

Running head: AGT & DRIVE BC Program

A comprehensive look at achievement goal theory and how it can be used to maximize the benefits of the DRIVE BC Basketball program.

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Past research has revealed the immense benefits and overall positive impact sport participation has on youth (Duda 2001; Roberts 2001; Weiss, 1993). Generally, based on the widely held assumptions concerning the value of competition, youth sports participation is highly regarded and considered to be pervasive. It is assumed that competitive athletics develop character, enhance moral development, and foster a positive motivational perspective on achievement that transfers to other pursuits later in life (Coakley, 1990; Greendorfer, 1987; Humphries, 1991; Kohn, 1986).

However, an overemphasis on competition in youth sport has been linked to a negative approach to achievement, specifically, a decrease in learning and motivation, an increase in maladaptive behaviors and emotions and lower levels of reasoning (Bredemeier, 1985; Coakley, 1990; Greendorfer, 1987; Vealey & Campbell, 1988). Poor sportsmanship, increased aggression, dropout, burnout, increased anxiety and little enjoyment are cited as examples of negative experiences in youth sport. Research on this area of sport has centered on the characteristics of the competitive environment and their effect on the behavioral patterns, attitudes, and affective reactions of sport participants (Scanlan & Lewthwaite, 1986; Simon & Martens, 1979). This literature suggests that competitive youth sport is not inherently bad or good, but it is a question of how this activity is structured and interpreted (Newton & Duda, 1993) that ultimately determines its utility.

The challenge therein is to create a sporting environment that maximizes the immense positive benefits of participation in youth sport, while eliminating the possible negative costs that can arise from participation in a competitive, achievement setting.

Since young people have so much to potentially gain from their participation in sport, it is worthwhile to explore how their sporting experiences can be maximized.

Researchers have attempted to delineate the variations in responses to competitive sport by investigating individual differences in how people define success and judge their competence (Duda, 1992, 1993). Nicholls (1984) achievement goal theory (AGT) provides an intentional framework of behavior that suggests “behavior is predicted by assuming that individuals are goal directed and that their behavior is a rational or economic attempt to gain their (*own specific*) goals” (Nicholls, 1984b).

Coaches of the DRIVE BC Basketball program (a basketball training school for boys and girls aged 9-18), are particularly interested in how DRIVE BC can maximize the experiences of participants taking part in the program. DRIVE BC would like all its members to have an optimal experience in the sporting environment. Not only would DRIVE BC like to develop elite level basketball players, but also develop well rounded athletes who thoroughly enjoy their experience in sport. Though some of the DRIVE BC players will go on to compete at a high level, DRIVE BC understands that most players in the program will simply learn basketball and life-skills that they can take with them in the future. The DRIVE BC mission is to:

- Teach life-skills through sports;
- Empower success among youth through sports;
- Promote physical activity and a healthy lifestyle through sports;
- Strengthen communities through sports;

Having these objectives as the DRIVE BC mission, it is important to understand that the structure of the program and how it is interpreted will ultimately determine whether the DRIVE BC program will succeed with its goals.

For these reasons, the purpose of this paper is to examine how the DRIVE BC program can optimize the experiences of athletes involved in the program using tenants of Nicholls achievement goal theory. Knowing that young people have much to gain from sport, it is important to understand how environments can be structured to enhance youngster's attitudes and to foster meaningful relationships with coaches and peers in sports programs. This paper will use Nicholls (1984, 1989) achievement goal theory (AGT) as the theoretical framework to the coaching of young athletes within the DRIVE BC program. It is the aim of the paper to predict what type of impact the application of achievement goal theory will have on the DRIVE BC program. It is also the aim of this paper to not only provide a literature review of the various work conducted around AGT, but also outline coaching methods the DRIVE BC program should instill to assure youngsters in the program are having positive experiences. It is hypothesized that the application of tenants of the AGT to the DRIVE BC program will ensure that all participants maximize their overall experience playing basketball in multiple ways. Through the application of AGT, it is predicted that participants in the DRIVE BC program will have positive attitudes towards sportspersonship, develop positive relationships with their coaches and peers in the program, increase their overall performance, have positive beliefs about their causes of success as well as several other positive benefits such as enjoyment, more time spent on practice and increased likelihood to participate in future programs.

Achievement Goal Theory

To begin discussion of how DRIVE BC can use achievement goal theory to fully maximize the benefits of youth sport within its program, it is necessary to clearly define AGT and several of its key concepts. The achievement goal theory represents a theoretical approach to understanding student motivation and achievement behavior in a physical activity setting. The central proposition of AGT revolves around the manner in which individuals determine their goals in achievement settings such as sport, PE, and the classroom (Murphy, 2004). Whether or not an athlete perceives an outcome as a success or failure depends on the athletes' achievement goals and how he or she defines success in the first place. In sport, success and failure are often seen as an objective state (determined by score and rankings); AGT holds that success and failure are *subjective* psychological states (Roberts, 2001).

There are several key concepts of the AGT. These concepts include conceptions of ability, psychological achievement goal state, dispositional achievement goals and the motivational climate.

