Observation and Analysis of
Competitiveness and the Self-Perception
of Female Athletes

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Submitted to the Master of Arts in Education Program
of Defiance College
in partial fulfillment of
the requirements for the degree of
Master of Arts in Education
July, 2009

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Abstract

This study was conducted with 17 women basketball players of a private, Midwest, NCAA Division III (National Collegiate Athletic Association) college. The purpose of this project was to determine if self-perception of competitiveness among collegiate female basketball players changed after the implementation of competitive drills during practice. The researcher used two instruments for data analysis for this project which were the Sports Orientation Questionnaire and the Sports Orientation Written Prompts. These two instruments were utilized as assessment tools and were administered before and after the intervention period. The intervention period consisted of three weeks of competitive drills conducted daily during basketball practices. The findings from this project indicated a slight increase in the self-perception towards being competitive among the female collegiate basketball players that participated in this research project.
Acknowledgments

I wish to acknowledge all the people who have assisted towards the successful completion of this project. Sincere appreciation is expressed to Dr. Burkhardt for all her guidance along with helpful suggestions and criticisms throughout the development of this project. Special thanks are also extended to Dr. Kaiser and the team members of Defiance College women’s basketball team for allowing me to perform the study with the team. Finally, I would like to thank the people very close to me, my family and Bill, for putting up with me during this journey. This would have never been possible if it wasn’t for your continuous encouragement and support. Thank you all.
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Chapter I: Introduction

As a graduate assistant for the women's basketball program at a Division III college, the coaching staff determined that the women's basketball team lacked a strong desire to win and play competitively. According to the professional literature reviewed, competitiveness was an interpersonal trait that was often associated with the desire to win or accomplish a goal (Mowen, 2004). Therefore, this graduate assistant wanted the athletes to exhibit more competitive behaviors when competing against one another and opponents. As a result of reviewing the professional literature regarding competitiveness, it was apparent that competitiveness could be simulated and encouraged during practice times by the implementation of competitive drills. Although there were many factors that could influence characteristics of competitiveness, it appeared to the researcher that this would be most effective to change competitiveness among her women's basketball team.

Statement of Problem

The purpose of this project was to determine if self-perception of competitiveness among Division III collegiate female basketball players changed by implementing competitive drills during practice. The research questions included:

1) According to the professional literature reviewed, how were competitive drills defined?

2) What did the professional literature reviewed indicate were the benefits of implementing competitive drills among female athletes?

3) According to the professional literature reviewed, how were competitive drills best implemented during practice?

4) What were the benefits of implementing competitive drills in practice?
Justification

College coaches constantly strived for different strategies that would improve their team and ultimately get more wins. Therefore, as a college coach, the researcher wanted to improve competitiveness with the team of women basketball players in attempt to get more wins. First, the researcher studied competitiveness and strategies to improve it among a team. Next, the researcher implemented competitive drills in practices which exposed the athletes to daily competition which was measured with wins and losses. Finally, the researcher determined if the competition in practice drills increased the team's competitiveness during games. In summary, the goal of this project was to change the players' competitiveness in order to win games; by putting competition in drills they did everyday in practice to determine if it would change their perception of competitiveness.

Definition of Terms

Competitiveness – A trait that is characterized by the enjoyment of interpersonal competition and the desire to win and be better than others (Mowen, 2004).

Division III – The lowest division of colleges as classified by the NCAA (National Collegiate Athletic Association) according to size of the school (NCAA online, 2006).

Practice – An organized plan when coaches give direct instruction to players in the gymnasium.

Sport Orientation Questionnaire – A questionnaire used in this study that described reactions to sport situations that yields three scores that included: competitiveness, win orientation, and goal orientation.
Sports Orientation Written Prompts- An assessment tool used in this project which was developed by the researcher based on research to obtain the self-perception of competitiveness of the athletes.

Limitations and Appropriate use of Results

The research project was conducted in a rural, small liberal arts college in Northwest Ohio. The limitations included using a small sample of collegiate basketball players which limited the number of represented athletes. In addition, the participant group had limited diversity. Another limitation was time, as the project was done over one season and the subjects were tested over a few weeks which limited prolonged results. One additional limitation was the project was conducted by the women’s basketball assistant coach, thus there was the potential for influence or bias. Therefore, due to these limiting factors, these results cannot be generalized to other collegiate women’s basketball teams.
Chapter II: Review of Literature

The purpose of this project was to determine if self-perception of competitiveness among Division III collegiate female basketball players changed by implementing competitive drills during practice. The research questions included:

1) According to the professional literature reviewed, how were competitive drills defined?

2) What did the professional literature reviewed indicate were the benefits of implementing competitive drills among female athletes?

3) According to the professional literature reviewed, how were competitive drills best implemented during practice?

4) Would competitiveness increase by implementing competitive drills during practice?

Research Question #1: According to the professional literature reviewed, how were competitive drills defined?

An exercise performed in sports that involved competition with the goal of defeating others was what competitive drills was defined as according to Mowen (2004). Additionally, Mowen stated that competition was an interpersonal desire to win or be better than others which was sought when a winner was declared during a practice drill. Previously in chapter one, practice was defined as an organized period in which coaches used drills and instruction to get individuals better and ultimately the team better. So through planning practices which was done by the coaches, the drills used during practices could be made competitive among the players. Therefore, competitive drills can be used as a strategy to make practices clearly competitive with rewards and punishments. (Smith, 1991).
The idea of competition to replicate game situations with a winner and a loser was the common theme coaches sought with utilizing competitive drills in practice (Rotella and Lerner, 1993). The authors added that competitiveness that athletes experienced through these drills presented a goal, or accomplishment of defeating someone which was similar to a game. Gill (1993) stated, that competition involved achievement motivation which was widely recognized as a way to experience pride in accomplishing something. These situations and feelings experienced during practice are done to simulate game situations for the athletes.

Research suggested that competitive drills were exercises that were performed in a practice setting that included a winner and a loser or rewards and punishments. Additionally, competition was an interpersonal desire to win which was desired by athletes when doing competitive drills. The research noted competitive drills in practice should replicate games situations with a distinct winner. Moreover, the research suggested that drills that presented goals, accomplishments, or winning can be used as a practice tool.

**Research Question #2: What did the professional literature reviewed indicate were the benefits of implementing competitive drills in practice among female athletes?**

A benefit of implementing competitive drills in practice was the simulation of competitiveness which was an important element of the game. According to Chamberlin and Lee, (1993) the context in which the learner transferred his or her acquired knowledge in the game was best done when competitive conditions were simulated in the practice environment. The authors also noted that a guiding principle of any sport was to simulate the competitive context as realistically as possible in the practice environment. Therefore, by the athletes
exposed to daily competition in the practice environment that resembles the game situations then the athletes would be better trained to do what they have been taught.

