look forward to competing	5	4	3	2	1
8. I am most competitive when I try to achieve personal goals.	5	4	3	2	1
9. I enjoy competing against others.	5	4	3	2	1
10. I hate to lose.	5	4	3	2	1
11. I thrive on competition.	5	4	3	2	1
12. I try my hardest when I have a specific goal.	5	4	3	2	1
13. My goal is to be the best athlete possible.	5	4	3	2	1

Form A (Individual Competition)

	Strongly agree	Slightly agree	Neither agree nor disagree	Slightly agree	Strongly agree
14. The only time I am satisfied is when I win.	5	4	3	2	1
15. I want to be successful in sports.	5	4	3	2	1
16. Performing to the best of my ability is very important to me.	5	4	3	2	1
17. I work hard to be successful in sports.	5	4	3	2	1
18. Losing upsets me.	5	4	3	2	1
19. The best test of my ability is competing against others.	5	4	3	2	1
20. Reaching personal performance goals is very important to me.	5	4	3	2	1
21. I look forward to the opportunity to test my skills in competition.	5	4	3	2	1
22. I have the most fun when I win.	5	4	3	2	1
23. I perform my best when I am competing against an opponent.	5	4	3	2	1
24. The best way to determine my ability is to set a goal and try to reach it.	5	4	3	2	1
25. I want to be the best every time I compete.	5	4	3	2	1