CHAPTER-2

REVIEW OF LITERATURE
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Anxiety

In modern competitive sports, the role of anxiety in sports performance has attracted the attention of sports scientists. It has been realized that the participation of sportsmen in competitive sports has intensified the psychic stress. A considerable amount of research has been done to ascertain the effect of anxiety and psychological stress on the performance of motor skills of the players. Most of the researches pertaining to the relationship between anxiety and sports are concerned with the questions as to how trait anxiety and state anxiety affect sports performance.

Competitive anxiety has been studied in relation to sex, age and sports performance. A number of studies have indicated that female athletes are significantly more anxious than male athletes. Kane (1972) has reported that in general, anxiety is higher for women than for men, although there are many exceptions. Ikponmwosa (1981) examined the relationship between sex-role standards and anxiety in competitive sports situations. The results obtained in this study were consistent with those of Cosentino and Heibrum (1964) and Gall (1969).
Segal and Weinberg (1984) conducted a study on male and female graduates to assess the relationship between sex-role orientation and competition trait anxiety (CTA). The results yielded a main effect for sex with females exhibiting significantly higher levels of CTA than males. Singh (1985) found significant sex differences in the competitive anxiety of the Indian athletes, the females having more anxiety than the males. In another study, he (1986) found significant differences in the anxiety scores of the athletes and the hockey players on the basis of sex, the males having less competitive anxiety than females.

Anderson and Williams (1987) conducted a study on gender role and sport competitive anxiety. The results indicated that females had significantly more competitive anxiety than all other groups. The effects of age upon state anxiety and trait anxiety are not consistent in all sports, nor the effects of sports upon state anxiety and trait anxiety for varying age levels.

Griffin (1972) investigated that state anxiety levels of women engaged in competitive sports decrease with age and state anxiety levels of women also differ among different sports. Power (1982) analysed the anxiety levels in track and field athletes of varying ages and abilities.
that there was a significant tendency for anxiety to increase with age. Hence, he found significant relationship between age and anxiety. Singh (1985) concluded that competitive anxiety decreases with the increase in age in the case of male athletes, but it increases in the case of female athletes.

Kee and Sik (1988) indicated that the anxiety level tend to be decreased, as the age is increased and the anxiety level seems to be decreased as the performance score increased.

**Personality Traits of Sportsmen of individual and Team Games**

The results regarding differences in the personality traits of players of individual and team games are unequivocal. Some studies have failed to be able to find difference between team and individual athletes (Lakie, 1962; Ikegami, 1968; Pyecha, 1970). But some studies have shown that athletes in group sports tend to be extroverted and self-confident, while those participating in an individual sports are more inclined to be introverted, stable and confident. Kane (1967) had questioned whether a single “personality type” exists for athletes. Some sports may show significant differences in personality profiles of its participants in cases where a sufficiently vide range of sports are selected (representing
many team or individual sports), it is doubtful whether such clear-cut differences persist. Of course, the popular belief holds that individual sport contestants are more introverted and self-centered than team sportsmen who are more extrovert and team oriented.

Hein (1954) found team sports participants to be more extraverted than those participants to be more extraverted than those participating in individual sports. He also found that participants in individual and dual sports possessed less amount of self-assurance. But Niblock (1960) found that the individual and team sports participants scored higher on ascendancy that did non-participants. Rushall (1967) demonstrated that male swimmers (individual sport) were to be more individualistic and self-centered.

Peterson et.al.(1967) reported that women athletes who participated in individual sports when compared to women competition in team sports were more dominant, adventurous, sensitive, radical, imaginative, self-sufficient, and more forthright. They also found team sports female athletes to be intellectually brighter and more conscientious and aggressive than the normative group of equivalent age and education. Thus, the athletes from the individual sports were more introverted
Malumphy (1968) and Ogilvie (1968) also conducted a related investigation, where four groups of female athletes i.e. athletes in team sports, in individual sports, team-individual sports, subjectively judged sports and the non-athletes, who differed on various factors. The athletes from individual sports were more extroverted than those athletes from team and team-individual groups. This seemed to be in disagreement with the findings of Peterson, Weber and Trousdale (1967). Malumphy also found that the team sport group was less extroverted than the non-athletes. However, he found individual female athletes to be more anxious, venturesome, tough-minded, extraverted, while team athletes were lower in leadership, less venturesome and extraverted. But Kirkcaldy (1982) found no significant differences regarding the personality dimension of team and individual athletes. However, Sharma and Shukla (1986) found that the individual sports athletes were higher on conscientiousness, outgoing, super-ego, strength, vigorous, relaxed and tough-mindedness. The investigator (1986) found that the players of individual events and team games differed significantly on the extraversion and neuroticism traits of personality. In the
case of both males and females, the athletic group was more extroverts and more neurotic than the hockey group. Sandhu, Mann and Brar (1987) found that the team players and wrestlers were equally extraverted.

**Personality Traits of Sportsmen of Various Games**

The area of personality and athletic has resulted in a great deal of contradictory claims as to whether or not athletes exhibit a characteristics personality profile (Lakie, 1962; Schendel, 1965; Werner and Gotthell, 1966; Kroll and Carlson, 1967; Singer, 1968; Rushall, 1968; Newmann, 1968; Berger and Litte4rfield, 1969; Hammer, 1969; Neele, Sanstroem and Metz, 1969). Researchers in sport psychology are trying to identify the hidden factors behind success in a particular sport.

Henry (1941) found that track athletes and pilots to be quite similar and they were significantly less hypochondrical and introverted than weightlifters and more neurasthenic than the physical education majors.

Kane (1970) found rather complex relationship between the second order personality variable “extraversion” and performance of “track athletes” (sprinters), and “throwers were found to be frequently more extraverted than middle distance runners. He claimed that as the distance increases, there was a trend towards introversion. Johnson (1972) demonstrated
differences between female athletes participating in such sports as basketball, bowling, field hockey and golf, as did Kroll and Crenshaw (1968) between footballers, wrestlers and gymnasts. Personality trait of basketball and softball women athletes have also been studied and reported in the literature (Foster, 1972). Maul and Voigt position in the team for volleyball. Friedman (1973) could not replicate these findings. Kruse (1977) found difference in personality and the position played in football.