Conceptions of Ability

In regards to conceptions of ability, AGT holds that people in achievement settings are motivated to demonstrate ability (competence), and to avoid demonstrating inability (incompetence) (Weiss & Williams, 2004). Nicholls (1980) identified two conceptions of ability: an undifferentiated or differentiated concept of ability. In an undifferentiated concept, the individual has an inability to, or choice not to, differentiate between ability and effort. In this regard, working hard is equated with ability. On the other hand, a differentiated concept of ability refers to ability to, or a choice to,

differentiate between ability and effort. In this case, hard work and ability are seen as separate from each other.

Conceptions of ability reflect the second concept of AGT, the psychological achievement goal state of an athlete.

Task-involved Athletes

Nicholls (1989) identified state achievement goal behavior that utilizes the undifferentiated concept of ability as task involvement. A task-involved individual is concerned with the development of his or her competence and uses level of effort and task completion to assess his or her competence in a self-reflective manner (Murphy, 2004). An individual who is task-oriented uses an undifferentiated conception of ability, and the person's actions are aimed at achieving mastery, learning, and/or perfecting a task. In a state of task-orientation, the individual evaluates personal performance to determine whether effort is expended and mastery achieved, thus the demonstration of ability is not compared to others, but is self-referenced and success is realized when mastery is demonstrated. The key word in this definition is 'self-reflective.' An athlete that is task-involved can be said to have high 'self-awareness,' meaning he or she is completely aware of his or her ability, effort and behavior. The task-involved athlete holds a 'less differentiated' conception of ability as they believe that ability equates to effort, and the 'harder you try, the more able you feel.' In addition, a task-involved performer is satisfied if they perform to a level that reflects how they have mastered a task or made personal improvements. When a person is task-involved, perceptions of ability are related to self-referenced standards as opposed to comparison with others.

Ego-involved Athletes

An athlete with an ego orientation holds a differentiated view of ability in that ability and effort are clearly separate from each other (Nicholls, 1984, 1989). The ego involved athlete sees his or her ability as a fixed attribute, thus limiting the effects that high levels of effort have on their performance. When a person is ego-involved, they judge their ability relative to others and have to demonstrate superior ability to outperform others to be satisfied (E.g. Basketball players who focus on beating their opponent or winning regardless of technique). The ego-involved athlete's priority is to show ability, not effort.

Ego-involvement leads to an 'outcome goal orientation,' which is problematic because factors are external and uncontrollable. For example, an ego-involved basketball player who focuses on who the opponent is and does not concern themselves with their own ability or effort is focusing on an uncontrollable factor, the opponent players' ability. An ego-involved player could also be worried about who is watching in the crowd or how he/she looks in front of certain people such as their parents, peers and other coaches. Again, these factors are uncontrollable. Whereas the focus should be on task completion; the athlete is focused on external factors that could lead to disruption in performance (Hanson, 2007).

The DRIVE BC program should be concerned with the idea of ego orientation because if one of the players is too ego-involved it could not only disrupt his/her performance it will also have a direct effect on the players' overall improvement as a basketball player. The talented player who is ego-oriented and perhaps only competes to

his or her maximum ability when he or she is challenged is not improving as a player (Hanson, 2007).

Achievement Goals

Achievement goals, also known as dispositional goal orientations, refer to students' purposes for engaging in achievement-related behavior and the meaning they ascribe to the behaviors. They can influence how participants approach, experience, and perform in achievement settings. When athletes are asked how they define success and judge their competence, the literature on achievement motivation using an achievement goal analysis suggests the responses can be divided into two distinct, global perspectives, namely a task orientation, or an ego orientation. Researchers have examined these two types of achievement goals (Roberts, 2001; Duda, 2001). Task goal orientation focuses on developing competence through learning and task mastery, and ego goal orientation focuses on demonstrating superiority over others. Researchers observed that task goals were associated with adaptive motivational patterns, including working hard and attributing success to effort, whereas ego goals were associated with less-adaptive motivational patterns, including avoiding difficult learning tasks and attributing success or failure to natural ability (Roberts, 2001; Duda, 2001).

Any training or competition situation where an athlete has an opportunity to display physical competence activates their task or ego involved goals. The athlete could be ego or task involved in certain situations or switch between the two (Murphy, 2004). For example, a basketball player could be highly task-involved and be very satisfied with their overall performance during a game based on their ability to make great decisions, make key rotations and sustain a high level of energy during the game. However, this

same player could get fouled at the end of the game and quickly change to an ego-involvement where success is dependant upon making or missing the free throw instead of technique and concentration (Hanson, 2007).

It is said that all athletes have a preference for task or ego-involved goals in sport (Murphy, 2004). A major tenet of achievement goal theory is that individuals will be predisposed to task and ego orientations as a result of socialization experiences in their sport and these orientations will subsequently influence whether an individual will adopt a task or ego goal in a specific situation. According to Murphy (2004), these predispositions are believed to develop through childhood largely due to the types of people the athletes come in contact with and the situations they are placed in. If an athlete grows up in an environment where he or she is praised for effort and personal improvement and is encouraged to learn from their mistakes they are likely to foster a task orientation. Success for these athletes is shaped by these early experiences as they learn to believe that success is associated with mastery, effort, understanding, and personal responsibility (Murphy, 2004). In contrast, an ego-oriented environment has been classified as one where children are shaped by rewards for winning (alone), praise for the best grades, criticism or non-selection despite making their best effort, or coaches whose style is to handout unequal recognition. This type of environment helps an ego orientation to develop, along with the belief that ability and talent, not effort earns success (Murphy, 2004).