A research study examined characteristics of successful college female athletes in which the authors noted the competitiveness trait. In this study, college coaches were interviewed about experiences with specific athletes who made substantial progress while on their team (Giacobbi, Whitney, Roper, and Butryn, 2002). The authors reported that all of the coaches described successful college athletes as being motivated and competitive. Giacobbi et al. (2002) added that the coaches viewed personal characteristics, which they used words such as competitive, as being the most important characteristic of athletic success among college athletes. These coaches reported that they felt their athletes were successful in practice and games due to a contributing factor of the athletes being competitive (Giacobbi et al.). Furthermore, the authors stated because of the likelihood of success this was a trait they sought when recruiting college athletes.

Unlike Giacobbi’s study where college coaches were interviewed about their athletes, Gill (1993) studied the athletes’ competitiveness directly by a statistical method called the Sport Orientation Questionnaire (SOQ). Gill noted in her study about gender influences on competitiveness that were apparent. The author confirmed that males scored higher on competitiveness and competitive sport participation which supported female athletes benefiting more with competition in practice. According to Gill’s findings, she stated that the SOQ was a representation of competitiveness, to strive for success and satisfaction in sport competition with female athletes. So despite Gill’s findings that males scored higher on competitiveness, she also noted that competitiveness was learned and able to be influenced (Gill, 1993).
There was a plethora of research that examined the competitive trait and how it was more common among males. According to Braathen & Svebak; Gill & Deeter; and Hellandsig (1992, 1988, and 1998) male athletes tend to score higher on competitiveness test than female athletes do. However, in another study done by White & Duda (1994) they found that both male and female athletes scored higher on measures of competitiveness compared to non-athletes. So despite women trailing behind in competitiveness compared to men, women athletes were still more competitive than female non-athletes.

The professional literature reviewed suggested the overall benefit of implementing competitive drills in practice were to gain competitiveness traits among the female athletes. In addition, literature recommended the importance of replicating competitiveness in practice drills that would be similar to games. Researchers also stated that the competitiveness trait was learned, therefore, opportunities during practice were essential in the development of competitiveness. Alike, studies have shown female athletes were less competitive than males therefore; the competitive drills used in practice would be beneficial to further develop competitive qualities perhaps less advanced than male athletes.

Research Question #3: According to the professional literature reviewed, how were competitive drills best implemented during practice?

The practice environment can be extremely complex with many factors that influence the arrangement of practice (Chamberlin and Lee, 1993). Therefore, the authors suggested that there were particular factors that were optimal for one practice environment, might not be for another team. However, Chamberlin et al. did suggest that the overriding theme to determine what was best for practice was to determine how factors influence the performance and learning of the
athletes. The authors concluded that competitive drills can be effectively used in high school or college setting but a youth church league might not be the appropriate setting.

Such as a basketball coach, Mike Smith, from Victoria, Texas commented that his high school men’s basketball team accomplished their goals by making practice competitive in nature, having a winner and loser on all of his drills and team functions. Coach Smith added that all his drills in practice were competitive in which he told the players what the punishment phase was for the loser as well as what the winner did (Smith, 1991). Likewise Gill (1993) noted that competition that had winners and losers had two separate motives which included the motive to approach success and the motive to avoid failure. Competitive drills that determine a winner and loser and were successfully implemented like Coach Smith, exhibited these motives (Gill et al.).

All in all, the research stated that when you have competitive practice drills there must a distinct winner and a loser. It was recommended to tell the athletes prior to the start of the drill what the competition was and the punishment for the losers. This was important because research stated that there were different motivators among the athletes when competing even in practice situations. Finally, researchers suggested that something that worked for one team might not work for another team or setting.

Research Question #4: Would competitiveness increase by implementing competitive drills during practice?

According to Dorrance (1996), who called his practice a competitive cauldron, was a successful soccer coach who attributes his success at UNC to this core principle. The coach developed his collegiate girl’s soccer teams practice environment into a competitive one because they kept score in everything they do. He believed in setting up a competitive atmosphere in
practice because outside competition, no matter how challenging, cannot be the only environment where the players were pushed. The UNC coach strived to create training environments that were incredibly intense and he stated that the intensity came to be the norm for most of the girls now (Dorrance, 1996). Coach Dorrance stated, “We think this competition has a hardening effect on the women on our team. It tells these women its okay to be the best, its okay to win.”

Gill (1993) stated, competitiveness was an important part of practice as she argued virtually all the evidence indicated that competitiveness was learned and not inevitable. If competitiveness was learned and influenced by social context, Gill noted that practice would then provide opportunities for the athletes to develop traits of competitiveness through competitive drills. Comparable, Mowen (2004) also stated that competitiveness may be associated with consumer behaviors and was a trait that can be acquired among athletes.

Just as Coach Dorrance stated, competitiveness can be used as a tool to push or challenge a team. It also allowed the team to experience more opportunities to compete other than just game situations. As research has shown, competitiveness was a trait that was learned and the more exposure that athletes have to it, the better. The professional literature reviewed suggested that the overall benefit of implementing competitive drills in practice were to gain traits of competitiveness among athletes.
Chapter III: Methods and Procedures

The purpose of this project was to determine if self-perception of competitiveness among Division III women college basketball players changed after the implementation of competitive drills during practice. The researcher implemented three competitive drills during practice to determine if the team members of the basketball team would change their perception of competitiveness. To determine their self-perception, the researcher used two different instruments. These instruments were utilized in a pre-intervention analysis and again in a post-intervention analysis. Data was collected and then analyzed by comparison of the responses of the pre-intervention to that of the post-intervention. In order to answer this question if their self-perception changed, a set of methods and procedures were developed for the project.

Participants

The team members of a women's basketball team that attended a NCAA Division III (National Collegiate Athletic Association, non-scholarship) college located in the Midwest participated in this study. The team members consisted of 17 women that were freshman, sophomores, or juniors enrolled at the college that ranged from age 18-21 years old. All the participants were volunteers and could withdrawal from the study at any time.

Intervention

The intervention for this project consisted of the implementation of three competitive drills during basketball practice. The competitive drills that were developed and implemented were designed in a manner that would allow for an outcome of a winning team and a losing team. These competitive drills done in practice had rewards and consequences which research
proved were motivating factors when athletes competed. In all three of the drills that were used, the team manager kept score in order to determine the winners and the losers. At the completion of the drill, as a consequence, the coaching staff had the losing team do conditioning exercises such as lining up along the baseline to run or do push-ups, and as a reward, the winning team was awarded an additional break during practice. The three drills included a rebounding drill, a hustle drill, and a win the game free-throw drill.