**Sex Differences in Competitive Anxiety**

The commonly accepted contention that women in athletics are more anxious seems to be borne out by research evidence. A number of studies have indicated that female athletes are significantly more anxious that other women. In comparing women track and swimming athletes to a norm group, Kane (1966) found athletes to be more anxious. Similar findings resulted from a comparison of women physical education majors to both a norm group and to men compared to the norm women, the physical education students scored low on emotional stability and were more anxious, and compared to males they were significantly more tense and less composed. Malumphy (1968) found female team athletes to be significantly more anxious than individual players and
non-participants. Kane (1972) has reported that in general, anxiety is higher for women than for men, although there are many exceptions. He further reported that British women athletes are significantly less anxious than their female counterparts in the USA, in part because the British are more generally accepting of females in athletics than are Americans.

Ikponmwosa (1981) examined the relationship between sex-role standards and anxiety in competitive sports situations. It was hypothesized that biological sex differences and liking or disliking of competitive sports were insufficient to adequately explain observed patterns of sex differences in competitive sport. These differences were explained as being a reflection of social perception of the sex type appropriate for competitive sport. The results obtained in this study are consistent with those of Cosentino and Heilbrum (1964) and Gall (1969).

Sanderson and Ashton (1981) investigated pre-match and post-match anxiety states of males and females as well as match winners and losers during a badminton tournament. Results revealed a significant decrease in the female players' anxiety after winning matches as compared to the male players.

Singh (1985) found significant sex differences in the competitive anxiety of the Indian athletes, the females
having more anxiety than the males. In another study, he (1986) found significant differences in the anxiety scores of the athletes and the hockey players on the basis of sex, the males having less competitive anxiety than females.

**Competitive Anxiety of sportsmen Belonging to Different Types of Games**

Several investigators have attempted to identify anxiety level as a correlate of good performance of the athletes of different types of games. Tutko (1971) stated that anxiety is greater in individual sportsmen than in team sportsmen. In an individual sport, success or failure lies solely with the individual participant. The individual stands alone when he fails and must singly accept the repercussions of losing. In the team games, errors usually go unnoticed because of the general activity of the contest, and moreover, success and failure are commonly shared. But, according to Spielberger, Gorsuch and Luschene (1970), there is no apparent trend showing individual or team sport athletes differ in A-trait.

Bush (1970) did not find any significant change in A-states from a baseline level to the A-states measured prior to competition in women inter-collegiate gymnasts.
Basler, Fisher and Mumford (1976) also did not find a relationship between A-states and gymnastic performance in college women.

Griffin (1972) found that female gymnasts had much higher A-states scores prior to competition, when compared with other female individual and team sport participants, including basketball players. Hardman (1973) also did not find any difference between athletes participating in individual and team sports or between athletes participating in contact and non-contact sports. In an early study, Gold, (1955) had observed that college tennis players were lower in A-trait than professional players. This appears to be contrary to what Hardman had suggested.

Griffin (1972) found differences in A-trait among athletes, while administering Spielberger’s Trait Anxiety Inventory (Spielberger, Gorsuch and Luschene, 1970) to 682 females engaged in eight competitive sports, representing three different age groups. He found that the differences in A-trait for the three age groups were significant with the 19 + group being lower in A-trait. For the various sports, A-trait scores also differed significantly and female gymnasts were highest in A-trait.

Johnson and Hutton (1955) investigated changes in what they termed “neurotic signs” and suggested that
wrestlers displayed increased "neurotic signs" right before the match and then returned to normal the day after the contest. Morgan (1970) reported that the anxiety levels of varsity wrestlers were lower prior to a match than at a pre-season measure. A subsequent study (Morgan and Hammer, 1974) however, indicated that the anxiety of wrestlers increased one hour before a match.

Mahoney and Avener's (1977) study with male gymnasts revealed differences in arousal patterns as a function of skill level. When asked to rate the levels of anxiety, they typically felt at various stages of competition. Olympic qualifiers reported slightly more anxiety than non-qualifiers prior to competition, but non-qualifiers reported higher anxiety during performance.

Some research findings support the results that basketball, hockey and volleyball players have higher level of anxiety (Oxendine, 1968; Frost, 1971; Alderman, 1974; Carron and Bennet, 1977; Klevor, 1977; Martens, 1977; Tutko, 1977; Gerson and Dashaiies, 1978; Martens et al. 1979), athletes, cricketers and non-sportsmen have low level anxiety which is justified by a few studies conducted by Symond (1946), Byrne (1961) Kenyn (1968) and Tutko (1977).
By administering Martens’ SCAT, Power (1982) made an analysis of anxiety levels in track and field athletes of varying ages and abilities. He found: (i) a significant tendency for anxiety to increase with age, (ii) the significant differences existed between the competition sub-groupings, and (iii) CTA seemed to be a significant problem as far as track and field athletes and as such levels of CTA were found to be detrimental to performance.

Using SCAT, Smith (1983) found that all-star athletes had significantly lower anxiety scores than playing substitutes and this agrees with the concept that team sport athletes of higher status were less threatened by competitive situations than athletes of lower playing status.

Raviv and Rotstein (1982) studied trait anxiety, state anxiety and self-control in marathon runners. The findings of this study revealed significance differences between the marathon runners group, the team sports athletes and individual sports groups. The marathon runners were characterized by a lower level of state anxiety before competition and a higher level of self-control. It was reported that a high level of self-control which is typical of marathon runners, makes it possible for the marathoners to endure the pain and other
difficulties which arise throughout the long run and to overcome them.

Singh (1986) found significant differences in the competitive anxiety between the athletes and hockey players, whether males or females or combined, the athletes having more competitive anxiety than the hockey players. He also found players of the team games had less competitive anxiety. Verma (1987) found that as compared to athletics and non-sportswomen, sportswomen from team games such as basketball, hockey and volleyball had higher level of anxiety. Sportswomen from individual sports such as athletics, wrestling, cycling etc., which are of an independent nature tended to reduce anxiety level and inculcate the tendency of introversion.

Gerson and Deshaies (1978) conducted a study on competitive trait anxiety and performance as predictors of pre-competitive state anxiety. The results yielded a significant positive relationship between SCAT and pre-competitive state anxiety. It was found that the anxiety measures were significant predictors of performance in this setting. This finding is in agreement with the results obtained by Martens and Gill (1976) and Scanlan and Passer (1978).
Thirer and Douknell (1980) examined pre-competitive anxiety level and its influence on athletic performance. They found no relationship between players' anxiety level and the coaches' assessment of performance in a game. This suggests that the coaches' rating may not be reliable as pre-competition anxiety levels were consistent with the perceived importance of each contest.

