

**COED ADOLESCENT SOCCER PLAYERS IN A COMPETITIVE
LEARNING MILIEU: AN ETHNOGRAPHIC ASSESSMENT OF GENDER
ATTITUDES, PERCEPTIONS AND SPORT SPECIFIC COMPONENT TESTING**

by

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ABSTRACT

The history of association soccer dates back to the 1800's, and all indications are that prospects for the female athlete was scarce in all sports. The researcher has arranged an environment where young females can train with males in a soccer setting that has all the necessary elements for the athletes to learn, improve and compete with their own gender as well as opposite gender. The female group has been noticeable underachievers in this sport and is not aware of their potential. The research methodology is ethnographic in nature and study could easily be related to a traditional way to learn and develop in this sport. The method stresses the importance of reproducing procedures that were taught to the researcher. The employment of this method was to provide motivation and additional teaching resources to assist and enhance development of the research participant's potential.

This was an ethnographic endeavor that accumulated several sources of data on 13 elite male and female athletes. Based on the data collected interpretations were made regarding their perceptions of the opposite gender. Ethnography was combined with descriptive statistics and employed to elicit and compile the data in the soccer specific testing components and the interviews. Merging techniques of observation (participant observation), field notes, video analysis, individual and group interviews were the sources of rich information for the researcher. This was a practical approach to bring out or discover any overt or covert trends, and to determine what possible barriers to learning would limit and reduce participation in the sport of soccer. The theoretical nature of the research, formal sociology is very much related to observational methods, choosing to gather data in a controlled and organized approach. The

researcher's decision to tape the interview process and his preference to videotape events would thereby collect a complete and accurate account of the training progression subject matter.

The results in the soccer specific testing indicated that the males were generally faster on sprint runs and had more endurance on the distance runs. However, a few of the females did better some of the males' scores in the aerobic and anaerobic events. The technical and tactical data indicated a slight improvement for the females when comparing pre and posttest results. Once more, the males were more advanced than the females. The psychological data showed the females progressed on the posttest scores. However, there was no overall male domination on the 20 categories. There are different areas on the inventory where females scored higher and other areas where the males would top the females. The interviews provided some enlightening information that confirmed aspects of male domination exist in sport and the feminist's role in sport as bringing attention to many gender issues, the positive and negative aspects of education and sport, the goals and motivation to participate in sport. Finally, the contrasting viewpoints between the American adolescent in this study and the English adolescent in Flintoff's (1993) dissertation and Flintoff and Scraton's (2001) study on physical education and gender issues.

The most important finding was that learning had occurred in the training milieu. Learning was accomplished through the males' ability to facilitate the dynamics of attention and discipline required throughout the training sessions that were offered. The soccer specific test results indicated a much more motivated female group and the females' spring season was very successful; the team went undefeated in all competitions. The males in the study began to shed the superior attitude to one of more respect and tolerance of their female counterparts. The female differs emotionally from the male as the interview data illustrated and the co-education environment was both positive and productive, but there are limits to the inclusion of the female

gender in the male training sessions. More planning would be necessary to assure that both groups develop. The study not only provided training and testing, but also made the participants more aware of many gender issues and how the research attempted to bridge the gap in sport between the sexes. If adopted, the psychological data could mean major benefits for the player who wants to know exactly what their strengths and weaknesses are; and when actions of strength are required and the capacity to work on weaknesses.

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The world, my brother! will abide by none,
By the world's Maker let thy heart be won.
Rely not, nor repose on this world's gain,
For many a son like thee she has reared and slain.
What matters, when the spirit seeks to fly,
If on a throne or on bare earth we die?

(The Rose Garden)
Sadi of Shiraz.

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CHAPTER 1: INTRODUCTION

The Research Map

It is fitting at the outset to be in accord with Harris (1999) and note that my accrual of research material is comparable with his, and to recognize the use of personal experience as a source of knowledge. He states that interpretive understanding demonstrates a belief in the individuality of human experience and a statement that we are unable to see the world from any other place than our own within it. Therefore, we never just do research, for there are underlying factors that shape and influence our work.

Most appropriately, Willis and Trondman (2000) describe qualitative research as a family of methods involving direct and sustained contact with agents, and of richly writing up the encounters, respecting, recording, representing at least partly in its own terms, the irreducibility of human experience. Furthermore, this research is ethnographic in nature and attempts to elicit an authentic understanding of young men and women's needs, desires, opportunities and constraints in the sport of soccer. In an editorial by McKenna and Mutrie (2003) they advise that debates about whether qualitative studies are valid 'science' are moot:¹ this style of inquiry is here and is likely to remain. As a result, it has something to say about the social elements of experience that traditional approaches have done little to resolve. Finally, students like doing qualitative research and, as educators, we must ensure that this choice of research is a set at a high standard (and not seen as a 'soft' option).

¹ T. Koch, "Storytelling: is it really research?" *Journal of Advanced Nursing*, 28 1998: 1182-1190.
D. Raphael, "The question of evidence in health promotion." *Health Promotion International*, 15 2000: 355-367.

Fittingly, the research document begins as a narrative of an individual in a culture who will interject personal experience into the text as in the confessional tale; and, more akin to autobiography, to investigate self within social context this method is referred to by Glesne (1999) as Auto-ethnography a style of writing that inquires into the self as part of a socio-cultural context. She elaborates that Auto-ethnography begins with the self, the personal biography, “Using narratives of the self, the researcher goes on to say something about a larger cultural setting and scholarly discourse, taking a sociological rather than a psychological perspective.” (p. 181).

Chapter one provides some autobiographical data on the researcher. Furthermore, it recounts and describes his own learning experiences as a soccer player in the cultural, social and economic climate of Scotland. This is where he had lived and what had shaped his outlook, prejudices and for the most part his thought processes. The researcher describes how the culture shock of relocation from a provincial town to urbanized New Jersey made his adjustment that much more difficult. The school children in this new environment were different. The females, for example, appeared much more mature physically and actually looked like young women. In Scotland the males and females were taught in separate classrooms.

Also, both the teenagers and the teachers in New Jersey had difficulty understanding the researcher’s spoken word because of his ‘Scottish accent’. However, with his father’s assistance, he found that he could still play soccer (football), the sport of his passion and enjoy it. In those teenage years, he practiced and played soccer with men who were seasoned professionals. Undoubtedly, this accelerated his learning. This experience was analogous to an educational or trade apprenticeship.

Although the game of soccer in Scotland and participating nations worldwide was considered very straightforward, the game, in fact, was quite complex. How to play the game requires an intuitive element and has to be ‘caught in the mind’ similar to a mathematical concept. In soccer, this concept is called ‘*vision*’ and there are a very small percentage of active and non-active players who had this attribute.

The journey from child soccer prodigy, to junior, college, amateur and finally a professional soccer player has been mapped out and his eventual retirement into coaching is discussed. His 15-year period of coaching players at all levels of play, has identified select questions related to improving performance and coaching the male and female athlete and to provide the environment that he experienced, in his formative years would make all his players better athletes.

As Babbie (2001) points out, identifying these questions suggests that I have been involved in a form of qualitative research all my life. In many ways, you do field research whenever you view or take part in social behavior and attempt to comprehend it, whether in a classroom, at an airline terminal, or at a sporting event. Whenever you report your observations to others, you are describing your field research endeavors.

Chapter Two provides a comprehensive review of the research literature that is available on the research questions that have surfaced in Chapter One. This includes feminist perspectives on whether the female athlete is oppressed, and whether gender bias still exists in women’s sports. The opinions related to male domination in the competitive sports arena is examined to determine if indeed the female athlete has been undermined for as much as a century. The chapter also provides some history and the statistical nature of soccer and the impact the sport has worldwide. Also, included is a brief synopsis on the game of soccer and how the game is

played. Participation motivation in the sport is also alluded to, and the opinions of researchers on this question are screened carefully, because there are significant numbers of boys and girls that leave the sport in their teenage years. In essence, this chapter examines all the possible impediments for youth players in the sport of soccer.

Chapter Three is devoted to the methodology used in the research. The basis for qualitative research and some descriptive statistics are discussed, because the nature of the game of soccer is holistic but can be separated into quantifiable components. The decision to use Ethnography is based upon the philosophical paradigm to which the researcher makes a total commitment. Atkinson and Hammersly (1998) describe this as an approach, which is based on the expressive nature of surveillance and aspiration to formulate a composition that makes sense. The study group, the sprint and performance testing, and the tactical and technical training sessions were key sources of data. Also, the soccer specific methods of training are key sources for eliciting relevant information.

Chapter Four is concerned with the qualitative study testing results. What did the study or the researcher accomplish? What, if any, questions were answered after completion of the research? Were there any relevant findings or performance differences between the male and female participants? Were there any significant psychological differences in thought processing, concentration, or self-confidence in adolescent soccer players? What additional questions were raised and what questions were answered?

Chapter Five discusses the study findings relative to personal experience and the literature that is available on the topic. The second part of the chapter explores the implications of these findings for future practice and also recommends areas where potential research would

be advantageous. This chapter also includes and comments on what the researcher has accomplished.

Chapter Six draws conclusions on the main findings of the investigation, and explores suggestions for potential submission for further research and for application and facilitation by physical education teachers, coaches and administrators in the domain of youth sports.

Male versus Female in Soccer

The development of quality in any field of study or profession relies upon research, training programs, and originality in practice. These accomplishments, however, are contingent upon knowledge of the current status of the field. Gilbert (2002) points out that recognized disciplines rely on periodic methodical reviews and analyses of research that are typically dispersed through handbooks and scientific articles.

Coaches too, strive constantly to improve the performance of players. The singular most important feature of their role is to provide the player with a training environment that is conducive to effective and efficient learning (Liebermann, Katz, Hughes, Bartlett, McClements, & Franks, 2002). The opinion is considered by Franks, Sinclair, Thompson and Goodman (1986) as the fundamental aim of coaching to improve the performance of athletes. Based on this precept Salminen and Liukkonen (1996) report that the coaches' leadership style is an important factor affecting the emotional atmosphere of any training sessions.

Over a period of 15 years, I have coached some outstanding athletes both male and female. My initial impressions about coaching females were that the female was much more attentive than the male. The females could soak up information and apply this in practice and game situations. Conversely, the male at times would be much more resistant and was not a very

effective listener, often looking to challenge the coach. I have always attempted to produce in my current male and female players the highest performance standards; however the female groups that I have coached have been a conundrum. Both the individuals and the team have noticeably underachieved. There are a number of peripheral reasons that more than interfere with their performance in soccer and have always been a consideration. Therefore, my idea to have the females practice with male soccer overachievers might provide a remedy for their indifference.

Rinus Michels, former head coach of the Netherlands comments in an interview on boys and girls playing together in soccer (Verheijen, 1998):

In practice, it has been found that the decision to allow boys and girls to learn soccer together has been successful. Surveys have shown that both boys and girls have reacted favorably to this possibility. One recurring criterion is that the important thing in sport is who can play his or her role at what level? Practice shows which boy or girl can reach what level. Soccer ability is the only criterion. This is why mixed soccer can be played until the age of eighteen, as long as the game remains a game. The limit is different for each individual and the only limit is the natural limit (physiological differences). On the average, a grown man runs faster, jumps higher and shoots harder than the adult woman. When it becomes important to raise the level of performance – in competitive leagues – the physical differences between men and women make mixed soccer impossible. I see no problems in the lower regions of adult soccer, where the principles of playing for pleasure still apply. Why should men and women not be able to play soccer together? (p. 263)

Finally, coed soccer is a recent and rather uniquely American phenomenon. Although there is scant evidence of adult women and men playing soccer together in a structured and sustained manner in other countries, coed soccer is popular across the United States. The novelty and cultural specificity of coed soccer partially explains the dearth of literature on its sociologic dimensions (Henry & Comeaux, 1999).

Study Rationale

Training females with *overachieving males* may enhance female performances. To investigate this hypothesis, this study will reproduce the training environment that helped my development as a young apprentice. In my apprenticeship, the other players involved in my training session provided guidance. The interaction between the older, mature players and me during a training session compelled performance learning. The verbal and non-verbal cues provided by players involved in the session encouraged me to perform more effectively. Listening and analyzing the constant communication between the players, and using the positive responses to guide me when I found myself in a similar dilemma, strengthened my performance confidence. Similarly, the negative responses that prevailed during those training sessions would assist my development in avoiding inconsistent tactical options and further enhance my performance proficiency.

The rationale for the study is based on the theory that combining male and female participants in the same soccer program would provide equivalent guidance and instruction that was made available to me. Combining the males with the female players is supported by Henry and Comeaux (1999) who concluded:

The actual engagement of players contributes to the same dimension: first and foremost, all want to play. In action and in concept, the definition of co-ed play by players as a game is infused with informality, de-emphasizes competitiveness, and focuses on integrative play. (p. 287)

The coed theory proposes that the work ethic in training sessions would increase because of the inclusion of the overachieving male group. This experience would assist the girls in the competitive component of the game of soccer. In essence, the males would become an additional teaching resource for the females.

Conversely, Flintoff and Scraton (2001) contend that much of the literature on mixed gender activities points out that males were a detriment to female participation in sports and growth as an athlete. In fact, Renold (1997) writes that many researchers have noted the active exclusion of girls from the majority of 'boy' sports. Whether or not this exclusion is in the form of school policies, particular discriminatory attitudes of significant teachers or the boys themselves, the inequality is transparent and continuously maintained. This study will also attempt to answer some other important questions about female athletic performance enhancement in a co-ed environment (Woodman, 1993).

This research is a continuation or expansion of a qualitative statistics course where the researcher was required to complete an inventory questionnaire. Based upon the results, I decided to expand the research and make it more comprehensive. Therefore, based on that earlier research more wide-ranging questions were spawned that lead to the following inquiry.

The inspiration for this study developed out my own personal experiences in coaching youth soccer. My involvement in soccer is not limited to coaching; I had been involved in all of the known possible stages of the game over a period of 50 years. Further impetus was provided by my participation in the 1994 FIFA World Cup Technical Study Group, where, I and other licensed coaches were called upon to collect and analyze relevant data of all the games played at the Orlando venue.

Finally, cases of women venturing into male-dominated fields and men venturing into female-dominated ones represent rich social facts that can shed light on key issues about dynamics aberrant to the construction of gendered social life and gendered identities. Various social processes are peculiarly enacted in these experiences, such as (1) the intricate interaction between patriarchal culture, gendered social organization, and gender Identity; (2) the

asymmetry of gender relations; and (3) the dynamics of change and resistance in a given social order (Laberge & Albert, 1999).

Research Questions

Having coached both males and females, I have read the literature pertaining to the differences in coaching both sexes. However, the research would hopefully provide more answers to some of the questions listed below.

- What fitness gains were made if any?
- Which gender would demonstrate greater fitness gains?
- What gender would show more motivation?
- What effect has male speed of play on female players?
- What effect will Theory of Attentional and Interpersonal Style inventory feedback have on participants?
- Is the female emotionally different?
- What is the difference in the male/female athletic psyche?
- Is a co-educational environment productive or counter-productive in terms of cooperation between the sexes or does one group inhibit the learning process for the other group?
- What are the sexual implications of co-ed training?
- What role could be played in bridging the gap between the sexes that feminists insist has existed because the male has attempted to dominate every aspect of human society?

Research Limitations

It would be most appropriate to discuss the attendance factor by both male and females over the whole study. As indicated earlier on the participation motives of young athletes, this

commitment in young athletes is subject to change at any time. Obviously, Their priorities are not the same as the coach's. It was extremely difficult to get the group together for the sessions. Initially, on the same day when the study began 2 females dropped out. Many of the participants are vigilant of their academics and they have other interests that conflict with soccer. As you near holidays the attendance at sessions does diminish. We also had our own drama within the study as some of the male players were swayed by outside forces to think of their careers that inevitably ended with their release from the study. Injuries too, played a part in session attendance. This could be a liability issues, therefore those participants suffering from injury were excused. In more than a few times I needed to be resourceful and incorporate training with the study session to ensure attendance. It was particularly the female group that did not show, however I did discuss and reflect on these ups and downs during the study and at times became very anxious at the possible outcome of study. It was interesting to note that on discussing this issue with (AG1) she said, "Use it as material in the study because it confirms what you had originally thought, that girls were not as committed as boys in soccer." Also, she mentioned that what had happened was in fact reality and this would allow me to make conclusions, instead of expecting a head count of 8 at 1:00pm on Saturday. This was also confirmed later that day during the group interview when two of the girls indicated that some girls have other interests and make those their priorities.

The researcher feels that a research grant would have helped considerably. State of the art measuring tools for testing and video analysis software would have enhanced the research. Also, the use of a vehicle to produce better camera angles would provide different perspectives and assisted in analysis. Finally, the study was not continuous. All of the males and females involved in the study were active participants in high school soccer whose schedule begins mid November

and ends mid February. Therefore, there was an approximate three-month break period. Finally, the addition of assistants would be most beneficial.

Researcher's Perspective and Bias

When coaching elite soccer players, I have always found females to be much more receptive in training environs. The female enthusiasm and motivation and their application in practice and game situations is excellent. Conversely, the elite males fit into this category, but at times males are not very effective listeners. I have always attempted to develop in my current male and female players to reach the highest performance standards; however the female group that I have coached over the past four years has been a mystery. The individual players and the team have noticeably underachieved when playing in pressure situations, often lacking in discipline and taking second place to teams that are not as talented. However, there are a number of peripheral causes that could be significant detractors and interfere with their soccer performance. Those causes, I believe are not the coach's responsibility nor are they in the coaching domain. Employing my hypothesis as a possible solution, is to incorporate the females with male soccer players and this might provide the necessary impetus and motivation as a remedy for the female indifference.

However, it should be known that on the evidence of the available physiological data, it is suggested that female players are more predisposed towards a style of play that entails the patient sequencing of passing, rather than one based on high rates of physical work. Although female players are likely able to cope with high rates of work for periods of a game, attempts to sustain this for the duration of a 90 minute match, played on a full sized field, will almost Certainly result in high rates of fatigue before the end of the game. Coaches of female teams

should base their strategies on periods of intermittent high-intensity play, separated by ‘recovery periods’ of containment and passing to retain possession (Brewer & Davis 1994).

The researcher must advise that he is quite familiar with the athletes in the study; he has coached both the males and females for several years. This could have influenced the researcher’s objectivity as an observer and should be noted.

Finally, Rainer (2002) points out an issue in a study regarding the ramifications of intense over-training and overplaying during a competitive season. The question of fitness testing during that period could find players in state of accumulated fatigue. Consequently, testing during this period could lead to poor scores and wrongful conclusions made about the results. In closure, Rainer queries whether it is practical for players to be rested during a season to allow adequate recovery.

Summary

The inclusion of a road map, research limitations, definition of terms, and the researcher’s perceptions and bias in the study and design was presented in this chapter to assist the reader with unfamiliar terminology and to provide some background of the pre-requisites of a serious student of soccer. Also, this concept of learning to play the sport of soccer in an unstructured environment, and the cultural climate is very much related to the present study and allows the researcher to introduce the rationale for this investigation

Definition of Terms

Acceleration: A soccer player needs to cover approximately 25 to 30 meters to accelerate to his/her maximum sprinting speed. The 30-meter test is therefore relevant measuring tool for a player's rate of acceleration (Verheijen, 1998).

Acclimatization: Related to certain physiological adjustments brought about through continued exposure to a different climate, for example changes in altitude and heat.

Aerobic Energy System: Energy derived from the chemical breakdown of different substrates with the utilization of oxygen. The aerobic energy system is used to fuel endurance activities of a lower intensity, such as walking, jogging or running at slow to moderate speeds and is used to provide endurance. This system produces energy by supplying oxygen to the muscles. Oxygen delivery can be increased by training the heart and cardiovascular system to pump blood more effectively around the body (McArdle, Katch & Katch, 2000).

Anaerobic Energy System: The anaerobic energy system works during sprinting or fast running, which may last for 1 to 30 seconds. During these times, oxygen is not available and therefore breaking down carbohydrates stored in the muscle renews ATP. Although energy is produced very quickly, a substance called lactic acid is also produced which causes fatigue and muscle tiredness (McArdle et al., 2000).

Adenosine Tri-phosphate (the energy currency): The energy in food is not transferred to the cells for biological work. Rather, this nutrient energy is harvested and funneled through the energy-rich compound known as ATP. The potential energy within the ATP molecule is then utilized for all the energy requiring processes of the cell. This energy receiver-donor cycle, in essence, represents the two major energy-transforming activities in the cell: to form and conserve

ATP from the potential energy in food and to use the chemical energy in ATP for biologic work (McArdle et al., 2000).

Attacking with width: There are two aspects in a soccer game attack and defend. In the attack phase the team spreads their formation (system) allowing more space to play therefore providing a decrease in possession turnovers. The outside flank players are responsible for taking up positions on the outside of the field creating width.

Attribution Theory: Is a cognitive approach to motivation. The theory presupposes that individuals make every effort to clarify, comprehend and foretell events based on their cognitive perceptions of them. Attribution theory² is concerned with how individuals interpret events and how this relates to their thinking and behavior.

Bad Reputations: unemployment, sub-standard housing and poor levels of health had a dramatic effect on the national character of Scotland. Glasgow took the brunt of the depression in the 1930s and acquired many negative stereotypes, which it is still trying desperately to lose as it maps out its future for the 21st century. During the inter-war years Glasgow was the corpse of an industrial city, devoid of the spirit of industry, with slums and razor gangs becoming the enduring images of the age. These images were perpetuated in the novel *No Mean City* and countless other literary imitations over the years which focused on Glasgow's 'hard man' character? It was a mentality which became entrenched over the years, but which reflected the economic and social problems which Glasgow was experiencing for much of the century (BBC Internet website, 2003).

² F. Heider, "*The Psychology of Interpersonal Relations.*" (New York: Wiley, 1958).

Bangsbo's Beep Test: a test that measures the athlete's ability to sustain energy output with reduced oxygen levels. (Also known as Yo-Yo Test).

BBB Group: the Blue Bad Boys an ethnic Croatian group in Australia whose parents had emigrated from Yugoslavia (Hughson, 2000).

Battle of the Boyne: One of the defining events in Irish history, and if any one event can be held up as the beginning of the centuries of conflict between Catholic and Protestant on this island then this is it. It lives on in story and song, as well as in the long memories of the Irish. Its commemoration by the Orange Men every year during the North's now infamous "marching season" is the cause of millions of pounds worth of damage to properties and business, as well as violent demonstrations by the supporters of the Orange Order against the RUC/ Northern Ireland Police Force and, more dangerously, against their Catholic neighbors (BBC, 2003).

Conditioning: expansion of the energy capacity of the muscle through an exercise program. Conditioning is not primarily concerned with the technique of performance, as would be in the case of training.

Counterattack: instead of sustained pressure by the attacking team, the counterattack develops from winning the ball from your opponent while they are in transition. Transition means that the team is switching from a defensive posture to an attacking one. Consequently, in doing so they leave themselves vulnerable because they are no longer marking or have left space for opposition forwards to get behind their last defenders.

Catholics: after Ireland was Christianized in the 5th century, nothing happened to disrupt the religious cohesion of the country until the Reformation and, in particular, the intervention of the English Tudor dynasty in the 16th century. Henry VIII, who had broken from the Roman Catholic Church over a marital dispute, declared himself King of Ireland and Head of the Church

of Ireland in 1542 and presided over the dissolution of the monasteries from which he derived considerable funds for his European wars. Although he was forced to adopt a conciliatory tone with the native Irish chieftains, he paved the way for his daughter Elizabeth I to subjugate Ireland and for the Stuart succession and Cromwell's Protectorate to colonize the island. With the plantation of Ulster and the Cromwellian land settlement, most of the land in Ireland passed from the native Catholic Irish to the Protestant settlers. In the 18th century, a series of Penal Laws was enacted whereby no Catholic could sit in the Irish parliament, hold public office, vote or practice law; as a result many of its most able men left the country. In the latter half of the 18th century, when religious fervor declined in England and a need for Irish recruits in foreign wars arose, the long process of Catholic emancipation began which culminated in the Relief Act of 1829 (BBC, 2003).

Defensive Compactness: the defensive phase in soccer when the team unit compressed together in an effort to limit the attacking team more space, therefore causing an increase in possession errors.

Dehydration: a condition in the athlete that results from extreme loss of body water.

Desiderable: something that is needed or that is desirable.

Dragging the Marker: the ability to create space for a teammate by having the opponent chase after you even though you are not in possession of the ball and are not an option to receive the pass.

Integrated Component Training: combining two or more components of soccer in a training session e.g. fitness, skill and tactics in one drill.

Exercise Recovery: a schedule of light exercise (cool down) after a training session intended to assist the player in reaching homeostasis (Fox, Bowers & Foss, 1988).

Fast-Twitch Fiber (FT): a muscle fiber characterized by fast contraction time, high anaerobic capacity, and low aerobic capacity, all making the fiber well-matched for high power activities (Fox et al, 1988).

Fatigue: a state of physical discomfort and reduced efficiency (in sport) resulting from extended or excessive exercise.

FIFA: Federation International de Football Association - the world's soccer governing body.

Fitness in Soccer: the ability to work for 90 minutes in a soccer game and perform the requirements of sprinting, jogging, running, dribbling, shooting, etc.

Figuration Sociology: in order to understand social phenomena, it is not necessary to evaluate observable facts. This is a key, and potentially incontrovertible, difference between feminist and figuration approaches to understanding and explaining phenomena (Colwell, 1999).

Flexibility: the range of motion about a joint (static flexibility); opposition or resistance of a joint in motion (dynamic flexibility).

Football (soccer): the origin and the meaning of the terms 'football' and 'soccer'. In virtually every nation in the world, it is usual to refer to the game simply as 'football'. Or the translation of that word into the native tongue. The use of both terms applies mainly in the United States where Americans refer to their native gridiron game as 'football.' Although, the use of the foot as an instrument of ball movement is minimal in American Football (Dunning, 1994).

Game of Soccer: a soccer game has a nominally fixed duration of 90 minutes, with a 15-minute interval at the midpoint. However, nominal time and actual playing time can differ substantially. The need for a definite result in some matches may necessitate an additional 30 minutes of play. There are 20 field players, 10 on each side and a goalkeeper assigned to each team. The object of

the game is to place the ball in the opposing net more times than your opponent. There are three officials who apply the rules of the game.

Glycogen: a polymer of glucose; the form in which glucose (sugar) is stored in the body, mainly in muscles and the liver (Fox et. al., 1988).

Ground: a common name or term given to any soccer stadium in Britain.

Haxey-Hood Game: Was a folk ritual, which still survives in Haxey, Lincolnshire. The hood in this game represents a roll of sacking or leather and the aim of the players is to fight for possession of the roll and convey it to their respected village inns. The roll or hood that is shaped like a ball is the symbolic representation of an animal. This event is made clear by a speech traditionally made by 'the fool' an official in the ceremony; this takes place the day before the game (Dunning, 1994).