An interesting finding is that goal orientations are believed to be relatively stable and enduring characteristics that are largely formed in mid-to late adolescence (Murphy, 2004). This finding emphasizes the importance of coaches and parents to shape a child's

development as early as possible during the 6-14-year-old phase. It is believed that during this period of development, children's cognitive abilities begin to understand that effort isn't the sole reason for success at a task (Murphy, 2004). At about 11 or 12 years age, they begin to realize that regardless of effort, some kids simply have more ability than others. This is why the idea of achievement goal theory and applying it to the teaching and coaching of kids at a young age is so important in their development as athletes and in their overall satisfaction of playing a sport. If an athlete understands at an early age that personal improvement is most important and that will lead to more enjoyment, than that athlete is properly equipped to understand the fact that some kids have more natural ability than others regardless of effort output.

Motivational Climate

The motivational climate refers to the situational goal structures participants perceive to be emphasized in an achievement setting (Fry & Newton, 2003). The motivational climate is of particular interest to the basketball coach because the motivational climate has a great importance on what type of goals an athlete will be oriented towards and what type of approach an athlete will take to his or her sport.

The two predominant goal structures are termed task-involving (or mastery based) and ego-involving (or performance based) motivational climates. The athletes' perception of the motivational climate and different goal structures emphasized is dependent upon several factors within the motivational climate. Some of these factors include how tasks are organized, the criteria used to evaluate participation, how participants are grouped, the source and power of authority, the extent of social

comparison, and expectations regarding how participants are supposed to work with each other (Ames, 1992a, Newton et al., 2000; Walling, Duda, & Chi, 1993).

Task-involving contexts emphasize the process of competition, focus on exploration of personal potential, base recognition and rewards based on task mastery, and sharing of power. On the other hand, ego-involving sporting situations emphasize competitive outcome, focus on differences in ability, base recognition and rewards on ability, and have a unilateral power base (Newton et al., 2000).

Nicholls suggested that in achievement settings, a perceived task-involving motivational climate would be beneficial because it would lead to adaptive motivational responses such as increase in effort, emphasis on personal improvement and overall commitment. In contrast, an environment that is perceived to be ego-involving would lead to more maladaptive motivational responses such as low effort, increased belief that ability equates to success and not effort, and increased comparison with others as opposed to personal improvement. It is clear that if a coach can understand the concept of the motivational climate and how he or she plays a crucial role in the athletes' perception of the climate, it will lead to a more conducive and positive learning environment.

Benefits of a Task-Involving Climate

Past research has outlined several benefits of a perceived task-involving climate. Smoll et. Al, (1990) study displayed boys with low self-esteem who played for coaches trained to apply positive coaching practices (e.g. reinforce effort and success defined in terms of personal performance) exhibited significant increases in overall self-esteem. In addition, research by Reinboth and Duda (2004), showed that young athletes who

perceived the coach-created climate as more task-involving reported higher levels of self-esteem and physical self-worth. Perceptions of an ego-involving climate were associated with lower self-esteem and physical self-worth.

Duda & Hall (2001) accounted for these benefits of a task-involving climate by mentioning that a task-involving climate would relate to more positive perceptions of physical self-worth as, in such environments, competence judgments are self-referenced and individuals are less likely to be worried about being evaluated. In contrast, in an ego-involving climate, a positive physical self-worth is more to be at risk because it is more likely to be contingent upon achieving normative success and superiority (Duda & Hall, 2001; Reinboth & Duda, 2004).

Fair play, Sportsperson ship & Relationship with Peers and Instructors

Having clearly defined individual goal orientations and the motivational climate in relation to Nicholl's AGT, it is useful to examine research studies that have shown the immense benefits tenants of AGT can have on youth sporting programs such as DRIVE BC. Two benefits identified as important for young people to gain from their experiences in sport include the appreciation of fair play (i.e., positive attitudes towards sportspersonship) and their positive interactions with peers and coaches (Sheilds & Bredemeier, 1995; Smith & Smoll, 1991).

Positive sportsperson ship and creating positive interactions with peers and coaches should be important to the DRIVE BC program. If DRIVE BC is to fully maximize the experience of participants in the program, not only it is necessary to establish an appreciation of fair play amongst its players, but it is also important to establish positive interactions between its players, their peers, and the DRIVE BC basketball instructors. Due to all the coaches of DRIVE being ex-University players, one of the missions of DRIVE BC is to create a positive relationship between all players and coaches in the program. DRIVE BC would like to create a coach-athlete mentor relationship that helps motivate the athlete to train diligently by the use of role modeling. Young players are more likely to have positive relationships with younger coaches who have experience playing the sport and also have gone through similar experiences as those players involved in the program (Hanson, 2007).