Rebounding drill. The first drill the researcher implemented was a competitive rebounding drill. The athletes were divided into two teams that were heterogeneous. One team was named the purple team and one team was named the white team. The teams had athletes of different athletic ability and different positions played. Next, the athletes were informed of the rules of the drill which included two teams competing against one another by scoring points for rebounding the basketball. The drill consisted of five minutes on the scoreboard with points being kept for both the purple and white team. In order to score points, a team prevented opposing players from getting the rebound. If the team got the defensive rebound, they received one point then they switched to become the team on offense. Additionally, if a team was on offense and they got an offensive rebound (i.e. because the defense didn’t box out or rebound) then they received one point and the defensive team lost all their points on the scoreboard. To help this drill run smoothly the manager kept the score and the time on the scoreboard. In addition, the coaches took shots during this drill in attempt to miss so that the teams were able to rebound. Finally, at the end of five minutes a winning team was determined and consequences and rewards were applied.
*Hustle drill.* The second drill the researcher used for competition during practice was similar in that the coaches separated the team into two teams, purple and white, and the teams competed against one another by scoring points. In this drill the players competed individually one on one and tried to make a basket to score a point for their team. Once the two teams were arranged with different positions and different ability level, each team lined up on the baseline underneath the basket. Next, they matched up accordingly with someone on the opposite team that played the similar position so that each time there was an equal opportunity to win, based on position. The first athlete in both lines stepped out on the baseline and the coach threw the ball out on the court. The player that got the ball first was on offense and the other player was on defense. From this point, the competition continued until a player scored. If the defender stopped her opponent from scoring and she got the ball then she attempted to score immediately. They continued to play until someone scored and then the team manager placed one point on the scoreboard for the team that scored the basket. At that time the next two athletes in line stepped out to compete. The drill continued until the time on the scoreboard ended. The team with the most points won. At the conclusion of the drill, the coaching staff applied the rewards and consequences to the winning and losing teams.

*Win the game free-throw drill.* The third drill used competitively during practice was a free-throw drill. This drill differed from the previous two drills in that instead of competing against a teammate the whole team competed together to obtain a goal. This drill was implemented at the end of practice so the entire team worked together towards one goal of winning. The goal of this drill was for the team to have more points on the scoreboard at the end of the drill then the imaginary visiting team. To start the drill, the team manager put a tied score
on the scoreboard (i.e. Home - 60, Visitors - 60). In order to score points, each of the players shot one free-throw. If the free-throw went in, then the home team got one point. However, if the free-throw did not go in then two points were awarded to the visiting team. After each of the team members shot one free-throw the team that was ahead on the scoreboard won the game. If the home team won the game, then practice ended. However, if they lost because the visiting team was ahead, then as consequences the coaching staff had the team run the length of the court the number of times they were behind in points. This drill was used competitively in which the team worked together to obtain a goal which was to score more points and win the game by free-throws.

The intervention of all three of these drills in the women’s basketball practice sessions provided opportunities to create a competitive environment during practice. These three drills were all similar in that the team manager kept score on the scoreboard and it was apparent that there was a winner and a loser. However, two of the drills had the team members competing against one another and the third drill had the entire team competing together towards a goal. After the drills were done, the coaching staff implemented the appropriate rewards and consequences.

Procedures

In order to collect data to answer the research question if self-perception of competitiveness among women college basketball players changed after the implementation of competitive drills during practice, the researcher developed data collection methods and procedures. Before the start of the intervention, the researcher followed procedures to get consent from those directly involved in the study as well as permission from the developer of the
questionnaire. Following the implementation of the intervention, the researcher implemented procedures to correctly administer the data collection instruments.

Pre-intervention. Two weeks before the start of the intervention the researcher received consent from both the Athletic Director as well as the Head Basketball Coach in response to a letter informing them of the intervention. Both of these individuals were informed of the project, the drills that were to be used and the means of collecting data. In addition, the researcher contacted Dr. Diane L. Gill, the questionnaire developer, via email for consent to use the Sport Orientation Questionnaire. Dr. Gill responded with approval to use the questionnaire in this study.

Sports Orientation Questionnaire. One week before the intervention was initiated, the student-athletes were informed that the coaching staff was conducting a project and would like to better understand female athlete's self-perception of competitiveness. The researcher told the team members that participation was voluntary and that all data collected would be used in strict confidence. They were asked not to put any names on the Sport Orientation Questionnaire or the Sports Orientation Written Prompts and to respond to the questions and prompts honestly and accurately. The student-athletes were informed that the team manager had the questionnaires that were needed to collect the data and that she would place them in individual lockers following practice. Upon completion of the responses, the student-athletes were asked to place the questionnaire in a folder located at the dry-erase board in the locker room. The researcher completed the explanation by telling the student-athletes that the folder was going to be picked up by the researcher by the end of the week.
Sports Orientation Written Prompts. The researcher instructed the team that the Sports Orientation Written prompts were also going to be used in the study for data analysis. Participates would respond to three open end questions that asked the team members about their feelings and perceptions pertaining to competitiveness. The researcher stated that the manager would pass out the prompts after practice and that the athletes were to complete the questions and return the completed form to the folder placed on the dry-erase board. Similar to the Sport Orientation Questionnaire the team members were informed that the researcher would collect the folder by the end of the week.

Post-intervention. Following three weeks of the intervention of competitive drills the researcher followed procedures to collect data again. At the end of practice, the researcher notified the athletes that another set of data was going to be collected.

Sports Orientation Questionnaire. The researcher informed the athletes that once again the team manager had placed the Sports Orientation Questionnaires in individual lockers in the locker room. The forms were part of the study to collect data again on the team members' self-perception of competitiveness. The team members were asked to complete the form that the manager placed in their lockers by responding honestly to how they felt about each statement made. Then they were directed to place the completed form in the folder located on the dry-erase board in the locker room. The athletes were advised the folder was to be picked up at the end of the week by the researcher for analysis.
Sports Orientation Written Prompts. Responses to Sports Orientation Written Prompts from the athletes were also needed for the study following the intervention period. Therefore, the researcher instructed the team members that the manager had the written prompts that included the same three questions that were on the pre-intervention tool. They were asked to respond to the questions that were placed in their lockers and place the completed form in the folder located on the dry-erase board. Finally the researcher notified the team members that the folder was going to be picked up at the end of the week.

Instruments

The researcher used two different instruments for data collection on this project. One instrument was from the work of Dr. Diane L. Gill (1989) which was a likert type questionnaire called the Sports Orientation Questionnaire. The other test included Sports Orientation Written Prompts which asked three open-end questions developed by the researcher based on the review of the professional literature in Chapter two.