Lads Culture: the noun lad is interchangeable with boy in Britain. This type of culture would have boys segregated from females with the idea that lads have activities that only boys should do without the inclusion of girls (King, 1997).

Lactic Acid: the reduction of pyruvic acid through the acceptance of two hydrogen forms lactic acid; the more intense the exercise, the greater flow of excess hydrogen to pyruvic acid, with a rapid increase in lactic acid (Fox et al. 1988).

Learning: the diversity of processes by which humans acquire the range and variety of skills, knowledge and attitudes that set the species apart from others.

Level of Play: The designation or your status as a player, youth, amateur, professional, etc. The higher level usually indicates a faster paced game.

Life-world: the subject of the qualitative research-interview is the life-world of the interviewee and his/her relation to it. The purpose is to describe and understand the central themes the

interviewee experiences and lives towards. In the interview project, coed soccer was a central theme in the life-world of the athletes, and the interviews sought to replicate this theme (Schwandt, 1998).

Marker: small plastic color-coded cones utilized to designate grid areas, field limits and player stations during the practice session.

Marking Player: a defensive player assigned to limit and control an opponent's offensive contribution in a game.

Match: the actual events when two team opponents meet and compete on the field of play.

Maximum Oxygen Consumption VO_{2max} : the maximal rate at which oxygen can be consumed per minute; the power or capacity of the aerobic or oxygen system. Also, VO_{2max} represents a fundamental measure in exercise physiology, and serves as a standard to compare performance estimates of aerobic capacity and endurance fitness (McArdle et al., 2000).

Number Off: a method of choosing teams for practice sessions. The group lines up and then begins to call a number. If two groups are required, the numbers (1) and (2) are called and if you called a (1) you are assigned to team one. This method is quicker for organizational purposes and you will never have people choosing the 'best player' first and the poorest player last.

Consequently, any youth player does not experience any psychological damage at being the last player chosen.

Off the Ball (movement without the ball): the amount of work required (running) when in possession of the ball (attacking) and without the ball (attacking and defending).

Old Firm: the name of the two main soccer clubs in Scotland (Rangers and Celtic). As early as 1904 this label was attached to the teams for the commercial aspects of the games played in those times. The phrase *Old Firm* was not without sarcasm, for the sporting press of this era had

not altogether overcome its distaste for professionalism and the objectionable moral values that this was presumed to introduce (Murray, 1984). Since their respective formations in the latter part of the nineteenth century, Celtic and Rangers have come to represent two distinct, polarized identities within Scotland. As Boyle notes, ‘on stating support for either of the two clubs people tend to be identified (accurately or inaccurately) with one particular cultural configuration (e.g. Catholic or Protestant). A former Ranger player offers a more direct interpretation: ‘It’s all about bigotry. If you are a Roman Catholic then the only team to support is Celtic, and, of course, if you are Protestant it is Rangers (Burdsey & Chappell, 2002).

Overachieving Males: the group of males that had participated in the study played with CSA Rathe (Under 18 boys’ team). When comparing both the girls and boys at the same 14-year age group, the boys were not competitive against opponents rarely winning and lacking in self-confidence. The females were competitive and were confident against good opponents. However, the boys made steady progress and became achievers while the females never reached their promised status.

Pace: A soccer player’s sprinting competence.

Perve: the male gaze, looking at women as sex objects; or at woman’s underclothes. Phosphate System: Phospho-creatine, like ATP, is stored in the muscle cells. Because both ATP and PC contain phosphate groups, they are collectively referred to as phosphagens (hence the name “phosphagen system”) (Fox et al., 1988).

Pitch: the name given to the actual playing area of a soccer game.

Poofters: a moniker that describes some males as having effeminate tendencies.

Pressure: the decreased time and space permitted by an opponent in an attempt to win the ball from the possessing team or player.

Pressing: upon giving away possession of the ball to your opponent one method to win back possession is to 'Press'. This means that on cue, a group of defenders will expend a lot of energy to win the ball back again in specific areas of the playing field.

Protestant: derives from the protests against the Roman Catholic Church at the time of the Reformation. Its intellectual fathers were Martin Luther in Germany and John Calvin in Geneva. It was Calvin and his disciple John Knox who influenced the development of Presbyterianism in Scotland, which then came to Northern Ireland with the Planters in the 17th century. Northern Ireland has three main Protestant denominations: Anglican, Presbyterian and Methodist. There are also a considerable number of smaller denominations among which is Rev Ian Paisley's Free Presbyterian Church of Ulster (BBC Internet, 2003).

Psychology in Soccer: How a player handles intimidation (verbal, physical) and the level of confidence (one of many variables) that player has when performing in important games (See Nideffer's Test of Attentional and Interpersonal Style).

Pushing the Team forward: when a team's goal area is under pressure from an opponent and a defender kicks the ball up-field this a cue to quickly move up field. The attackers must come out too, or risk being penalized for seeking to gain an advantage.

Reading the Game: a player's capacity to anticipate actions by his opponent or his/her teammates.

Religious Sectarianism: was rife throughout Scotland for much of the century, but was again concentrated in Glasgow. Although the country had been predominantly Protestant since the Reformation, an influx of Irish immigrants, drawn to the industry on Clydeside throughout the 19th and early 20th century, had established a large Catholic community. Irish immigration actually had slowed considerably during the Depression compared to earlier decades, however,

huge levels of unemployment and fierce competition in the labor market inflamed an already volatile situation. Unemployed, skilled laborers from the Protestant community complained bitterly about Irish immigrants taking 'their jobs' and this brought ruthless discrimination in the labor market, with Orange and Masonic Lodges often influencing the allocation of jobs within Clydeside Industry in favor of Protestant workers. The Church of Scotland and other Protestant institutions positively encouraged this anti-Catholic feeling at the time, and sectarianism was entrenched in many of Scotland's most basic institutions. Children generally went to both Catholic or Protestant schools, they lived in different streets and areas of the city, and the rivalry was played out on the football field between Rangers in the west of the city and Celtic in the east. In the early 1930s the Scottish Protestant League became a strong political force in Glasgow, especially amongst the skilled working classes in Govanhill, Kinning Park and other areas in the West of Glasgow. It did seem for a while that these organizations could command a lot of political support, which undoubtedly worried both Labor and the Tories, however, these groups were, in general, considered to be extremist by the mainstream press and the middle classes, and had no real political future. Sectarianism remains a problem in 21st century Scotland, although the problem has diminished with each new generation as the economic and social circumstances, which created such a situation, becomes less relevant (BBC Internet, 2003).

Rest Recovery: resting to recover from exercise or sprinting trials.

Slow-Twitch Fiber (ST): a muscle fiber characterized by slow contraction time, low anaerobic capacity, and high aerobic capacity, all making the fiber suited for low power output activities (Fox et al., 1988).

Specificity of Training: the essential construction of a training program for a specific activity or skill and the primary energy system(s) involved in performance.

Speed of the Mark: the first two or three steps taken by the athlete indicate the power, quickness and acceleration that are often essential in competitive play.

Speed of Play: soccer games are played at many speeds. At lower levels of competitive soccer that includes recreational and amateur the ball speed and player movement is much slower than player and ball movement in professional soccer.

Standard of Play: during the game, the physical, mental and technical output can be described as urgent.

TAIS- Test for Attentional and Interpersonal Style: an inventory designed by Dr. R. Nideffer that assesses the thought processing, concentration and self-esteem of athletes. Also, the instrument has been used as an aid for training and selection in business, sport and the military.

Training: an exercise plan to develop an athlete for a particular event. Increasing skill of performance and energy capacities are of equal consideration.

Tactics (decision making) in Soccer: a preferred action in specific situations, both for the players and intended by the coach. An approach by the players to play according to guidelines practiced upon prior to a match. Decision-making can be classified as team, small group or individual when operating in both attack and defense.

Tactical knowledge: plays an essential role in game understanding. Bunker and Thorpe (1986) indicated that the uniqueness of games is the decision-making process that precedes the execution aspect of performance in a game. They contended also that each game situation poses a unique problem and that this element of games lies within the cognitive area of learning.

Take opposition numbers: when soccer games are intense there are always physical challenges or tackles. Players that do not mind the rough play will often note the number of the opponent that knocked them down in a challenge. The player will consciously wait and repay that same player with a heavier challenge later in the game.

Technique Analysis: an identification of specific characteristics of technique, which are studied with regard to their contribution to the specific process and overall achievement in soccer.

Technique in Soccer: a player's specific sequence of movements or parts of movement in solving the incoming movement of the ball and applying the correct tasks (receiving, passing) enabling the continuation of play (dribbling, passing or shooting) in those situations. The players' ability to use all of the appropriate body surfaces to receive, pass and dribble the ball while under pressure from an opponent. Skill acquisition is acquired through repetition and drill. The actual training methodology in technique acquisition used in United States Soccer coaching schools is:

- *Elemental game phase* – the learner is shown the basic movements and individual skills without the distraction of a pressing opponent. The emphasis is on successful task completion
- *Transitional game phase* – the learner now is given the opportunity to perform the newly acquired skills and is under passive pressure of an opponent. The degree of difficulty in task completion is higher and the goal is efficiency in technique.
- *Practical game phase* - the learner must use those individual skills and movements in a competitive game milieu under full pressure from an opponent. As the learner moves through the phases the degree of task difficulty is more intricate.

Touch: the term used to define a soccer player's skill in receiving and distribution of a soccer ball. The ability to reduce or add weight to a pass or pass reception; to curve or flight a pass when faced with obstacles; an array of skills to negotiate any obstacle.

Vision: Movement organization is conceived as the process by which decisions taken are translated into meaningful action. Thus, the essence of both perception and movement organization is to be found in their representational nature, with the link between the two being assured by independent decisional processes. Movement is thus conceived as expressing the result of perceptual, decisional and organizational processes that precede it (Bootsma & Hardy, 1997). When describing a player's vision he/she is located somewhere on the bell curve. Players with true tactical ability are in 93% range of the distribution and above. This is a difficult attribute to define and must be experienced. (For example, if you have never tasted Strawberry Jam you may be able describe the color and touch of its physical properties but you cannot describe the taste). In addition, the player is very creative and is perceptively advanced compared to other players in anticipating situations. An analogy could be a good arithmetic student and an advanced calculus student.

Warm-up: an activity of biomechanical movement that precedes flexibility exercises, to prepares the body and aid in reducing injury as the player progresses into the key part of the soccer training session or game.

William of Orange: A dedicated advocate of tolerance, William III, (1650 – 1702) was one of the most significant players on the continent, constantly strove to spread Protestantism and decrease the Catholic influence of France and Spain. He died in 1702 from complications after being thrown from his horse (BBC Internet, 2003).

CHAPTER 2: REVIEW OF LITERATURE

Introduction

Historically, sport has always been a competitive arena, and competitions usually stay primarily within the same gender. This review will focus on the important components relating to the sport of soccer and how those aspects relate to the study. The areas of participation motivation, impediments to learning, feminist perspectives will be explored, male and female perspectives on sports will be considered, reported and detailed. The review will inspect gender equity issues and opportunities for females will also be examined, furthermore, the review will attempt to determine what implications if any, apply to male dominance in the sport and how this effects female inclusion or exclusion in sports. Finally, the text will provide an appraisal of the magnitude of gender research done in this area of athletics.

This review lists 170 journal articles, 14 reports, 69 books, 24 web-site articles, 2 unpublished PhD theses, 1 published PhD thesis, 1 unpublished Master's thesis and 1 cassette recording. These were the primary resources that provided the researcher with the means to map and write the literature review. Several of the journal articles were retrieved through the Inter-library loan department; the majority of the other articles were obtained from the main library at the University of Central Florida. There are 6-videotaped training sessions with sound. Following the sessions the study group was asked questions related to the activity and solicited for additional comments or observations.

Young Women and Men in Sport

The domain of sport has been characterized as a potent and particularly public achievement environment (Roberts, 1984; Scraton, 1978). Similar to the classroom, the relevance of exhibiting ability, performance standards, and competition are hallmarks of the sporting enterprise. For many children, their major exposure to sport occurs within the educational setting. Studies in the United States have indicated that accomplishment in school sport (in contrast to academic class-work) provides an important contribution to students' overall sense of worth and status in the school system (Duda, Fox, Biddle & Armstrong, 1992).

The most impressive statistics for female participation in soccer are in the United States where there were 3 to 4 million registered female soccer players a decade ago in 1993, rising to 7.2 million in 1998 (no Author, 2002). Cox and Thompson (2001) have confirmed these figures in their study as they consider women's soccer as exponential growth. With approximately 30 million registered participants worldwide, it is one of the fastest growing sports in the world. The 3rd Women's World Cup, which was held in the United States in 1999, also attested to soccer's growth with the large number of spectators viewing the games. 92,000 live spectators, and worldwide television audiences that exceeded 40 million viewed the final game between United States and China. Soccer has always been very prominent in the United Kingdom.

Women's and girls soccer is undergoing a period of unprecedented growth and is the fastest female sport in England. In the last decade there has been a 400% increase in the number of girls participating in soccer. There are now 700 women's teams with 18,000 players, and 1,150 girls' teams with 23,000 players. In schools, there are now 1,500 competing in the ESFA competitions and over 1,000 girls attending Centers of Excellence that have been established throughout the country (Football Foundation, 2004). A nationwide sport survey also indicated

that football had retained its position as being the most popular club membership sport for young people. The major increase in membership was in clubs that offer football from 13% of all young people in 1994 to 18% in 1999 (Sport England, 1999). However, football at clubs is still dominated by boys. In 1999, 32% of boys were members of a football club compared with 24% in 1994 while 3% of girls were members compared to 2% in 1994 (Sport England, 2000).

In Great Britain, a government sponsored group named Sport England (2002) produced a fact sheet detailing survey results that indicated 85% of girls between the ages of 6 and 16 take part in sport outside school on a regular basis (at least 10 times a year, which equates to 2.9 million girls). This compares to 89% of boys (3.2 million boys). As indicated in the last paragraph the conservative estimates of 30 million youth sport participants in all sports in the United States, combined with the knowledge that childhood physical activities is related to long term health benefits have led researchers to study motivation from participating in and discontinuing participation from structured youth activity programs (Weiss & Fraser 1995).

While these studies have provided answers to what motivates children to participate in sport, they did not explain why some individuals maintained their interest while others stopped participating. In addition, the link on how the process of physical activity involvement evolved from initial adoption, to maintenance of, and some times to attrition from involvement were omitted (Frederick & Ryan, 1992; Klint & Weiss, 1987; Longhurst & Spink, 1987; Wankel & Kreisel 1985).

In some studies (see Horn 1985; Black & Weiss 1992) the focus was on the influence of coaches' reinforcement and performance feedback on perceptions of competence, satisfaction and motivation among youth participants. Results indicated coaches had a vital role in shaping perceptions and influence on young athletes. Specifically, contingent praise and performance

feedback following skill mastery, and contingent encouragement and performance feedback following skill mistakes, were associated with higher self-perception of ability, enjoyment, and intrinsic motivation in youngsters. However, Passer (1982) in his study discovered that stress is considered by youth sport researchers and practitioners as one of the most important psychological issues confronting this field of research.

Having coached youth soccer in the United States over the past 15 years, I have observed, experienced and learned certain patterns in both male and female participation motivation in sports. A number of studies have reported several significant findings on the relationship of socializing agents and sport involvement of male and female athletes. For the most part, these studies have been based upon the social learning paradigm. Bandura's theory (1977) began with his analysis of the importance of models of behavior in learning. That is, in the naturalistic setting, individuals learn new behaviors through the observation of models and the effects of their own actions. According to Bandura, modeling, whether by live models or symbol models (film and television), is a key influence in the acquisition of both pro-social and reprehensible behaviors (Gredler, 1992). This theory, when explained by Higginson (1985) in a sport context, suggests that sport participation is dependent upon:

- The personal attributes of the athletes
- The influence of the socializing agents such as parents, coaches, and peers
- The influence of opportunity set that there is an opportunity for prospective athletes to participate in the sport of their choice (Higginson, 1985).

Many aspects of the social learning theory prevail when accounting for sport participation, i.e., social class background, personality traits and opportunity set. These particular

variables may, for some female athletes, exert a more profound effect than the agents of socialization (Higginson, 1977).

McPherson, (1968); Snyder and Sprietzer, (1978); Greendorfer, (1977), and Higginson (1980) have reported in their studies that parents were the major socializing agents in the early years for both male and female athletes. However, later in life that influence diminished, and peers, coaches and teachers became the major supportive agents for male and female athletes. As participation progressed into the adult years, a trend for athletes, especially female, was to become more reliant on male peers (Theberge, 1977). In a study that explored the dynamics of how young people make decisions about their sport participation, Coakley and White (1992) used an interactionist approach. It was not assumed that young people somehow get socialized into sport in response to external influences, nor was it assumed that socialization into sport conforms to an instantaneous conversion model, although that was the model on which the 'Ever Thought of Sport' campaign was based. As an alternative, it was assumed that young people become involved in sport through a series of changing, back-and-forth choices made within the structural, ideological, and cultural context of their social environment. In 1985, the British Sports Council initiated a media-marketing campaign designed to "sell" sport participation to young people, especially 14 to 18 year-old working class youth who had stopped or never participated in organized sport programs. The campaign was promoted under the slogan "Ever thought of Sport?"

Duda (1992) writes that children are more likely to be enthusiastic about participation in achievement-related activities when they find these activities enjoyable and absorbing. Furthermore, she considers research in this period of time suggests that fostering a task-oriented interpretation of success would set the stage for more captivating and satisfying experiences and

prolonged involvement in sport. The concept of soccer academies is a viable project to assist in the development of potential athletes. These special sports schools would offer youngsters an opportunity to pursue a sport seriously after school hours in schools which include children's and young people's sport of choice, and could be categorized as a sports proficiency school and a higher sports proficiency school. It is also possible to attend, from the earlier ages of six or seven, a full-time boarding school, which combines an academic curriculum with sports training. The academies could specialize on a single sport, while others could include a number of sports. Children are considered based on recommendations and through a screening process. The parents too, are interviewed and must convince the administrators that they would support and not interfere with the program (Chambers, 1976).

Accordingly, sex differences in competitiveness do not necessarily imply sex differences in sport participation. Indeed, many females engage in non-competitive sport and exercise activities. Nevertheless, interpersonal competition is the dominant sport form today, especially in educational settings, and these lower levels of competitiveness may well be a major psychological barrier to sport participation (Gill, 1986). Also, there have been reports that for young women, physical education is often associated with feelings of discomfort and embarrassment. Those reports described females as experiencing feelings of self-consciousness in an exercise environment. However, usually the difficulty was not the activity itself that turned young women away from physical education and sport but the rules and arrangements pertaining to gym wear and the limited hygienic showering routine that typically accompanies physical education in schools (Coakley & White, 1992; Health Education Authority, 1997; Health Education Authority 1998).

It has been commonplace knowledge that privacy and appearance were always important issues for young women. Unless sport participation allowed the young women opportunities to control their presentation of self in a way that fit with their definition of who they were, they would likely not participate. Coggins and Foster (1997) believe that recognizing barriers to participation is important because they will influence both attitudes to physical activity and confidence to be active in specific situations and environments. Some other barriers to exercise reported by the Health Education Authority (1998) by young women are: lack of time, negative past experiences, self-consciousness in an exercise environment, the financial expense and no close friends in attendance. Coakley and White (1996) advise us that gender distinctions relative to sport have traditionally been made explicit in British schools through sex-segregated physical education curricula in which females and males are usually taught different activities in single sex groups, by same sex teachers. With the social organization of the schools, sporting prowess has generally brought high status to young men and not to young women. From their data, Coakley and White (1996) found this was reflected in the fact that young men were more likely than young women to be ridiculed if they were physically inept and clumsy, while young women were more likely to see sport as irrelevant in their lives. Butcher, Lindner and Johns (2002) found in their 10 year retrospective study that nearly without exception young sport competitors dropped out of a sport at some point in their sport histories. It appears that most youngsters participate in a variety of sports (average of four) during their school years, seeking for the activities that appeal to them most. For the majority of sport dropouts, their withdrawal was from a specific sport and was not permanent withdrawal, since over 70% of the total sample dropouts were competing in at least one other sport at the time of withdrawal, 55% of the Grade 7/8 sub-

sample began a new sport in the dropout year or later, and 10% of the entire sample rejoined the sport they had left over a period of 1-6 years.

Women's involvement in sports that once were traditionally viewed as men's sports, such as soccer, is increasing rapidly (Flintoff & Scraton, 2001; Harris, 1999). The popularity of the game is shown by the fact that an estimated 20 million women worldwide participate in soccer. (Harris, 1980). Interestingly, (Chu, Leberman, Howe & Bachor 2002; McDermott, 1996; Mennesson, 2000; Scraton et al., 1999; Theberge, 1995; Wright & Clarke, 1999; Young & White, 1995) consider the prime reasons given by women for participation in sports traditionally considered as masculine, were the joy of involvement in a sport requiring physical strength and speed, as well as a love for the sport. Miller, (1996) claims women may prioritize different benefits from playing sport than men. Some of these benefits include having a good time, feeling good, the feeling of pushing back frontiers of age and tradition, caring for each other, socializing and meeting people, as well as displaying the expected qualities of determination, competitive spirit and robustness which is a requirement in sport. The British Broadcasting Corporation Football Academy web-page informs their readers that currently Norway (75,000 players) and Germany (169,826) are well ahead on the European front, but the US, where the woman's game is far in advance of the men's game, leads the way. In women's soccer, a staggering 7.8 million girls play soccer in the United States, where there is also a full-time professional league. However, in keeping up-to-date the professional league folded in the summer of 2003 due to lack of economic support. This does not in any way influence the other levels of participation in the United States. Consequently, the barriers to participation in sport and involvement in sports administration that have been pointed out at a European Symposium for Gender Equity by Ms. Deena Scoretz of the International Council of Sport Science & Physical Education seem to be

overcome. Those barriers included; not knowing the language and jargon of sports, the lack of awareness of the ability of women to make a meaningful contribution, the lack of good role models and prejudice (Welch, 1999). Conversely, Bodenstedt and Wasmund-Bodenstedt, (1988) comment on the position of women's sports, opposing the latter point of view that despite increasing participation numbers and improved performance, there still exists a widespread consciousness that women are still denied many privileges normally reserved for males.

In studying the processes of social and sexual differentiation that shape sport, it would allow us to understand behaviors that produce, reproduce or oppose established social relationships (Mennesson, 2000). Scraton (1982) illustrates how the participation of boys in sport at school is a way of declaring their opposition to the disciplines and cultures of formal education. Boys who excel at sport have station among their peer group – even if they perform poorly in academic work. For girls getting involved in school sport – with its de-sexualized sportswear and discipline and masculine image seems to be giving in to school. She continues by stating that girls are more likely to resist school discipline by accentuating their femininity and their adulthood, through the wearing of make-up and risqué clothes - the antithesis of school sport. For most girls there is no street credibility in sporting success. Eccles and Harold (1991) have questioned why girls and boys differ from one another in their involvement rates and participations in sports. Eccles (Parsons), Adler, Futterman, Goff, Kaczala, Meece and Midgeley³ have built a theoretical model for analyzing the motivational factors underlying an individual's decision regarding achievement-related choices. This model was created on the

³ See J. Eccles (Parsons) et al., *Expectations, values and academic behaviors. Achievement and achievement motivation* (San Francisco: W.H. Freeman 1983).

assumption that it is one's interpretation of reality rather than reality itself that directly influences activity preferences.

According to Murray and Matheson (1988) the family, through the process of child rearing appears to be the most influential and pervasive institution for enculturation. Jambor (2002) agrees as she describes parents as powerful socializers and role models of children's sport participation. She theorizes that by understanding the parent, the child might be better understood. Furthermore, for males, motivation in the institution of sport in our society is probably one of the strongest reinforcements for the male gender role for boys that participate in sport. Parker (1996) is in accord noting that it is accepted that young people enter schools as sexual and gendered objects, having already experienced the formal and informal learning networks of the family environments, peer groups, and the constant barrage of conditioning from the media. In their research, Dunning and Maguire (1996) discuss the pressure to participate in sport – from the media, in schools, from their age-peers and, of course in many cases from their parents, especially fathers with whom they identify as role models though-out the United Kingdom.

Coakley and White (1992) have determined from their study that adolescents clearly showed that sport participation was not a separate experience in young people's lives; the decision to participate in sports was integrally tied to the way young people viewed themselves and their connection to the social world in which they lived. With that resolve in mind, gender distinctions relative to sport have traditionally been made explicit in British schools through sex-segregated physical education curricula in which females and males are usually taught different activities in single sex groups, by same sex teachers.

Other research literature reveals women who competed in intercollegiate sports, as having preferred the social experience of being with friends ahead of skill improvement and competitions as reasons for their participation in sport (Lenskyj, 1990). Inasmuch as some females persist in their involvement in sport, there must be some type or source of positive feedback for continued participation. However, according to Harris (1987) there must also be negative feedback, if no correction takes place, anyone who had ever participated in sport would continue to do so without learning.

In their research, Flintoff and Scraton (2001) comment on the female perception of an active lifestyle suggesting that females were clearly influenced by dominant discourses of health and well being, seeing health benefits as a key purpose for taking part in physical activity. Harris (1987) informs us that the new breed of female athlete is involved in sport to maximize her potential and be successful: she is not there for social interaction and fun alone.

Larsson (2003) has concluded from his interview data on ‘Young people’, a gender-neutral concept, that they participate in sport because the ‘want to do something meaningful together’ first and foremost – at least when it comes to team sports. In athletics, which is regarded as a real sport, one participates mainly because one wants to compete and perform well, at least when one desires to achieve, while girls do it for the social thing:

I train to achieve. I guess I’ve done that all along. But I don’t train because my friends train, but because I want to...I think one stops doing sport because...because you don’t perform well... I think. Or maybe you just simply get tired of it. Find something else to do that is more fun. (p. 6)

Some athletes will choose to leave sport to sustain or maintain a relationship. Harris (1987) feels this should be accepted by a mentor and not used to create feelings of guilt in the athlete. Coakley and White (1992) are in agreement on this issue as they emphasize that due to

the structure of most male/female relationships, the sport and leisure activities of young women were often altered when they had boyfriends. Females more often than not, considered their own personal interests a low priority, thus preferring to maintain their present relationships with their boyfriends. However, Higginson (1985) claims that female athletes who participate in sport at the elite levels are most assuredly influenced by an array of factors. The exact nature of sport involvement and participation, though, is still largely indeterminate as it continues throughout the life cycle. Jambor and Weekes (1996) echoed this sentiment in their case study on non-traditional athletes; they concluded that there are many parameters in participation motivation. Also, Haga (1999) attempts to shed light on this issue by stating:

When we want to understand the involvement of women and men in sport, we must study their relative positions both historically and in today's society. The life situation of Norwegian women has changed over recent years: with fewer children, lighter domestic chores, better education, more work outside the home, and growing economic independence. These developments have provided women with the skills, courage and self-assurance they need to fill demanding positions in government, business and sports. (p. 1)

The domain of sport has been characterized as a potent and particularly public achievement environment. In many ways similar to the classroom, the relevance of exhibiting ability, individual performance standards, and rivalry are hallmarks of the sporting enterprise (Duda, 1992). Accordingly, Bodenstedt and Wasmund-Bodenstedt (1988) are at variance when they conclude that female sports and athleticism are occurrences of 2nd degree social importance – nice and valuable, however, they cannot in any way be compared to the significance of male achievements in the public spectrum (note: one cannot rank them equally although male and female parameters are constantly compared with each other).