In the area of competitive sports, the relationship of performance to state-trait anxiety has also been studied by many investigators including Carron and Bennet (1976), Hanin (1980), Cratty and Hannin (1980), because in the stressful setting provided by competitive sports, it is not unusual to observe an athlete whose fears at least interfere with the effective performance.

A great deal of research work has also been done to study the role of competitive anxiety in sports. A number of investigations have indicated that female players have more competitive anxiety than the male players. But there are few studies which have compared the anxiety level of the superior athletes and non-athletes. But these studies have found that athletes are emotionally more stable, have lower trait anxiety than non-athletes. Several investigators have tried to study the level of competitive anxiety of sportsmen belonging to different
types of games. It was found that team game players have low anxiety than the individual event players due to the nature of the game, though many studies are inconclusive.

**Sex differences approach**

Within both psychology and sport psychology, research on gender issues began with an examination of sex differences in characteristics and behavior. Sex differences refer to biologically based differences between males and females, whereas gender refers to social and psychological characteristics and behaviors associated with females and males. Because this early work assumed dichotomous psychological differences that paralleled and indeed stemmed from biological male and female differences, sex differences is the appropriate term. The study and discussion of sex differences has a long and colorful history, often with sociopolitical overtones. For our purpose though, we can start with the most notable recent work on sex differences (Maccoby and Jacklin). Maccoby and Jacklin surveyed the vast existing literature on psychological sex differences. Their main finding, which is often ignored, was that few conclusions concerning sex differences could be drawn from the diverse literature on this topic. They did note, however, that the literature suggested the possibility of
sex differences in four specific areas: math ability, visual spatial ability, verbal ability, and aggressive behaviour.

Several reviews, particularly the meta-analytic reviews of Eagley and Hyde and Linn, suggest that sex differences in these areas are minimal and not biologically based. Meta-analyses consistently indicate that less than 5% of the behavioral variance in these areas is accounted for by sex. Moreover, sex differences are inconsistent, and interactions are common. For example, sex differences might show up with one task or one type of behaviour but not with another. In general, then, overlap and similarities are much more apparent than differences when comparing males and females.

Frodi, Macauley, and Thome, in a review of the aggression research concluded that the literature does not support the belief that males are more aggressive than females or that females display more indirect or displaced aggression. Rather gender differences in aggression are inconsistent and seem to be a function of other factors, such as justification, sex of the instigator, and situational cues. In a more recent meta-analysis, Eagley and Steffin concluded that on average, males are somewhat more aggressive than females but that sex differences are inconsistent and related to attributes of the studies such as type of aggressive behaviour and
perceived consequences. Recent reviews and meta analyses of other cognitive skills and social behaviours, including conformity and nonverbal behaviour, lead to similar conclusions. Clear sex differences do not emerge. Rather, overlap and similarity are more apparent; and many interactions qualify the differences that are observed.

AGGRESSION

Recent studies have found that dispositional and situational variables have a simultaneous influence on the affective and cognitive components of an individual's behaviors, whether dealing with anxiety for physical education students (Papaioannou & Kouli, 1999) and/or with the satisfaction level of male tennis players (Balaguer, Duda, & Crespo, 1999) or female basketball players (Treasure & Roberts, 1998). Unfortunately, to date, the potential effects of both dispositional and situational variables on aggression in (team) sports have not often been addressed. Therefore, the purpose of this study was to consider simultaneously the influences of the goal orientations pursued by young male handball players and the induced motivational context on observed aggression. Despite the lack of consensus on the definition of sport aggression, one that is often accepted
is behavior which occurs outside the rules of the considered activity and with the intent to harm (Tenenbaum, Stewart, Singer, & Duda, 1997).

Research on the sport aggression consists mainly of two types of studies: that which reports mainly on the individual level of analysis - the dispositional variables - and that which focuses mainly on what Kornadt (1984) called an analysis from the outside - the situational variables. The sociocognitive theory of achievement motivation (Nicholls, 1984) suggested making a precise distinction between the dispositional (goal orientations) and the situational variables (motivational climate). To this end, and although it was not a theory on aggression, that approach seemed to shed new light on the already long-lasting issue of sport aggression. Achievement goal theory (Nicholls, 1984) contends that the demonstration of competence (or at least avoiding the demonstration of a low level of competence) is the major goal in an achievement context such as sport. According to Nicholls' theory, the orientation of the individual towards a certain type of goal depends particularly on the way the individual defines his or her own competence. Two types of goal orientations have traditionally been distinguished: the task-goal orientation, that is the self-referenced goals (improve a performance or control a task for oneself), and
the ego-goal orientation, that is goals through which individuals want to prove their competence compared with others or with socially defined standards. In the case of dispositional variables, numerous studies have focused on the motivation-aggression relationships within this theoretical perspective (Duda, Olson, & Templin, 1991; Rascle, Coulomb, & Pfister, 1998; Treasure, Carpenter, & Power, 2000).

Duda et al. observed that male and female basketball players' strong ego-goal orientation was associated with a more significant perception of aggression legitimacy; "Individuals tend to approve of doing whatever is necessary (including injuring another person) to satisfy their own needs" (p.85). Ego-goal oriented individuals would be more likely to exhibit a "win-at-all-costs" attitude, which might include aggression in their quest for victory. In a natural setting, Rascle et al. (1998) showed that high ego-goal oriented handball players (mean age = 15.4 years old) displayed more instrumental aggression than did those with low ego-goal orientation. Instrumental aggression is nonemotional and task oriented (focused more on the aspects of the games). This type of aggression differs from hostile or "reactive" aggression (Tenenbaum et al., 1997), an emotional response usually involving frustration or
anger, which is an end in itself (the main objective is the resultant pain or suffering of the victim; for instance, to hit or insult an opponent).

Aggression plays a major role. According to research it is apparent that sports is perhaps the only setting in which acts of interpersonal aggression are not tolerated, but enthusiastically applauded by large segments of society (e.g., Tenebaum, Stewart, Singer & Duda, 1996). Tenebaum et al., (1996) define aggression as the infliction of an aversive stimulus, physical, verbal, or gestural upon one person by another. This definition encompasses two distinct types of aggression, hostile and instrumental. Tenebaum and colleagues describe hostile aggression as having a principal reward, or intent, to inflict pain upon another for the individual’s own sake. In instrumental aggression, the major reinforcement is the achievement of a subsequent goal.