Sports Orientation Questionnaire. The Sport Orientation Questionnaire was a likert type questionnaire with 25 statements describing reactions to sport situations. These statements were meant to reveal the athletes self-perception about competitiveness, win orientation, and goal orientation. Each statement had five choices from which to choose from. They were: strongly agree, slightly agree, neither agree nor disagree, slightly disagree, or strongly disagree. The student-athletes circled one of these choices for each statement depending on how they felt of each of the statements that were made in the questionnaire.
Sports Orientation Written Prompts. Another instrument for collecting data was a Sports Orientation Written Prompt form that was developed by the researcher pertaining to self-perception of competitiveness. These prompts the researcher developed were based on the review of literature discussed in chapter two. The literature indicated that a good principle of any sport was to simulate the competitive context as realistically as possible in the practice environment. Therefore, when competitive drills were used in practice, it was best for a distinct winner and loser which replicated game situations.

The questions the researcher developed for the Sports Orientation Written Prompts were aimed to obtain the self-perception of competing and what it was like when the athletes won or lost. The form contained three questions about winning and losing in drills during practice. These three questions were: 1) Do you always play to win during drills in practice, why or why not? 2) How do you feel when you don't win in a drill during practice? 3) How do you feel when you win in a drill during practice? These written responses allowed the student-athletes to write about their feelings and perceptions of competitiveness during practice situations.

Timeline

Before the start of the intervention, a letter was sent to the Athletic Director and the Head Basketball Coach during the first week of January, 2007. A brief discussion about the study between the researcher and the Athletic Director later occurred prior to the testing of the athletes. The Athletic Director was in support of the study since the researcher was already directly involved with program as the Assistant Coach. In addition an email was sent to Dr. Diane L Gill for permission to replicate the Sports Orientation Questionnaire.
Both the Sports Orientation Questionnaire and the written prompts were distributed to the team members after practice on Monday, January 15, 2007. The researcher allowed the entire week for the team member to fill out their responses and turn into the folder that was placed in the locker room. Then the researcher picked up this folder at the end of the week on Friday, January 19, 2007.

The intervention period lasted three weeks so once the folder was picked up on that Friday, the pre-intervention was complete and the intervention started the following Monday, January 22, 2007. Everyday in practice for the next three weeks, the three drills discussed previously were incorporated during practices. Then after the three weeks of intervention, the researcher distributed the Sports Orientation Questionnaire and the Sports Orientation Written Prompts for post-intervention results. Both of the testing instruments were given to the team members after practice on Monday, February 12, 2007. The researcher once again allowed the athletes the time of one week to complete the assessment tools and then the researcher collected the folder at the end of the week on Friday, February 16, 2007.

The entire timeline of the study was seven weeks. This included the three weeks of the intervention period along with pre-intervention and post-intervention data collection.

Data Analysis

The researcher collected all the papers from the Sports Orientation Questionnaire and the Sports Orientation Written Prompts. The data was read and analyzed separately. The Sport Orientation Questionnaire was given an overall score in competitiveness, win orientation, and goal orientation. The overall score was calculated by points given to each response in each of those categories. The Sports Orientation Written Prompts were read and then analyzed by
simple yes, no, and maybe categories. In the responses, the researcher read the response then determined categories and grouped responses by common themes. Additionally, to prevent any mix up of the responses from the team members, the researcher put both the Sports Orientation Questionnaires and Sports Orientation Written Prompts on different colored paper for the pre-intervention and post-intervention data collection. During the pre-intervention, the researcher administered the questionnaires and prompts on white paper. During the post-intervention the researcher used yellow paper for the questionnaires and prompts.

*Sports Orientation Questionnaire.* The Sports Orientation Questionnaire was evaluated on a points scale. The questionnaire yielded answers in the following three categories: competitiveness, win orientation, and goal orientation. Points were valued from one point to five points and were given to each statement depending on the circled response. If the athlete circled strongly agreed with the statement they received five points. If the athlete circled slightly agreed they received four points for that response. The circled response of neither agree nor disagree was worth three points. Slightly disagree was worth two points and strongly disagree was given one point.

Each questionnaire was totaled by adding up the points that were given in each of the three categories. So each test yielded three scores to the responses of the athletes, the three scores were competitiveness, win orientation, and goal orientation. Once this information was formulated the researcher entered the data into Microsoft Excel in order to accurately display the data for analysis.
The mean, mode, median, and range were processed of all the data entered. This was done in all three of the categories so comparison of the pre-intervention scores can be compared to those in the post-intervention scores.

**Sports Orientation Written Prompts.** The other instrument used, the Sports Orientation Written Prompts were read and a system was developed to categorize the responses for each question. The researcher determined if the responses to the written prompts was a yes, no, or maybe/sometimes answer. The researcher placed the written response in one of those three categories.

The first question in the Sports Orientation Written Prompts asked if the athletes always played to win during drills in practice, why or why not. The researcher determined if the answer was yes, no, or sometimes. Then once all the written prompts were in one of these categories the researcher noted common themes within the responses. These common themes were discussed in chapter four however, no further analysis were done on these by the researcher.

The second Sports Orientation Written Prompt asked the student-athletes, how they feel when they don't win in a drill during practice. The data analysis done on this question was to once again categorize the responses. The researcher had four different categories which included upset/mad, ok feeling, motivated, and neutral category. The researcher placed each written response into one of these categories then looked for common themes.

The third and final question used in the Sports Orientation Written Prompts asked the athletes, how you feel when you win in a drill during practice. The researcher determined the categories of responses. They included, good, accomplishment/self satisfying, or very good/love
it. Once all the written prompts were placed in one of these categories, the researcher looked for common themes among them.

Once all the Sports Orientation Questionnaires and Sports Orientation Written Prompts were collected and scored, the researcher entered the data into Excel in order to accurately display the data for analysis.

By using the set of methods and procedures discussed in this chapter, the researcher was able to collect and analyze data by comparing the responses of the athletes in a pre-intervention to that of post-intervention scores. The two instruments used by the researcher aided in determining if the team member's self-perception of competitiveness changed after the implementation of competitive drills.
Chapter IV: Results

The purpose of this project was to determine if self-perception of competitiveness among Division III collegiate female basketball players changed after the implementation of competitive drills during practice. The researcher used two instruments to collect data. They were the Sports Orientation Questionnaire and the Sports Orientation Written Prompts. These two instruments were utilized to determine the student-athletes' self-perception of competitiveness before the intervention. During the intervention period, the researcher implemented a series of competitive drills during practice so that there were clearly winners and losers in which the losing team had consequences. After the three weeks of the intervention of competitive drills, the researcher distributed the same two instruments to collect post-intervention data.

The data from both the pre-intervention and post-intervention intervals were read and scored. The researcher scored the pre and post intervention results of the Sports Orientation Questionnaire and then analyzed the Sports Orientation Written Prompts. The results were as follows.