Fry & Newton (2003) observed the application of AGT in an urban youth tennis setting. The purpose of the study was to examine the motivational responses of tennis players in relation to their goal orientations and perceptions of the motivational climate in

an elite tennis academy. The researchers studied the relationship between goal orientations and the perceived motivational climate on predicting the attitudes towards sportspersonship and quality of relationships with peers and instructors involved in the tennis program. Members of the tennis academy completed a survey with tennis-specific measures of goal orientations, motivational climate, and attitudes toward tennis, their instructor, fellow players and sportspersonship behaviors.

The researchers in this study concluded that youngsters involved in the USTA's Star Search tennis program were having positive experiences. More specifically, the athletes reported that they enjoyed tennis, had positive interactions with their tennis pros and peers in the program, and endorse sportspersonlike behaviors in tennis. Overall, the researchers were able to conclude that youngsters involved in the USTA's Star Search program were successful in exposing youth to tennis in an environment that lets them thrive and foster their interest and sustained involvement in sport. For the purposes of this paper, of more interest is the relationship the researchers found between tenants of Nicholls' AGT ('84, '89) and the athletes' attitudes towards tennis, sportspersonship, and the relationships they share with the tennis pro instructors and peers involved in the program.

Sportspersonship

In regards to sportspersonship, athletes who perceived a highly task-involving climate exhibited more positive sportspersonlike attitudes, while perceptions of an ego-involving climate were negatively associated with the endorsement of sportspersonlike attitudes. The motivational climate accounted for a considerable amount of the variance between the tennis player's attitudes between sportspersonship. These results confirm

that if participation in tennis is to foster sportspersonship, than young tennis players should learn and train in an environment that emphasizes task involvement. On the other hand, when an emphasis is placed on ego-involvement, athletes tend to focus on performance outcomes and how their performance measures in comparison to other players. This emphasis on comparison leads to an attitude that engaging in unsportspersonlike behaviors is justified because winning is the most important thing and it is winning that will ultimately lead to advancement in sport.

The researchers also found that dispositional task-orientation was also associated with positive sportspersonship attitudes. Goal perspective theory suggests that goal orientations are related to sportspersonship attitudes and behaviors. Nicholls suggested that ego orientation may be associated with a “lack of concern about...fairness” (Nicholls, 1989). Duda and colleagues found that ego orientated athletes were more likely to approve of injuring another player while task oriented athletes were more likely to adopt positive sportspersonship behaviors and attitudes (Duda et al. 1991).

The researcher’s results regarding sportspersonship are of particular interest in the development of the DRIVE BC coaching philosophy. Frequently young athletes at DRIVE BC will “cheat to win,” placing too much emphasis on winning the particular game or contest. In these circumstances, it is witnessed that the athletes not only display a negative attitude towards sportspersonship and competition, but also in the process of “cheating,” they are actually compromising their technique and learning improper fundamentals. An example of this from DRIVE BC camp is a team shooting game that is often played that involves teams shooting from a designated spot trying to earn 10 completed baskets before the other teams. In an effort to win the particular round of

competition, some kids move past the designated shooting line or shoot too fast in order to get more shots than the other teams. During these instances, participants can be seen shooting the basketball from the wrong part of their body, practicing the wrong technique and disrupting learning and improvement. These observations are justified when coupled with the researcher's findings regarding sportspersonship and the perception of a task-oriented climate and task oriented goal disposition.

If the DRIVE BC coaching philosophy emphasizes the development of a task-oriented goal disposition as well as creating a task-oriented motivational climate, not only will it be teaching athletes more positive attitudes towards sportspersonship, but will also further develop participants technical skills because the focus on task-orientation leads to mastery. A solution to the team shooting example provided above according to these research results and AGT would be to reward proper technique and the employment of positive sportspersonship attitudes as opposed to just winning the particular game or contest.

Attitudes towards tennis, instructor, and fellow players

The researchers also found a strong connection between the perceptions of the motivational climate and the tennis players' attitudes towards their tennis instructors and peers in the program. Overall, when athletes perceived a high task-involving climate they reported they liked their tennis pros, enjoyed playing for them, and wanted the same tennis pro instructor the following year. In addition, they also reported more positive relationships and better attitudes towards others peers in the program than did athletes who perceived an ego involving climate.

The researchers concluded that the profile of youngsters who perceive a task-involving climate, and all the positive benefits of this type of environment, should preserve and maintain motivation. When children like and respect their tennis pro instructors and peers in the program, they will exert more effort, enjoy their participation, be more likely to continue in the program and optimize their potential ability (Fry & Newton, 2003). The researches also make the connection between the tennis pro instructors overall enjoyment in coaching when the athletes attitudes towards tennis are positive.

The athletes overall experiences are much different when they perceived an ego-involving climate. Firstly, the athletes reported a negative attitude towards their tennis pro instructors and also towards peers in their program. The results show that an ego-involving motivational climate would be unpleasant for not only the tennis players but also the instructors. These findings are not surprising when one considers the nature of an ego involving climate: one where the coach encourages rivalry among players, the coach sends messages that mistakes are bad and should be punished, coach praises favorable outcomes rather than high effort, and the coach pays most of his/her attention on the most talented players (Fry & Newton, 2003). It is clear that a perception of a task involving climate greatly enhances experience while an ego-involving climate may lead youngsters away from the sport.