Rascale, Coulomb and Pfifster, (1998) hypothesized that there would be more aggression and higher ego-goal orientation as opposed to task-goal orientation, “In an ego-goal orientation, the individual is concerned with demonstrating skill relative to others’; the individual’s focal concern is with social comparison. In contrast, when a person has a task-goal orientation, that person is concerned with demonstrating mastery at the skill.”
(Rascale, et al., 1998). It was discovered that Institutional sport context groups differed in their rating of Ego-goal orientation, but there were no significant differences in ratings of Task-goal orientation. However, it was indicated that league players were significantly higher on Ego-goal orientation. League teams were also significantly higher on instrumental aggression. With regard to means of hostile aggression, Furthermore, as relationships between goal orientations and aggression were investigated, it was identified that high Ego-goal classified players committed more instrumental aggression than low Ego-goal classified players. Analysis also revealed that League teams displayed more instrumental aggression than Physical Education and Interscholastic teams, as the 2 latter contexts appear to be more protected from competitive pressure identified in League context. With regard to relationships between goal orientations and aggression, discriminate function analysis indicated that players scoring high on Ego-goal orientation displayed more instrumental aggression than those scoring low on Ego-goal orientation. “Therefore Ego-goal orientation could be a valuable predictor of aggression, especially instrumental aggression.” (Rascale et al., 1998)
The notion of instrumental aggression being healthy for sport was also evident in a study done by Mintah, Huddleston, and Doody (1999). This was designed to explore the relationship between the extent of agreement or disagreement with the use of hostile and instrumental aggression and the types of justifications (hostile or instrumental) provided by athletes in contact and semi-contact sports.

Bredemeier and Shields, (1986) proposed that contact-sport athletes consider intentional aggression as necessary to intense competitive play. However, it is also possible that contact-sport athletes might not recognize examples of instrumental aggression as being intense enough for contact-sport competition. “It may be that athletes in sports that are based on full body contact view instrumental aggression as natural game behavior and hostile aggression as a more appropriate means to the desired outcome of winning.” (Bredemeier & Shields, 1984) However, it is these athletes that take aggression too far in certain sports and the result does not benefit any of the athletes or the game itself. “It is instrumental aggression that is natural game behavior and is quite healthy for certain physical sports.” (Mintah et al., 1999)

The degree and the amount of aggression present in a particular sport may depend on the nature of the sport
itself, which was made evident in the following study by Huang, Cherek & Lane, 1999.

Huang, Cherek & Lane, (1999) reveal that possible explanations for these results may refer to learned aggressive behavior patterns, such as various coaching styles which are successful for individuals participating in high contact sports. Huang et al., (1999) indicate that it is also possible that these athletes were more aggressive prior to participation in high contact sports. Aggressive behavior may be influenced by the combination of parents’ or peers’ aggressive behavior or parental reinforcement (positive or negative) of the aggressive behavior. Subsequently, participation in high contact sports may reflect the individual’s preferences for such activities rather than the shaping of aggressive behavior through participation. (Collis, 1972)

Atkins & Stoff, (1993) revealed the differentiation between the two forms of aggression and the presence of a relationship between hostile aggression and poor impulse control.

Vitiello et al., (1997) discovered that in humans, the term aggression encompasses a variety of behaviors. However research into subtypes of human aggression has been rather limited. A significant part of the research which has been done has been conducted in children
using clinical observation, experimental paradigms in the laboratory, and cluster/factor-analytical statistics in an attempt to subdivide aggression. Although, Vitiello and Stoff believe that a consistent distinction can be identified between an impulsive-reactive-hostile-affective subtype (i.e., hostile aggression) and a controlled-proactive-instrumental-predatory subtype (i.e., instrumental aggression).

Johnson, Hutton and Hohnson (1954) in their study concluded that national champions were aggressive, highly anxious, possessed high level intellectual aspiration and exceptional feeling of self-assurance. Husman (1955) showed in his study on boxers, wrestlers and cross-country distinguishing characteristics as far aggressive tendencies are concerned. His findings were that the cross-country runners tended to be more extra punitive than the boxers and boxers possessed less overall intensity of aggression and had more super ego. Lakie (1962) has investigated the personality characteristics of certain groups of inter-collegiate athletes; Singer (1967) enquired into the personality differences between and within basketball and tennis players. Thune (1959) studied the personality of weightlifters.
While some studies have looked specifically at football teams (Rushall, 1970; Straub and Davis, 1971; Mandel, 1974), others have conducted studies on other sportsmen. In general, successful football players have been described as being aggressive, ambitious, dominant etc. (Ogilvie & Tutko, 1966, 1971; Ogilvie, 1968).

Tenebaum and colleagues explain that aggression occurs in sports where an athlete's generalized expectancies for reinforcement for aggressive behavior are high, (e.g., receiving praise from parents, coaches or peers) and where the reward value outweighs the punishment value (e.g., gaining a tactical and/ or psychological advantage with a personal foul). "Expectancies of reward (or punishment) for aggressive acts may be learned by previous reinforcements (or punishment) or by modeling / imitation of significant others such as coaches, parents, or sport heroes." (Tenebaum et al., 1996,) Winning has become an essential part of sport and increased professionalism creates an atmosphere of winning at all costs.

Faulkner, (1974) and Smith, (1979) indicated that toughness and a willingness to fight are attributes that impress coaches and management, but are definitely not the only way of creating favorable evaluation. The degree and the amount of aggression present in a particular
sport may depend on the nature of the sport itself, which was made evident in a study done by Huang, Cherek & Lane, (1999). Here, the authors promoted a theory based upon individuals developing their aggressive habits in sports through instrumental learning, whereby an athlete learns to perform a clean aggressive act, i.e., an act of instrumental aggression, in order to achieve a goal such as winning through positive reinforcement.

Warburton and Kane (1966) suggested that many top track and field athletes and swimmers show a predominance to introversion. Singer (1969) found wrestlers and footballers to be more hostile and aggressive than archers, tennis players, golfers and gymnasts.