Hanson and Kraus (1999) have concluded in their study that all categories of experience in sport seem to have a potential for positive effects on academic experiences for young women.

Also, in their work, variation in the form of sport or level of commitment in sport is considered and seems to make insignificant differences in academic experiences. Fittingly, young women not involved in sport activity may in fact be on a less contested terrain and experience reduced stigma than female athletes, but they also experience less exposure to the better competition and the antagonism of team sports. In closing, the authors reveal that women in the 1990s, who cross the threshold into the male domain of sport experience benefit in one of the most intricate areas of curriculum – science. Incidentally, these findings lend support to educators, coaches, and policy makers who continue to work for equal access and participation to sport in America’s schools. This research was conducted in the United States and considers national similarities and disparities with regard to how women enter the world of soccer and whether gender relations continue to impact on both their access to and opportunities in the sport (Scraton, Fasting, Pfister, & Bunuel 1999). However, the interview data collected by Coakley and White (1991) clearly showed that sport involvement was not a separate experience in young people’s lives; the decision to participate was integrally attached to the way young people viewed themselves and their connection to the social world in which they lived. Finally, an interesting note is provided by Dennison (1996) on participation in sport:

Although bidding farewell to the rigors of training and the extreme restrictions that every elite athlete must abide by is certainly a cause for celebration, for many athletes’ sports retirement is a death of sorts. As my subjects expressed to me, the loss of participation, camaraderie, competition, excitement, and identity associated with the athletic role requires a serious adjustment. (p. 351)

Impediments to Learning in Youth Sport

The sport of soccer is taught as part of the national Curriculum for Physical Education in Britain. Schools are required to teach games as one of the three areas of activity. Although there

is no obligation to teach football as such, the high profile of the sport in the United Kingdom means that most schools do decide to teach it (Skelton, 2000). However, Skelton (2000) does mention that her limited review has set out the various ways in which broader structural inequalities, specifically social class, ethnicity, gender and sexuality, are re-worked around soccer in the United Kingdom and Australia.

Obviously, the physical education curriculum that included teaching football was afforded to the girls. However, in this study the girls complained that the class teacher would use the session as an opportunity to provide the boys with more training. In fact, when the teacher asked the girls if they wanted to take part, the majority refused and would take a seat on the sidelines and observe. In her review Skelton (2000) contradicts an already stated fact by insisting that the role of male teachers was to preserve football as a male only activity: “What is of significance here are the means by which the men teachers in the school sought to exclude girls from football. This was achieved in two ways: by preventing them gaining access to the means of playing the game; and, denying the possibility of girls possessing requisite skills.”

(p. 12)

Harris, (1987) asserts that females who have had helpful socialization during early childhood and who have acquired athletic skills, still face many obstacles and hurdles to continued gratification and positive reinforcement in competitive sport. Those who have made a commitment to pursuing excellence – to achieve all they are capable of becoming in sport – still feel they may be jeopardizing their femininity. The stigma linked with a serious commitment to competitive sport creates a significant amount of social and personal anxiety for the female athlete. For example, being identified as a tomboy and afterward being portrayed as unfeminine, manly, lesbian, or some similar condescending adjective inhibits further participation for many

females. Those stressors, combined with the general lack of support or prospects for them, continues to diminish the number of participants in the female ranks.

This point of view is reverberated by Birke and Vines (1987), as they believe the pressure on girls to conform to a socially created notion of womanhood can be very powerful. Girls are often encouraged in sporting activity up until puberty. Then support is withdrawn as athleticism conflicts with gender role and any delay in menarche might lower a girl's already waning self-esteem and increase fears that she is not feminine. Such psychological trauma can feed back to suppress menstruation, which gives just a notion of the degree to which our physiology is embedded in our life in the widest sense.

Involvement in sport gives children the opportunity to have fun with other kids, experience new surroundings and be active through exercise. However, DeKnop and De Martelaer (2001) report that this is a problem; the children are taking part in adult-oriented sports (controlled, organized and rationalized by adults). By degrees they learn the norms and values of the adult world, such as obedience, discipline and coordination with others. The conversion of children into mini-adults at a younger and younger age can deny them opportunities for spontaneous play, which is also a valuable learning experience. Changing a recreation activity into a work related task could expose young athletes to anxiety, so they become dissatisfied and discontinue their involvement in sport. In a number of studies, researchers have asked children and adolescents questions of this nature, "What would you do if your friends wanted you to do something that your parents told you not to do?" Dependent upon the precise wording of the question, the results generally show the parents influence is high during the school years and then gradually declines, and that the influence of the peer group is low in the beginning and increases steadily, reaching a peak in early adolescence. Harris (1995) considers such

experiments misleading and provides several reasons. The questions are usually posed by an adult and given the context-sensitivity of social behavior; the responses might differ if a teenager asked the questioner. Second, questions that seek responses to “What would you do if...?” Have low validity, according to the lack of correspondence between tests of moral judgment and moral behavior. Thirdly, the questions focus on emotionally charged relationships, rather than on behavior; in effect the child is asked, “Whom do you love more, your parents or your friends?” Lastly, children commonly belong to peer groups that share their attitudes, and in numerous cases, their parents attitudes. Typically, Harris (1995) notes that when researchers observe, rather than pose questions, peer influence is found to be persuasive, even at ages in conditions where parental influence would be expected to have precedence. Hargreaves (1986) is in agreement when she defines and expands on the term ‘battered child athletes’. This expression is used in United States to describe the increasing numbers of children who are psychologically impaired or physically injured by the extreme pressure placed on them to become sports superstars by parents, teachers, and coaches. Moreover, in a study on German youth, Zipprich (2003) discusses male and female attributes and abilities. Abilities that are considered dominant for girls are handwriting, drawing, singing, communication, tidy, deceitful, cognitive abilities and school performance. Whereas, being courageous, strong, aggressive and good with computers are attributes associated with boys.

Co-Education in Sports

An interesting article listed on the British Broadcasting Corporation News on 08/01/03, discusses the appropriateness of single sex-classes as a means to help boys close the gap with girls on school examinations. Estelle Morris, the present Schools Minister, made the following

statement: “Underachievement by boys at school is a major challenge, however, there is no simple, single solution to tackle the problem.” (p.1)

The report named Recent Research on Gender and Educational Performance was written by academics from the University of Cambridge School of Education and Homerton College. The report underlines a significant gap in academic performance between boys and girls in many schools and indicates precisely which schools need to tackle the problem with strategies specifically designed to motivate underachieving boys. Overall GCSE results show that girls at all levels do better, but the gap is bigger among the higher achievers. For example, in 19%, 14% of girls received A plus or A grades in GCSE English compared with only 8% of boys. Across grades A plus to C the figures were 66% of girls and only 49% of boys. Although the gap in performance is clear, the reasons for its emergence remain distinctly cloudy. The report reveals factors that might play a part and portrays them as ‘anti-achievement culture’ among some boys, including macho peer groups disrupting school work, low expectations, teaching styles that suit girls rather than boys, a loss of motivation brought on by a loss of traditional male jobs and the way that pupils are grouped in lessons. The report recommends that English should be taught in a way that engages both boys and girls, in order to counter the image of literacy as a feminized subject. This experience was not a novel one; differences between girls and boys in educational outcomes of school education have been a focus of concern in Scottish education for nearly 30 years (Scottish Executive, 2001).

In a related article, some people find culpability in a ‘*laddish culture*’ among boys that suggests that it is not cool to study hard. Dexter Hutt, a Birmingham head teacher of the Ninestiles School, states that boys are spending too much time watching football and not enough time on studies. Furthermore, he strongly advises that: “The boys need to raise their game, the

main reason for this is the culture of football that we have. A lot of the lads are watching a lot of football during the week.” (p. 1) It is interesting here to note the teacher’s response to diminished performance in academics. He uses soccer-laden terminology to get his point across.

Hemmings and Parker (2002) have completed an interesting study on youth soccer trainees. The topic was group cohesion in a professional environment using 19 youth trainees and they found that in fact:

Cohesion or a lack of it emerged as one key finding. A culture of authoritarianism was found, where the need for togetherness in trainees was stressed on a daily basis. Little cohesion (social or task) was evident, with the existence of a clear first and second year split, clique formation, social isolates, and favoritism shown towards some individuals. (p. 284)

Furthermore, cohesion in the life of the trainee was non-negotiable and imposed in almost militaristic fashion, with youth players paying lip service to the idea of togetherness when in reality self-preservation and individualism seemed to be more beneficial. Leading researchers have suggested more qualitative and longitudinal research is necessary to progress in the field and enable a greater understanding of the development or erosion of cohesion. (p. 287)

In her dissertation introduction Cahn (1990) states that academic historians steered clear of the topic of women’s sport, and sociologists, who in general granted more respect to the subject, typically ignored gender issues. Gill (1986) concurs as she too considers neglect of sport achievement especially disappointing because the influence of gender roles seems more pronounced in sport than in other achievement areas. Lenskyj (1990) reports that over the past two decades in North America, there have developed a keen interest in female issues related to sport participation. But, she indicates that although there are accounts showing an augment in involvement, sex inequality in sport remains a pervasive predicament. Accordingly, Flanagan (2002) agrees indicating that inter-collegiate female athletes are yet to reach parity with men. Lenskyj (1990) has also asserted that traditional theoretical and methodological approaches in

the social sciences perpetuate gender bias, while in exercise physiological research, biological arguments for female physical insufficiency – claims that would now have no validity in non-sport frameworks such as education or employment – continue to be alluded to as grounds for the formal regulation of female sporting activity in the school and the populace. Furthermore, Lenskyj (1990) makes an appealing declaration on the issue of female participation in sport and the pervasive problem of sexual inequality in sport:

It is important to distinguish between research on women and woman-centered research, that is research that takes the standpoint of women and has as its goal women's empowerment and the transformation of social relations between the sexes (Smith, 1979; Bunch, 1983). While the current expansion of sport – related research on girls and women is a welcome step, it represents only a preliminary stage in the elimination of gender bias: female subjects are now included, but the research questions, methods and analyses continue to be grounded, for the most part, in male experience (Eichler & Lapointe, 1985; McIntosh, 1983). Given the fact that equal access to athletic programs, facilities and training is a recent development in women's sport history, women's and men's experiences are necessarily worthy of emulation. Therefore, it is neither valid nor productive for research to focus on comparisons between the sexes, unless such research accepts difference and diversity, rather than using the male yardstick to measure all human behavior. (p. 235)

Murray and Matheson (1988) have defined gender as socially or culturally determined. Gender is how one develops after birth and gender roles refer to a series of behaviors deemed appropriate for a certain sex in a given society. Gender roles are culturally learned and include attitudes, values and expectations, such as women may cry, men may not; women may knit, men may not; men play football, women may not. Duncan (1990) points out that men are often

stereotyped in western industrialized societies as having a distinct set of social attributes - for example, independence, decisiveness, intellectual superiority and courage, however, the female is considered dependent, indecisive, intellectually inferior and timid. This stereotyping contrasts the male as active, aggressive and spontaneous and the female as weak, passive and responsive. Hargreaves (1994) recalls research that has shown the behavior of parents and other adults towards children (even when they are newly born) differs according to sex of the child. From the earliest hours of life the physical body is the focus for the construction of gender, and because gender is experienced through the body, 'masculinity' and 'femininity' seem absolutely intimate and fundamental. We understand our gender because we are given names; color-coded, dressed, talked to and treated in particular ways, which accord with our sex. Girls seem to be handled more gently; boys are tossed around and wrestled with more frequently and vigorously; girls are more closely supervised and allowed less physical freedom; boys are encouraged to be more adventurous and to play vigorous out-of-door games; girls are given domestic toys, skipping ropes, and Barbie dolls; boys are given fighting toys, footballs and Action men; girls are restricted in methods used and distances covered when traveling; boys are allowed more freedom when traveling away from home for sports meetings.

The above paragraph in my opinion is absolutely true. However, there would need to be research to determine if we reversed roles, and omitted or changed certain behaviors that a real and effective transformation would in fact occur. Also, in regard to restricting freedom with females when traveling away from home or sometimes close to home, this is a safety issue and from my perspective simply based on experience. Evidence of more tangible results on female related rape, abduction, etc., can be found in the local newspaper.

In a study by Pfsister (2000) on immigrant Turkish girls in Germany, the soccer team is considered successful and the Turkish community up to a certain age has accepted them. The older the girls get the contradiction between being a woman and a soccer player becomes more of a dilemma. In interviews with the players it became apparent that priorities change upon getting married. Conflicts began to surface with family members and players had to falsify documents in order keep their participation in soccer games undisclosed. Many of the parents believe that one's value as a woman by taking part in such an unfeminine activity is reduced. "Who will marry you if you play soccer and everyone has seen your legs?" complained one of the mothers. "However, there were some fathers who were proud of their daughters. And, above all, the players were proud of themselves: not only had they conquered 'male' space and 'male' domain but they had also shown that they could play as well or even better than German girls." (p. 517)

Societal Implications of Males and Females in Sport

Soccer is a game that continues to captivate audiences worldwide. It is estimated that the FIFA world cup finals that are staged every four years attracted a worldwide television audience of 40 billion viewers (Sheppard, 1999). Participation in soccer is unprecedented in the United States and is number one sport in youth organizations. Girls as well as boys are now participating and unlike other sports, exclusion of smaller children and athletes do not take place.

Murray and Matheson (1988) inform us that social institutions serve to teach society's values and the institutions through which we learn the values of our culture are the family, education, religion, politics, economics and sport. The family, through the process of child rearing, appears to be the most influential and pervasive institution for enculturation. But for

males the institution of sport in society is probably one of the strongest reinforcement mechanisms of the male gender role for boys who do participate. The realm of sport has been characterized as a powerful and largely public achievement environment. Comparable to the classroom, the significance of exhibiting ability, performance standards, and competition are hallmarks of the sporting experience (Duda, Fox, Biddle & Armstrong, 1992).

The Minister of Cultural Affairs in Norway, Aslaug Haga (2003) offered his perspective on gender equality and sport:

When we want to understand the involvement of women and men in sports, we must study their relative positions both historically and in today's societies. The life situation for Norwegian women has changed over recent years: they have fewer children, lighter domestic chores, better education, more work outside the home, and growing economic independence. These developments have provided women with skills, courage and self-assurance they need to fill demanding positions in government, business and sports. (p. 1)

However, Von der Lippe (1997) depicts the Norwegian woman's quest for liberation in sports as a class-bias issue. Not unlike many revolutionary movements, tensions not only existed between the dominant and marginalized but within the marginalized itself. In Norway, the latter worked itself out of the voluntary women's organizations. It was here that tensions concerning the concept of 'a woman' and the appropriate female roles developed. As sociology might describe it, the yearning to retain notions of traditional femininity was closely correlated to a critique of modernity.

Melling (1998) interprets similarities in her research on the working-class heroine in football fiction. She states the idea of a dominant ruling class controlling the working class by consent is problematic in her study because in a sense it is reductionism. Reality is far more complex and brings us back to Thomson's statement regarding intellectual knowledge of the lives of ordinary people. It appears that working class women outwardly deferred to a patriarchal

hegemony. However, this does not insinuate that patriarchy was the only form of hegemony in working-class society or the only dominant group. Banas (2002) infuses the opinion that sports are one of the great American pastimes, but the reality is that sports have encouraged a very distinct separation between males and females in American society. The attitudes acquired through sports are learned on the field and breached into the real world to create conflict between the sexes. However, I find this a very narrow minded viewpoint if one were to look at the opportunities afforded to collegiate and professional female athletes. Furthermore, attitudes are adopted; you may discard negative attitudes if you feel they are undesirable.

Haga (2003) reports that traditionally sport has been defined as a masculine activity, from which women historically have been excluded, but this has also altered radically over the last twenty years. In Norway, as many women as men, participate in regular physical activity in their leisure time. A look at the sport organization shows that women account for only 36% of the memberships. Norwegian women's participation in various sports discipline contrasts considerably. Today, soccer is actually the principle female sport in Norway followed by handball.

In conclusion, Haga (1999) affirms his position on gender equality by stating:

The implementation of equal opportunities is in the interest of society as a whole, because the participation of women and men on an equal basis in different aspects of society is the best way to ensure that the different needs of people are taken into account. Better opportunities for women in sport may also make a contribution to a society, which is better for both women and men. Women participate with great success in sport disciplines today that earlier were exclusively for men. By participation in wrestling, marathon, ice hockey and soccer, female athletes probably contribute not only to a change in people's perception of which activities are suitable for women, but perhaps more important, this may lead to a change in the concept of femininity and what is acceptable behavior for girls and women. Research also indicates that women can be empowered through sport participation. Empowerment can be defined as 'the process by which individuals in a disadvantaged social group develop skills and abilities to gain

control over their lives and to take action to improve their life situation.’ If women can be empowered by participation in sport, for example by gaining better self-confidence and a better relationship to their own bodies, sport for women may play an important role in improving their lives. It may also aid them to challenge the traditional gender order and maybe even contribute to change in the women’s role in society and thereby contribute to the development of a more equalitarian society for women and men in general. (p. 3)

Competitive Gender Differences in Soccer

Child development research has demonstrated that early social learning experiences are sex-typed and that boys are socialized toward more active play styles, while females are socialized into more quiet, expressive forms of play that do not require gross motor activity. In addition, several studies have established that males receive more support and guidance toward vigorous styles of play and energetic motor activity from parents, peers and instructors. Furthermore, not only have these conclusions confirmed differential treatment and reaction to play activities of boys and girls, but also they have indisputably shown that young females receive more disapproving responses when engaged in active motor activities (Greendorfer, 1987). Evans (1989) also illustrated this in another setting as he observed young coed students perform in physical education activities. Although both boys and girls were fully involved in the activities, the boys tended to dominate the setting and determined the pace and direction of the game being played.

According to Evans et al., (1987) children were able to portray themselves as more or less competent in different sport activities during physical education lessons. Most boys were better, or at least more competent and willing to perform, at basketball and football skills than girls. Most girls were better at some gymnastics movements. Placing boys and girls in mixed sessions this way at once, announced rather than obscured or dissipated individual ability differences. It also exacerbated and confirmed both the teacher and students ideological and

stereotypical expectations and assumptions about young males and females. Those expectations and assumptions could be brought to the surface to explain ability differences in young athletes. In this context, seeing differences between children the researcher in this case called for a return to separate activities for boys and girls, appealing not to the pupil's gender as the basis of preferred grouping actions but to the more 'reasonable' pedagogically acceptable reference point, the youngster's apparent physical abilities and skill. The researcher has indicated a lack of success with mixed physical education by attributing the blame on the feeder junior schools:

It does not work well in the sense that it is very difficult to integrate boys and girls. Also, the policy of our junior schools is separate physical education so they may have to be forced into co-educational physical education. So it's emphasizing the barriers rather than bringing them together. Gym was particularly bad – the girls were frequently better than the boys and the boys were conscious of this. (p. 66)

Gender draws attention to, 'the nature of the social relationship between men and women and implies that status and social position are culturally constructed'. With that viewpoint in mind, Shotten, Armour and Potrac (2003) cite the argument that males currently have access to more than twice the opportunities and public resources available for sport, and more significantly, the males that control sport demonstrate little intention to redress this imbalance. This argument is consistent with Scraton et al., (1999) who have determined that there remain some barriers to the development of the female football game. One key obstacle is the association of football with male sport that contains the conventional stereotypes of hegemonic masculinity in western culture. For females to enter the powerfully male-defined and restricted world of football, they have had to challenge overriding notions of 'appropriate' female sport.

In several case studies of physical education departments in three comprehensive schools, 3 physical education teachers undertook research. Those teacher researchers used a variety of methodological techniques in an attempt to understand their own actions and perspectives and

those of their colleagues and pupils, in order to enlighten the process of curriculum change. Moreover, it was the researchers contention that if we are to understand the boundaries and possibilities of educational change, in this case involving mixed gender grouping, then we need to consider schools and departments as ‘arenas of struggle’, circumstances in which power is unevenly distributed amongst members and in which there are likely to be ideological dissimilarity and conflicts of interest. This is not for a moment to suggest that departments are habitually riddled with discord or disunity, but the data below will suggest that innovations involving mixed sex grouping in physical education may have a noteworthy capability to make them so (Evans et al., 1987).

In reference to any differences in coaching females Stewart (2003) cites a study by Holbrook and Barr in the late nineties. He concluded that while coaching females is not significantly different than coaching males, gender differences occur in some psychological domains. Females respond differently to positive feedback and they seem to value personal improvement over winning more than males, and regard team unity as a stronger motivating factor than males.

Dissimilarity in Male and Female Soccer Players

A number of authors insist that males are more competitive than females (see Dahlgren & Johnson 1979; Old & Shaver, 1980). Miller (1998) writes that as boys become men they gain a definitive edge in everything. Matched for size and age, men have less body fat and greater capacity for oxygen uptake than women – not to mention muscle mass. A woman has only 40 to 60 percent of a man’s upper-body strength, although her leg strength is 60 to 80 percent of the male. In an extensive analysis Lenny (1977) singled out competition as a situation likely to elicit

sex differences in self-confidence, one of the most consistent predictors of success. In a study on sport and academic achievement orientation, Duda (1983) looked at male and female Anglo and Navajo children. She reported both sex and cultural differences; male Anglo children were the most win – loss oriented, rated athletic ability the most, and reported the majority achievement – oriented attributions. She also observed stronger sex disparity for sport than for academic accomplishment (Gill, 1986). Numerous important findings outside the sport psychology literature, however, offer persuasive evidence about attribution tendencies and the subject's sex. Cox (1985) cites an example by (Ickes and Layden, 1978) where male and female undergraduate students were asked what they attributed their successes in sport. The results showed that males were far more likely than females to attribute their successes to internal causes. In her book *Inside Volleyball for Women*, Mary Jo Pepler (1977) commented on this characteristic of male athletes. As an Olympic athlete and All - American, she promoted volleyball by giving demonstrations and clinics at high schools. Part of the demonstration would be to challenge a group of six young men to vie against a female athlete and herself. She marveled that, no matter by how much the boys were outscored, they were always prepared to try again with the total confidence that they would come out as winners next time. She recommended that young female athletes should develop this trait (Cox, 1985).

Research also suggests that females may prioritize different benefits from playing sport than males. These benefits include: having fun, feeling good, the feeling of pushing back frontiers of age and tradition, caring for each other, the involvement of the family as a unit, socializing and meeting people, recovery from adversity, as well as displaying the expected qualities of determination, competitive spirit and robustness that any sport requires (Miller, 1996).

In Henry and Comeaux's (1999) ethnographic case-study approach, the aim was to observe aspects of egalitarianism between men and women in a coed soccer league. The researchers believe that now they can assess the conflicting claims regarding soccer's egalitarianism and evaluate the meaning of soccer in the United States:

Clearly, in its most egalitarian design, soccer remains dominated by men on the field and in concept – the separate involvement of women did not make soccer their game and neither does the coed format. Expectations by feminist scholars that mixed sports may represent an empowering alternative form of women's involvement in athletics (Hargreaves, 1994) and 'challenge sexism at its roots' (Messner & Sabo, 1994: 198) remain unfulfilled. (p. 285)

Finally, Brewer and Davis (1994) have stated that there is a general lack of data analyzing the pattern and demands of women's soccer, almost certainly due to the relatively recent growth of the sport. From the data that is available, it would appear that there are remarkably little differences between the men and women's games. Henry and Comeaux (1999) amplify this point of view when reporting that amateur soccer players have not been the topic of much inquiry, limited evidence points to a strong correlation between equal participation and interest in soccer as a spectator sport. Inquiries about the future of the 'people's game' may find a precious source of data in the practice and views of the participants.

Feminist Perspectives on Gender and Sport

Hanson and Kraus (1999) inform us that organized sport developed in England in the late 19th and early 20th century as a response to what was viewed as the crisis of masculinity and the potential 'feminization' of man. Organized sport in England was created as a 'gendered' institution to 'build men' with the audacity and strength it would take to protect and rule a nation. Today, sport plays a significant role in constructing and stabilizing a male-dominant

system by creating men who fit into the patriarchal ideology with reference to masculinity, by excluding and discriminating against women, and indicating how men's bodies are biologically superior to women bodies (Birrell, 1988; Hill, 1988; Messner, 1992; Sage, 1990; Theberge, 1985).

Acker (1987) writes that securing equal opportunities for the sexes is the central aim of liberal feminism. While Birrell (1984) defines feminism as an ideology that opposes patriarchy, that includes the willful systematic oppression of women. Albeit, the objective of liberal feminism in education and other strata is to remove barriers which prevent females from reaching their full potential, whether those barriers are located or exist in a school environment, the individual psyche or discriminatory labor practices. This position has found support by the European Symposium on Gender Equity whose aims are to review the personal and cultural difficulties that inhibit women from playing a full role in the organization and management of national and international sports federations (Federation of Yorkshire Sport, 1999). However, Messner (1994) provides some additional insight and feedback on the initial comment and the symposiums' suggested goals. He offers this interpretation based on an interview response with a 33-year-old blue collar male:

That imbedded in the liberal ideal of equal opportunity is a strong belief that inequality is part of the natural order. Thus, it is only fair that women get an equal shot to compete, but it's really such a relief to find that, once given the opportunity, they don't have the physical equipment to measure up to men. Females are still limited to their own sex. (p. 76)

On the other hand, Opie (1992) describes her own perspective as she informs her readers that she has become conscious of limitations in feminist interpretations. Although at one point they are liberatory because they open to inspection what has been previously hidden, they are also restrictive in the sense that they can appropriate the data to the researcher's interests, so that

other significant experiential elements, which challenge or partially disrupt that interpretation may be silenced.