*Sports Orientation Questionnaire*

In scoring the Sports Orientation Questionnaire, the researcher used the scoring guide created by the developer Dr. Diane L. Gill. The Sports Orientation Questionnaire was scored by tallying the three scores recorded by the student athletes. The Questionnaire had twenty-five statements for the student-athlete to respond to in which it asked three different types of questions. These types of questions included content directly related to: Competitiveness, Win Orientation and Goal Orientation. The three types of questions were strategically placed in order so the researcher knew which item was aligned with a particular type of question. For example,
all the odd numbers were statements about competitiveness. Then every other even number was a statement about win orientation and the others were goal orientated statements. There were 13 competitive statements, 6 win orientation statements, and 6 goal orientation statements.

The researcher tallied a score for each of the three items of competitiveness, win orientation, and goal orientation all of the Sport Orientation Questionnaires for each student. At the top of the page of the Questionnaires the researcher wrote three scores. The first was the competitiveness score, the second was the win orientation and the third was the goal orientation. The researcher did this for all of the Sports Orientation Questionnaires. The scores were recorded for both the pre-intervention and post-intervention administration. Once the scores of the two tests were organized the mean was calculated for each of the three items of all Questionnaires. In other words, the mean was calculated for the group of athletes for both pre and post administrations. Figure 1 illustrates the results of the Sports Orientation Questionnaire by comparing the mean of each of the three categories of both the pre and post-intervention administration.

![Figure 1](image-url)
The data confirmed that there was a very slight increase in the mean of all three categories of competitiveness, win orientation, and goal orientation used in the Sports Orientation Questionnaire between the pre and post intervention administration. The results showed competitiveness had a mean of 60.53 in the pre-intervention score. The post-intervention mean score was a 60.58. Win orientation had a mean score of 26.6 during the pre-intervention and a 27.25 during the post-intervention. Finally, the goal orientation had a pre-intervention mean score of 26.2 compared to a 26.92 post-intervention. The results illustrated slight changes however; all three of the categories tested did increase from pre-intervention to post-intervention.

*Sports Orientation Written Prompts*

The other data collection instrument that was administered for this project was the *Sports Orientation Written Prompts*. This instrument included three specific questions that provided the student-athletes an opportunity to write their own responses. The three questions that were used in this data collection instrument were: do you always play to win during drills in practice, why or why not? How do you feel when you don't win in a drill during practice? How do you feel when you win in a drill during practice? These three questions were administered to the athletes during the pre-intervention and post-intervention administration. The questions were as follows.

*Question 1 – Do you always play to win during drills in practice, why or why not?* To score the written responses the researcher read all the pre and post-intervention responses for the first question and categorized the athlete's responses. These categories were yes, no, and sometimes. Each written response in the pre-intervention and post-intervention was organized
into one of these categories. Figure 2 presents two pie graphs illustrating percentage of each type of response.

**Figure 2 – Comparison of the pre and post-intervention responses to Question 1 of the Sports Orientation Written Prompts.**

![Pie charts showing pre and post-intervention responses.](image)

**Pre-intervention**

It is evident that the athletes' responses to Question 1 which was if you always play to win during drills in practice, why or why not, changed slightly. More yes's originated in the post-test results and less no's. In addition, there was less in the category sometimes that responded during the post-intervention responses.

By analyzing the data, and trying to get a clear picture of the athlete's feelings, the researcher also examined the frequency of each individual response. The researcher wrote down each response that was categorized in question 1. The researcher looked for common themes as to why the athletes answered they way they did. In figures 3 and 4, one might notice the different themes that emerged during the pre and post-intervention responses to the question do you always play to win during practice, why or why not.
Figure 3 – Pre-intervention responses to the
Sports Orientation Written Prompts Question 1

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Maybe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes-I am very competitive</td>
<td>I go hard but not too hard – someone gets hurt</td>
<td>Most of the time do the drill to learn how to run it</td>
</tr>
<tr>
<td>Yes-I hate losing</td>
<td>No-Someone could get hurt</td>
<td>Not always-depends on mood and the drill we are doing</td>
</tr>
<tr>
<td>Yes-I give it 110% to get the most out of the drill</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes-I try to win – but get a feel first for the drill</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 4 – Post-intervention responses to the
Sports Orientation Written Prompts Question 1

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Maybe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes-I’m competitive and I want to win</td>
<td>No-someone could get hurt</td>
<td>Sometimes-depends on the drill</td>
</tr>
<tr>
<td>Yes-I try to win all the time at practice</td>
<td></td>
<td>Most of the time-especially when we have something to win, like less running</td>
</tr>
<tr>
<td>Yes-It will help me and the team</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes-I don’t want to receive the consequences of losing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes-I play to win because I hate to lose</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes-I hate to lose and winning means a lot</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I try to win – I work hard but don’t always win</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes – I get a feel for it then it increases</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In these tables, the data confirmed that more athletes answered yes to playing to win during practice in the post-intervention responses. Several explanations accompany the answer yes which included: yes because I don’t like losing. It was noted that in the pre-intervention that statement occurred only once, but in the post-intervention it occurred three times. Another common theme was yes I play to win because I am competitive and like to win. This theme appeared in the pre-intervention once and was in the post-intervention responses three times.
These common themes became more apparent in the post-test in addition to more student-athletes responded to yes they play to win during practice.

Question 2 - The researcher then analyzed the responses of the pre and post-intervention to Question 2 of the Sports Orientation Written Prompts which was, *how do you feel when you don’t win in a drill during practice*. The data was categorized into one of three categories which included: mad, motivated, and neutral. This data was placed in a pie graph by the researcher to illustrate the differences of the pre-intervention and the post-intervention responses. Figure 5 exemplifies the percentages of the categories responded by the athletes in the pre and post-intervention response to the question of how the athletes feel when they don’t win in a drill during practice.

**Figure 5 – A comparison of the pre and post-intervention responses to Question 2 of the Sports Orientation Written Prompts.**

Pre-intervention  
Post-intervention

It was evident that the responses to the Written Prompts of question two changed drastically from the pre-intervention to the post-intervention data analysis. The graphs illustrated that there were more athletes that responded in the post-intervention that they were mad. The neutral responses decreased as well from the pre-intervention to the post-intervention results. To further examine the athletes written responses the researcher took the categories in Figure 5 and recorded the answers to expose common themes that athletes noted. In the next figure, these
three categories of mad, motivated and neutral are revealed by the frequency of responses of the pre and post-intervention results.