Huang, Cherek & Lane, (1999) investigated the relationship between aggression and type of sports involvement in high school age boys. The goals of this study were to assess how athletes participating in high and low contact sports respond to provocation in a laboratory setting and whether there are group differences in self-reported behaviors. Analysis of the results indicated that individuals who participated in high contact sports emitted significantly more aggressive responses than individuals who participated in low contact sports.
Tenebaum, Stewart, Singer & Duda, (1996) instrumental and hostile aggression, and their relevance to sports are outlined distinctively, As Tenebaum et al., (1996) discuss, sports is perhaps the only setting in which acts of interpersonal aggression are not tolerated but enthusiastically applauded by large segments of society. The study indicates "legal actions in sport (i.e., body-checking in hockey, tackling in football), represent either instrumental or hostile aggression, if the athlete's intention was to cause injury."(Anshel, 1990) With respect to spectators, it is noted that if their intent is to gain an advantage for their team by distracting the opposing players using such tactics as verbally abusing the opponent's, then this is considered instrumental aggression. If the intent is to physically or psychologically injure the athlete, spectators are being hostile. Tenebaum and colleagues explain that aggression occurs in sports where an athlete's generalized expectancies for reinforcement for aggressive behavior are high, (e.g., receiving praise from parents, coaches or peers) and where the reward value outweighs the punishment value (e.g., gaining a tactical and/ or psychological advantage with a personal foul).Winning has become an essential part of sport and increased
professionalism creates an atmosphere of winning at all costs.
This study indicates is that there is a clear difference between hostile and instrumental aggression, and sports today are becoming more and more competitive. However Tenebaum and colleagues state that the increased competitive nature in sport, results in increased aggressive acts, but by no means excuses hostile aggressive acts as appropriate game behavior.

It is evident that instrumental aggression is healthy for certain competitive sports, and hostile aggression bears no place within today's athletic competition. As expressed in the literature, it is clear that there are positive effects of instrumental aggression within sports.

Rascale, Coulomb & Pfister, (1998) that if instrumental aggression is used appropriately in league play, then it is most definitely welcomed within team sports. Whether or not the athletes themselves agree with the use of aggression in sports was also studied, and it was revealed that there was a common understanding that instrumental aggression is natural in game behavior (e.g., Mintah, Huddleston & Doody, 1999).

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the only way of creating favorable evaluation. The degree and the amount of aggression present in a particular sport may depend on the nature of the sport itself, which was made evident in a study done by Huang, Cherek & Lane, (1999).

Conceptual Framework for Understanding Goal Orientations

Task/Ego Orientation

The most frequently used terms in differentiating and defining goal orientations and the terms that will be used for this study are task and ego orientation. Weinberg (1992) explained that the way in which athletes define success and failure in athletic environments is dependent upon their goal orientation. Task-orientated individuals view success and failure through self-referencing, and ego-orientated individual's measure success and failure by social comparison (Duda, 1989a). In other words, task oriented athletes determine success and failure by evaluating the improvement or decline of personal performances, and ego oriented athletes determine success and failure based on whether they beat or were defeated by their opponent(s). However, there are cases when an individual has both high task and ego orientation. This is an important consideration
when examining the coach's role in the facilitation of orientation environments, which will be discussed in detail later. Task and ego orientation are not only differentiated by how one measures success and failure, but also by how one measures ability and is motivated. Task oriented individuals concentrate on the mastery of particular tasks and measure ability by the improvement of personal performance standards; ego oriented individuals emphasize competitive outcomes (winning/losing) and measure their ability based upon the comparison of the performance of others (Chaumeton & Duda, 1988). The motivation of task-oriented athletes is towards learning, developing, improving, and mastering skills, but the motivation of ego oriented athletes is to demonstrate normative competence by outperforming others with the least amount of effort possible (Lochbaum & Roberts, 1993; Treasure & Roberts, 1994).

**Performance/Outcome Orientation**

Another way of discriminating goal orientation is by using the terms performance and outcome. Similar to Weinberg's (1992) notion of goal orientation, Vealey (1986) defined goal orientation as the mean by which an athlete assesses competence and success. A performance orientated athlete focuses on the execution of his or her
sport skills capabilities during competition when evaluating competence and level of success, and an outcome oriented athlete focuses on the win/loss outcome of the competition in assessing competence and success (Vealey, 1986). The differences in the focal points and assessment of competence, ability, and success/failure among performance and outcome-oriented individuals are similar to those of task and ego oriented individuals, respectively. Task oriented athletes have more opportunities to experience feelings of competence and success because they have more control over their personal performances than they do over the outcome of the contest.

**Goal/Win Orientation**

The concepts of goal and win are a third way of discriminating between goal orientations. A definition that coincides with Weinberg's (1992) and Vealey's (1986) definition of goal orientation is that of Gill, Dzewaltowski, and Deeter's (1988). This group of researchers explained that goal orientation is the way in which one perceives achievement and is directly related to how one attempts to attain achievement (Gill et al., 1988). Gill (1986), who also considered the factor of competitiveness in her examination of goal orientations, defined goal orientation as the "emphasis on setting and reaching personal
standards in sport” (p.244), and win orientation as the “desire to win and to avoid losing in competition” (p.244). Therefore, a goal-oriented athlete perceives achievement when their performance has surpassed a prior personal performance; however, a win-oriented athlete perceives achievement when they out-perform their opponent(s). According to this interpretation, goal orientation and win orientation are similar to the respective concepts of task and ego orientation and performance and outcome orientation.

Mastery/Performance Orientation

A fourth way of describing goal orientations is by utilizing the terms mastery and performance. Ames and Archer (1988) described goal orientation as the way in which individuals are motivated to achieve certain tasks. Based on Ames and Archer’s (1988) operationalization of goal orientation, mastery and performance orientations are respective counterparts of task and ego orientations, performance and outcome orientations, and goal and win orientations. Mastery-oriented individuals are motivated by the need to develop and master a skill, and they recognize that the ability to do so depend on the amount of effort put forth (Ames & Archer, 1987; 1988). With performance-oriented individuals “…there is a concern with being judged able and one shows evidence of ability

Learning/Performance Orientation

A differentiation of goal orientations has also been termed learning and performance. Competitive orientation greatly influences the perception of one's competence (Elliot & Dweck, 1988). This notion of goal orientation is consistent with other researchers' definitions of goal orientation (e.g., Ames & Archer, 1988; Gill et al., 1988; Vealey, 1986; Weinberg, 1992). Learning oriented people increase perceived competence by mastering a task, and performance oriented people increase perceived competence by receiving favorable judgments by others or avoiding negative ones (Elliot & Dweck, 1988). Relating these definitions to the athletic environment, learning oriented participants would increase competence by improving personal performance of a sport skill; performance oriented participants would...
increase competence by receiving positive feedback for outperforming an opponent. Again, performance orientation in this case is situational (outcome of the contest), paralleling that of ego orientation, and learning orientation is personal (individual performance) paralleling that of task orientation.