However, the paramount pressure in sports feminism is the aspiration for parity of opportunity for women in comparison with men. Hargreaves (1994) expands:

It is an incentive, which is based on the belief that, although male power in sports predominates, it is not inviolable. Sports feminism represents a struggle by women, and by men on their behalf, to get more of what men have always had. The growing concern to provide access for females to traditionally masculine activities is a central feature of liberal democratic ideology; the intellectual and political framework of this is usually described as liberal-feminism. Liberal feminism is defined as 'an attempt to remove or compensate for the inscriptive and social impediments that prevent women from competing on equal terms with men, without otherwise challenging the hierarchical structures within which both sexes operate' (Miles & Middleton, 1989). (p. 27)

However, Bryson (1987) reports that a quandary does exist for feminists:

Sport is so thoroughly masculinized that it seems unlikely that it can be reclaimed to serve women's interests. However, there is also a sense in which women cannot afford to allow its effects to continue unchallenged. Negative evaluations of women's capacities are implicit in the masculine hegemony in which sport is embedded. This has the effect of promoting male solidarity through the exclusion process, which provides support and fuel for negative male attitudes towards women. Women finish up accepting that men are more capable than they are. Attitudes about the relative gender capabilities are not confined, in their effects, to the sporting arena. They are basic to maintaining masculine hegemony: sport crucially privileges males and inferiorize women. (p. 350)

Bennett, Whitaker, Woolley-Smith and Sablove (1987) are in agreement with Bryson as they consider sport, play, and games to be serious issues of feminist analysis. Male conduct, institutionalized under patriarchy, furthers the systematic oppression of women by teaching and emphasizing control of women's bodies, values, and attitudes toward self. Sport, leisure, and games, perpetuate male dominance and female oppression as well as other configuration of dominance and oppression based on class, culture, and race. Yet this pervasive and powerful means of patriarchal control has received virtually no consideration among feminist scholars. In addition, Acker, Barry, and Esseveld (1983) comment that sociology for women has emancipator

possibilities for researchers as well as the researched, for female researchers have been absent and ineffective within the main sociological traditions. Yet a limited solution is made available by Harris (1999) as he believes that men can do research on women. He names this concept a postmodernist view, and this notion indicates that although he is of different sexual nature than what he is investigating, there also exist significant commonalities, such as influence, age, class, race, hobbies and football.

Arnot (1982) (cites Charricoates, 1980) who adopts a similar posture from her research in education as she concludes that even though femininity varies, “the subordination of women is always maintained....”

All women, whatever their class (economic class for women is always in relation to men – fathers and husbands) suffer oppression. It is patriarchy in the male hierarchical ordering of society, preserved through marriage and the family via the sexual division of labor that is at the core of women’s oppression; and it is schools, through their different symbolic separation of the sexes, that give their oppression the seal of approval. (p. 69)

Hargreaves (1990) whom I consider to be a pioneer in feminism and an outspoken proponent of women’s rights provides a response to what she perceives as a general disregard or just an adequate treatment of gender relations in the sociology of sport. She considers that much of the writing on women’s studies has a general propensity to focus on disparity between men and women in sport, rather than the relations between them. The consequence of inappropriate focus is a general failure to incorporate, systematically, relations of power between the sexes, to relate them to other structures of power in society and to deal with discord and change. She writes on a number of issues that have practical and theoretical dimensions, for example, the male/female distinction in sport, the desire for equality of opportunity with men in sport and the particular difficulty of working out the relationship between capitalist relations and gender relations in sport.

However, Dewar (1991) displays a more flexible approach and reports that the words ‘women in sport’ mean different things to different people:

For some they are a contradiction in terms. For others they are evidence and cause for celebration of women’s achievements in a progressive and equitable age. What is clear is that there is enormous diversity in the images that exist about the relationships women have in the sporting world. The diversity exists in both the academic and popular literature and the debates in these are often lively and intense. (p. 15)

In contrast, according to Flintoff (1999) feminism is much more than acquiring equal opportunity. In her thesis she provides insight into the real meaning of feminism. She credits (Ramazanoglu, 1989a) who states that changing society for the better is among the many aims of feminism, however an adequate understanding of what is wrong with existing societies in the first place, as well as the consequences of pressing for specific changes, involves the production of a feminist theory:

Feminism is a partly lived experience, a political struggle for liberation, but it is also an intellectual activity. There is no point in engaging in political struggle if we do not have an accurate understanding of what we struggle against. This intellectual activity is the development of a critical understanding of society, and thus of the sources and mechanisms of the oppression of women. It is the development of ideas that are rooted in women’s daily experiences, but it is also the impact of these ideas on these experiences. Feminist thought gives women new knowledge of social life, the power to think about our circumstances, and the power to act upon them. (Ramazanoglu, 1989a) (p. 45)

This concern, according to Hargreaves (1990) is related to the overriding issue in sports feminism, the desire for equality of opportunity with men. It is based on the belief that, although male power in sport predominates, it is not sacrosanct. In essence, it represents a struggle by women, and by men on their behalf, to get more of what men have always had. The increasing worry to provide equal opportunities by providing access for females to traditionally masculinized activities is a central characteristic of liberal democratic ideology, the intellectual and political framework of which is usually described as liberal feminist. Liberal sports feminism

challenges historically acquired inequalities in sports between men and women, but it is not a challenge to the conventional character of modern sports or to the 'essential' nature of modern capitalism and patriarchy (see Dyer 1982; Gerber, Felshin, Berlin & Wyrick 1974; Klafs & Lyon 1976; Parkhouse & Lapin 1980; Twin 1979).

Lois Bryson (1990) has the integrity to impart a critique on critical feminist perspectives in sport by suggesting that:

People tend to accept without question that men are far better at sport than women because men are stronger, faster, and tougher. If it were not important to be skillful, strong, fast, and in particular, tough this misconception would not matter. But sporting prowess is positively valued and is the basis through which social and economic powers are distributed. To be better at sport (by implication even for those men who do not participate in athletics) is symbolically translatable into being better or more capable in other areas of life. Through a dialectical process, women who are culturally defined as incapable of equaling men at sport, are rendered inferior and by inference, less capable in other areas of life.

The dialectical element of the ideological processes underpinning contemporary sport is of crucial importance. These processes construct a form of dominant masculinity and in doing so define what is not approved. Each cultural message is a dual one, celebrating the dominant at the same time as inferiorizing the "other." This dominant form of masculinity has usefully been called hegemonic masculinity (Carrigan, Connell, & Lee, 1985), and the message it conveys renders inferior not only femininity in all its forms but also non-hegemonic forms of masculinity. The inferiorizing of the "other" is most frequently implicit, though it is also explicitly and graphically conveyed when, for example, coaches, supporters, and commentators chastise their team for playing like girls or poofters. (p. 173)

Women's right of entry into soccer strata can be construed as a political outcome of a liberal-feminist dialogue that centers on equal prospects, socialization practices and legal - institutional conversion. However, over the past two decades an accurate and well-rehearsed

critique of liberalism has emerged, questioning the weakness of the concept of equality in accepting the gender-linked values of conventional sports while failing to acknowledge or understand broader structures of power (Scraton, Fasting, Pfister & Bunuel, 1999).

In this regard, Flintoff and Scraton, (2001) advise that feminists have a difference of opinion that a more complete understanding of women's lives comes from a recognition of the intricate, interrelationships between different aspects of their lives. Whereas, a critical feminist structure that focuses on the creation of gender in sport is used to argue that young women who compete well in the sport domain will develop skills such as self-confidence, achievement motivation and independence that will benefit them in other endeavors – perhaps to a greater extent than they benefit young men (Hanson & Kraus, 1999). Hargreaves (1990) provides some personal insight into the increasing level of theoretical sophistication in the area of writing. There is still a general tendency to focus on differences between men and women in sport, rather than on relations between them. This results in a general breakdown to incorporate, systematically, relations of power between the sexes, to relate them to other structures of power in society and to deal with divergence and change. However, Connell (1989) reports that men who grapple with textual politics of feminism are likely to be from advantaged class backgrounds, whose political literacy is an aspect of a quest of higher education or on the other hand men that have used the education system to escape the working-class milieu. Furthermore, he asserts that in neither case the reading is likely to be pleasurable and enriching.

The literature they are most likely to encounter, the 'public face' of feminism as Segal (1987) puts it, is – not to put too fine a point on it – hostile to men and little inclined to make distinctions between groups of men. The reader is likely to encounter a lurid picture of men as en bloc as rapists, batterers, pornographers, child abusers, militarists, exploiters – and women as

victims.... Young men who read much of this literature and take it seriously seem to have one major reaction: severe feelings of guilt.

Guilt is an emotion with social effects, but in this case they are likely to be disempowering rather than positive. A young man 'feeling terrible about being male' will not easily join with other young men in social action, nor can he feel solidarity (except at some symbolic level) with women. Thus guilt implies that men's personalities must change but undermines the social conditions for changing them, an enterprise this requires substantial interpersonal support. Nor is there any set of texts to turn to. In terms of what is widely available, there is little between popular feminism (which accuses men) and the mass media (which ridicule feminism). A small literature of masculinity – therapy exists (e.g. Goldberg, 1987; Farrell, 1988) designed to assuage the guilt feelings of men affected by feminism; this is almost as demobilizing as the guilt itself. (p. 299)

Hargreaves (1994) informs us that Sports Feminism was a latecomer to the women's movement, which had tended to focus on questions of legal, political, and ideological importance, rather than on cultural issues such as sport and leisure. The most important feature of Sports Feminism is the desire to achieve equality in opportunity for the female athlete. Moreover, Harris (1987) is more definitive advocating equal opportunities for personal growth and development throughout all levels of competitive sport should be available to the female, particularly the retired female who aspires to a career in sport. This position is questioned by Harris (1999) as he describes the demands by a number of women (and men) for equality of opportunity that see sport as the last male bastion, and the place for gender inequality. He carries the argument farther by informing his readers that there has been much misguided research into gender issues in and around the world of sport. The majority of women whom he has talked with (for his doctoral research) do not want to play football with men what they want is a greater share of the resources and a fairer deal in general.

But Lenskyj's (1990) position is that it is neither valid nor productive for research to focus on comparisons between the sexes, unless such research accepts difference and diversity,

rather than using the male yardstick to measure all human behavior. Scraton et al. (1999) stress the importance of qualitative accounts that follow sportswomen to articulate their own feelings about being women who play and enjoy sport. However, Colwell (1999) in her work examines the relationship between various sports feminists and figurational sociology. She affirms the key contributions of feminist sports sociologists to our understanding of sex/gender, sports and physical education. Moreover, she considers this as being fundamentally responsible for the changes in approach and focus in the sociology in sports, but having stated this she finds feminist theory on sport have some problems:

Sports feminists embody a critical, evaluative approach, based on the assumption that non-critical approaches depoliticize sports feminism, and thus implicitly support the status quo. Figurational sociologists, however, maintain that in order to understand social phenomena, it is not necessary to evaluate them. This is a key, and potentially incontrovertible, difference between feminist and figurational approaches to understanding and explaining phenomena, and raises the question: ‘Can be a feminist and figurational sociologist at the same time?’ (p. 220)

Colwell (1999) is also critical of Lenskyj as she writes that her analysis implies that a unified body of people shares the same perception of a ‘code word’ (femininity), the same ‘circular way of thinking’, the identical perceptions, and the corresponding permanent interpretation of femininity. “Feminine women are assumed to be heterosexual, Lenskyj makes a sweeping generalization. This raises the question about *who* Lenskyj is suggesting makes the assumption that feminine women are heterosexual”. (p. 221)

Harris (1987) describes sport experience through the developmental years in females as just as important as it is for males. Sport provides a forum for testing oneself, a Medium for expressing emotion and thought and a training ground for learning collaboration, competitiveness, and self-reliance. In contrast, Pfister (2000) deems that this is not sufficient, however, just to provide sports courses or opportunities of taking part in sporting activities. Girls

and women must be won over to a life with sport and encouraged to participate in physical activities- to be knowledgeable and motivated as well as supported in their activities.

Greendorfer (1987) is in accord, as she reports that it would seem that the domain of sport has been ignored too often as a potential source of rich social learning experiences for females, Furthermore, she calls for additional time to devote more research consideration to sport as a viable and natural activity for females, because sport participation in childhood and adolescence has implications for a complete partaking in various social spheres of adult life.

It is also interesting that Scraton et al. report that at an early age, the prospects for girls to chose their physical activities were largely dependent upon male support and approval. Many of the women in their research were encouraged by fathers, brothers or male friends to step into this 'boys space' and thus gained early entry into the informal male football culture.

The British Broadcasting Corporation News announced via the Internet on 08/01/2003 that Northumbria University had been given a 350,000 pounds (British currency) grant to study discrimination in sport. The research project, which is being funded by the European Fund, will see up to 60 women offered sports leadership training and qualifications by the university. Katy Storie, the project coordinator informed the media of possible implications of receiving the grant that:

We hope women completing the course will manage to get paid employment in initiatives or, at the very least, become valued sports volunteers. Also, we would like to find out if women actually become more enjoyable when they are offered free qualifications and training. Finally, we are also keen to determine if they take advantage of these qualifications and want to play an active role in sport in their community. (p. 1)

However, earlier Brah and Deem (1986) considered progress lethargic and mention that it is significant that more than a decade after feminists began drawing attention to problems of chauvinism in education some official acknowledgment of the issue has finally emerged outside

of the Equal Opportunities Commission that had fought that particular battle for a decade. But, Dewar (1991) has a different viewpoint as she writes regarding 'Women in Sport.' These words mean different things to different people. For some they are a contradiction of terms. For others they are evidence and cause for celebration of women's achievements in a progressive and equitable age.

Today, feminist scholarship flourishes. Writings by feminists have propagated throughout at least two continents and Australia. And, contrary to social science, which demonstrates a general apathy to the fact that social groups are composed of, gendered individuals, feminist analysis centers on the study of relations between the sexes. Within the incipient gender paradigm, gender is considered a key dimension of overall identity and a determinant of behavior (Messner & Saba, 1990). Although change has been slow, the opportunity for women to engage in a range of sports and physical activities has become available throughout Europe, Australia and North America. Women's access to football can be seen as a political outcome of a liberal – feminist discourse that centers on equal opportunities, socialization practices and legal/institutional reform (Scruton et al., 1999).

The Feminine Ideal

A feminine girl is considered to be highly conscious of the public image she presents and spends much of the time in care of her appearance. She uses make-up and the hair is the product of beauty salon perm, she has pierced ears and always wears nice earrings, she wears skirts and in some cases puts on a false suntan (Cockerill & Hardy, 1987). This concept is addressed by Birrell (1988) with regard to the suitable place of women involved in sport. She writes that this niche has always been limited by societal attitudes toward women, filtered through such

elements as health, beauty, women's distinctive nature, physical capabilities, and prevailing ideologies of female behavior. At the turn of the century, as sport became increasingly popular for men, women's proper place was on the sidelines, cheering her man on to victory. If she herself actively participated, she was expected to do so within the bounds of middle-class taste, and there was to be nothing strenuous, competitive, or, indeed, particularly active about it.

Duncan (1990) writes that glamour is typified by women who have been 'made up' and who are therefore different than men, who have had cosmetics applied to their faces and bodies, who are hairless in the right places, polished and blemish free, and are arranged in poses that display their physical attributes. Attributes such as features of a women's face, her breasts, hips, thighs and legs identify her as female and proclaim her sexual difference and her femininity. However, Gill (2001) perceives much more in a sporting context as she concludes all the meanings, social roles, expectations, standards of appropriate behavior, beauty, power, and statuses are constructed in the sport culture. But, Markula (1995) senses exclusion as she writes about the many feminist scholars that consider the glossy festival of feminine beauty a disservice to women. They point out that the female bodies come in various shapes and weights; paradoxically the media portray only slim and tight muscled models. Therefore, this fashion ideal is oppressive to women because of its singularity. Women are expected to be thin to be considered attractive and accepted in this society. Also, it is often not enough just to eliminate the excess fat from their bodies; women are required to achieve an athletic tight look as well (Markula, 1995). Similarly, while women in non-traditional sports are the targets of speculation regarding their femininity, female gymnasts and skaters receive unqualified approval for their grace and womanliness, despite the fact that these may have been achieved through puberty-delaying drugs and starvation diets (Lenskyj, 1987).

Harris (1987) warns that despite all the potential benefits of the sport experience, girls are systematically denied a variety of opportunities from birth. Toys used by boys are mostly instrumental, varied, challenging, manipulative and numerous, whereas toys for girls are generally passive, expressive, and oriented to their role as homemaker and mother. Pursuits involving physical activity are quite different for boys as well as girls. Boys are organized into complex games requiring rules, cooperation, organization, competition, etc. In the process they learn a great many behaviors that will serve them in later life. Girl's games are simple and they do not offer the same challenges nor do they inculcate the requirement of social behaviors. In addition, Hargreaves (1994) writes it is argued that girls are socialized to behave in 'feminine-appropriate' ways - a process which can be viewed as having beneficial or, less typically, negative effects. Girls learn behaviors in more subtle ways; they are generally restricted to play near home and their play activities constrained (Harris, 1987).

Thorne (1999) considers adolescence as a period where boys and girls come to be seen and to see themselves as sexual actors, however females are more pervasively sexualized than boys:

Athletics provides a continuous arena where at least some boys can perform and gain status as they move from primary through secondary schooling. But for many girls, appearance and relationships with boys begin to take primacy over other activities. In middle school or junior high the status of girls with other girls begins to be shaped by their popularity with boys; same gender relations among boys are less affected by relationships with the other gender. In short, the social position of girls increasingly derives from their romantic relationships with boys, but not vice versa. (p. 155)

Gilroy (1989) lucidly points out in her paper a quote attributable to Jennifer Hargreaves that is related to the question of boys and girls and their involvement in physical activity. "Boys involvement in sport equals manliness: it makes a man out of a boy. For girls, the commonsense view holds that, if they are not careful, it will also make men out of them." This point of view is

supported by Mennesson, (2000) concerning male cheerleaders that build a masculine image of this activity, employing acrobatics, lifting and physically demanding movements, and in a similar way female soccer players present their sport as being more tactical than the male game, since it is based on technical mastery rather than physical strength. Krane (2001) contends that there are many new images in women's sport and uses boxing, ice hockey, and mountain bike riding as examples. However, she has inferred that women in those sports are constrained, to varying degrees, by traditional notions of femininity. Within women's sport environments, females continue policing themselves, emphasizing the importance of balancing the perceptions of masculine athleticism with feminine appearance.

In the late-modern era, women are encouraged to be more physically fit and to benefit from exercise in health terms and in order to gain equality and freedom of action (although the counter argument could be made that what many women are really doing is striving to make themselves more desirable to men). Gilroy (1989) notes that physical prowess is valued for women when displayed in the form of a woman as a beauty object, and although this form of competence may empower them, it does so in the form of a double-edged sword, in essence, they are promoting their own oppression. Halbert (1997) provides a response in an effort to clarify gender appropriate behavior. She argues that successful athletes (male or female) are active, strong, aggressive, ambitious and competitive. However, non-competitive females that perpetuate a posture that confronts the 'limitations of femininity' sometimes perceive females that display athleticism. Thus women athletes threaten traditional norms by violating gender-appropriate behavior that often results in stereotypes, labels, and stigmatization planned to identify and endorse those defined as problematic.

Sykes (1998) has contended that one of the ways that heterosexuality maintains its privileged status is through the discursive figure of the 'closet' where everyday speech normalizes heterosexuality while silencing lesbian sexuality. This contention is articulated by Blinde and Taub (1992) in their interpretation on women who are falsely accused as deviants:

One group of women judged to violate multiple categories of gender norms and thus subjected to various forms of deviance labeling and stigmatization is athletes. Women athletes are frequently perceived to cross or extend the boundaries of socially constructed definitions of 'femininity' (Theberge, 1985; Willis, 1982). In a culture that traditionally equates athleticism with masculinity, women who participate in sports are often viewed as masculine, unladylike, or manly (Willis, 1982). Such descriptors imply that women athletes violate presentation of self and occupational gender norms (Shur, 1984). Moreover, both the popular press and research literature have examined the assumed conflict between athleticism and femininity (Colker and Widom, 1980; Griffin, 1987; Hall, 1988). This presumed incompatibility, along with equating sport and masculinity, results in belief system linking women athletes with lesbianism (Lenskyj, 1991). The lesbian label, representing a violation of sexual norms (Shur, 1984), is based on the idea that women who challenge traditional gender-role behavior cannot be 'real' women. (Lenskyj, 1991) (p. 522)

Men's normative heterosexual gender identities are confirmed by their involvement in sport. Women's identities are challenged by sporting prowess. Hargreaves (2000) position on this issue is fittingly described as: "Because the muscularity and power invested in female sport bodies invents the myth of gender by rendering women less feminine and more masculine, sportswomen have feared being labeled as lesbians." (p. 22)

Hargreaves (1985) asserts that for men, sport provides opportunities both as spectators and players. They can affirm their identity and status as heterosexual males and their physical, symbolic and economic dominance over women (Stevenson, 2002). Similarly in a related matter, Cox and Thompson (2000) recognize that the discourse of heterosexuality is particularly influential in the construction of sportswomen's bodies. They continue by stating that sporting discourse posits that the body must be physically powerful. On the other hand, heterosexual

discourse, which depends on gendered distinctions for its meaning, constructs the male body as strong and active and the female body as weak and passive (Cox & Thomson, 2000).

Cox and Thompson (2000) also describe in their research the contradiction of the female body possessing traits assumed to be masculine. This has stigmatized those individual women who do play soccer, but also women's sport in general. Many of the players had their sexual identity questioned after stating they participated in the sport of soccer. Lenskyj (1987) describes the girl who prefers boys' company and boys' games' may be acting on equally pragmatic motives. She is no doubt aware that it is the boys who enjoy greater freedom and independence while they play their 'boys games, whereas playing with dolls, for example, restricts girls' mobility and keeps them under closer adult supervision.

As numerous scholars of females have documented, normative adolescent femininity is constantly being rewritten. Authors have argued that new subject attitudes are being made accessible to girls that provide a counter-discourse to the girl as a victim. This is the most notable in the shift of discourse on adolescent femininity away from romance to a new theme of independence and assertiveness. Passivity, quietness, acquiescence, and docility no longer represent the primary markers for signifying normative girlhood. It has been pointed out that girls are being taught that self determination, individualism, self efficacy, independence, sexual subjectivity, and assertiveness are all desirable traits of the new ideal girl (Adams & Bettis, 2003). This viewpoint is in agreement of a recent research-based book *The Frailty Myth*. Colleen Dowling (2002) writes that women are as capable as men of excelling in sports, and that fact there are no biological reasons for women to stay off the sporting field. Also, it is important to stress that over the last several decades, and particularly during the 1990s, women have made many advances in organized, competitive, high performance spectator sports. The Olympic

games can serve as a clear example both of the changes in attitudes towards women athletes and of their increased numbers in sport.

Male Dominance in Sports

In his introduction on research into inner city, secondary school multiethnic males, Parker (1996) states that although historically the sporting world has evaded much scrutiny in terms of construction of masculinities, of late, a broad theoretical critique has emerged depicting sport as a fundamental gender structured institution, representing a bastion of male domination. Crosset (1990) has reported that nineteenth-century physical educators and ideologues of early sport perceived inherent links between sport, morality and manliness. This connection between manliness and sport was supported by quasi-scientific theories and was accepted as rationale for the first sporting clubs and physical education programs for young men in England and the United States. Despite turn-of-the-century social critics like Thorsten Veblen, who discounted this association, the idea that sport was a masculine activity retained credibility well into the 1950s (Veblen, 1953).

Kinkima and Harris (1998) are in agreement with their contemporaries as they allege that sport is increasingly acknowledged as a dominant cultural institution strongly associated to identity and ideology (Messner, 1988; Duquin, 1989; Sugden and Tomlinson, 1994; Brown, 1998) which routinely and systematically creates and reinforces the ideology of male superiority and vigorously refuses to accept the inclusion of women (Bryson, 1987; Kidd, 1987; Messner, 1988; Creedon, 1998; Duncan and Messner, 1998; Dunning, 1999). In addition, Koivula, (2002) points out that sport has traditionally been regarded as primarily male dominated (e.g. Birrell, 1983; Birrell & Theberge, 1994; Kane, 1998; Lenskyj, 1990; Matteo, 1986; Messner, 1988,

1990a, 1990b; Pedersen & Kono, 1990; Synder & Spreitzer, 1983). Others view the movement as an essential site for the construction of male identity, sport is becoming increasingly significant as it provides opportunities for men to assert their supremacy at a time when male hegemony is continually confronted and opposed in everyday life (Duncan & Messner, 1998; 170).

However, it has been suggested that athletics is an exposé of the socio-cultural system in which it occurs and that sports replicate, as well as reproduce the attitudes, beliefs, rituals, and values of the societies in which they are developed. It is therefore disputed that athletics has been, and continues to be, a site for the building, renaissance, amplification, and naturalization of perceived gender disparity, and further, that it serves to endorse the gender dichotomization and the gender order in which the gender types are differently appreciated (Birrell & Cole, 1990; Bouchier, 1997; Hargreaves, 1986; Kane & Snyder, 1989; Messner, 1988).

Harris (1987) characterizes male dominance in sports as having the power of decision-making in its control of sport through available economic resources. Hanson and Kraus (1999) have pointed out that in the United States, males are more likely to become involved in sports than females. The majority of educational work that is concerned with alterations in gender relations has been addressed to girls, justified on 'equal opportunity' principles and governed by 'sex-role' theories. This framework is not very relevant to educational work with boys, yet gender issues surface here too. School settings do not simply become accustomed to a natural masculinity among boys or femininity among girls. They are representatives in the matter, bringing together particular forms of gender and negotiating relations between them.

According to Brewer and Davis (1994), soccer has traditionally been viewed as a game limited to male involvement. Females are not encouraged to participate, and have often

encountered open hostility. Although, the English Football Association banned women from participation as early as 1921, and only repealed this decision in 1971. This despite the fact that a game played between two female teams in that era attracted over 50, 000 spectators.

Ekstrand (1982) in the introduction to his doctoral dissertation on soccer injuries and their prevention writes about the history of sports and medicine. He appropriately cites the viewpoint of Snook (1978) with regard to significant reasons for the popularity of athletics now and in the past. He alludes to the role of the male as the hunter and food gatherer: “Since the earliest times athletes have been an integral part of man’s life and culture. Originally a part of the basic requirements for survival, they developed into contests of speed, strength and skill.” (p. 11). Dunning and McGuire (1996) are in accord with Ekstrand as they (cite C.B. Fry) who wrote in 1899 that:

It is the barbarianism in us that loves soccer. The game is exceedingly civilized and scientific nowadays; but clothe it, as you will in law and order, it nonetheless fascinates and appeals to us by reason of that in us which desires the stress and excitement of fighting. In olden times, the game was nothing more or less than a free fight; now it is, as it were, a very refined form of the same. Indeed, the game has become almost too refined. It was at its very best when just entering upon its civilized stage, before there were quite so many rules and regulations. (see Fry 1899, 20)⁴ (p. 307)

Sport, as it exists today, is clearly a male dominated institution that has been ‘created and shaped by men without regard to the existence and experience of women’ As a result, women have been both actively and passively excluded from participation. According to (Brown, Frankel, & Fennell, 1989) this exclusion has taken a number of shapes and forms. Sex role stereotypes of gender-appropriate behavior continue to define involvement in sport past the childhood years as being consistent with the female role. In consequence, fewer opportunities have been made available and women have been socialized away from involvement in sport.