**Figure 6 – Pre-intervention responses to the**
**Sports Orientation Written Prompts Question 2**

<table>
<thead>
<tr>
<th>Mad</th>
<th>Motivated</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upset-if it was really competitive and I don’t win</td>
<td>I try to work harder next time</td>
<td>Ok – bad though if we have to run for it</td>
</tr>
<tr>
<td>Upset-I know I can do better</td>
<td>Feel like haven’t accomplished anything</td>
<td>Ok-but felt like haven’t put forth best effort</td>
</tr>
<tr>
<td>Usually frustrated - depends on reason of lost</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frustrated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mad-question self if they play hard then gets mad if they run</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Figure 7 – Post-intervention responses to the**
**Sports Orientation Written Prompts Question 2**

<table>
<thead>
<tr>
<th>Mad</th>
<th>Motivated</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>I’m ticked – I don’t like to lose</td>
<td>More determined to win next time</td>
<td>Depends on reasons – people didn’t try then it sucks, if they tried then its ok</td>
</tr>
<tr>
<td>Really mad-I don’t like to lose</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mad-felt like I should have worked harder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upset-can do better</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upset-know we will probably run</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Little upset</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bad-I most likely have to run</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Don’t like it-then we have to run</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feel like a loser</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

By comparing Figure 6 and Figure 7 it was noticeable that the responses changed by more athletes felt mad during the post-intervention but also themes of the responses change slightly. In the results of these written prompts during the pre-intervention only one athlete responded they got mad if they didn’t win in a drill during practice and if they had to run. Then in the post-intervention three athletes responded they were mad if they didn’t win because they
had to run. The results concluded that the post-intervention which was administered after the intervention showed an increase in the frequency of the athletes that got mad when they lost and had to run if they didn’t win.

Question 3 of the Sports Orientation Written Prompts stated, *how do you feel when you win in a drill during practice.* The researcher read the entire pre and post-intervention written responses and sorted them into one of these three categories: good, self satisfaction, and accomplishment. All these were apparent reactions in both the pre-intervention and post-intervention responses. However, one other category emerged in the post-intervention results. The researcher observed descriptions of a feeling that was not present in the pre-intervention that included words like wonderful and love it. The researcher decided these words were stronger than words like good. Therefore, the researcher categorized these into a post-intervention category of very happy to represent a stronger positive emotion.

The pre and post-intervention results of the athlete’s self-perception when they win during a drill in practice are as followed in Figure 8. This Figure illustrates a pie graph of the percentages of responses made by the athletes based on how they felt before the intervention and after.

*Figure 8 – A comparison of the pre and post-intervention responses to Question 3 of the Sports Orientation Written Prompts.*
According to the results, more athletes responded that they felt good or very happy in the post-intervention than in the pre-intervention tested. This category of very happy, was absent in the pre-intervention responses as the researcher noticed only responses with the word good to explain a positive feeling. However, in the post-intervention the researcher analyzed words like happy and wonderful and loves it which seemed a lot more powerful then good. Therefore, this category of very happy emerged as these feelings became apparent in the post-intervention responses.

The responses to question three of the pre and post-intervention of the Sports Orientation Written Prompts were also recorded by the researcher. Similar to the previous two questions of the Written Prompts the responses to question three was recorded into a table to determine common or changing themes and the frequency of them. All the pre-intervention responses were charted as well as the post-intervention responses. Figure 9 and 10 illustrate the pre and post-intervention responses to question three of the Sports Orientation Written Prompts.

<table>
<thead>
<tr>
<th>Good</th>
<th>Accomplishment</th>
<th>Self Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>Felt like I accomplished goal</td>
<td>Satisfied-I put the effort and work in to win</td>
</tr>
<tr>
<td>Good-winning is a good feeling</td>
<td>Felt accomplishment-did something good</td>
<td></td>
</tr>
<tr>
<td>Good-won, but what can I make better</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good-did what I was supposed to do</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good-felt like I accomplished something</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good to feel like a winner</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The results presented in the Figure 9 and Figure 10 confirmed the difference of the athlete’s responses from the pre-intervention to the post-intervention administration. More athletes responded during the post-intervention that used more descriptive words that were not used in the pre-intervention. Although, there were still the same number of responses for self-satisfaction and accomplishment, there was definitely a change in a few of the responses by the very happy category that emerged in the post-intervention results.

Conclusion

The data collected from the two instruments used in this project showed differences in the responses between the pre-intervention and post-intervention analysis. In the Sports Orientation Questionnaire there was a slight increase in the mean of the scores of the three items tested for which included: competitiveness, win orientation, and goal orientation. All three of these scores increased from the pre-intervention results to the post-intervention. The other instrument used, the Sports Orientation Written Prompts, also showed differences in the responses from the pre-intervention to the post-intervention results. In the three questions that were used in this testing...
instrument, all of them had changes in the frequency of categorized responses from the pre-intervention compared to the post-intervention. In the post-intervention results there were more responses to wanting to win and feeling great when the athletes do win. In addition, the post-intervention results revealed themes how the athletes felt that were not present in the pre-intervention responses. By analyzing the data from these two instruments, the researcher was able to evaluate the self-perception of competitiveness of the student-athletes used in this project.
Chapter V: Discussion

The researcher of this project, who was also the assistant women's basketball coach, wanted her athletes to exhibit more competitive behaviors towards winning. The professional literature was reviewed and it was determined that competitiveness can be simulated during practices.

In order to increase the competitiveness among the female basketball players, the researcher implemented competitive drills during practices that had measurable outcomes of winners and losers. The research questions that were answered in this project included:

1) According to the professional literature reviewed, how were competitive drills defined?

2) What did the professional literature reviewed indicate were the benefits of implementing competitive drills among female athletes?

3) According to the professional literature reviewed, how were competitive drills best implemented during practice?

4) What were the benefits of implementing competitive drills in practice?

To complete the project, the researcher used two instruments to collect data. They were the Sports Orientation Questionnaire and the Sports Orientation Written Prompts. Both of the instruments were distributed and analyzed during a pre-intervention and post-intervention administration. During the three weeks of the intervention period, the researcher implemented three competitive drills, in which there were clear winners and losers with the losers subject to a mandatory consequence. The consequences included running or doing push-ups. After the three-week intervention period of competitive drills, the post-intervention assessment was conducted. The data was then collected and analyzed by comparing the athletes' responses on the two instruments used to determine if their self-perception of competitiveness had changed.
Meaning of Findings

The data that the researcher collected from the two instruments used in the project indicated an increase in the self-perception of competitiveness in the athletes. However, this increase was minute. A mean was calculated for the Sports Orientation Questionnaire within the three categories tested, which were competitiveness, win orientation, and goal orientation. The means from all three of the categories did increase from the pre-intervention scores compared to the post-intervention. However, each of the categories increases was less than one point. For example, the category competitiveness, the maximum amount of points was 65. The mean of the pre-intervention scores was 60.53 and the mean post-intervention scores were 60.58. So while the researcher stated there was an increase, it was only a very small increase.

The other two categories surveyed in the Sports Orientation Questionnaire were similar to the previous category competitiveness, with minute increases. In the category of win orientation, a maximum score of 30 points were possible. In the pre-intervention administration, the mean score was 26.6 while the post-intervention results were a 27.25 score. Again, this was a small increase.