There are several strong coaching implications in regards to the discrepancy of attitudes towards tennis instructors and their peers in the program between players who perceived a task-involving climate as opposed to an ego-involving climate. It is of particular note that athletes who like their instructor report more adaptive behaviors such

as increased effort and a desire to optimize ability than athletes who do not like their instructor. As mentioned above, athletes were more likely to like their tennis instructor if they perceived a task-involving climate.

If DRIVE BC is to optimize the experience of members in its program it should establish a task-involving motivational climate. If participants in the program perceive a task-involving climate and report positive attitudes towards their instructors at DRIVE BC they are more likely to sustain involvement in sport and exhibit high levels of effort and persistence.

Smith et. al. (1979) research examining effective coaching behaviors in youth sport revealed that youth sport coaches who display high percentages of positive reinforcement (both after mistakes and desirable performances) and technical instruction behaviors, in combination with a low percentage of punishment behaviors develop players that like the coach, their teammates, and their sport more. Their results also show that when a coach exhibits these behaviors it is associated with players reporting higher levels of self-esteem over a season, lower levels of trait anxiety over a season, and lower drop-out rates for the future year.

Beliefs about causes of success and performance improvement

Van-Yperen & Duda's (1999) work will assist in hypothesizing the application of AGT to the DRIVE BC program in regards to the player's beliefs about causes of success and performance improvement during the season. The DRIVE BC program is interested in differences between goal orientations and beliefs about causes of success in its participants because DRIVE BC believes its athletes should focus on things under their personal control such as effort and hard work, both task-oriented attributes. Understanding different athlete's beliefs about causes of success will help DRIVE BC alter its coaching program to best fit its members.

The second variable studied is also of particular importance because an often held assumption by Coaches is that a player must be ego-oriented and train in an ego-oriented climate if he/she would like to improve performance. These coaches often stress comparison amongst players, attempting to use competition to improve each player's performance (Hanson, 2007). The results of the study will help determine if the application of AGT to DRIVE BC will improve the performance of players' in the program.

Van-Yperen & Duda (1999) extended past work testing AGT in sport by examining the relationship of goal orientations to beliefs about the causes of success in the case of elite male Dutch soccer players. The researchers were also interested in the relationship of goals and beliefs to ratings of performance in the soccer players (both self-report and coaches appraisal). Seventy-five male pupil representing five teams from an internationally renowned soccer school in the Netherlands completed the TEOSQ and a measure of their determinants of success in soccer at the onset and conclusion of one

season. Assessment of the coaches' appraisal and athletes' self reported performance in soccer were carried out at the same time.

Beliefs about success

In line with other studies examining dispositional goal perspectives, a positive association between ego orientation and the belief that ability or innate talent is the determinants of success was revealed. Task orientation was linked to the belief that effort, team play, and parental support contribute to achievement in soccer.

Two additional beliefs relating to task-orientation and beliefs about success were found in the soccer players. The researchers found that the players who were task-oriented or perceived a task-oriented climate were more likely to believe that personal success may come from cooperate and supportive relationships with others such as other team members and parents. Due to the fact that parents play a significant role in the lives of athletes aged 13-18, it is important to understand that task-oriented athletes will view their parents as having more influence on their success than ego-oriented athletes. Having this knowledge, it is safe to assume that task-oriented athletes will make more effort to have supportive relationships with their parents because they understand this will contribute to their success in sport.

Performance improvement

The researchers (Van-Yperen & Duda, 1999) cite a meta-analysis of research (Utman, 1997) in which individual goal perspectives were manipulated and subjects had to perform an experimental task to predict that task involvement would lead to increase in soccer performance for the players during the season. The results of the meta-analysis suggested that task involvement leads to better performance than ego involvement,

particularly when the experimental task is quite complex (Utman, 1997). Van-Yperen & Duda (1999) found their data supports these suggestions. The researchers found an athlete's dispositional task orientation has a significant effect upon performance improvement over the course of a season.

Since performance is such an important part of sports and often used by coaches as selection criterion, this data has important implications in the coaching of young talented athletes. The data suggests that in the final stages of talent development, high task-oriented individuals will outperform their low task-oriented counterparts. This is of particular importance to coaching because an often held assumption of coaching and motivation is an athlete must be ego-oriented to improve performance over task-orientation (Hanson, 2007). An important question is why task-orientation can be related to performance improvement. The researchers suggest that highly task-oriented athletes believe that success is primarily determined by effort and collaboration, which implies that they believe that one's behavioral outcomes are more under personal control (Van-Yperen & Duda, 1999). Therefore, athletes who are highly task-involved will be less likely to make performance attributions to things that are uncontrollable such as the weather or referring which could lead to maladaptive behaviors such as reduced effort.