Interestingly, Hargreaves (1985) concurs, and refers to sport as a significant depiction of masculinity - the core of male virtues akin to courage, aggression and the competitive instinct were closely associated with it. The cult of athleticism was in essence a cult of manliness and so if women joined in on equal footing they could hardly be simultaneously projected as sexual objects by men, whose position was clear:

... beauty of face and form is one of the chief essentials [for women], but unlimited indulgence in violent, outdoor sports, cricket, bicycling, beagling, otter-hunting, paper-chasing, and the most odious of all games for women – hockey, cannot but have an unwomanly effect on a young girl’s mind, no less on her appearance ... Let young girls ride, skate, dance and play lawn tennis and other games in moderation, but let them leave field sports to those for whom they were intended – men (p. 50).

Brewer and Davis (1994) concur with Hargreaves as they point out that soccer has traditionally always been viewed as a game dominated by male participation. In fact, females have had little encouragement to participate in the sport, and have often encountered resistance and open hostility. Caudwell (1999) reported early in her research that it became evident that issues surrounding sexuality were a concern to women in spite of their sexual identity. A heterosexual female gives this response when asked to describe her sexuality:

Obviously, since I started playing football I suppose you tend to think more about it because, you know, you meet different people and stuff like that, you know but . . . you tend to get labels you know, I mean I would never . . . although I am heterosexual, I would never sort of . . . that term wouldn’t be used by myself, but then when you mix with other people then that’s the way you are termed, you know, I’m . . . I’m constantly referred to as the heterosexual, you know now, and I just accept it, it doesn’t bother me, but it’s just like a total new, a new terminology, until I started playing football I never really . . . I mean obviously I’d come across . . . but I would never have used it in my day to day, you know . . . (Di, age 31) (p. 391)

Also, Skelton (2000) is of the opinion that there is a long-standing association between soccer and schooling instruction. In retracing its history, researchers have remarked that modern

⁴ See Fry, C.B. (1899): “Some famous footballers”. *The Windsor Magazine*, p. 20.

forms of soccer appear to have been developed in Britain in public schools around the 1840s. The game was initially, an exclusive preserve of the upper and middle classes. However, from 1870 onward football inherently became a working-class sport. In addition, it is fair to state that much of the literature, which associates football and schooling to social class, tends to focus on its significance and relationship to the lives of working-class boys. Here, two points of view are made accessible. Initially, there is the literature discerning the value of soccer as expressed by the boys themselves. A second perspective is one, which considers the value schools place on football both in terms of enhancing their own status and that of their pupils. It has been suggested by Clarricoates (1978) that football achievement was seen to be of greater significance than academic accomplishment by teachers of working-class pupils.

This opinion is in accord with Martino (1999) who writes:

Thus, a particular cool masculinity involves rejecting schoolwork and high achievement. In this cultural context, the practice of fashioning masculinity as a form of protest against the values and priorities of the educational system is apparently not confined to a particular working-class dynamics (see Willis, 1977). It emerges here within the contours of a much broader phenomenon of enacting a particular form of hegemonic masculinity that is organized around 'being cool', which is defined in terms of rejecting the demeanor of the hard-working, high-achieving and compliant student. It is interesting that Nathan (interviewee) perceives being smart as more acceptable for girls because this highlights the gendered dimension of 'acting cool' and perhaps accounts for many boys' rejection of schooling. If schools are in the business of producing and regulating certain forms of subjectivity which are perceived to be antagonistic to the performance of a particular kind of 'cool' masculinity, this may account for many boy's rejection of schooling, which in this particular instance and within localized cultural context of an Australian co-educational high school, appears to be cut across class boundaries. However, it is important to highlight that these middle-class boys, because of their privileged status – because of their parents' socio-economic standing – are advantaged in ways which working-class boys are not. Thus, there is a particular register of middle-class protest masculinity, which appears to be organized for some boys around 'acting cool'. (p.250)

King (1997) adopts a similar position in his study as he describes the relationship between masculinity and football. He refers to the work of Paul Willis in *Learning to Labor*

(1977) as he explains how the sons of the rough working class guarantee the reproduction of their parents' inferior class position by their resistance to school, which is regarded as the embodiment of middle-class and establishment values. In other words, their full-fledged resistance at a particular time can ultimately lead to subordination and consent. Moreover, the author feels Willis's approach is insightful but that he wants to dig deeper and argue that the elements of resistance and compliance may be temporally separate and casually related in a way. However Willis disputes that resistance and compliance may be simultaneously and paradoxically inseparable. Also, King (1997) considers masculine relations as substantially concerned with status, the pride that a lad attains from football are important. It assists him in asserting himself in relations with other men in his community.

This point of view is analogous to Epstein, Kehily, Mac an Ghail, and Redman (2001) as they explain how the dominance of football and fighting in the United Kingdom can marginalize not only females, but also those boys who are not attracted or good at playing soccer. The authors base this opinion on ethnographic evidence from research in two primary schools in London:

In a school contest in which football is allowed to dominate unchecked, we demonstrate that football and fighting simultaneously solidify and cut across ethnic boundaries and that many boys become deeply invested in these activities as the primary signifiers of masculinity. For these boys, being a "real man" is established through their prowess in both activities, and they gain popularity and status both with other boys and with girls through them. Football and fighting become a measure of success as boys/men and a more important achievement than academic success, while relative failure or lack of interest in them becomes a marker of stigmatized effeminacy or homosexuality. (p. 158)

Hargreaves (1986) discusses the struggle to redefine sport that has ethical implications connected with the belief that male dominated and controlled sport has produced an excessive stress on competition, with many ugly proliferations, and that macho models of sports that

celebrate the male/female distinction are brutalizing and limiting, both for young males who are inducted into them and for females who copy them. Despite women's constant involvement in sport, athletics continues to exist as a male preserve and as a key arena of masculine socialization and achievement. Furthermore, the study of female sports can reveal how notions of masculinity continue to pervade athletics, underpinning societal structures of male dominance (Cahn, 1990).

This idea was examined earlier by Beechey (1980) when she wrote about the concept of patriarchy:

Theoretically, the concept of patriarchy has been used to address the question of the real basis of the subordination of women, and to analyze the particular forms it assumes. Thus the theory of patriarchy attempts to penetrate beneath the particular experiences and manifestations of women's oppression and to formulate some coherent theory on the basis of subordination, which underlies them. (p. 9)

Organized sport developed in England in the late 19th and early 20th century as a response to what was seen as a crisis of masculinity and potential 'feminization' of man. Structured sport was created as a gendered institution to build me the courage and strength it would take to defend and rule a nation (Hanson & Kraus, 1999). Mean (2001) has imparted in detail significant information regarding the exclusion strategy that was successfully enacted by the English Football Association (EFA), in 1921. This attitude of small mindedness is clearly established and was supported in 1988, by the in service Secretary of the EFA. She writes persuasively on the exclusion strategy of the EFA:

... who banned all women's football from affiliated clubs and venues in a move which effectively put an end to women's organized, competitive football (i.e. exclusion). This eventually ensured the loss of knowledge about the ability, skills and success of women footballers (i.e. invisibility). This exclusion was supposed to be about financial irregularities (but argued to be about defending men's football from the threat posed by the great popularity of women's football, e.g. Davies 1996). However, the EFA also stated that they were '...impelled to express their strong opinion that the game of football is quite unsuitable for females and should not be encouraged' (1921). Because the exclusion was echoed in educational settings, this act ensured that football skills and

knowledge became the property of males, simultaneously constructing and maintaining male hegemony about football. The idea that women are unsuitable for football remains a prominent discourse, which can be identified, in recent EFA practices and public self-portrayal (despite stated equal opportunities policies). (Bradshaw, 1997), (Dunning 1999:236-6) cites the Secretary of the EFA in 1988, Ted Croker, as stating: "Football is a game of hard, physical contact, a form of combat. It is, and must remain, a man's game. Women have no place in it except to cheer on their men, wash and iron their kit, and prepare and serve the refreshments." (p. 791)

Belenky, Clinchy, Goldberger and Tarule (1997) provide a less cynical but interesting comment that could provide an opportunity for Ted Croker to accrue some erudition. The chance to develop a skill that could help him enormously in other areas of his life:

The tendency to allocate speaking to men and listening to women impairs the development of men as well. The frequent failure of men to cultivate their capacity for listening has a profound effect on their capacity for parenting, for it is mothers more often than fathers who are most likely to still their own voices so they may hear and draw out the voices of their own children. (p. 167)

Similarly, Hughson (2000) provides some interesting insight into the attitudes that provide the basis for male identity in his study on young males, Australian/Croatian soccer fans who reside in the Western suburbs of Sydney: "Most prominently, these can be identified as machismo, chauvinism, misogyny, and homophobia. These attitudes are manifested in practices that are revealed at soccer matches, at home, and in other areas of social life." (p. 10)

Furthermore, he comments on misogyny in the Bad Blue Boys group that this type of behavior has been observed mainly in the forms of direct and indirect verbal abuse. The targets for direct verbal abuse in a number of contexts are usually anonymous. Demands for sexual favors being yelled from stationary or moving motor vehicles at young women walking at the curbside are a common practice. Women who prefer to dress risqué are particularly prone to such abuse. A similar observation is made by Walker (1988) as mentioned the specific practices of playing football, drinking, marauding around town, and so on, constituted, as it were, almost a quantitative index of manhood: prowess in these culturally exalted forms of masculinity made

you more of a man, although there were many other which were suitable for males or even gender neutral. On the other hand, there were practices, refusals of practices – the flight from masculinity - whose appropriateness for males was at least in doubt.

This type of male behavior has been established by Dunning (1994) as he describes the central difference between lower working class communities and those of more ‘respectable’ counterparts in the upper, middle and working classes appears to be that, in the latter, violence in face-to-face relations tends to be normatively condemned whilst, in the former, it tends to be normatively condoned and rewarded.

Cockburn (1981) too, asserts that boys are conditioned from childhood in numberless ways to be more effective than girls. They are trained in activities that develop muscle, they are taught to place their weight firmly on both feet, to move freely, and to use their bodies with authority. With regard to females they are socialized to seize or shelter them and led to expect them in turn to acquiesce or submit.

For men, sport provides opportunities as spectators or players, where they can affirm their identity and status as heterosexual males and their physical, symbolic, and economic dominance over women (Stevenson, 2002; Sabo & Panepinto, 1990). Furthermore, Duncan (1990) considers a definition of masculinity as not so intimately connected to physical appearance. Instead, she supports Bergers (1985) evaluation of the male that is based on his actions and accomplishments. King (1997) offers another interesting theory on what the male attains from involvement and participation in football. Since masculine relations are substantially concerned with status, the pride a lad attains from football is very important. It assists him in asserting himself in relations with other males in his community. Dowling-Naess (2001) adds that individual boys and men actively shape masculine identities as they interact in a given social

setting on the basis of the resources available to them. Here it is imperative to distinguish that gender inevitably intersects with social structures created by class and race, as well as other superseding discourses in a given society. She is of the opinion that:

Currently, in Norway, as elsewhere in the developed world, two powerful messages, which influence upon the construction of masculinity, are those of the 'body beautiful' and the 'mechanical body'. In fact the body, or rather its appearance has become more and more linked to the 'project' of self-identity because as Gliddens (1991) argues it no longer an 'extrinsic given'. Individuals in the Western world have become concerned with the management, maintenance and appearance of their bodies in a society which recognizes the body's potential to act as a resource and to provide social symbols about self-identity (Shilling, 1993). Indeed, Featherstone (1991) talks of the body's 'exchange value' in a consumer culture, where fit, youthful, slim, healthy bodies enjoy a higher value than their opposites, due to the fact that they are bestowed with a sense of worthiness. (p. 128)

And, according to Murray and Matheson (1988) achievement as a personality characteristic is more strongly stressed and reinforced in the training of boys than that of girls. However, Epstein, Kehily, Mac an Ghail and Redman (2001) have a more divergent opinion from their research on gender relations in school playgrounds. They inform us that:

. . . the dominance of football and fighting can marginalize not only the girls but also those boys who are interested in or good at football. In a school context... we demonstrate that football and fighting simultaneously solidify and cut across ethnic boundaries and that many boys become deeply invested in these activities as the primary signifiers of masculinity. For these boys, being a 'real man' is established through their prowess in both activities, and they gain popularity and status both with other boys and with girls through them. Football and fighting become a measure of success as boys/men and more important achievement than academic success, while relative failure or a lack of interest in them becomes a marker of stigmatized effeminacy or homosexuality. (p. 159)

Parker (1996) amplifies this notion in his discussion with a group earmarked as 'victims' revealing that parental support also plays a part in the progress of this social itinerant masculine conduct. Particularly evident here was a synchronization of familial values and norms, and individual pupil experiences and of schooling, all of which compounded the subordinate position of this pupil group. Thus because members of a so-called 'inferior' group attached themselves to

such academic discourses by way of psychological investment, their masculine orientation was necessarily rendered problematic, and subsequently questioned by those operating around a more manual behavioral agenda.

Skelton (2000) comments on 'the passion of football' and how this sport occupies a central place in many of the strategies aimed at counteracting boys underachieving in Western schools. She indicates that this concern has grasped the attention of the British government, media and schools:

Football is taught as part of the National Curriculum for Physical Education (PE). Schools are required to teach games as one of three areas of activity (the other two being gymnastic activities and dance). Although there is no obligation to teach football as such, the high profile of the sport in the UK means that most schools do opt to teach it. At the same time, as one subject of 10 in primary schools in secondary schools, and a 'foundation' rather than a 'core' subject, there is little time available within school hours to concentrate on this particular game. However, as will be discussed later, football takes a central position in lunch and break-time activities and in extracurricular sports clubs. Indeed there can be few primary or secondary schools that does not have a school football team. Thus, it can be suggested that although occupying a minor role in terms of the school curriculum, its major significance is twofold: firstly, it's a potential to boost the status of a school through the achievements of its team; and, secondly, it is the preferred lunch/break-time activity of the majority of boys. As Corrigan (1979, p. 102) observed in his study of a comprehensive school in Sunderland, 'there are a number of different games of football, rather than one game with one label'. The argument to be presented here is that before football is eagerly embraced as a means of countering some boys' alienation and disaffection from schooling, account should be taken of the range of ways in which football is inscribed with broader structural issues. It will be argued that not only does football embody signifiers of conventional, hegemonic modes of masculinity, and therefore can be read in terms of gender and sexuality, but also it is intertwined with discourses around social class and ethnicity. (p. 6)

Connell (1989) presents an interesting account of masculinity in an educational setting. To opt for masculinity, to know where you stand in the pecking order is quite comparable to choosing or supporting a soccer team. This process of differentiation in a secondary school is considered as being very important to be familiar with, and that conflicting masculinities are being produced. But to picture this as a marketplace, a free choice of gender-styles would be

illusory. These choices are effectively structured relations of power. In each of the cases mentioned, the demarcation of masculinities occurs in relation to a school curriculum, which organizes knowledge hierarchically, and sorts students into an academic hierarchy. By institutionalizing scholastic failure via competitive grading and streaming, the school forces differentiation on boys. But masculinity is organized – on the macro scale – around social power. Social power in terms of access to higher education, entry into vocations, control of communication, is being distributed by the school system to boys who are academic ‘successes’. The reaction of the ‘failed’ is likely to claim to other sources of power, even other definitions of masculinity. Sporting competence, physical aggression, and sexual conquest may do. In addition, the process of distinguishing masculinities in secondary school has been noticed in ‘ethnographies’ of working class schools in Britain and Australia.

Soccer as viewed by Skelton (2000) has been fashioned within educational settings, and there has been speculation in both Australia and the United Kingdom linking the game to issues concerning gender, in particular, constructions of masculinity. She cites the following observations:

Football is a major signifier of successful masculinity (Epstein, 1998) that indicates the close association of football to hegemonic masculinity. Hegemonic masculinity defines what it means to be a real man or boy, and other forms of masculinity are seen in relation to this form (Connell, 1995). It is a position which is achieved as a result of collective cultural and institutional practices and asserts its authority although these practices, particularly through the media and the state (Kenway, 1997). Evidence to support the view that the ways in which football has been conventionally ‘played out’ reflects those practices associated with attaining and sustaining hegemonic masculinity can be found in literature on football written by male sociologists (Robins 1982; Dunning et al., 1988; Murphy et al., 1990). The majority of these accounts are couched in language that is evocative of the characteristics currently associated with hegemonic masculinity. (p. 8)

Thorne (1999) is in agreement on this issue as she reports on the problems of aggressive masculinity. Boys are often the subjects when parents and teachers are asked about gender

situations they find most disconcerting. This disturbing conduct lies at contrasting ends of a continuum. At one end is the aggressive masculine bonding in evidence when groups of boys disrupt classrooms, derogate girls and invade their play, and make fun of subordinated 'weaker' boys. Boys who engage in this type of behavior take center stage in many school ethnographies; in fact, she noticed, their approach is often likened with masculinity itself. At the other extreme, parents and teachers suggest that boys who do not uphold dominant ideas of masculinity, who shun a tough and belligerent attitude, and have an aversion to sports, are therefore vulnerable to ostracism, teasing, and being labeled 'sissy', 'nerd' or 'fag'. Parker (1996) has confirmed his particular construct as he indicated that violence within school sport is not new. Within this environment proceedings on the game fields were the testing ground of true character. The sporting encounter symbolized the notion of a muscular elite at war, and was regarded as a site of moral upbringing, catharsis, and a basis upon which the imperial forces of the British Empire might prosper. He writes:

Resilience towards painful sporting practice was all-important. After all, manliness and masculinity were equated with one's ability to withstand pain on the sports field, pain which bred morality, loyalty and commitment, and which was considered a necessary initiation into manhood. Thus, experiences of aggression and violence, both in a sporting and a wider institutional context, were celebrated as active agents in the masculinizing process. (p. 146)

The very fact of women's participation in sport challenges the conventional view of sport as male. It shatters down the barrier toward women's full entrance into public life. And, it disrupts the syllogism between men, sport and masculinity: men are masculine; men play sport therefore sport is masculine (Cahn, 1990).

However, Archetti (1999) formulates an explanation on the relationship between soccer and the tango in *Masculinities* that contradicts some of the viewpoints cited by researchers in the review:

Borocoto, *El Grafico's* journalist, wrote a canonical piece in 1928 on the relations between the tango and football. He argued that football was the most modern of all spectacles because it had 'continuous action', 'passionate beauty' and improvisation'. It was transformed in Argentina into a national sport when "the art of dribbling 'was incorporated in its practice...in the field of football the aesthetic pleasures and the local identities are mixed, while the tango speaks to sentiments and displays sensualities.... Furthermore, 'Football is the collective sport of the *criollo*: the tango his music. How different are those predilections? The first constitutes an aesthetic pleasure associated with interest affections, the traditions of clubs and barrios; the other appeals to the sentimental side [of Argentineans] with some sensualism'. (El Grafico, no. 467, 1928: 8)

Thing (2001) attempts to explain what (Hargreaves, 1997; Theberge, 1977; and Scraton et al. 1999) conclude to be an underlying motivation for females that participates in masculine sport games. They believe that females that do participate in masculine sport games cannot be seen as defiant to hegemonic male sport. All the same, Scraton et al. (1999) explains that these females have simply crossed gendered boundaries in an effort to access a sport that is associated with masculine traits.

Finally, there are some writers that have offered explanations on how sport operates as a male preserve. Theberge (1985) cites (Boutilier & SanGiovanni, 1983, pp. 100-101) on how sport and masculinity are social realities that support, inform and reinforce each other and together contribute to the traditional polarization of sex roles. They allude to three reasons why men reject women's entry into sport: because of a need to sustain sport as a socializing agency that prepares men for adult roles in the public sector, particularly the workplace and political life; to maintain the hierarchical ranking of sex roles, expressly in the valuation of masculine over feminine roles; and to preserve a totally male dominion that allows perspicuity and intimacy –

qualities that are typically missing from what is generally viewed as suitable behavior. In closing, Whitson (1990) considers the major games, in other words, continue as institutions through which the reproduction of hegemonic masculinity, and through this, male hegemony, is aggressively pursued. He applies Dunning's (1986) framework, these games are typically institutions in which physical strength and fighting skills are celebrated, in which male camaraderie is also fêted, and which therefore strengthen constraints on boys' experimenting with other ways of being male.

Sexual Coercion in Athletics

Fasting, Brackenridge, and Sundgot-Borgen (2003) contend that in the past 30 years there has been research conducted on a number of ways the population experience sexual harassment and coercion, and how it impacts their lives. However, they describe the studies in this area initially as scarce, but have shown steady and significant growth since the mid-eighties. Furthermore, the studies they mention are both qualitative investigations and quantitative surveys. Qualitative studies have been used to assemble descriptions of abuse and harassment experiences and from these risk factors have been illustrated. The quantitative research has often been based on small samples and surveys with a low feedback rate. However, Kane and Disch (1993) would disagree as they both point out there has been a plethora of articles establishing that sport is an institution that creates and reproduces male power and domination in our culture. Furthermore, feminists' scholars have long argued that sport serves as a central site for the production of male supremacy and hyper-masculinity, not only in sport, but also in the larger social order. In addition the two researchers contend that the construction of gender difference and hierarchy in sport, and its importance in sustaining patriarchal power, should not be

underestimated. And, they cite Melnick, who observed that a central element of the sport experience for men is equating manhood and masculinity with attitudes and behaviors that demean and devalue women.

Similarly, commenting on this topic is a written excerpt from Benn's (1985) article on sexual harassment, where the public is advised through the columns of *Cosmopolitan Magazine*. A woman had written back to answer a *Cosmopolitan* question. 'The worst aspect is often the fact that harassers quite genuinely believe they are offering you a compliment. Who do they think they are, Errol Flynn?' However, what is this woman really suggesting? It is a well-known fact that Errol Flynn was a womanizer. Did this mean it would have been agreeable for Errol to harass her since he was a well-known actor? Here we have selective harassment, where the man on the street is considered a low-life. A panacea for circumstances akin to this is addressed by Shah⁵ in *Caravan of Dreams*.

In Hughson's (2000) conclusion on ethnographic field work done with a group called the Bad Blue boys, a group of young, male, Australian/Croatian soccer fans, he asserts that they are not dehumanized; rather, they are more or less incorporated into a scheme of what is and what is not considered civilized social process. And he emphasizes this point:

From a socially marginalized position, the young men of the BBB construct a collective social identity that represents an amalgam of ethnic cultural tradition and a distorted version of culturally dominant masculine iconography consumed through various media forms. The successful businessman and happy family man might revile "young louts" who swear at women or call other men 'faggots,' but such practices are not framed outside of an articulation with hegemonic masculinity. Being civilized is not only a question of degree but also one of power. It is much easier to be civilized watching soccer from a corporate box than on the terrace with the 'lads.' (p. 21)

This observation is supported by Walker (1988) as he describes:

⁵See Idries Shah, *Caravan of Dreams - Coercive Agencies*, (London: Octagon Press, 1968). (p. 197)

The specific practices of playing football, drinking, marauding around town, and so on, constituted as it were, almost a quantitative index of manhood: prowess in these 'culturally exalted forms of masculinity' (Carrigan, Connell & Lee 1985:592) [3] made you more of a man, although there were many other practices which were suitable for males or even gender neutral. (p. 5)

Lastly, Costanza (2002) indicates that many scholars had illustrated, throughout the late nineteenth and twentieth centuries that a debate raged over the propriety of physical education for women. Opponents of female athleticism, fearing that women's physical activity would unravel the fabric of society, argued that vigorous exercise corrupted a woman's intellect, disfigured her physique and, perhaps most heinously, eroded her reproductive capacity. Hargreaves (1995) also comments on this provincial attitude on the activity of women's cycling. This sport was described as an indolent and indecent practice that transport girls to prostitution; it was said to be an activity far beyond a female's strength and one which made women incapable of child bearing. These types of attitudes and beliefs were prevalent at the turn of the century and are debilitating as far as women were concerned. Shah (1978) appropriately defines this posture and provides a solution. He states that learning begins when scholars can examine their assumptions and produce an attitude which can seem perplexing but which trains the mind to be flexible without producing cynicism. This is brought into perspective when describing an interchange that he had with a teacher and how he was able to set up a framework through which to approach many things. The teacher exclaimed, "Hindsight shows how often yesterday's so called truth may become today's absurdity."

Gender Relationships

According to Kessler et al. (1987) gender relations are historical. The pattern they assume any society is produced by its particular history and is always a process of transformation. Even

when change is slow to the point of being invisible the principle should always be kept in mind; because it directs attention to the ways in which the patterns of gender that constantly being promoted in everyday life (Cunningham, 1989).

During the last 30 years, participation in women's soccer has expanded exponentially, with approximately 3 million registered participants in the United States. It is one of the fastest growing sports in the world (Cox & Thompson, 2000; Krane, 2001). However, in terms of actual research in gendered relationships Renold (1997) reports that the focus has often concentrated on and prioritized the experiences of one sex over another and has thus not explored the complexities and contradictions embedded in the dynamic relationship of boys' and girls' experiences in school and sport. She continues her composition by stating that there has been a scarcity of studies investigating the gendered nature of sport and sporting activities within the everyday playground experiences in schools that exceed more than an inert representation of the traditional and sometimes dualistic idea of boys and girls sports. However, White and Brackenbridge (1985) contradict that viewpoint by stating that most studies on sport and gender have addressed questions relating to performance and participation rates of women as athletes. Furthermore, improving standards of performance and increases in women's participation in sport are well documented.

Constanza (2002) informs us on the available literature in the magazine *Punch* from as early as the turn of the century. These verses describe the widespread participation of middle-class women in a variety of sporting activities during England's 'golden age' of sport. She writes:

Despite its misogynistic undertones *Punch* represents one of the most fertile sources of information concerning ordinary middle-class women's experience in sport and leisure activities in Edwardian England. The most recent work of several outstanding scholars has stressed the necessity of turning to alternative sources to enhance the understanding of women's experience in the history of sport. Although scholars invariably utilize *Punch*

cartoons to illustrate trends in middle-class women's sportive participation, a thorough exploration of the magazines satires of sportswomen, and the underlying attitudes that these reflect, has yet to be produced. Perhaps *Punch's* reputation as a male-dominated enterprise has caused scholars to overlook it as a worthwhile source of information about women's participation in sport. Indeed, a cursory glance within *Punch* shows sportswomen as the target of myriad misogynistic jokes, heightening the suspicion that the magazine failed to take women seriously. A closer reading of the contents, however, reveals other articles and cartoons that supported women in sport, showed respect for women athletes and ridiculed men's preoccupation with flirtation and their lack of skill; some cartoons also poke fun at men's incomprehension of sportswomen. The sheer volume and inconsistent portrayals of women within the pages of *Punch* suggest complex, paradoxical motivations for the satirizing of sporting women. (p. 32)

The above paragraph is a stark contrast to research by Burgess (1989) on gender relations in school that influence the day-to-day lives of women teachers. That humor was not in any way a display of respect or support for women. Firstly, the manner in which jokes that focused on femininity and their domestic roles were used to condescend and coerce women. Secondly, the lack of social space for women and the way in which the staff-room was designed did not provide work or relaxation areas. Finally, the many social situations provided symbols by which issues could be raised between men and women that related to gender characteristics.