The last category assessed of the Sports Orientation Questionnaire, was goal orientation. This category also had a maximum score of 30 points. The pre-intervention mean was 26.2 and the post-intervention mean was 26.92, which resulted in a .72 increase. Similar to the first category of competitiveness, these results did indeed indicate an increase from pre-intervention scores to post-intervention, however; the difference between the pre and post intervention scores of the Sports Orientation Questionnaires were very minute.

This data indicated to the researcher that perhaps the self-perception of competitiveness among the women's basketball team did increase due to the competitive drills incorporated
during practices during the intervention period. All three of the categories that were assessed in the Sports Orientation Questionnaire did show an increase from the pre to the post-intervention test results.

The researcher did find more of an increase however, in the responses of the Sports Orientation Written Prompts from the pre-intervention and post intervention administrations. The frequency of wanting to win and being competitive in the athletes' responses increased from the pre-intervention to the post-intervention survey. The increases were evident in all three of the instruments responses in the Sports Orientation Written Prompts.

The first question of the Sports Orientation Written Prompts asked the athletes if they always play to win during drills in practice and why or why not. The percentages of yes answers to this prompt went from 48% in the pre-intervention to 73% in the post-intervention. The response of no declined from 22% in the pre-intervention to 9% in the post-intervention. The response of sometimes resulted in 33% in the pre-intervention compared to 18% in the post-intervention. To the researcher, this might have meant that there were more athletes that were playing to win than there was before due to the intervention period.

The data from Question 2 also showed increases in the responses of the athletes. The question prompted the athletes to answer how they felt when they don’t win in a drill during practice. The data indicated an increase of 56% in pre-intervention to 82% post-intervention to the response of feeling mad when they don’t win. The response by the athletes of feeling motivated when they don’t win had a decline of 22% in pre-intervention to 9% post-intervention; and the response of neutral feelings declined from 22% to 9%. These changes from the pre-intervention percentages to the post-intervention percentages might have meant to the researcher
that some of the athletes changed their attitude and perception about losing during a drill in practice due to the intervention that was implemented.

The last prompt used in the Sports Orientation Written Prompts asked the athletes how they felt when they win in a drill during practice. The category *good* resulted in 67% in pre-intervention to 46% in post-intervention. Although the percentages declined in the responses of feeling good when the athletes won during a drill, stronger, more descriptive words were used in the post-intervention responses that were not present in the pre-intervention. For example, a new category *very happy* was only evident in the post-intervention responses and was not noted in the pre-intervention responses. Therefore, an increase of *very happy* increased from 0% before the intervention to 27% in post-intervention. Other categories of self satisfaction went from 11% to 9% and the category of accomplishment or feeling like the athletes have succeeded resulted in 22% to 18%. These results might indicate that stronger feelings by the athletes were expressed and felt during the post-intervention assessment. More athletes that were very happy confirmed to the researcher that the athletes felt better about winning in a drill than they did before the intervention period.

The data from the Sports Orientation Written Prompts and the Sports Orientation Questionnaire might indicate that the feelings and self-perceptions of the athletes were changed due to the intervention administered. The researcher found that the athletes wanted to win more and lose less after the intervention of competitive drills were implemented.

The researcher felt the most influential factor that changed the athlete’s self-perception of competitiveness was the consequences that had to be completed by the losing team during the competitive drills. The researcher arrived at this conclusion because so many athletes responded in the post-intervention prompts to being more competitive so they didn’t have to run.
This might imply that the intervention of competitive drills to change the self-perception of competitiveness among the athletes did indeed do what the researcher sought for with her athletes, which she wanted to win more and be more competitive.

Summary

A graduate assistant coach, working with the women's basketball team at a Division III college, implemented this project. The researcher wanted to encourage her players to exhibit more competitive behaviors when competing in basketball. The researcher reviewed the professional literature and determined that competitiveness could be simulated and encouraged during practice times. Therefore, this project was done to determine if self-perception of competitiveness among women college basketball players changed after the implementation of competitive drills during practice.

Intervention. The researcher implemented three competitive drills during the three weeks of the intervention period to determine if the 17-team members of the basketball team could change their perception of competitiveness. The drills that were developed and implemented were designed for an outcome of a winning team and a losing team. During these drills, the team manager kept score to determine the winners and losers. At the completion of each drill, the coaching staff had the losing team do conditioning exercises as a consequence such as running or push-ups while the winners were awarded with an extra break.

Sports Orientation Questionnaire. To collect the data of the self-perception of the basketball athletes, the researcher used two instruments. The first instrument was called the Sports
Orientation Questionnaire, which was used with permission from the originator Dr. Diane L. Gill (1989). The Questionnaire is a likert type questionnaire with 25 statements describing reactions to sport situations. These statements were meant to determine how the athletes felt about competitiveness, win orientation, and goal orientation. The responses were scored upon depending on the response that was circled for each statement. For example, five points were given for the circled response of strongly agree while only one point was awarded for the circled response of strongly disagree. A mean was calculated for each of the three categories of competitiveness, win orientation, and goal orientation.

*Sports Orientation Written Prompts.* The second instrument used in this project was the Sports Orientation Written Prompts. These prompts were developed by the researcher based on the review of literature discussed in chapter two. The instruments contained three questions about winning and losing in drills during practice and how they (the basketball athletes) felt. The open-end questions allowed the athletes to express their feelings and perceptions of competitiveness during practice. The prompts were analyzed by being categorized into a category then a comparison of the pre-intervention was done to the post-intervention data.

*Pre-intervention.* Both of these two instruments, the Sport Orientation Questionnaire and the Sports Orientation Written Prompts were distributed and analyzed in a pre-intervention administration. The researcher distributed both of the instruments to the team members after practice and allowed the entire week for the athletes to respond to the statements and prompts. Following the pre-intervention administration of the instruments used, the researcher implemented the intervention. During the intervention, the three competitive drills were
implemented daily in practice with consequences assessed to the losing team and the winning team awarded an extra water break.

Post-intervention. The researcher then administered both the Sports Orientation Questionnaire and the Sports Orientation Written Prompts to the athletes after the three weeks of the intervention period was completed. The two instruments were distributed to the team members similarly to the pre-intervention method by handing them to each athlete after practice and allowing the week for responses to be completed. The responses were completed by the athletes and turned into the researcher.

Data analysis. The researcher collected the data from the pre-intervention and post-intervention of the two instruments that were utilized and read the results. The Sports Orientation Questionnaire was calculated by the mean for each of these three categories for both pre-intervention and a post-intervention administration. Three scores, one for each of the three categories were recorded by the researcher for data comparison. The researcher then compared the mean of the pre-intervention and post-intervention of all three of the categories to determine if the perception of competitiveness among the women basketball athletes changed.