Other research has shown that performance improvement could be due to task-involvement corresponding to effective strategy use in training and competition (Lochbaum & Roberts, 1993). While the stress literature (Jones & Hardy, 1990; Lazarus & Folkman, 1984) indicates that under conditions of high perceived control, subjects' perceptions and experience of stress (which is likely to occur from time to time in a highly competitive sports climate) evoke problem-focused coping behaviors, including

information gathering, advice seeking, goal setting, the employment of mental skills, and spending more hours in practice. Problem-focused behaviors which have been linked to task-orientation (Pensgaard & Roberts, 1999; Kim & Duda, 1998) are less likely than emotion focused behaviors to cause performance stagnation or even performance decline. The research has shown to be the opposite for ego-orientation. Ego-oriented athletes have shown higher competitive stress in sport (White & Zellner, 1996), and heightened anxiety responses, which could lead to ineffective coping behaviors and a subsequent performance decline.

Achievement goals, Behavior & Perceived motivational climate

In the effort to hypothesize the application of AGT to the DRIVE BC program, it is important that perceived motivational climate be examined in relation to the participant's achievement goals and achievement behavior. Xiang (2004) examined the relationship between achievement goals, the perceived motivational climate and achievement behaviors in an elementary physical education program. This study is useful in the sense that it provides information on younger athletes who are in an achievement setting. This variance in subjects and studies examined will allow a broader overall view of how to fully maximize experience and performance of kids involved in the DRIVE BC program using AGT because as mentioned, DRIVE BC includes boys and girls of varying skill levels and ages. DRIVE BC coaches and trains a variety of athletes, all with their unique individual and team goals; therefore a broad picture of achievement goal theory and its relation to our overall coaching philosophy is necessary.

Xiang's study extended previous research on achievement goals, perceived motivational climate, and their achievement-related correlates by focusing on an elementary physical education program. The elementary school running program called Roadrunners is very similar to the DRIVE BC basketball program in the sense that Roadrunners promotes cardiovascular health, physical active lifestyles, and mastery behaviors such as persistence and effort. Correlations and multiple regression analyses showed the mastery goal as the only motivational construct related positively to both student persistence/effort for Roadrunners and their one-mile run performance.

They also provide empirical support for the notion that, while mastery and performance goals both exist among students, the mastery goal is consistently associated with a variety of motivational variables likely to enhance long-term and high-quality engagement in learning. The mastery goal interacted with the perception of a mastery-focused climate to predict student one-mile run performance. This finding appears consistent with the theoretical prediction that achievement goals and perceived motivational climate may interact to influence student achievement-related cognitions and behaviors.

Orthogonality of Achievement goals

An important assumption of achievement goal theory is that the goals are orthogonal; that is, task and ego goal orientations are independent, which means one can be high or low in each or both orientations at the same time (Roberts & Treasure, 1996). However, most of the research in AGT has focused on examining the cognitive, affective, and behavioral correlates of being either task-or ego-oriented (e.g., Duda, Chi, Newton,

Walling, & Catley, 1995; Lochbaum & Roberts. 1993; Treasure & Roberts, 1994a). An interesting research question, therefore, presents itself as it would be beneficial to understand the differences between athletes who are high in ego orientation and low in task orientation and athletes who are high in both ego and task orientation.

Roberts, Treasure & Kavassanu (1996) examined the orthogonality of achievement goals and its relationship to beliefs about success and satisfaction in sport. The participants were 333 sports involved students attending a large University in the Midwest of the United States. The participants were administered the POSQ (Perceptions of Success Questionnaire) to understand the orthogonality of their achievement goals and its relationship to beliefs about success. The researchers found that when high-ego individuals also were high in task orientation, this was sufficient to mediate the belief high ego-oriented individuals typically hold. The researchers found that high ego/high task-oriented individuals exhibited the same adaptive beliefs as the high task/low ego-oriented individuals.

These results are important in the fact that past research has deplored being high in ego orientation and suggests those involved in sport do their utmost to depress ego orientation and enhance task orientation instead (e.g., Duda, 1992, 1993; Roberts, 1992, 1993). However, the present study suggests that task orientation should be enhanced as well for high ego-oriented individuals. Rather than replacing ego with task orientation, it seems similar results can be achieved by enhancing task orientation for high ego-oriented individuals. This is an interesting finding because as mentioned earlier, it has always been a difficult task for coaches to suppress ego orientation in competition. Coaches believe a high ego orientation is necessary to compete at a high level and attain peak

results. The present research suggests that athletes with high ego orientation should be taught to also be highly task involved in order to debilitate some of the negative effects of high ego-involvement. The athlete who is both high in task and ego involvement is said to potentially have more determinants and causes for success (Roberts, Treasure, Kavassanu, 1996).

Recreational Sports

The DRIVE BC program contains athletes with varying abilities who have different motivations for participating in sport. While some athletes who come to DRIVE BC strive to earn a scholarship and perhaps play professionally, some athletes participate in DRIVE BC for recreational reasons and might not take sport participation as seriously as the elite athletes. These athletes might cite reasons such as staying fit or making friends as reasons for participating in DRIVE BC. As a coaching staff this presents a challenge because DRIVE BC would like all members of its program to enjoy their experience at DRIVE BC but also maximize their potential and achieve their specific goals. In regards to the overall purpose of this paper to maximize all participants of DRIVE BC's overall experience, it is beneficial to discuss Duda's (1998) research in the recreational sport domain. Duda's (1998) research examined the relationship between achievement goal orientation and specific motivated behaviors, such as persistence and behavioral intensity. Participants were classified into four groups based on their orientations to both achievement goals. The results of the study showed a significant interaction effect between task and ego goal orientation for persistence and behavioral intensity. Specifically, participants who were high on task orientation participated in