From a quite different perspective Henry and Comeaux (1999) point to the newness and cultural specificity of coed soccer as a partial explanation of the scarcity of literature on its socio-cultural dimensions. Social research is virtually nonexistent and mention is limited to news articles and unusual references in writings on sports. Such references document the intensity of the physical competition between men and women on the pitch, the challenge to both masculine and feminine stereotypes, and the increased gender awareness brought about by form of interaction across sex lines. The limited contributions by social scientists on coed sports in general deal with historical occurrences, language analysis, or promote non-violent and non-sexist 'new games. Finally, Birrell (1988) points out that an important factor contributing to the

lack of research is the relative scarcity of female scholars. At this point in time, it was reported that only 36% of the membership of the North American Society for the Sociology of Sport was female, and this proportion is apparently not high enough to counterbalance the general lack of attention to women's issues by male scholars.

It is important to stress that over the last two decades, and particularly the era of the nineties that women have made many advances in organized, competitive high performance spectator sports. The Olympic games can serve as a clear example of both the changes in attitudes towards women athletes and their increased numbers in sport (Bernstein, 2003; Harris & Clayton, 2002). Felshin (1974) reports that equity for women is translated into demands for privilege and practices attendant to the male competitive model. Once the principle of discrimination as difference was recognized, women were able to petition successfully for equal treatment in terms of scholarships, budgets, coaching, facilities, and other aspects of athletic opportunity.

Scruton (1994) notes that for some pundits feminism has achieved its aspirations and is no longer significant or essential. The equal opportunity agenda of liberal feminism has become predictable with women's rights a legal and sensible reality. Women now seem to have the prospects in most spheres of life if they decide to take them. The significance is on autonomy and individual choice – the new woman can select her lifestyle, her career, to have a family or not, to participate in sport, to marry or have a joint household or stay at home and supporting children and partner. However, she does state that an option and less positive scenario is that feminism is over because it has been proven wide of the mark. Having been given opportunities women have found major difficulties. Also, females are now disappointed and despondent

because feminism has denied them their 'natural' experiences and responsibilities, particularly in relation to motherhood and the nuclear family life. Scraton (1994) makes this comment on women changing material reality:

It is significant that there has been little research little empirical research on women's leisure since the main studies in the 1980s. There appears to be a gap in leisure research with women or gender relations having fallen from the agenda. This silence in research could be because the academics' world of leisure is currently dominated by the theoretical debates around the postmodern condition creating what could be termed a 'new' academic mainstream. Whatever the reason, it is important that this gap in research is addressed for, as I will be arguing, there is much work to be done in this area. In order to learn more about women's leisure lives in the 1990s it is necessary to look at their experiences at home, in the family, in paid work and in relation to men. As for the work of Feminists in the 1980s argued, it is impossible to study women's leisure as something separate from the rest of their lives. In order to understand women's leisure we must adopt a holistic approach that acknowledges the complexities of women's lives in a multitude of different arenas. (p. 253)

Flintoff and Scraton (2001) discuss one of the limitations of their research pointing toward the range of young women involved in their study. They considered the young women to be more positively oriented to schooling and physical education; this was not representative of the whole population and they expressed the need for caution on the interpretation of their data. Furthermore, they felt that there was an urgent need for more in-depth qualitative accounts of young women who are located differently not just in terms of their interests, but also structurally. They describe the young women interviewed as, at best apathetic to physical education, at worse hostile. Even reporting that girls who enjoyed physical activity still dismissed a lot of physical education and questioned its purpose. However, with exception to the male behavior at mixed activity groupings the researchers do not really probe or question the reasons for hostility or apathy regarding the female experience in physical activity.

In regards to women in sport it is difficult to come to terms with as Arnot's (1982) observation on the concept of male hegemony. She writes:

That the process of understanding requires one to perceive the concept of male hegemony as a whole series of separate ‘moments’ through which women have come to accept a male-dominated culture, its legality, and their subordination to it and in it. Women have become colonized within a male-defined world, through a wide variety of “educational moments” which seen separately may appear inconsequential, but which together comprise a pattern of female experience that is qualitatively different from that of men. These educational moments when collated can provide considerable insights into the collective “lived experienced” of women as women. (p. 64)

To contrast Arnot’s (1982) opinion is an observation by the writer Idries Shah (1978):

‘Speak to everyone – they will modify it according to their imagination.’ It is often said that one should ignore obtuseness, and never tackle it head on, that by definition you can do nothing about it. How convenient it would be if things were really as simple as that! Experience shows that sometimes, at least, you must deal with obtuseness – otherwise it may indeed happen that obtuseness will deal with you.

Why can’t everyone play? Males and Females in Soccer

Those concerned with the future of women’s sport must challenge the issue of integration or segregation. The trepidation emerges in several different forms in the field: should physical education classes be coeducational or single sex? At what age should co-education commence? Should girls be allowed to participate on boy’s teams? Moreover, Birrell (1984) provides a qualified opinion on the questions:

The issue of integration in sport can be approached from several directions. In terms of the participant, we can review the literature, which generally informs us that girls and boys are physiologically equals capable of competing against each other before puberty, but after puberty, boys begin to have a decided advantage over girls – an advantage compounded by the fact that many studies compare trained boys to untrained girls. We can review the psychological literature that demonstrates how men and women react when competing in single sex or integrated settings. (p. 24)

J. Evans, Lopez, Duncan and M. Evans (1987) write about their thoughts on the political and pedagogical implications of mixed sex groupings in physical education. Their material is derived from three case studies of three physical education departments in three comprehensive schools. They consider this idea as unique and their discussion concentrates on the process of innovation and considers its implications for teacher identities and the nature of their classroom application. Traditionally, the physical education course outline has been clearly distinguished for boys and girls, particularly in the senior sections of high schools. However, for some instructors this has become a challenging rather than a routine and satisfactory feature of their teaching and curriculum as debate about 'sex differentiation' and equal opportunities and schooling has filtered into the thinking of the physical education vocation.

Sex differences in achievement orientation and competitiveness are widely cited in both everyday dialogue and psychological literature. Numerous investigators have examined the psychological aspects of gender roles and achievement, and have provided significant insights (Gill, 1986). Evans et al., (1987) believe that mixed sex groupings are an innovative change in which a physical education department can accomplish with relative ease. Once effected, the organizational change may raise rather than solve questions on how pupils should be effectively treated within the subject. Those questions concern how teaching should be approached, what activities are suitable for whom and when and how the learners should be organized and evaluated. However, the research indicated resistance to mixed grouping from some teachers based on some deep-rooted sub-cultural views of physical education curriculum. This was construed as a conflict and struggle between different teachers that otherwise would be a customary part of school life, and it does seem essential for those desiring to undertake innovations of this kind, to acknowledge that these quite clearly can be exacerbated rather than

resolved in the process of educational change. However, there have been several lawsuits in Canada regarding female exclusion from coed school sports. Ryz (1997) describes a possible example in wrestling, whereby, the sport requires physical contact to effectively demonstrate a technique, and the school board assumes that sexual assault allegations are more likely to occur.

In the Netherlands, mixed (co-ed) soccer is engaged in recreation circles on a steadily increasing basis. The term 'mixed' covers all situations in which boys and girls play soccer with or against each other. Verheijen (1997) has indicated that more and more coaches and trainers now realize that there are more similarities than differences between boys and girls, and the few differences that do exist often have no influence on the game of soccer. He continues with the view that the learning progression is the same if they begin to play at six years of age; they go through the same stages of development. Most people think, perhaps unconsciously, that this is not the case. The automatic assumption is that boys learn soccer better and at an accelerated rate than females. Such attitudes necessitate that the ability to play soccer is genetically determined – that there are 'soccer genes' and those boys having more than girls. Verheijen (1987) emphatically states that such a suggestion is nonsense:

The fact that most six year old boys have a better knowledge of handling a football better than many girls the same age is due to the fact that boys are reared to play with a ball, whereas girls are given dolls to play with and rarely have the chance of acquiring any sort of familiarity with a ball. (p. 43)

van Lingen (1997) echoes those sentiments as he states that young players judge each other on the basis of personal experience, irrespective of their sex or existing prejudices. Mixed soccer (coed) has brought about a reversal in the approach of boys and girls playing soccer together. Scraton et al. offer a different point of view asserting that at school some of the women faced major barriers to their participation in soccer. This illustrates interesting differences

relating to how sport is organized in each country: “We had fun playing with the boys...I had problems when I was 14 because then I had to leave the boy’s team. I could not play on a women’s team, you had to be at least 15, so they wrote a call for girls in the newspapers and we organized a girls’ team.” (Ingrid, Germany)

Evans (1989) solicits for integration and co-operation between boys and girls and they should operate in a context where the ultimate aim is to bring children together to value and respect each other. It is important to assist girls and boys to build confidence about their own capabilities and strength and this can be achieved productively by using activities where boys and girls are together. He maintains that if boys and girls are being taught together and cooperation exists it is easier to show the girls that they have no need to feel physically inferior, and the myth about what boys can do is quite false.

Coed soccer is a recent and rather uniquely American phenomenon. Although there is scant evidence of adult women and men playing soccer together in a structured and sustained manner in other countries, coed soccer is popular across the United States. A search of the Internet sites yielded 22 adult coed soccer organizations in 14 nationwide states. Coed soccer is part of a larger social movement that emphasizes the joint involvement of men and women in sporting activities (Henry & Comeaux, 1999). However, in a study that explored the dynamics of how young people made decisions on sport participation, Coakley and White (1992) reported that coed physical education classes in the secondary years were welcomed by some of the young people they spoke to, however, there were others, mostly young females, who were not enthusiastic on such an idea because they perceived their proficiency in sport and physical activities to be especially poor.

In another related area of female sports, Messner, Duncan and Cooky (2003) report that quantitative data shows a frequent underreporting of women's sports a qualitative analysis of the ways that women and men are presented on the sports news reveals further gender asymmetries. They revealed that two themes had persisted from previous studies that (a) the choice to devote a considerable proportion of the already insignificant coverage of women's sports to humorous feature stories on non-serious women's sports, and (b) the often humorous sexual objectification of athletic and non-athletic women.

Lenskyj (1990) indicates that it is important to distinguish between research on women and woman-centered research, that is, research that takes the standpoint of women has as its goal women's empowerment and the transformation of social relations between the sexes. Cox and Thompson (2000) write about their research experience with 16 women. They reported that the players expressed a sense of joy in their physical capabilities that had been developed through soccer. All had confidence in their bodies in running, jumping, executing skilful movements and using physical force to overpower their opponents.

In conclusion, Archetti (1999) writes this poignant paragraph in *Masculinities* on how he views the gender issue:

Masculinity without femininity, men without women, is perhaps unthinkable. A man needs a woman to reaffirm his own masculinity, but the woman who fulfils this function does not always need to be the same. The lyrics of the tango, a dance made for a man and a woman; will permit me to discuss the tension existing between a conventional morality that defines woman as passive and chaste- the mother and the disciplined spouse – and a romantic drive in which man is fascinated by the seductive power of the *femme fatale*. Mosse has emphasized the fact that in the construction of modern masculinity woman was subordinated to man; at the same time, the demands she made upon him were thought to strengthen his masculinity (1996:76). The coexistence in the tango of different moral codes provides, in many ways, alternate definitions of manhood. (p. xviii)

The Separation of Integrated Soccer Components

Coaching the Soccer Athlete

Like every other sport, a distinctive feature allows soccer to be easily distinguished. The game's structure is uniquely its own and gives the game a different character. One reason it is so enthusiastically played, particularly by youngsters, is because of the simplicity of its concept: scoring goals, without the use your hands. This is the fundamental, original idea of soccer. This uncomplicated idea makes it possible for the game to be played with the most rudimentary of rules and equipment. In addition, soccer can be played in practically any environment. A backyard for example, or even a cement surface can easily accommodate youths and become a viable playing surface (Bauer, 1993).

Based on experience there are several differences in the approach and methodology in coaching the soccer athlete. Obviously, there are noteworthy approaches in coaching an elite athlete compared with the recreational athlete. Coaches begin with the supposition that the fundamental intentions of coaching are to improve the performance of an athlete through an acknowledged developmental process. This process is progressive in nature and assumes that the athlete has mastered the fundamentals of technique through the association with an expert.

Mentoring is a process that is believed to lead to high levels of success in both personal and professional endeavors. In soccer, it is evident that the role of the experienced coach entails more than teaching individuals how to shoot a soccer ball correctly or how to dribble a ball around a set of cones. There is a personal dimension to coaching that involves expanding one's role to go beyond established, required responsibilities. Albeit, this process is called mentoring and has been empirically examined in educational and sport science domains.

Franks, Sinclair, Thomson and Goodman (1986) state that one of the essential aims of coaching is to advance the performance of athletes. Specifically, coaches endeavor to provide athletes with feedback, in an environment conducive to skill knowledge, with the expectation that this information will assist the athlete in shaping a permanent improvement in performance.

According to Bloom, Durand-Bush, Schinke and Salmela, (1998) mentoring is a process that requires further research but it is believed to lead to high levels of success in both personal and professional endeavors. In sport, there is evidence that the role of the coach entails more than just teaching individuals how to shoot correctly, or how to dribble a ball around obstacles. There is a personal dimension to coaching that involves expanding one's role to go beyond traditional, required tasks. This process has been referred to as mentoring and has been empirically examined in the educational and sport science domains. According to Merriam, the word mentoring has its origins in Greek mythology, where a father trusted his son to learn from a wise old man named Mentor. Mentoring is a popular term currently being used in several domains, including that of sport.

The study of expertise in teaching and coaching is a relatively young research endeavor. Research on experts in different subject matter reveals some interesting consistencies regarding the constitution of experts. Physical education has data available that has focused on the characteristics of expert and novice teachers. The research found that experienced teachers made more decisions concerning the execution of instructional strategies than did inexperienced teachers. They also noted that during classes experienced teachers were concerned with student skill development while novice teachers focused on ensuring that the students were active, content, and obedient (Hardin, 2003).

Training has been defined as a process of athletic improvement conducted on the basis of scientific principles underlying the physical, mental, technical and tactical development of the athlete. The areas of science having a major applied impact on coaching in the training and competition environment include anatomy, physiology, biochemistry, biomechanics, growth and development, statistics, tests and measurements, motor learning, psychology, sports medicine, nutrition, pedagogy, sociology, and information and communication technology (Woodman, 1993). Essentially, she feels there is a need to fully appreciate the value and responsibility of coaching:

It is important to understand the task of coaching, that is, the job of the coach. It is generally agreed that the job of the coach is to help athletes achieve their best possible level of performance. In the broad sense it can be defined as preparing an athlete for competition. This can encompass a wide range of tasks from teaching basic skills to beginners, planning and implementing long-term training programs, immediate pre-competition preparation, and providing technical and tactical advice throughout a competition or performance. Coaches must be able to implement, evaluate, and modify training programs for effective development of the athlete. They must be able to develop an effective competition plan and build recovery and regeneration techniques into program planning to reduce the chance of over-training or injury. They must also be able to cope with immediate treatment and rehabilitation, should over-training or injuries take place. The safety of the athlete in both training and competition is of paramount consideration. (p. 3)

On the surface, coaching involves deliberate interventions by the trainer in order to enhance performance. But covertly, demeanor is taken for granted, but understanding the current social and cultural milieu of sport, that acts as powerful influences on the behavior of both coaches and athletes. Some of these understandings are about the way we behave towards each other as human beings, for example, etiquette, and concern for safety and avoidance in cheating (Brackenbridge, 1991).

Another important observation on coaching is brought out in Theberge's (1995) study on a female ice hockey team. She reported that while other teams in the league had experience-

coaching turnover, the team she researched did not. The same man had coached the 'Blades' for nearly a decade. The coach was highly qualified, intense and placed high expectations on the players. Collectively and individually, players tire of his intensity and criticisms. However, to a player they acknowledge and appreciate his contribution to their development as a team and individually. Without him the team and the players would not be as successful.

Demonstration is widely used in the development of motor skills, and it has been argued that visual presentation is preferred over verbal instruction because language is unable to specify with precision critical aspects of human movement. A persistent problem in the learning of many activities arises when performers cannot observe during enactment aspects of their performance that lie outside their field of vision (Carroll & Bandura, 1982). Demonstrations can also be called observational learning; in other words, they provide an opportunity for pupils to gain detailed information about an individual technique, sequence or strategy by watching some performer, be it a teacher or another pupil or pupils. It is difficult to measure the full effects that watching a practical demonstration has on learning, but there is no doubt that visual observation does influence performance for the majority of students. Demonstrations should provide pupils with a focus of where they are heading with their learning, whereby they should clearly see what the result of practicing and observing some movements will be (Blake, 1998).

Blake (1998) elucidates on the use of demonstration and employs observational learning, as a method that provides an opportunity for pupils to gain detailed information about an individual technique, sequence or strategy by watching some performer, be it a teacher or another pupil or pupils. It is difficult to measure the full effects that watching a practical demonstration has on learning, but there is no doubt that visual observation does influence performance for the majority of pupils.

Newell (see Hodges & Franks, 2002) report on the effectiveness of demonstration as a teaching tool in motor school learning. He states, 'When the information to be conveyed through demonstration is redundant, there is, by definition, no information transmitted to the learner.' On the other hand, there is an occasional tendency for coaches to verbally overload players when using demonstrations. Some coaches indulge themselves in explaining the minutiae or strategy, thereby taking up a considerable amount of the practice time available to players. Furthermore, repetition is an important factor in demonstrating a technique. The gradual acquisition of more complex aspects of a movement occurs through increased opportunities to observe on more than one occasion. Historically, observational learning has been of interest to those who teach and study motor skills. In its traditional form, observational learning consists of the reproduction of a novel pattern of action following the visual observation of one or more correct performances of the new movement pattern (Doody, Bird & Ross, 1985).

Miller (1989) points out that observation is critical in the process of coaching. Several recent studies (Franks & Miller, 1986; Franks, Elliot & Johnson, 1985) have revealed that coaches experience difficulty in remembering critical events that occur during sporting competition. This seems to be the case for all levels of coaching experience. Moreover, Franks and Miller (1986) emphasize that the accurate analysis of competition is fundamental to the entire coaching process and underlies improvement in performance.

Anderson (1982) reports that it necessitates at least 100 hours of learning and practice to acquire any significant cognitive skill to a reasonable degree of competence. He cites Fitt (1964) on conceptual skill acquisition, as falling into three stages of development. The cognitive stage, involves an initial encoding of the skill in a form adequate enough to permit the learner to generate the preferred behavior to at least some rudimentary approximation. The associative

phase is the second stage and involves the refining of skill performance. Mistakes in the initial understanding of the skill are gradually identified and eradicated. Concurrently, there is a reduction of verbal mediation. Finally, the third stage, the autonomous stage, is one of steady sustained improvement in the performance of the skill. Improvements in this stage often continue for an indefinite period.

Finally, the attitudes a coach brings to the judgment process greatly affect how players are assessed. A good coach is constantly self-critical and is always ready to adjust and adapt to the numerous situations that might come about and affect the players or the team (McDonald, 1988).

Training Soccer Athletes

The overall exercise intensity in female soccer is not as high in the male game due to the lower physical capacity of female players. On the other hand, the activity profile of the female soccer player is very similar to that of male soccer player, and there is little difference in the training potential of men and women, i.e. the response to training from a baseline level is similar. Therefore, male and female players should train in the same way and with the rapid development of female soccer, the overall intensity of the female game has been elevated, and it is important to emphasize training at a high intensity. On the other hand, sudden large increases in the amount of training and intensity within a short period should be avoided, as alterations in the menstrual cycles may occur when the training becomes too demanding. This condition is generally reversible after several days to weeks of rest or much reduced training (Bangsbo, 1994).

In the last few years several factors have emerged which have further underlined the importance of a player's ability to run considerable distances during the course of the game,

therefore increasing the need for higher levels of endurance. For example, combining the physical and tactical components are pushing the team forward, counterattack, attacking with width, defensive compactness, movement without the ball, pressing and double teaming the opponent all over the field, a timely change in marking coverage (Arcelli & Ferretti, 1999).

The training program of soccer players is usually structured to incorporate three main areas of focus. They are physical training, technical skills and tactical training. It is possible to integrate physical, technical and tactical skill training and this is of greater benefit to the holistic development of players. However, Flanagan and Merrick (2002) discuss a major limitation of this approach and attribute this to the coach's ability to quantify training work-loads and intensities accurately, since training sessions predominately involve on-field fully integrated ball-centered activities, drills and modified games.

The researcher or coach has a set method of conducting training however, it is always sensible to assess constantly what one is doing and be prepared to adjust it. All preparation and development of training should be decided by four factors the coach, the players, the demands of the individual game, and the situation. These four elements influence each other and, thereby, the development of a set training component (Bangsbo & Peitersen, 2000).

Jan Reker, Director of the Dutch Professional Soccer Coaches Association describes modern soccer as a sport that is evolving at the speed of an express train. The demands made on modern players during the game are increasing and to contend physically, technically, tactically, and psychologically the athlete must be disciplined otherwise he or she would become surplus to requirements.

It is interesting that in the Netherlands, soccer experts emphasize the technical and tactical problems in soccer. In the modern game, however, these problems can only be

appreciated and solved if you have the necessary physical qualities. You cannot make it at the premier levels of competition without the speed, strength and agility (Verheijen, 1998). Finally, training is a process of athletic improvement conducted on the basis of scientific principles underlying the physical, mental, technical, and tactical development of the athlete (Woodman, 1993).

Aerobic Capacity in Soccer

Reilly (1994) claims that the values of VO_{2max} for soccer players tend to be high, supporting the belief that there is a large contribution from aerobic power to playing the game. It is estimated that soccer match play calls for an average uptake in the region of $55 - 70 \text{ mL} \cdot \text{kg}^{-1} \text{ min}^{-1}$, of which the higher values tend to be found at the top level of play when players reach peak fitness. Nonetheless, values do not reach the same levels as in specialist endurance sports such as cross-country running, skiing, distance running, or orienteering where values frequently exceed $80 \text{ mL} \cdot \text{kg}^{-1} \text{ min}^{-1}$. Appropriately, Reilly, (1994) cautions that VO_{2max} indicates the maximal ability to consume oxygen in strenuous exercise; it is not possible to sustain exercise for very long at intensity that reduces VO_{2max} . Reilly does emphasize that:

The upper level at which exercise can be sustained for a prolonged period is thought to be indicated by the so called 'anaerobic threshold': this is usually expressed as the work-rate corresponding to a blood lactate concentration of $4 \text{ mmol} \cdot \text{l}^{-1}$, the onset of accumulation of lactate in the blood (OBLA) or as a deflection in the relation between ventilation and oxygen consumption with incremental exercise. (the ventilatory threshold) (p. 90)

Finally, Bangsbo (1994) enlightens us that three tests of significance have been purposely developed for soccer: the Yo-Yo Endurance Test, Yo-Yo Intermittent Test and the Yo-Yo Intermittent Recovery Test. In the Yo-Yo Endurance tests the players perform repeated 20-meter shuttle runs interspersed with a short recovery period that decreases rapidly as the test proceeds.

The time allowed for a shuttle is progressively decreased and is dictated by audio beeps and voice progress information on what level of advancement of the test the players are currently engaged. The aim of the test is to complete as many shuttles as possible. The test is finished when the player cannot complete the 20 meters in the allotted beep time.

The Yo-Yo Endurance Test is an evaluation of the player's ability to work continuously over a long period of time (endurance). The test is particularly useful for individuals at all levels of training that participate in endurance exercise, such as distance running. Based on scientific results it is possible to convert the test results to maximum oxygen uptake. The test normally lasts between 5 and 20 minutes.

Scientific studies have shown that a relationship exists between an individual's test results from the Yo-Yo Endurance Test (performed indoors) and his or her maximal oxygen uptake (VO_{2max} ; expressed per kg of body mass). Thus the test results from the Yo-Yo Endurance Test provide a good indirect measure of an individual's maximum oxygen uptake (Bangsbo, 1994).

It is clear that acyclic aerobic endurance is important for a soccer player. The shuttle run test is soccer-specific and was specially developed by Jens Bangsbo. The test measures endurance, but as the speed of the test increases, the players have to continuously brake and accelerate. During the test the player's heart rate is gradually brought to its maximum. The flow of blood through the muscles and rate of respiration also increase slowly but surely to a maximum. When the maximum heart rate is reached the body is producing the greatest amount of energy per unit of time. At that moment there are no further sources of energy available. It is therefore, not possible to accelerate to the next step of the test. The maximum heart rate, coupled

to the step reached in the shuttle test, is a measure of a player's aerobic endurance (Verheijen, 1998).

Anaerobic Capacity in Soccer

The notational analysis of sport performance is concerned with identifying critical events often referred to as performance indicators, in individual or team sports. Such events are thought to be keys to success in those particular sports. Although not exclusive, most performance indicators are discrete events (counts or frequencies), such as the number of successful passes or compared with the number of poor passes when in possession of the ball in soccer. An important duty of a notational analyst is to compare the frequency distribution of such events (Nevill, Atkinson, Hughes & Cooper, 2002).

Testing athletes' anaerobically in soccer calls for specific tests that the players are required to perform in a game situation. In the context of soccer, running is a multifaceted activity. Players constantly have to react to changing game circumstances by varying the route and speed of their biomechanical motion. Also, soccer is becoming more rapid and the space in which play occurs is diminishing. This is attributed to new tactical schemes utilized by defensive minded coaches. Now, players have to make more runs of different lengths to break down zone defenses and the feinting that is required that successfully assist the player attaining freedom from the opposition marker. The added number of sprints will always have the tendency of more sprints with abrupt directional change (Verheijen, 1998).

Speed off the mark is one of the most important physical attributes that a soccer player can possess. Soccer players are required to make many sprints over a short distance. The 10-

meter sprint is very appropriate for measuring the speed that soccer players can attain during the first 3 or 4 sprint strides.

Verheijen (1998) writes on the subject of starting speed and unequivocally states that recent scientific research into improving starting speed has demonstrated that the greatest gains can be achieved in the first stride sprint. During conditioning for starting speed the emphasis must be on the developing strength in the initial push off strides. A considerable energy flow is a prerequisite for explosiveness during the first sprint strides.