A number of contemporary theorists have proposed that goal orientations influence perceptions of success and failure and subsequent emotional experience (Dweck and Leggett, 1988; Roberts, 1984). These goal orientations have been termed task and ego involvement. When an individual is task involved, their primary goals are learning, individual improvement and the mastery of skills. Success in these areas is judged against previous levels of personal performance. In contrast, ego involved individuals evaluate their abilities in comparison to others. Thus, success for this group depends on performing better than everyone else.

According to Nicholls, Cheung, Lauer, & Patashnick’s (1989) goal orientation theory, people obtain feelings of success from the attainment of goals. The types of goals that an athlete describes as valuable are evidence of the athlete’s goal orientation. Feelings of success are achieved by the interplay of the achievement of goals and the respective value placed on their
attainment by the athlete. Feelings of success or failure are dependent on the athletes' goal orientation. The value we assign to accomplishments, both personal and in comparison to the performance of others defines our goal orientation. Our goal orientation is the lens through which we view success.

Research on goal orientation theory has demonstrated the existence of two independent conceptual views of success, task and ego, the combination of which is goal orientation (Duda, Nicholls, 1989; Nicholls, Cobb, Yackel, Wood, & Wheatley, 1990; Nicholls Cobb, Wood, Yackel, & Patashnick, 1990). The first dimension of goal orientation is task-involvement or the mastery of skill. To succeed the athlete must work hard and put forth his or her best possible effort. Success is in the process; joy is the journey. A person that scores high in task-involvement views contests as opportunities to improve skill. The better the opponent, the greater the opportunity for improvement. Failure is doing less than your best. Stephens (1993) found that athletes scoring high in task-orientation were significantly more likely to view themselves as having ability and to enjoy their participation in sport.

The second dimension of goal orientation is ego-involvement. The athlete dominant in ego involvement
derives feelings of success from the attainment of superiority, relative to the achievements of others. Joy is found in being crowned "King of the Hill," regardless the magnitude of the hill. According to research by Walling and Duda (1995), participants high in ego involvement are reluctant to attempt tasks with a high probability of appearing inferior. This type of athlete is likely to see winning, or the achievement of superiority as paramount and is willing to do whatever he or she must in order to win, even if that entails bending the rules (Duda, 1991). Once the athlete fails to win, or perceive herself as superior, she is likely to discontinue participation in the sport. According to Jagacinski and Nicholls (1984), the two independent factors of goal orientation are present in all athletes and the degree to which each factor exhibits itself is the athlete's goal orientation.

Is it possible that athletes competing at the same competitive level differ in personal goal orientation depending on the sport they play. In reviewing the literature, no studies comparing the goal orientation of athletes participating in different sports at the same level of competition were found. There is, however, research that evaluates the goal orientation of athletes playing the same sport at different levels. Carpenter and Yates (1997) found that amateur soccer players scored significantly
higher for level of task-involvement than did the semiprofessionals soccer players. However, scores for ego-involvement, while higher for semiprofessionals, were not significantly different. A study by White and Zellner (1996) used the TEOSQ to describe male and female athletes participating in a variety of sports at three competitive levels of play, intercollegiate, organized high school, and college-age recreational sports. The study found that high school athletes were significantly more ego-involved than the intercollegiate athletes and that college-age recreational athletes were the highest in task-involvement. It appears that the level of competition plays and its associated motivational climate influences the goal orientation of the athlete.

The goal orientation of the athlete may impact the athlete's perception of her motivational climate. Study by Roberts and Ommundsen (1996), of 148 students with some level of competence in sport or physical activity at the Norwegian University of Sport and Physical Education, presented evidence that athletes who are primarily task-involved perceive the motivational climate as mastery goal oriented. Likewise, athletes who are primarily ego involved perceive their motivational climate to be performance goal oriented.
A correlation was found between motivational climate and motivation in the field setting (Ames, 1988). Students who perceived their motivational climate to be mastery goal oriented were more likely to use effort strategies, prefer challenging tasks, like their class more, and believe success and effort to be significantly related.

Walling, Duda & Chi (1993) found that the perception an athlete has of his or her competitive climate tends to produce degrees of satisfaction with participation and levels of performance worry. Using the PMCSQ along with measures of performance worry and team satisfaction researchers found that athletes who perceived their environment to be mastery goal oriented expressed feelings of greater satisfaction with their participation on the team and experienced lower levels of performance worry. In contrast, athletes that perceived the environment to be performance goal oriented expresses less satisfaction participating on the team and greater levels of performance worry.

**Gender**

Another factor that may participate in an athlete’s goal orientation is the gender of the athlete. In a study by Duda (1989) using varsity high school athletes involved in individual and team sports, a significant difference was found between the goal-orientation of female and
male students. No sport-specific comparisons of the goal orientation of the participants were made. Results indicated a significantly higher score for females on task-involvement and a significantly higher ego-involvement score for males.

In examining the goal orientation of participants and their parents involved in a summer basketball camp, Duda and Hom (1993) found no significant gender-related differences in goal orientation. The results of a one-way MANOVA revealed no significant gender difference in the goal orientation of the young athletes or their parents.

Duda, Chi, Newton, Walling & Catley (1995) evaluated the goal orientation of members of a college tennis class and revealed significant differences in TEOSQ scores related to task-involvement with females scoring significantly higher in task-involvement than males. No significant difference was found related to ego-involvement.

Li, Harmer & Acock (1996) studied the goal orientations of 467 undergraduate students enrolled in a variety of physical education classes. Examination of means for task and ego-involvement revealed significant difference only related to ego-involvement with males.
scoring significantly higher than females. No significant differences were found related to task-involvement.

Research indicates that results are less than consistent in regards to the goal orientation of males and females. While findings are equivocal, the majority of results indicate that, in varying degrees, more males score higher on ego-involvement than do most females and more females score higher on task-involvement than do most males. Review of the literature points to the need for further study regarding level of play, experience in sport, and the impact of the goal orientation on female athletes.