intramural sport longer, and devoted more time to practice their intramural sport irrespective of their level of ego orientation. An interesting finding was the high ego/low task-oriented group reported devoting the least amount of time to practice. Duda (1998) interpreted these results by arguing that high-task orientation provides the participant with mastery standards to fall back on if he/she is not the best at a specific task or the desired extrinsic reinforcements are no longer present. Duda concluded that individuals who are high in both task and ego orientation have two sources of success and several reasons to continue his or her participation in an activity. For DRIVE BC, Duda's (1988) results provide useful information in regards to how we should approach coaching recreational athletes. From Duda's (1998) results it can be assumed that if the DRIVE BC coaching staff can emphasize the importance of high task orientation and create a motivational climate that fosters high task orientation for its recreational athletes, they are more likely to participate in DRIVE BC longer and spend more time practicing basketball. We can also conclude that if the participants are participating and practicing longer they will be enjoying their experiences playing the sport and the DRIVE BC program itself.

Coaching techniques using AGT

In order to begin implementing AGT in DRIVE BC it is necessary to outline specific coaching techniques DRIVE BC should instill in its program. The techniques are adapted from Murphy (2004) suggestions on coaching techniques using AGT.

I. *Coaching objective:* Assess athlete's achievement goals.

To begin with, it is important to assess each individual athlete in the DRIVE BC programs specific achievement goals in order to explore what achievement and success mean to them. During this process, the DRIVE coach should gauge the level of the athlete's ego and task orientations and try to get an understanding of which goal orientation is most dominant to that athlete. To accomplish this, the DRIVE coach should interview the athlete using questions from the Task and Ego Orientation in Sport Questionnaire (TEOSQ). Examples of questions from the TEOSQ are: "When do you feel most successful in sport?", "How much success do you feel when you beat others?" and "What about when you try really hard but don't win?" The TEOSQ will provide a starting point for the DRIVE coach to get understanding of what motivates the specific player. In addition, the coach should understand how achievement goals may influence thoughts, feelings, and behaviors in the athlete. During this process the DRIVE coach should look for any pattern of responses of the athlete prior to or during competition. The coach will study the athlete's thoughts and feelings prior to competition and analyze the levels of anxiety displayed by the athlete, his or her emotions during competition and reasons he or she gives for success and failure.

II. *Coaching objective:* Assess the *sources* of athlete's achievement goals.

After assessing the athlete's achievement goals, it is important for DRIVE BC Coach to assess the sources of the athlete's achievement goals. Assessing the sources of the athlete's achievement goals helps coaches ascertain whether the sources that generate feeling of competence (or incompetence) are task or ego involving (or both). During this process the DRIVE coach should explore the most important influences on the athlete's achievement goals. The "who or what" criteria the athlete uses as sources of information for ability is identified here. The DRIVE BC coach should talk to the athlete about "what" or "who and why" they focus on most in order to feel a sense of achievement. The "what" responses can be ego-oriented such as "winning" or "beating my opponent" or task oriented such as "a personal best time" or "improving a skill." The "who and why" refers to specific people the athlete might use as a source of achievement goals. Parents, coaches, team-members and opponents are all possible source influences on the athlete's achievement goals. Again, these responses could be ego-oriented, such as "My coach because he tells me I am better than everyone" or task-oriented, such as "My parents are my source of success, because they will praise me if I work hard."

III. *Coaching objective:* Educate the athlete about achievement goals.

During the third phase of coaching techniques, DRIVE BC coaches should educate the athlete about achievement goals. Helping athletes understand their achievement goals is a critical role for a coach. The job of the DRIVE BC coach is to help the athlete understand his or her sport and how different achievement goals exist for him or her. During this phase, the DRIVE coach works with the athlete to explore the psychological

demands of the sport and discuss with them what makes his or her sport psychologically tough. The coach will present the athlete with different quotes such as “I just go out and play, I don’t really care if I win or lose” or “Tennis is just about winning...no more, no less...no one looks at how well you played,” and ask the athlete whether the quote represents an ego or task orientation.

The DRIVE BC coach will also help the athlete understand the advantages and disadvantages of task and ego orientation at this time. The coach will ask the athlete about which attitude he or she feels is the best one and why. The coach will introduce the athlete to the fact that two challenges are made of them in all competitive situations:

1. **The self-challenge:** to maximize, improve, and maintain current standards of effort and personal skills in the physical, technical, tactical, and mental components of that sport.
2. **The game challenge:** to use the self-challenge to overcome the test or opponent set for them on that day. (Murphy, 2004).

When young athletes are given information regarding the different type of achievement goals and how it relates to sport they are likely to feel liberated because they can understand their motives and why they feel, think, and behave in certain way in certain situations (Murphy, 2004).