Soccer players will make various short sprints throughout the game. And, they have very little time sandwiched between sprints. Therefore, the players must be able to recover rapidly from fatigue. The more rapid the recovery, the more time it takes before fatigue has a negative effect on their sprint capacity. Conditioning for repeated short sprint capacity is analogous to that for starting strength. Five successive sprints of 10 meters are completed, with a rest period of 10 seconds between successive sprints. The top and the average sprint times can be evaluated, in addition to the decline in the sprint times. This latter aspect can be construed as a gauge of a player's capacity to recover (Verheijen, 1998).

The players are required to sprint over a distance of 30 meters three times. The initial time is not of consequence. The best times of the second and third sprints are important. In addition, there is a rest period of 5 minutes between successive sprints. The rest period prevents fatigue from influencing the test results. The stopwatch was used to time the sprints, however the participants themselves who had timepieces with them monitored the rest period.

Soccer Technique

The primary characteristic of soccer technique is that skill can be observed directly, technique is perceptible. Since technique is a direct experience, players are only too keen to acquire and develop this facet of the game. The drills and practice sessions associated with technique provide a greater sense of pleasure than the tough physical component of football (Csanadi, 1963). Historically, observational learning has been of interest to those who teach and study motor skills. It is a well known fact that if people practice a particular task, then performance does not diminish; as it would in a mechanical apparatus built to execute the task in question, but rather becomes more dependable, skillful, dexterous, and enduring in the course of practice (Beek, 2000). In its traditional form observational learning consists of the reproduction of a novel pattern of action following the visual observation of one or more correct performances of the new motor movement (Doody, Bird & Ross, 1985).

Lees (2002) considers it implicit, in the concept of technique that if a skill is performed with correct technique rather than improper technique, performance will be improved. However, he mentions that vigilance should be used when using performance as a gauge of technical skill. Other factors and variables can affect performance; therefore in some cases good technique customarily does not mean a good performance. Hochmuth (1984) confirms this assertion by insisting that other factors including psychological, anthropometrical and neuromuscular characteristics affect performance. Finally, Arend and Higgins (1976) report that the teacher (coach) who is a trained analyzer and observer of human movement will be better equipped to enhance the process of skill acquisition in their students.

Frequently skills that are vital components of team sports are assessed subjectively on the basis of their contribution to the game. In this study, the researcher pre-determined that the

technique used to receive a pass from a player was performed to the best advantage. In other words, did that player's skill result in continued or loss in possession of the ball. Also, Nevill, Atkinson, Hughes & Cooper (2002) describe notational analysis in sport performance and how this method is concerned with recognizing critical events, often referred to as 'performance indicators', in individual or team sports. Such events are considered to be keys to achievement in those events.

Although not exclusive, most performance indicators are discrete events (counts or frequencies), such as the number of shots on goal, number of positive passes, number of negative passes. An important responsibility of the notational analyst or the researcher is to compare the frequency distribution of such events over a range of categories such as first and second half of a game or in the study pre and post-test scores.

Morya, Ranvald and Pinheiro (2003) describe investigations in their research of the use of countermanding paradigms. This is a concept called 'a point of no return', the moment beyond which the response to a stimulus cannot be inhibited. Moreover, countermanding paradigms probe the participant's ability to inhibit the initiation of an intended movement by infrequently presenting an imperative stop signal in a reaction time task. The probability of not being able to stop the response – that is, responding even when the spot signal appears – increases with the stop signal delay. Clearly the ability to react quickly to changing stimuli and inhibit or modulate one's action accordingly is an important aspect of skilled behavior in sport, but little research has focused on this 'point of no return' in sport.

Coaches often make assumptions on the use of immediate feedback as the most applicable way to progress in skill maturity. Thus, it also is assumed that equipment that provides an immediate response is beneficial for learning. However, this may not be the case.

Sometimes it may just be as effective to give feedback information after some longer setback in a more specific and inadequate manner. This is because an over-exposure to criticism (too much information) might hamper performance if it is provided but not needed (Liebermann, Katz, Hughes, Bartlett, McClements and Franks, 2002). They also report that it is well documented that when feedback is supplied in a suitable manner, motor skill acquisition improves significantly. Consequently, feedback is a major factor in the improvement of sport skill performance.

Bolling (1994) offers an opinion on how impossible it would be to compare great football teams of the past and determine “the best team that ever played the game”, because teams that are successful often bring new ideas to the game. This has always been one of the main reasons for team success. But without skillful players there can be no success and, therefore, one of the most important reasons for the game’s improvement over time is the development of the player’s technique and physical capacity.

Individual skills range from the simple basis of possessing a soccer ball and keeping control, or playing the ball under pressure from an opponent. Precise technical skill adapted to a match situation enables the player to avoid losing the ball too frequently and then having to expend more energy in trying to regain possession of the ball. Individual skill is not a singular component, which can be explained, in conclusive terms; in fact, technical skill is continuously developing (Luhtanen, 1994).

Technique analysis is the term given to an analytical method that is used to understand the way in which sport skills are performed and, through this understanding, provide the basis for improved performance. It is primarily used within the teaching and coaching of sport skills and within the field of sports biomechanics, although it is equally applicable in a clinical setting. This

type of analysis has been practiced for many years. However, its development into a systematic process incorporating scientific principles and methods is documented from only about half a century ago with the publication of texts linking scientific principles to coaching practice (Lees, 2002). Hughes and Bartlett (2002) point out that notational analysis has focused traditionally on team and match play sports, studying the interactions between players and the movement and behaviors of individual team members. Those analysts have used simplistic measures such as the number of shots on goal during a game in football, although using ratios provides more meaningful information, such as; number of shots on goal to number of shots per game. The degree to which particular attention has been focused on general game displays, the tactical and technical indicators has made analysis a real contribution to our knowledge concerning the physiological, psychological, tactical and technical demands of numerous sports. Also, it should be noted that winners and errors are powerful indicators of technical proficiency and have often been applied in studies on net and wall games (Hughes & Bartlett, 2002). There has been exploration of stress resistance of skills learned either implicitly (with a small pool of explicit knowledge) or explicitly (with a large pool of explicit knowledge). Although the findings were not conclusive, evidence was produced that demonstrated that an implicitly learned skill is less likely to fail under pressure than an explicitly learned skill (Masters, Polman, & Hammond, 1993).

Decision-making in Soccer

In its evolution, soccer was first characterized by attack in play; then, progressively, the game evolved to a more defensive attitude. At the present time, there appears to be a balance between the two aspects of field play. In essence, tactical match play is the transition between

ball possessions (attack) and recapturing of the ball (defense) that has been dispossessed (Grehaighe, Marchial & Duprat 2002). Luhtanen, Vanttinen, Hayrinen and Brown expressed another point of view (2002b) on game understanding. This is defined as a player's ability to interpret tactical offensive and defensive game situations based on justifiable arguments for these solutions. Jean-Paul Sartre, the French philosopher, describes an ideal related to soccer tactics. He suggests that the course of a soccer match is an exciting and emotional event, within whose realms a constant alternation takes place between:

- Freedom and restriction
- Spontaneity and planning
- Individuality and group dynamics
- Options and power.
The individual players' options in unpredictable soccer situations veer, therefore, between these pairs of ideas, and a player's actions acquire meaning only when taken as a whole in the context of the actions of the team. The player's reaction has meaning for, and leads to action by, another team member. This develops a strong experience of connection and belonging, this creates a nice, sociable team feeling. (Bangsbo & Peitersen, 2000) (p. ix)

Franks et al., (1981) indicate that individuals who play within a team game are involved in three basic processes. They recognize a changing environment, they make appropriate choices relating to their perceptions and they select and effect a corresponding action. The speed with which a player can make a correct decision differentiates between a good and an average performer. The skill of decision-making has a profound effect upon the performance of individuals within a game setting. Williams (2000) asserts that the decision-making skill is attributed to the superior recall of the experienced soccer player, and this is credited to an enhanced knowledge base and more rapid and efficient retrieval of this information from memory.

The development of tactical thinking in most team games has revolved around the principles of possession. That is to say, in most ball games, possession of the ball is of paramount importance. Ball possession in team games is therefore at the apex of tactical reasoning, and therefore the first decision each team member must make is in relation to ball possession. Reports from several top class soccer games indicate that on the average during 90 minutes (game time); individual players come into contact with the ball for 90 seconds. It is therefore of paramount importance that all players understand all the alternatives in 'off the ball' behavior. If a player is not involved in possession of the ball and his/her team is on the offensive then the player's next decision relates to whether he/she can be directly involved in play. That is, can the player become an immediate target for a pass in the area of the ball? It is interesting to note that younger players, 12 and under, have a problem adapting to possession. One of the reasons why young players polarize around the ball in a swarming type fashion is due to their inability to see beyond direct involvement in play. This is largely a development problem and corrects itself when players become conscious of indirect involvement in team play (Franks et al., 1982).

In soccer circles, the above paragraph simply describes, 'Vision and Team Chemistry'. Team Chemistry is most often seen in championship teams, whereby, the athletes have the ability to abandon selfishness, play collectively and place petty grievances or personality conflicts aside when in the competitive team arena. Vision or seeing the whole soccer field is a metaphor for a rare ability in soccer players. This gift is not unlike the ability of a grandmaster in the game of Chess, where that individual can see numerous possibilities from the move just made by his opponent, and counter with a better move.

Ball sports fall into the category of externally paced sports, i.e., in which the constraints are determined by the opponent. In these sports, the player must deal with two types of tradeoff, which consist of producing an accurate motor response in the time allowed by the opponent, and the semantic sensory-motor tradeoff. This involves correctly allocating resources to the semantic aspects of the current situation in order to determine and prepare the sensory-motor mechanisms required for action (Ripoll & Benguigui, 1999).

In a discussion on the attributes affecting the mental assessment processes in soccer players Luhtanen (1993) in his introduction to his study on a statistical evaluation of an offensive action in soccer writes:

In soccer games, the players, coaches and spectators will get positive experiences when the attacking play is successful. This means a lot of offensive attempts, scoring chances and goals. Positive attacking play will in the future is a key point for attractive football. This may explain why the majority of match analysis has been related to attacking play. (p. 215)

Kuhn (1993) discusses anticipation – coincidence in his study to develop a test that differentiates between soccer players of different levels: “Passing into an open space and placing the ball accurately and timely for a teammates are important skills in soccer. This ability of anticipation-coincidence can be defined as the timing of an athlete’s response to coincide with a response triggered by an outside source.” (p. 244)

Individuals who play within a team game are involved in three basic processes. They perceive a changing environment, they make appropriate decisions relating to their perceptions and they select and execute a corresponding action. The speed with which a player can make a correct decision delineates between a good and average performer.

The performance indicators in football look to reflect the relative importance of the use of pace, space, fitness and movement, and how players use those features of performance, of

themselves and their opponents, targeting the technical strengths and weaknesses of the respective performers. Those features will be replicated in the ways that players and teams attack and defend against their opponents in soccer, and how the players utilize the areas in the playing environment and the assortment of playing actions necessary to make a contribution during the game (Hughes & Bartlett, 2002).

Bangsbo and Pietersen (2002) comment on the tactical component of soccer and suggest that analysis on performance should be based over a set period of time:

...you should maintain the general tactical aims while adjusting tactical issues in relation to day-to-day realities, such as squad changes, particular opponents, or a team's position in a tournament. You must employ this flexible thought process in order to keep adjusting-and possibly reevaluating-the tactical plan. Your tactical role has succeeded when, in a winning team, the connection between your main tactical principles, the current game's tactical concept, and the team's performance are visible. (p. 209)

The aim of a tactical training session is to improve the player's decision-making process when confronted with different situations during the game. Tactical performance in soccer is based on the player's application of tactical knowledge, skill and abilities. In order to improve tactically a player must have the capacity and a solid understanding of these three issues (Bangsbo & Peitersen, 2000). Therefore, McCullagh (2000) stresses the application of observational learning in a dynamic environment for assisting learners to acquire the perceptive abilities of their more experienced colleagues and their coaches. Furthermore, Franks, Wilberg, and Fishburne (1982) state that individuals who play within a team framework are involved in three basic processes. They perceive a shifting environment, and they will make appropriate considerations relating to their awareness and then they choose and execute a corresponding action. The speed with which a player can make a correct decision delineate between a good and an ordinary team performer.

The essence of the coaching training session has to be questioned if the process of decision-making is absent (Franks et al., 1986). Tactical performance indicators seek to reflect the relative importance of the use of pace, space, fitness and movement, and how players use these aspects. From work on deliberate practice Helsen, Hodges, Van Winckel and Starkes (2000) note that, as soccer players develop, they routinely devote more hours of practice each week. This is not only consistent with other domains, but also necessary and desirable.

Psychology in Soccer

Learning and learning theory is of strong interest in the United States, and a powerful influence on human learning has been E.L. Thorndike. Any discussion of learning, whether it is applied or basic, must pay its historical debt to Thorndike. In 1898, when the rest of psychological researchers were concerned with the properties of consciousness and the association of ideas, Thorndike was working on an objective, behaviorist work on animal learning. From this early work he stated that the Law of Effect, was a theoretical statement of rewarding and punishing events that determine behavior (Adams, 1971).

Human beings are constantly engaged in the process of assessment in order to comprehend, predict, and control themselves and their world, people must be able to evaluate and assess. They assess the physical and mental skills and abilities of those they are employed with and compete against. Furthermore, assessment aims at enhancing your ability to understand, predict, and control behavior. To accomplish this objective you must first accumulate relevant data and typically the data that goes into an everyday assessment recipe includes past history, behavioral observations, interview information and opinions (Nideffer & Sagal, 2001).

Skilled perception is an important determinant of sports expertise. This is certainly the case in soccer, where players are confronted with a complex and rapidly changing environment. Players must pick up information from the ball, teammates and opponents before deciding on an appropriate response based upon current objectives and action constraints. Such decisions are often made under pressure, with opponents attempting to restrict time and space needed to perform. This temporal pressure suggests that a player's ability to anticipate future events, from early components of action sequence, is an integral part of skilled soccer performance. Consider, for instance, the unhurried actions of talented defenders when intercepting an opponent's pass, suggesting that they have all the time in the world. This ability to read the game distinguishes good skilled players from less skilled players (Williams, 2000).

Two competing theories have been proposed to account for decrements in skilled performance under pressure. Distraction theories propose that pressure creates a distracting environment that shifts attentional focus to task-irrelevant cues, such as worry about the situation and its consequences. Self-focus theories suggest that pressure raises self-consciousness and anxiety about performing correctly, which increases the attention paid to skill processes and their step- by- step control (Bellock & Carr, 2001).

The Test of Attentional and Interpersonal Style Inventory was taken by the study athletes to assess and help predict how an individual will perform under a variety of circumstances. To understand how an individual is going to behave, the best sources of data are:

- Close observation over a long period of time
- A lengthy and exhaustive interview conducted by a highly skilled assessor.

From the knowledge base of clinical psychology come tests designed to assess personality and emotional problems. Making this sort of information useful in the sports or

business world requires years of experience and a great deal of clinical skill. The possible information gap these tests could provide in making immediate business decisions is immense. Furthermore, at the opposite end of the continuum are highly specific tests designed by researchers for use in certain, specific selection situations. Those types of tests are derived typically through an empirical process where numbers determine reality. Also, those tests lack any grounding in any theory of human performance and are usually a face valid combination of traits, characteristics, or behavior styles (Nideffer & Sagal, 2001).

The cognitive processes during a game are all based on the way information is processed and analyzed. The process has four phases: perception, including attentional regulation; anticipation (assessment); preference of action; and information return (Bangsbo & Peitersen, 2000). Furthermore, those same authors comment on these unique psychological abilities:

Good soccer players are quite perceptive; they understand and analyze the game situation very quickly. They have developed this ability through countless situational interpretations and experiences. Memory and experience are important prerequisites for gaining good anticipatory abilities. Having collected many experiences through time, a player has a good basis for 'reading the game'. This element, however, is not just about having years of experience, but is also built up by training in specific tactical situations for a concentrated period of time... To reinforce choice of the correct actions, the coach must provide feedback about the results of their actions. A player can personally assess the appropriate action and add it to one's long-term memory bank (Bangsbo & Peitersen, 2000). (p. 58)

Williams (2000) is in agreement because he states skilled soccer players are better than their counterparts because they identify and recollect structured patterns of play because their knowledge allows them to 'chunk' or group perceptual information into larger and more significant units. This capacity allows the skilled player to recognize the evolving features of pattern of play early in its initiation, thereby facilitating anticipation. Furthermore, Williams (2000) also asserts that quality players' display advanced cue utilization. Advance cue utilization

refers to a player's ability to make accurate predictions based upon an opponent's posture and bodily orientation. This capacity to expect an opponent's actions based upon partial or advance sources of information is indispensable because of the time constraints placed on the athlete, particularly in fastball sports.

All the study participants had taken the (TAIS) instrument. The difficulty was in providing a computer laboratory that could hold my students as well as an appointment time when I might have the student take the test.

Finally, in their efforts to interpret and comprehend the events and behaviors encountered within the emotionally laden and socially rich environment provided by athletics, researchers in the field of sport psychology have adopted the attribution theory. The sport-oriented investigators interested in causal explanations for achievement behavior, individual effects, and expectancy of success have been predominately channeled by Weiner's model of causality. One of the most essential aspects of this model concerns the causes (attributions) which people use to clarify the outcome of their participation in achievement-related situations (Belcuig, 1991).

Researching Soccer Athletes in Their Own Domain

Sport Ethnography

Studying athletes in their own unique environment is now the domain of researchers with a different point of view than those trained in ethnography and anthropology.

Sands (2002) discusses sport ethnography as not simply a field guide to doing ethnography in sport studies, nor is it a collection of methodological case studies that illustrate field technique in specific sport situations: "Doing good ethnography is more than recording

behavior through a video lens or a microphone, catching behavior in a snapshot, or describing it in a notebook. Doing good sport ethnography demands more than reading one of the many textbooks and applying its concepts.” (p. xxi).

Ethnography is an alternative and legitimate method for qualitative researchers to represent their findings. Sands (2002) writes that the steps of ethnographic process has developed from the early work in anthropology. To reside with the inhabitants, envision the stage of cultural behavior as a living laboratory; place yourself within the network of social relations, and be precise in your data recording, using both observation and participation. Most importantly, preserve at all costs the objectivity that the science of anthropology was built on.

According to Atkinson and Hammersley (1994), defining the term ethnography has been subject to controversy. They note an array of positions between the following two extremes. For some, it refers to a philosophical paradigm to which one makes a total commitment. In contrast, for others, it assigns a method that one uses as and when appropriate (Holt & Sparkes, 2001). In their article, *Manifesto for Ethnography* the authors Willis and Trondman (2000) expand appropriately on the direct point of view in the latter sentence by stating:

What is ethnography for us? Most importantly it is a family of methods involving direct and sustained social contact with agents, and richly writing up the encounter, respecting, representing at least partly in its own terms, the irreducibility of human experience. Ethnography is the disciplined and deliberate witness-cum-recording of human events. As arguably the first ethnographer, Herodotus, said in arguably the first ethnography, *The History* (1981: 171)⁶, ‘So far it is my eyes, my judgment, and my searching that speaks these words to you’. ‘This-ness’ and ‘lived-out-ness’ is essential to the ethnographic account: a unique sense of embodied existence and consciousness captured, for instance, in the last line of Gerald Manley Hopkins’ poem ‘As Kingfishers’, ‘What I do is me: for that I came’. The social body is the site of this experience engaging ‘a corporeal knowledge that provides a practical comprehension of the world quite different from the act of conscious decoding that is normally designated by the idea of comprehension. (Bourdieu, 1999: 135)

⁶ Herodotus *the History*, trans. D. Greene, (Chicago: Univ. of Chicago Press, 1987) 171.

Participation and observing produces a broad angle view of cultural behavior. Flowing from the currents of culture reality, the ethnographer learns and assimilates much. However, at some point, the fieldworker must focus attention on the personal lives of people, either to have concepts clarified, to have behavior explained, or to understand the effects of behavior on individuals (Sands, 2002). Holt and Sparkes (2001) cite an article by Wolcott who considers the observation element of the participation observation roles as always facing the difficulty of what to look for and what to look at, “and the never ending tension between taking a closer look at something versus taking a broader look at everything.”

Lees (2002) has determined that there are three main steps in the qualitative process – observation, evaluation and intervention. There have been several aids developed for the methodical use of observation. Evaluation is the defining process of the qualitative method and refers to the way ‘introspective judgments’ are made about the performance (fault diagnosis). Three key approaches have been used for this. The intervention process has received little direction from authors and so this aspect of the qualitative approach is not a consideration. The evolvement of ‘phase’ and ‘temporal analysis and ‘critical features’ can be used to support systematic observation.

Giulianotti (1995) points out that the first recognized definition of ‘participant observation’ is credited to Lindeman and is as dichotomous as it is literal. He guarantees the researcher’s full engagement in the subject’s activities (participation) and the professional distinction of the discipline (observation):

The term [participant observation] implies not that the observers are participating in the study but that they are participating in the activities of the group being observed... There are few such persons available and those who are must be trained. Such training involves its own difficulties. Shall the participant observer be trained to look for exactly the same

factors that the observer from the outside seeks? This method would inevitably lead to error for the participant observer should be free to see many things that the outside observer can never see. (Lindeman, 1924, p.191, quoted in Bruyn, 1966, p.13)

Sands (2002) provides some critical features that provoke a suitable frame of mind in the field worker. With the understanding and application of these criteria the ethnographer will examine his or her cultural beliefs throughout the process of a fulfilling experience: participant observation; the relationship between research and participants; the social or physical parameters where participated behavior is observed; the emotion of culture shock; and reciprocally constructive connection with participants; the fieldwork time frame.

Despite the importance of behavior observation as a method in a wide range of disciplines, Newtonson (1976) asserts that we know relatively little about the process of behavior observation itself. However, De Bono (1968) considers it more than possible for a great many new ideas to come about when new information is gathered from observation or experiment:

New information is probably the surest road to new ideas, but it is still unreliable, for mostly the new information is explained by the old theory and fashioned to support the theory. . Although new information can lead to new ideas these can also come about without any new information at all. It is perfectly possible to look at all the old information and come up with a very worthwhile new way of putting it together. The most perfect example of this is, of course, Einstein. Einstein did no experiments, gathered no new information, before he created the theory of relativity. Since he contributed nothing except a new way of looking at information that had been available to everyone else. (p. 20)

However, according to Guilianotti (1995) there are three significant overlaps in the use of participant observation by anthropologists and sociologists:

First both are driven by Malinkowski's (1926, p. 146) famous refrain that the researcher "relinquish his comfortable position on the verandah," to find out what is exactly occurring in arcane communities. Second, there is an implicit in studying communities typically considered to diverge significantly from the "normal" practices and mores of Western society. And third, both disciplines generally provide an empathetic presentation of these deviant communities, utilizing a relativistic approach to knowledge and social values. Upholding Weber's method of *verstehen*, Becker (1967, p. 247) notes that the

participant observer in a prison must observe “through the eyes of the inmates and not through the eyes of guards or other involved parties.” (p. 2)

It has been noted by Sparkes (2002) that, in recent years, considerable attention has been devoted to the uses of autobiography: “Against this backdrop, some scholars in the social sciences have used their own experiences for analysis and have produced what have been called narratives of self or auto-ethnographies.” (p. 73)

Such an approach recalls events from the author-as-researcher’s life, and these events then form the foundation of a written narrative that facilitates interpretation from a variety of theoretical perspectives (Sparkes, 2002).

Finally, it would be most suitable to cite Elias (1987) on what his perceptions are on detachment and involvement on phenomena and attempt to correlate those opinions as they might possibly relate to this research or to sport ethnography as a whole:

The way in which individual members of a group experience whatever affects their senses, the meaning that it has for them, depends on the standard forms of dealing with, and thinking and speaking about, these phenomena which have gradually evolved in their society. Thus, although the degree of detachment shown in one’s encounter with natural forces may vary from individual to individual and from situation to situation, the concepts themselves which, in societies like ours, all individuals use in thinking, speaking and acting – concepts like “lightning”, “tree” or “wolf” no less than “electricity”, “organism”, “cause” and effect” or “nature” – in the sense in which they are used today, represent a relatively high degree of detachment; so does the socially induced experience of nature as a “landscape” or as “beautiful”. The range of individual variations in detachment, in other words, is limited by the public standards of detachment embodied in modes of thinking and speaking about nature and widely institutionalized use of natural forces for human ends. (p. 5)

Since ethnographers attempt to observe everything within the setting or situation they might be observing, in a sense they do not sample at all. In addition, to the extent that what is observed is only a portion of what might be observed, what a researcher examines is, therefore, a de facto sample of all the possible observations that might be made. And, the samples of persons

considered are typically small (a few individuals, or a single class) and do not sanction generalization to a larger population (Franks & Wallen, 1993).

Fusion of Qualitative and Quantitative Inquiry

Glesne (1999) distinguishes between the ethnographic researcher and a journalist by the latter's tendency to swoop in and swoop again. The ethnographic researcher means to stay in the environment long enough to get a full description and deeper understanding of events. The central theme of participant observation is to understand the research the setting, its players, and their behavior. Achieving this outcome requires patience, time and a learner's attitude. In describing the participant-observation process, Glesne (1999) writes:

In everyday life you observe people, interactions, and events. Participant observation in a research setting, however, differs in that the researcher carefully observes, systematically experiences, and consciously records in detail the many aspects of a situation. Moreover, a participant observer must constantly analyze his or her observations for meaning (What is going on here?) and for evidence of personal bias (Am I seeing what I had hoped to see and nothing else? Am I being judgmental and evaluative?). Finally, a participant observer does all of this because it is instrumental to the research goals; this is to say that the observer is present somewhere for particular reasons. In your ordinary, everyday life, you may be a good observer of the interaction around you, but you do not consciously record and analyze what you hear and see in the context of particular goals that direct your behavior. (p. 46)

The human observer is an enormously valuable, flexible instrument for behavior research, capable of detecting and abstracting extremely complex organization in behavior. Complete use of competent observation requires that we understand not only what the observer knows, but also how he or she came to know it, so that his or her insights may be accurately communicated to others. The study of the process of behavior observation is a step in that direction (Newson, 1976).

Davids, Lees and Burwitz (2002) point out that both qualitative and quantitative methods have enabled the general characteristics and development of soccer skills such as kicking to be determined. For example, biomechanical analyses of movement skills use qualitative and/or quantitative methods. The qualitative analysis is based on observations of skilled actions, enabling them to be explained in both performance and general mechanical terms. This characteristic is useful for identifying global characteristics and providing predictors of skill, and it offers a method for quickly and rapidly distinguishing between performances, both between individuals and within an individual, as factors such as physiological status and skill change. With practice, individuals can develop considerable ability in distinguishing how skills vary from one performance to another. Such an approach is the preferred method adopted by sport coaches. The detail or accuracy of a qualitative analysis can be increased by using viewing aids such as repeated slow or stop frame video recordings of the skill. In addition, quantitative analysis can add to this by offering more precise information about a skill and is based on biomechanical measurements made directly or from a recording of movement (Davis et al., 2002).