Locke and Latham (1990) have associated goal characteristics with general emotional states. When performance meets or surpasses an important goal, the individual experiences success and feelings of satisfaction. Furthermore, individuals will be more satisfied with higher levels of goal attainment. More satisfaction will accompany larger positive discrepancies between goals and performance. Similarly, greater dissatisfaction will be experienced when a goal has been missed by a lot rather than a little. Clearly, goals have been associated with both positive and negative emotional experience. While goals provide valuable direction, they also satisfy Locke and Latham's (1984)
conditions for generating stress. They are important, require action, and may not always be reached. Given their dynamic nature, goals must be carefully applied to be effective agents of positive emotional experience.

Lewthwaite (1990), goal importance has received little research attention. As a result, factors influencing goal importance have not been identified. However, participative goal setting has been associated with increased goal commitment. Several researchers (Hollenbeck, Williams and Klein, 1989) have found that commitment is higher for personal rather than assigned goals. In other words, commitment is simply higher for goals that the individual has a hand in setting.

Locke and Latham (1990) have argued that, if goals are in line with personal ability and expectations are high, and then commitment will be also. If the person does not believe that goals are attainable, goal commitment will be low.

Rueda and Dembo (1995) have indicated that allowing individuals to set their own goals may produce more accurate goals and greater interest in attaining them. Thus, individuals should be actively involved in setting realistic or attainable goals for themselves. This is a discrepancy issue.
Lazarus (1991) has maintained that positive emotions result from the achievement of important personal goals. Brunstein (1993) found that both goal commitment and attainability influenced feelings of subjective well-being. Specifically, high goal commitment and favorable conditions for goal attainment were associated with higher feelings of well-being. High commitment and low attainability were associated with lower feelings of well-being.

Mento and Locke (1992) demonstrated a negative relationship between goal difficulty and satisfaction. With more difficult goals, positive discrepancies were smaller or disappeared entirely. As a result, satisfaction decreased. Clearly, prospects for goal attainment influence emotional experience when important goals are involved. Thus, coaches and sport practitioners must address the setting of goals that are both challenging and realistic.

Deci and Ryan (1985) have argued that many individuals set and attempt to handle optimal goal challenges themselves. Yet, individual differences in self-concept are sometimes associated with less than optimal goal levels. Specifically, athletes with low perceptions of ability show a preference for easy rather than challenging
personal goals (Burton, 1992; Duda, 1989; Dweck and Leggett, 1988)

In a study with collegiate soccer players, Hardy, Maiden and Sherry (1986) found that goals for competition were rejected as the event drew nearer and anxiety increased. As competition approached, concerns about negative outcome appeared to override initial expectancies for goal attainment. This study indicates that goals may have to be modified downward for competition in order to remain realistic.

Goal orientations influence emotion in achievement situations and there are two main reasons for this. First, different goal setting styles promote different levels of discrepancy. Generally, performance and success oriented athletes set goals that accurately reflect ability. As a result, regular success and positive emotions are experienced. Failure oriented athletes, on the other hand, are interested in comparing well with peers but modest ability levels preclude this. Discrepancies are unfavorable and negative social evaluation makes negative emotion a regular part of the competitive experience. Second, emotion is affected because different goal setting styles produce different attribution patterns. Performance and success oriented athletes attribute success to internal factors such as ability or effort. Since they take credit for
success, emotions such as pride or satisfaction are possible. Failure oriented athletes, however, readily accept blame for failure by attributing it to a lack of ability. This promotes negative emotions. Conversely, they are hesitant to accept credit for success, attributing this instead to luck, an easy task or additional external factors (Elliott and Dweck, 1988). The result is that success in meeting or exceeding goals is unlikely to produce positive emotions.

Several researchers and theorists have suggested that athletes must concentrate on the process of achieving outcome goals rather than outcome goals themselves (Gordon, 1992; Roberts, 1984).

Emmons (1992) has reported that end goals are associated with emotional distress for several reasons. First, the distal nature of end goals makes progress toward them appear slower or more deliberate than it actually is. Second, it is more difficult to track progress toward end goals. Third, there is only one end goal, so goal success is infrequent. As a result, athletes often set short-term goals which afford regular feedback on the size and direction of goal-performance discrepancies. In addition to providing regular feedback, short-term goals have emotional value due to several other factors. First, short-term goals are regarded as instrumental to the
attainment of end goals (Locke, Cartledge and Knerr, 1970). It is suggested that emotional intensity may reflect not only the size of the discrepancy between a short-term goal and performance but how this discrepancy allows progress toward the end goal. Obviously, this point emphasizes the importance of setting short-term goals at realistic levels. If goals are set unrealistically, both short-term goal failure and the lack of progress toward the end goal will contribute to emotional experience. Second, goal specificity increases with regulation to short-term goals (Carver and Scheier, 1990). Discrepancies between goals and performance are less ambiguous when goals are short-term, specific and measurable. This point may have implications for emotions like anxiety that are associated with uncertainty.

Ideally, short-term goals should be implemented in terms of specific performance levels (Locke and Latham, 1990).

When control is available, goals may be set to change the specific cause. In sport, common causes of uncertainty include concerns about insufficient skill, a lack of information about the opposition and unfavorable individual matches. Gordon (1992) has identified different goal setting categories for sport that can be applied effectively to these causes of uncertainty. The categories include technical, tactical and physical goals.
Technical goals are performance goals related to skill improvement. They are appropriate if an athlete feels that insufficient skill is the main cause of their uncertainty and anxiety. Although personal ability is considered reasonably stable, supplementary practice can produce improvement over time. Consequently, a volleyball player may choose to address performance by serving and passing repeatedly to a spot on a wall. The effectiveness of such an exercise may require setting process goals for regular attendance, total repetitions performed in each session and serve receive efficiency during regular evaluation. The strength of simple programs like this is that barriers to improvement are minimized. Although training partners are desirable, they are not necessary. The apparatus is low cost and accessible. Finally, the number of repetitions and, to a large extent the improvement in skill, is controllable by the athlete.