IV. *Coaching objective:* Help the athlete develop an achievement system.

During the last coaching objective, the DRIVE BC coach should help the athlete develop an achievement system that includes identification and review of key performance qualities and responses. The coach should work with the athlete to identify

specific qualities and skills to be reviewed in training and in competition. The coach will identify important technical, physical, and mental skills and qualities that need to be maintained or developed within him or her over the short, mid-, or longer term. Mental qualities might include: concentration span, positive self-talk, self-control, body language and posture, and routines. It is also important to develop a coaching system where the athlete is encouraged to set performance goals for the skills identified in training or competition.

The second part of helping an athlete develop an achievement system is the development of an achievement log. The achievement log is used to facilitate a task-oriented approach to each day or week. The achievement log can be scored on qualities, skills, or activities that are relevant to performance (e.g., consistency of effort, communication, diet, rest and recovery). The log can be assigned to daily or weekly qualities.

The third part of the athlete achievement system will be helping the athlete develop a system for task-involved goal setting and reviewing in competition. The athlete should record “self-challenge” goals for the upcoming competition revolving around questions such as “Which of my skills were on form?” or “What are my areas for improvement?” This will help keep the athlete task-focused prior to and during competition and will also allow the athlete and coach to rate preparation and performance in relation to task-involvement.

Finally, the DRIVE coach should also help the athlete develop a scoring system for his or her overall development and performance in competition. This system should

be based on how they performed or improved in the range of qualities or goals that were important in that event.

TARGET: Ways of creating a Mastery Motivational Climate

Another area where DRIVE BC should apply the tenants of AGT in its coaching techniques is through the use of the TARGET structures to create a mastery motivational climate. Ames (1992) developed a number of practical strategies for interventions in school classrooms by adopting the TARGET structures that define a mastery climate. These are considered to be important because they provide a comprehensive framework for researchers and coaches to prescribe a wide range of motivational principles and techniques that are consistent with a motivational climate.

TARGET (Task, Authority, Recognition, Grouping, Evaluation, Time)

I. Task: Coaching activities

Strategies: Have variety and individually challenging activities; have the players set process rather than outcome goals.

Application: DRIVE BC Coaches should encourage all participants in the program to focus on setting process goals rather than outcome goals. In addition, when directing players or discussing their improvement, all coaches should focus on the process of their goals and performance and not the outcome. Also, DRIVE BC Coaches should not offer the same drill or activity in continuous sessions so that each member will feel challenged and have opportunities to demonstrate mastery.

II. Authority: How the coach operates with the players.

Strategies: Let players have a 'say' in matters such as leadership roles, decisions, practices, etc.

Application: It is very important that DRIVE BC establishes a coach-player relationship that is positive. DRIVE BC coaches will allow players to have control over some lesson planning and leadership roles. This will assist in the development of a mastery climate and will allow the players to feel a sense of power and control over their personal improvement. Allowing players' control over lesson planning will also make them feel personally responsible for how hard they are working.

III. Recognition: What is rewarded?

Strategies: Recognize personal progress and improvement in players.

Application: DRIVE BC coaches will above all else recognize personal improvement and progress in all our players. In evaluations, DRIVE BC coaches will focus strictly on improvement in relation to each individual player so that players in the program understand that DRIVE BC is about personal improvement and reaching one's own individual goals before comparing ourselves with others. DRIVE BC should establish a climate that has members of the program support each other's individual development and not be concerned with comparing who is more skilled or performs better than others. Camp awards will reflect hard work and teamwork as opposed to demonstrating superior ability.

VI. Grouping: Use of groups.

Strategies: Be flexible over groupings in practice; avoid always having the most or least skilled always together.

Application: DRIVE BC coaches should consider how groups are used within its program. While it is necessary to have players of the same ability compete and train together to allow maximum improvement, it is also necessary to have a balance between separating groups according to ability and allowing all campers to play together. DRIVE BC coaches should include activities that allow all members of the camp to play with players of different abilities, gender, and age. These activities should rely more on cooperation or the accomplishment of a shared goal, rather than competition. These activities will bring members of the program closer together and give the program more of ‘family’ feel as all members will get to know each other.

V. **Evaluation:** Use of Feedback.

Strategies: Evaluation based on improvement and effort: allow players to evaluate themselves as well as being evaluated by others; avoid public evaluation.

Application: DRIVE BC coaches should avoid public evaluation of any its campers at all costs. By allowing campers to evaluate themselves and get evaluated by others, the DRIVE BC coaches will be giving the players a sense of accountability; they will be forced to critically self-evaluate themselves based on effort and improvement in the program. DRIVE BC coaches should encourage constant self-evaluation and reward players who improve based on their own self-referenced standards of success.

Time: Scheduling

Strategies: Allow time for practice and improvement; help players with time management to encourage practice.

Application: DRIVE BC coaches should structure practice so members of the program are allowed specific program time to practice. Also, DRIVE BC coaches should instruct campers about time management and provide each camper with a player booklet that will allow them to structure their day to allow time for basketball skill improvement.

Conclusions and Future research

It is clear that achievement goal theory can provide a necessary framework for the coaching of participants in the DRIVE BC basketball program. More importantly, it has been displayed that if DRIVE BC coaches are interested in maximizing the benefits of youths participating in their program, they should apply tenants of AGT to the program itself, and more specifically into the coaching techniques of its instructors.

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