The Sports Orientation Written Prompts were read by the researcher and categorized by the response to the open-end question. The researcher determined this by identifying similar responses and categorizing them accordingly. The categories included yes, no, and maybe. This allowed the researcher to determine the frequency of each individual response to the question. The data was analyzed by comparing the percentages of the pre-intervention to the post-intervention categories. In addition, the researcher looked for common themes to why the
athletes answered the way they did. Themes such as wanting to win so the athletes didn’t have to run were among the prompted responses. These themes were noted to determine if common themes were apparent in both the pre-intervention responses and post-intervention. However, the themes to the Sports Orientation Written Prompts were not further analyzed in this study. The results to each of the questions were recorded and charted into graphs for comparisons of the pre-intervention results to the post-intervention results.

Results. The data the researcher collected from the two instruments used in this project both showed differences from the pre-intervention to the post-intervention analysis. The researcher concluded that both the Sports Orientation Questionnaire and the Sports Orientation Written Prompts showed an increase of athlete perception of competitiveness and similar traits such as wanting to win among the women college basketball athletes during the duration of this project. The data from the Sports Orientation Questionnaire appeared to indicate having a slight increase in the mean of all three items tested for which included: competitiveness, win orientation, and goal orientation. All three of these scores, from the three categories increased from the pre-intervention results to the post-intervention.

The other instrument used, the Sports Orientation Written Prompts, also showed an increase in the frequency of responses towards competitiveness from the pre-intervention compared to the post-intervention. The post intervention results indicated that there were more responses to wanting to win and feeling great when the athletes do win. In addition, the post-intervention results revealed themes how the athletes felt that were not present in the pre-intervention responses. The small increases of competitiveness among the athletes self-
perception of competiveness was evident in both the Sports Orientation Questionnaire and the Sports Orientation Written Prompts.

From the results of these two instruments, the researcher was able to evaluate the self-perception of competiveness of the student-athletes by comparing their feelings before and after the intervention period. The results of the pre-intervention compared to the post-intervention indicated that the self-perception of competiveness among the team members changed after the intervention period was administered. Overall, the data from both instruments might have indicated that the perception of competiveness among the athletes increased with implementation of competitive drills.

Recommendations

Four major recommendations were made to others who may wish to implement this project in the future.

The first recommendation made would be the length of time to conduct this project. This project was conducted during a five-week period of a collegiate women's basketball season. The intervention period lasted only three weeks with one additional week each devoted to the administration of the pre-intervention and post-intervention tests. It was recommended for the study to be conducted over a longer period of time perhaps the duration of the season. The pre-intervention would be administrated at the beginning of the season followed by competitive drills implemented consistently the remainder of the season. This would be followed by a post-intervention data collection near the end of the season. Therefore, for a more conclusive research project recommendations were made to implement competitive drills all season to
determine if self-perception of competitiveness among women college basketball athletes could be changed.

The second recommendation that was made included the participants of the study. The researcher was limited to conduct this study with the basketball team that she coached, therefore only 17 women basketball athletes participated in the study. In addition, the athletes that participated in this project were members of a Division III college, which is a non-scholarship athletic program and therefore can be very different to other programs elsewhere. The athletes used in this study were by no means a typical sample of college athletes. The athletes used in this study were limited by being from one college and one team. It's recommended for more conclusive results on the perception of competitiveness among college women athletes to study more teams, from other colleges and/or universities.

Another recommendation made by the researcher would be to expand the interventions by adding more competitive drills during practice times. In this project, three drills were used daily during practice as the intervention of competitive drills. At the completion of the project the researcher thought more drills could have been utilized to expose the college athletes to an even more competitive practice environment. With a small change from the pre-intervention responses to the post-intervention responses the researcher raised the question of whether enough competitive drills were used during the intervention period. The data that was analyzed from this project proved that the athletes' self-perception of competitiveness was slightly changed; however, as stated earlier it was a very small amount.

The last recommendation made by the researcher was to further examine the actual themes of responses that became present during the duration of this project. The researcher noted responses to not wanting to compete in fear of getting hurt. This response occurred more than
once and could be further studied as why athletes have those feelings and ways to diminish them. Another interesting response the researcher noted that could be examined was the responses from the athletes that did compete against others because they want to win compared to other athletes that compete against others because they hate to lose. These two responses occurred frequently in the data and, although the athletes were competing, it is apparent from the data apparently they competed for different reasons. These common themes became evident of why or why not the athletes wanted to compete and could be further examined. Recommendations are made to further investigate motivating factors with competition. Some of these factors became apparent in this study such as playing to win or some played to not lose and have to do the consequence of running.

Conclusion

The researcher of this project wanted to determine if her college women's basketball teams' perception of competitiveness could be changed. The results of this project enabled the researcher to evaluate the self-perception of competitiveness of her student-athletes by comparing their thoughts and feelings before and after the intervention period. The results from the pre-intervention data compared to the post-intervention data indicated that the competiveness increased in the student-athletes and self-perception of being competitive might have changed. This data was important to the researcher as it demonstrated team's self-perception of competitiveness could be changed and it might influence academic performance.
References:


Appendix A

**Sport Orientation Questionnaire**

The following statements describe reactions to sport situations. Read each statement and circle the letter that indicates how much you agree or disagree with each statement. Please answer them on how you *usually feel* about sports and competition. There are no right or wrong answers; simply answer on how you feel.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Slightly agree</th>
<th>Neither agree nor disagree</th>
<th>Slightly disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am a determined competitor.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>2. Winning is important.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>3. I am a competitive person.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>4. I set goals for myself when I compete.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>5. I try my hardest to win.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>6. Scoring more points than my opponent is very important to me.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>7. I look forward to competing.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>8. I am most competitive when I try to achieve personal goals.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>9. I enjoy competing against others.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>10. I hate to lose.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>11. I thrive on competition.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>12. I try hardest when I have a specific goal.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>13. My goal is to be the best athlete possible.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>14. The only time I am satisfied is when I win.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>15. I want to be successful in sports.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>16. Performing to the best of my ability is very important to me.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>17. I work hard to be successful in sports.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>18. Losing upsets me.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>19. The best test of my ability is competing against others.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
</tbody>
</table>
20. Reaching personal performance goals is very important to me. A

21. I look forward to the opportunity to test my skills in competition. A

22. I have the most fun when I win. A

23. I perform my best when I am competing against an opponent. A

24. The best way to determine my ability is to set a goal and try to reach it. A

25. I want to be the best every time I compete. A
Appendix B
Sport Orientation Written Prompts

Please read the following questions regarding drills done during basketball practice and take the time to respond to them on how you actually feel. Please DO NOT put your name on the responses.
Thank you.

1) Do you always play to win during drills in practice? Why or why not?

2) How do you feel when you don’t win in a drill during practice?

3) How do you feel when you win in a drill during practice?