Tactical goals are related to strategy. This type of goal is appropriate when the cause of uncertainty and anxiety is insufficient information about an opponent. Often, athletes are anxious before competing against an opponent for the first time but relaxed when more information is available the second time around. The process of information seeking (scouting) and planning
(game plan preparation) in sport can help minimize uncertainty by increasing understanding or knowledge. In this process, an opponent is studied and their weaknesses are identified. Based on these weaknesses, a competition plan is developed to affect control over the opponent and reduce uncertainty. Goals can be set in terms of the time an athlete spends studying an opponent and familiarizing themselves with the plan.

**Competitiveness Orientation**

Competitiveness is a strong motivational force that can guide behavior. Competition is present in our society across a broad spectrum of domains. As a motivation that energizes and channels behavior, it can be a determining factor in people's level of achievement in life (Jackson, Ahmed, & Heapy, 1976). Historically, this concept has been studied as both a personality variable and as a temporary psychological state in persons that is triggered by the demands of certain situations. There has been surprisingly little research on the motivational properties of competitiveness.

One particular area of psychology in which competitiveness is likely to exert significant effects is task
performance. Few have examined competitiveness in particular.

The first notable definition of competitiveness in the psychology literature is, “An individual’s tendency to approach or avoid a competitive situation” (Martens, 1975). Martens further describe competitiveness as “A social comparison process and a situation specific form of achievement motivation. Competitiveness originates in the intrinsic motivation to be competent but competitiveness may also be extrinsically motivated” (Martens, 1976). So we see by these definitions that Martens defined competitiveness as a cognitive process that is activated in particular situations. Although achievement motivation need not be conceptualized as a personality variable, Martens described it as such. Competitiveness traverses the domains of cognitive, social, and personality psychology. Because of the broad characterization of this concept, it has been operationalised and studied in different ways.

Jones, Neuman, Altmann, and Dreschler (2001) developed the Sports Performance Inventory (SPI), which attempted to measure athletic potential. Based on an exploratory factor analysis of 83 self-report questionnaire items, six factors were extracted. Competitiveness was among them. This subscale exhibited acceptable
reliability, Cronbach’s alpha = .95. It was also able to discriminate between college varsity athletes and novice athletes. Since college athletes scored significantly higher than novice athletes did on this subscale, there is good evidence of concurrent validity.

Hellandsig (1998) has shown that competitiveness can predict outcomes of interest in sport psychology. In this a competitiveness subscale of a measure called the Sport Orientation Questionnaire (Gill, Dzewaltowski, & Deeter, 1988) was used to measure differences in adolescent athletes. The Sports Orientation Questionnaire (SOQ) is a self-report instrument that measures, among other things, trait competitiveness. High levels of competitiveness, as measured by this method, predicted high levels of performance in a variety of sports.

Higgs (1972a) measured competitiveness of participants by observer report. Observers classified participants as good or average competitors based on their behavior in three game situations. Conditions were controlled such that participants ran side-by-side with another person on a treadmill whose previous performance was approximately equal to their own. In another condition participants ran alone on a treadmill. Those judged to be high in competitiveness by observer
ratings, persisted longer than those judged to be average in competitiveness. This was true across conditions. Persistence was measured in relation to the participant's own ability on an oxygen uptake trial conducted before the experimental conditions were imposed. The results of this study support the construct validity of the author's measure. That is, those who are judged to be more competitive should outperform those judged to be less so and the evidence was consistent with this prediction. However, the author did not include a detailed description of the observer ratings used to judge competitiveness.

Another issue is that competitiveness was also treated as a psychological state induced by the demands of the situation. Competitiveness conceptualized as a state and as a person-situation interaction.

Higgs (1972b) measured participants' competitiveness by observer report and then subjected them to a battery of psychological and motor ability tests. However, there were no significant differences in personality, as assessed by this procedure, between those judged to be high or average in competitiveness. The only differences were in motor ability. These findings suggest that competitiveness may be linked to physiology rather than other personality traits. However, the limited
sample size and methods of assessing competitiveness and personality leave the results of this study in doubt.

Frederick (2000) also tried to link competitiveness to other personality variables, as well as to performance measures. The results of this study showed that competitiveness was negatively correlated to both internal locus of control and GPA. In summary there have been some attempts to link competitiveness to personality traits. Competitiveness has predicted outcomes of interest such as performance at some athletic tasks. However there is no evidence of a distinctive personality profile that is linked to competitiveness.

The results of much of the previous research show that there are gender differences in competitiveness. Most show that men are more competitive than women are in general. Most of these gender differences have been tested using self-report measures of trait competitiveness. Several studies have shown that men score higher on the competitiveness subscale of the SOQ (Gill, Kelley, Martin, & Caruso, 1991; Ruan, 1993).

Other self-report measures show mixed results. A study using the SPI found that while males were more competitive than females in a novice athlete group, the
reverse was true of college athletes (Jones, et al., 2001). Another study found that among 155 professional tennis players, females were significantly more competitive (Houston, Carter, Smither, 1997). A study of Taiwanese swimmers after participation in a tournament found that females were more competitive than males on the SOQ (Lee, 1997). As a whole, trait competitiveness measures have shown that males tend to be more competitive than females in general. Results that show females as more competitive had small samples of high level athletes which are not typical of females in general while the male samples were larger and more representative. Although the results have not been unanimous, there seems to be reasonable support for this gender difference.

Gender differences in competitiveness are not due to biological sex, but rather to differences in social roles (Olds & Shaver, 1980). This research has shown that the more masculine a person is, as measured by the Personal Attributes Questionnaire (Spence & Helmreich, 1979), the more competitive he or she is regardless of his or her biological sex. Other research has shown that the gender difference may exist because females have a stronger desire to maintain equitable outcomes based on socialized differences in submissiveness and dominance between the genders (Wyer & Malinowski, 1972). So it
seems that this gender difference may be learned rather than biologically based. While I acknowledge that this gender difference likely exists, the causes will not be discussed at length here. Future research needs to investigate this issue.

Evidence of this gender difference in competitiveness is also found in state competitiveness and the interaction between trait and state competitiveness. For example, Kline and Sell (1996) looked at trait competitiveness across group tasks of varying degrees of competitiveness.

Hellandsig, (1998) noted that low scores on win orientation and high scores on friendship predicted high performance in all types of sports. Win orientation becomes more important based on an athlete's age (Hellandsig, 1998). As an athlete ages, he noted that winning became more important than friendship. He also noted that this changed by age, gender and the type of sport the athlete participated in. This was noted to be especially true for females, whereas a negativistic lifestyle for males predicted discontinuation from competitive sport.