The qualitative analysis of performance has been the focus of many articles and research (Brackenbridge & Alderson, 1985; Thompson, 1985; Franks, Goodwin & Paterson, 1986; Franks & Goodman, 1984; Franks, Goodman & Miller 1983). In effect, those writers had originally proposed that in order to acquire relevant sporting data, an all-inclusive analysis system should be developed to aid the coach. Several technological advances have been made in developing micro-computer managed systems for data recording in such sports as field hockey, soccer, wrestling, water-polo, volleyball and fencing. However, the essential concept is not that computers and video recorders can be used to gather relevant data, but that the information

pertaining to key aspects of performance is objectively recorded and stored. Franks et al., (1986) (cites Thompson, 1985) illustrate this fact unmistakably when he describes a simple pencil and paper method of accumulating match play data during a soccer game.

Franks et al., (1986) report that the coaching of a technique relies heavily upon observation and analysis carried out in order to effect performance improvement. If analysis is to be the yardstick by which change is measured, the process used to analyze performance becomes a critical component of the coaching procedure. Several recent studies have shown that the observational skills of coaches during competitive events are both inconsistent and erroneous (Franks & Miller, 1986; Franks, Elliot & Johnson, 1985; & MacDonald, 1984). Factors that are known to influence the accuracy of these observations are the magnitude of the event; the nature of the observation medium; the attention focus and the priming for predictable events (Franks et al., 1986).

Accordingly, Lees (2002) provides insight into the concept of technique in sports as:

A specific sequence of movements' that appears to be well established in sports literature, but the concept of technique analysis is less well developed. Although several descriptive and analytical goals for technique analysis can be identified, the main justification given for its use is to aid in the improvement in performance. However, the conceptual framework underpinning this process is poorly developed with a lack of distinction between technique and performance. The methods of technique analysis have been divided into qualitative, quantitative and predictive components. Qualitative technique analysis is characterized by observation and subjective judgment. (p. 813)

Scruton et al., (1999) are in agreement with other scholars that the significance of qualitative accounts are prioritized allowing sportswomen to articulate their own feelings about being women who play and enjoy sport. The researchers are mindful that dialogue related to gender must be culturally and traditionally located and they are aware of the positive contribution of post-modernism and post-structuralism to the understanding of gender, they

remain apprehensive that many of these accounts discard or overlook structural and cultural contexts. Finally, Denzin and Lincoln (1998) report that the diversity of approaches, methods, topics and epistemologies noted in their writings on qualitative inquiry, suggest that a major question for qualitative feminist research will be the degree to which these various approaches speak effectively to sociology for rather than about women.

The Participant Interviews

The qualitative research interview is theme-oriented and not person-oriented. Two people are discussing a theme, which is interesting to and important to both persons. The resulting interview may then be analyzed primarily with respect to the life-world that is described by the person, or with respect to the person who is describing his/her life-world (Kvale, 1983).

According to Bloot and Browne (1994) the flexible nature of the interview allows clarification and more comprehensive data to emerge. The rationale of the interview was to acquire data about the males' and females' personal experiences, opinions and constraints on their sport involvement, contrasting to determining factual information about the informant's knowledge base (Dowling, Potrac, & Jones, 2002).

The interview questions were developed and related to the literature review and a study on gender relations in physical education by Flintoff (2001). To be precise the interviews were 'semi-structured.' They can be described as neither a free discussion nor a highly prearranged questionnaire. The interviews were carried through following an interview-guide, rather than containing, then asking exact questions, focused on certain themes. The interviews were taped and transcribed word for word. The typed out description together with the cassette constitute the material for the subsequent clarification of meaning.

Kvale (1983) states that the mode of understanding in the qualitative research interview can be briefly outlined in 12 main aspects. The first aspect (a) is based upon the interviewee's life-environment; (b) is an attempt to find and understand the meaning of phenomena in his life-environment; it is (c) qualitative, (d) descriptive, and (e) specific; it is (f) pre - supposition less; it is (g) focused on certain themes; it is open for (h) ambiguities and (i) changes; it depends upon the (j) sensitivity of the interviewer; it takes place in (k) interpersonal interaction, and it may be (l) a positive experience.

Flintoff and Scraton (2001) cite the influence of Feminist methodology debates for using in depth group and individual interviews. Feminists argue that a more complete understanding of women's lives comes from an acknowledgment of the multifaceted, interrelationships between different parts of their lives. Sport and physical activity involvement cannot, for example, be detached from their roles as mothers, daughters, wives or their roles in paid employment.

The interviews in this study were structured around key subject matter and were intended to supply the principal reasons for female participation in sport, the impediments to learning in a co-ed environment, the distraction and presence of the male or female in this milieu, the motivation within and outside gender to perform in the different components of the sport in question.

Qualitative information gathering techniques were used in this study. The selection of methods included formal and informal interviews, field observations, and document and testing protocol data. Notes were taken throughout the study and provided ideas for questions in both the individual and group interview. Also, questions were drawn from the collected current literature and used with observable data. Each participant was interviewed formally prior to the completion of the study for the purpose of obtaining study perspectives and background information. The

interviews lasted approximately 30 minutes to one hour and were given before and after games and practice sessions. The group interviews were given after the training sessions, with anyone who had a point of view or comment speaking up. Also, a contrasting view point of qualitative methods of data collection are advocated by Culver, Gilbert and Trudel (2003) as the likelihood of achieving depth and comprehensiveness in an interview is relative to the opportunities given to the participants to express themselves. Also, we presume that many research questions in psychology require only the interview method. Might it be possible that interviews alone do not thoroughly capture processes under inquiry:

Ethnographic interviews take on an art form. As Sands (2002) reveals in his craft: The fieldworker must apply the brush strokes of timing for certain questions, choose aggressive versus passive direction, determine the amount and kinds of information requested by questions, decide how many subjects to interview at once and whether to interview individuals or groups, choose a location for the interviews, and allow the subject and tenor of the interview to set the pace of information kind and flow. (p. 66)

In-depth semi-structured interviews were conducted with 7 young women and 6 young men ages 15-17. All the interviewees were chosen because they were actively involved in competitive club and high school soccer and played important roles in the research study. Coakley and White (1986) insist that it is not easy to use interview data as a basis for making conclusions. Such data cannot be used to generate statistics that can be compared and analyzed apart from the lives of those being studied. The interviews do provide information beyond the sometimes-superficial responses elicited by survey questionnaires sent to a large sample of respondents. Furthermore, the challenge in analyzing interview data is in identifying patterns in the responses of different individuals and highlighting important content in a wide range of information given by each respondent. Kvale (1983) has indicated that the analysis and interpretation of a completed interview has been far less treated in the literature than the

interview situation. A key difficulty of analysis is: how should wide-ranging interview material be structured for efficient analysis? What does one physically do, faced with many pages of typed out interviews? The strictly quantifying forms of content analysis in the positivist science oriented traditions are difficult to apply meaningfully in practice. And in the clinical tradition the phase of interpretation has tended to be left to the experienced clinician's intuition. Two of the interviews with the females were of a non-standardized nature. The phenomenological interview is a process that allows the researcher to learn more about a particular person's experience without having a set of pre-determined questions. The session begins with a particular question to provide guidance to the interview. After the initial response, another question is asked based on the response, and this continues throughout the interview. This method allows the interviewee to be the expert on the subject and be in control of the discussion. The researcher's expertise and responsibility is focused on the process of asking pertinent and effective questions (Dale, 1996).

Video Analysis

Glesne (1999) indicates that photography and videotaping techniques can enhance observation and they can be used in an assortment of ways. She cites Grimshaw's (in Botorff, 1995) description of the primary advantages of videotaping as *density* and *permanence*. The density of data collected with videotape is greater than that of human observation or audio recording, and the nature of the record is permanent, in that it is possible to revisit the observation repeatedly. However, Franks (1988) considers the analysis of a sporting situation as conjecture that there is some natural organization and predictability within the situation.

Sport biomechanics and notational analysts are concerned with the analysis and improvement of sport performance. The practitioners of both make extensive use of video

analysis and video-based technology. The issues that are common to both biomechanics and notational analysts include optimizing feedback to the performer and coach to improve performance. Other common issues include the management of information complexity, addressing the reliability and validity of their data, and the exploitation of the approaches and methods of artificial intelligence. Investigators from both disciplines study patterns of play involving the individual or constellation of individuals.

A performance indicator is a selection, or combination, of action variables that aims to define some or all aspects of performance (Hughes & Bartlett, 2002).

In most conditions, during the training session, players are active in correcting errors. On occasion, some coaches will use alternate aids to provide external visual feedback, e.g. videotaped replays of the game that can assist in the assessment of performance of players during the game. Leiberman, Katz, Hughes, Bartlett, McClements & Franks (2002) discuss the influence of videotape analysis:

Although video technology originated in the 1950's, its use in coaching is an innovation less than two decades old. Its attractions for use in training are its relatively low cost, accessibility and portability. It is affordable for most field workers and, perhaps, already the most popular technology in sport. However, using this medium requires performers to adopt a passive attitude. Individuals watching their performances cannot always control the feedback information received during a video presentation. The feedback is delayed until the task is complete and, therefore, cannot always be associated with the internal sensory information at the time of motor execution. Moreover, the information available may often exceed the athlete's processing ability; thus, additional guidance may be required, particularly with inexperienced young athletes. In such cases, the coach's role is to guide and help in associating the visual feedback generated by the presentation of the video movie with the expected results. (p. 765)

Soccer-Specific Performance Testing

Bangsbo's (1994) made observations that there are several reasons as to why performance testing can be beneficial in soccer, however a test is only effective if it is specific or relevant to the game. Also, the testing conditions are the equivalent from one occasion to the next. This enables a comparison of results with future tests. Furthermore, this practice will increase the participants' validity of the test.

Hughes and Bartlett (2002) comment on performance testing and have determined that if a single set of data (indicators for a performance of an individual or a team) can give a distorted impression of a performance, by ignoring other, more or less important variables. From their reviews of recent research and the work of many consultants, it is clear that many analysts do not give sufficient data from a performance to fully represent the significant events of that performance. The researchers believe that presenting data from both sets of performances is not enough to elucidate on the performance. Polman, Walsh, Bloomfield and Nesti (2004) extend this opinion by indicating awareness to one problem in a team sport like soccer is establishing precise performance measures. One can, identify aspects such as work rate; number of sprints made or passes accomplished. Such quantitative data, fails to provide any information regarding their quality or the necessity of these actions. Assuming the role of researcher I find this statement indistinct. The player has a positional role within a team he or she must fulfill that particular role. A defensive marker must close down the opposition forward, however, the role grows dependent on the situation, and he or she has small group responsibilities, e. g. as a back four player utilize the off-side trap. The role expansion continues, because primarily the player is a defender this does not exclude him or her from participating in an attacking role.

Bangsbo (1994) has determined that performance tests for soccer can be designed to cover the technical, tactical, psychological and fitness components of the game. He also asserts that testing should have a purpose, therefore, clear objectives should be defined before selecting a test. There are several good reasons for testing players including:

- Research
- To study the effects of a training program
- To motivate players to train harder
- To give players more objective feedback
- To make players more aware of the objectives of practice
- Evaluate whether a player is prepared to compete in a match
- To plan and implement short and long-term training programs (Bangsbo, 1994).

Testing is used because sport psychologists believe the resulting information will be accurate and useful in developing programs for performance enhancement. At times, however, the testing process and the information provided by tests can be useful even if the information is inaccurate or irrelevant (Nideffer & Sagal 2001).

In adding a note of caution for athletes Rainer (2001) asserts that managers and coaches may be naïve to the fact that players may be compromising fitness over a season by overplaying. While symptoms developed are not as serious as full blown over-training syndrome, accumulated fatigue caused by constant playing and insufficient recovery may place players on the over-training continuum, such that players enter games not fully recovered from previous engagements. Eventually, this could lead to a decrease in performance, vulnerability to injury and immuno-suppression. It would seem currently those methods of fitness evaluation need to be

re-addressed, so that players can be scrutinized continually to identify the indicators of fatigue before they develop further.

Despite the universal nature of soccer and a formal history extending back over a century, there are still many uncertainties concerning its physiological requirements and optimum training and conditioning methodology. Possible explanations include the importance placed by many players and mentors on the skill aspect of the game, sometimes to the neglect of the fitness requirements; the methodological complexity for sports scientists of investigating such an open and varied sport; the conservative nature of a sport in which many coaches are former players who prepare their team just as they were once trained; and the evolving nature of the game, in which strategy, tactics and the functionality of players continue to change (Tumulty, 1993).

All actions in soccer vary in time, space, speed and direction of the movement. Thus, any individual action by a player can be considered as a random test for individual skills, physical abilities, tactical understanding and team proficiency. Also, MC Gregor, Hulse, and Strudwick (2002) point out that within the game of soccer, work-rate is insufficient for success unless allied to and coordinated with basic skills of the game. The traditional approach to soccer coaching is technical - tactical development of the players. However, fitness is incorporated in all of those training sessions and the psychological growth of the player will closely parallel the three other aspects (Luhtanen, Vanttinen, Hayrinen & Brown, 2003).

The information gained from soccer tests can be set up to accomplish short and long term goals optimize individual training strategies, and most importantly the players' physical, technical, tactical and psychological profiles will provide data which can be used for comparison purposes (Balsom, 1994). In addition, it is also important to understand more about the physical limitations of performance during match play; sport scientists need to test both male and female

soccer players. Once the rationale for testing has been clearly defined, the appropriate test or tests must be selected and implemented. Some factors of importance related to testing in soccer are: specificity, reliability, and feasibility. Specificity in football simply means that a recorded measurement is applicable to football. Reliability is the test – retest reliability and refers to how reproducible the test can be.

There can be many reasons for testing an athlete. Obviously, in this example to study the effects of training in a distinctive environment, or to use as a reference for the future planning of instruction, or to test to determine whether an athlete is prepared for competition. Bangsbo (1996) discusses some general requirements for testing.

In order for fitness tests to be reliable, certain factors have to be considered before performing the test:

- The athlete should be well rested but thoroughly warmed up
- Any equipment should be in good working order and the test areas should be accurately marked
- The athletes should be given clear instructions on how to perform the test
- The athletes should have performed the test on at least one prior occasion, on a different day, before a test result can be considered valid
- The athletes should be aware of the aim of the test.

Also, it is essential that the testing conditions are similar from one occasion to the next. This enables a comparison of the results with previous and future tests. It also increases the participants' faith in the test. The conditions given under points 1) and 2) ensure that these requirements are met. Being well rested before a test means that the athlete should not have performed intensive exercise on the day before or on the day of the test. (p. 2)

Also, to be useful a test must have high validity, which can be demonstrated by a strong relationship between the test results and the physical performance of the athletes during games.

This comparison is complicated by the fact that a single measurement obtained from match

analysis may not express the soccer-specific endurance capacity and the true physical ability of a player may not be demonstrated in any given match due to tactical limitations (Bangsbo & Lindquist, 1992).

Balsom (1994) reports that an essential component of any testing program is to interpret the test results and provide direct feedback to the athletes involved. Players too, may react differently to the same testing program due to variables such as physiology, existing training status and personal motivation. However, the researcher does attempt to find a plausible explanation if players are not within the same fitness parameters of their teammates. In addition, Eccles and Harold (1991) point out that according to several theorists, it is not success or failure per se, but the interpretation one makes about these outcomes that influences future performance expectations.

Soccer is also described as a dynamic game in which many of the important skills to master are interceptive actions, such as kicking with the lower limb, heading and, in the case of the goalkeeper, catching and punching the ball (Davids et al., 2002). Also, anyone who looks at a soccer game can recognize that this sport is physically challenging. What distance do players actually cover during the game? How do the athletes cope with the physical and mental requirements of match play? What should the conditions for preparation be? Bangso (1994) reports that: “In recent years scientific studies have provided a substantial amount of information in regard to these issues” (p. 110).

Performance analysis of sport has been used primarily to inform the coaching process. Objective information about an athlete’s performance can be assessed to design practice sessions that will aid in the modification and adaptation of athlete behavior. Consequently, the practice session itself can be considered a critical element in the development of skilled athletic

performance. During this session, effective instruction may be crucial to the pursuit of optimal sporting performance, the more effective the instruction, the more the instructor's role will benefit individual and team performance. Such instruction requires the application of skills that range from development and structure of learning experiences to the presentation of instructional and feedback information (Hodges & Franks 2002).

Bauer (1993) comments on the many factors that influence the daily performance of a soccer player. The following are of particular importance and will be alluded to and assist in providing, hopefully, a bounty of information:

- The player's overall psychological and physiological characteristics
- His or her natural inherent attributes
- The degree of his or her technical and tactical skills and their fitness
- His or her education
- The player's lifestyle and nutritional habits
- The attitudes and influence of parents, siblings and friends
- Peer pressure at school and employment responsibilities
- The extent and quality of past training experiences.

Soccer is considered a total physiology sport. A soccer player is a combination of a sprinter and a marathon runner; he/she must perform with short bursts of power and speed, but also have the ability to keep moving for ninety minutes or more. In this regard Bangsbo and Lindquist (1986) draw our attention to this fact:

Thus, a soccer player needs a well-developed ability to perform high intensity activities frequently during long-term exercise. A lack of this physical capacity may limit the performance of a player during soccer matches. Therefore, it is important to test this capability, which will be referred to as soccer-specific endurance capacity. (p. 125)

The actual distance that a player covers during a game depends on playing position, individual and team tactics and style of play. However, when the game has concluded the player may have traveled up to 13km (8 miles) and sustain a mean work rate of about 75% of maximum oxygen uptake, and there will be an appreciably low glycogen content in the leg muscles at the match conclusion (Bangsbo & Lindquist 1992).

In their research, Hughes and Bartlett (2002) describe a performance indicator as a selection, or combination, of action variables that aims to define some or all aspects of performance. Clearly, to be useful, performance indicators should relate to successful performance or outcome, because analysts and coaches use performance indicators to assess the performance of an individual, a team or elements of a team. They are sometimes used in a comparative way, with opponents, other athletes or peer groups of athletes or teams, but often they are used in isolation as a measure of the performance of a team or individual alone. Finally, Leibermann et al. (2002) infer that coaches regularly strive to improve performance of athletes. The most important aspect of their role is to provide the athlete with a practice environment that is conducive to effective and efficient learning.

Summary

According to Kessler et al., (1987) gender relations are historical. The pattern they assume in any society is produced by its particular history and is always a process of transformation. Even when change is slow to the point of being invisible the principle should always be kept in mind; because it directs attention to the ways in which the patterns of gender that are constantly being promoted in everyday life (Cunningham, 1989).

During the last 30 years, participation in women's soccer has expanded exponentially;

with approximately 3 million registered participants in the United States, it is one of the fastest growing sports in the world (Cox & Thompson, 2000; Krane, 2001). However, in terms of actual research in gendered relationships Renold (1997) reports that the focus has often concentrated on and prioritized the experiences of one sex over another and has thus not explored the complexities and contradictions embedded in the dynamic relationship of boys and girls' experiences in school and sport. She continues her composition by stating that there has been a scarcity of studies investigating the gendered nature of sport and sporting activities within the everyday playground experiences in schools that exceed more than an inert representation of the traditional and sometimes dualistic idea of boys and girls' sports. However, White and Brackenbridge (1985) contradict that viewpoint by stating that most studies on sport and gender have addressed questions relating to performance and participation rates of women as athletes. What is more, they claim that any improving standards of performance and increases in women's participation in sport are well documented. Furthermore, they view the economic market as male dominated and the analysis of trends since the 1960's reveal little change in the percentage of women occupying positions of power. In fact, the opposite is true, as it appears women are losing some of the power they used to enjoy. I think this is contrary to what I have read regarding the goals of feminism. Has the quest for power eliminated the goal for equal opportunity?

Finally the review is quite comprehensive and is a conscious effort to examine in as much detail any literature that would answer questions relating to gender prejudice, participation and impediments in youth sport, male dominance in sport and the hair splitting that feeds possible biases reported by many female researchers in the domain of sport. In modern society for example the male athlete still dominates the athletic terrain. Some studies show the female athlete has closed the gap and rendered chauvinism ineffective. In particular, the research will

elicit data in various ways from co-ed adolescent athletes that have been participating in soccer competitively for most of their lives.

CHAPTER 3: PROCEDURES

Introduction

The human observer is an enormously indispensable, flexible instrument for behavior research, capable of recognizing and abstracting enormously complex organization in behavior. Full application of skilled observation requires that we understand not only what the observer knows, but also how he came to know it, so that his insights may be accurately communicated to others (Newson, 1976). This opinion is endorsed by Palomino, Rigotti and Rustichini (2000) as they consider observing subjects in their natural environment, rather than in a laboratory setting, as possible and yields interesting results. In particular, the environment surrounding players preference provide a considerable piece of the explanation for those options. Also, several theoretical traditions are closely linked to observational methods. Contemporary practitioners of *Formal sociology* that include members of the ‘new’ Iowa school follow the original direction of symbolic inter-actionist Manford Kuhn and the more recent inspiration of Carl Couch who focus on the makeup of human interaction. Methodologically, they follow Kuhn’s inclination toward data gathered in a controlled, systematic fashion; they prefer to videotape interaction, thereby producing complete records of social events (Denzin & Lincoln, 1998).

Lees (2002) depicts qualitative analysis as characterized by the subjective interpretation of movement. He also attributes the definition to Knudson and Morrison (1997) as the ‘systematic observation and introspective judgment of the quality of human movement for the purpose of providing the most appropriate intervention to improve performance. He concedes this amplification contains a statement about the process of qualitative analysis as well as its goal

and identifies the three important steps of the qualitative process – observation, evaluation and intervention.

Frankel and Wallen (1993) describe the goal of researchers engaging in ethnographic research is to ‘paint a portrait’ of a school or a classroom (or any educational setting) in as thorough, accurate, and vivid a manner as possible so that others can also ‘see’ that setting and its participants and what they do. The purpose of this study is to establish a setting for coed soccer players and examine the relationships, perceptions and testing outcomes through the application of ethnographic research methodology. Finally, the aim of Ethnography is to be (come) of interest and include all of the social sciences and the humanities, especially, the branches of sociology, anthropology, history and human geography, linguistics, education and pedagogy, the arts, health studies, media and cultural studies (Willis & Trondheim, 2000).

The Participants and the Training Routine

The participants in the study were comprised of 15 adolescent male and female soccer players who played for the Complete Soccer Academy- Florida. Those athletes were considered the elite athletes in their age group. Both the boys and the girls attended private and public high schools in greater Orlando, Florida. The girls ages ranged from 15 thru 17 and had participated in soccer as early as their 6th birthday. The boys were older, most were graduating high school seniors. The boys’ ages ranged from 17 to 18 years and they too had participated in organized youth soccer since they were 5 and 6 years old.

Since ethnographers attempt to observe everything within the setting or situation they might be observing, in a sense they do not sample at all. In addition, to the extent that what is observed is only a portion of what might be observed, what a researcher examines is, therefore, a

de facto sample of all the possible observations that might be made. And, the samples of persons considered are characteristically small (often a few individuals, or a single class of students) and do not sanction generalization to a larger population (Fraenkel & Wallen, 1993).

The study plan was to begin in September 2002 and conclude in June, 2004. However, there would be a period of approximately three months when all the study members participated in high school soccer and I would not have access to them. Initially, the training sessions were to take place on a different weekday than the boys and girls attended their regular practice sessions. However, due to some attendance problems, I asked the boys to come to one of the girls training sessions to alleviate this problem. The training program consisted of a comprehensive matrix of soccer skill and tactical drills, combined with game competition. These session's involved warm-up and flexibility exercises, physiological conditioning, and motor skill development. The participants also were required to take part in a series of soccer specific testing protocols that included the following:

- Yo-Yo Endurance test
- Speed off the Mark – 10 Meter Sprint Test
- Acceleration Sprint – 30 Meter Sprint Test
- Repeated 10 Meter Sprint Test
- Repeated 10 Meter Short Sprint Test
- 40 Meter Sprint and Recovery Test
- A Sequence Scheme III Test
- Tactical 6 versus 2 Test.

Training Site

The site selection was of high quality, there was never any interference and the session would often move along without interruption. I would always arrive early and prepare whatever field markers would be necessary and finalize the session plans the evening prior to the event. Any equipment that was required was also packed and prepared the evening prior.

All of the study training session had taken place at Lake Sylvan Park in Sanford, Florida. The United States Women's national soccer team as a preparation site had used this complex for many of the team's important tournaments. This first session was conducted late morning, the second session time frame was early afternoon and the remaining sessions were conducted from 5:30pm until 7:30pm. In addition to my field observations, I conducted both informal and formal interviews to closely map out the individual and group athletes experience. All of the field sessions were video taped by Rene Calalang who is currently employed by Disney Sports and travels world wide to cover sporting events.

Data Collection

Traditionally, soccer coaching practice was largely based on custom, intuition and common sense. Although coaches were highly dedicated and intellectually honest, their methodology and actions on the training ground were not always based on applicable information, sound preparation or scientific confirmation. The modern game is much different, leagues, associations and administrators require that coaches be licensed, that they have gone through courses that enlighten them on physiology, psychology, and the physical demands of the game. The term coaching process is a method devised to determine, plan and implement coaching action. This process necessitates the ability to evaluate soccer situations, apply

coaching philosophy, and assess actions to provide effectiveness. One of the steps in this progression is called 'data collection'. This step is considered the most important because all remaining steps are created from it (Fairs, 1987).

This study was based on collection and analysis of qualitative data. The data collection process included a series of field notes, investigator observations on tape, transcribed group and individual interview recordings, written observations of taped field sessions and the compilation of the Internet generated TAIS instrument analysis report. The performance test results will be compiled and assessed and generated on Excel spreadsheet as descriptive statistics for physical performance comparisons. The taped practice sessions will be examined to assess the participants' tactical and technical performance aspects of soccer. Data was collected over a nine-month period that included the fall months of 2002 until the summer months of 2003.

The practical sessions had taken place after I had completed a day's work in the Orlando area. Although I did take field notes, I found myself consciously observing the session and thinking "What is going on here?" This was very difficult to assess, because the training sessions had become second nature and routine. I had been involved in these activities for a number of years.

The study group became somewhat more stable after those initial dropouts. However, to assure attendance in the female group I did change the team training sessions. This would assure me that I would have the full compliment at the activity.

Field Notes

Field notes were taken during the aerobic, technical, and tactical sessions. The research would dutifully observe the players in all the activities and log anything that appeared

significant. During the anaerobic testing the research was absorbed in securing accurate time scores for the participants, therefore, only if something of consequence happened I would advise the assistant coach to advise me during a break in the proceedings. The TAIS instrument was taken in an office environment and the participants were briefed prior to taking the test. The office environment was set up in three rooms and I was constantly moving from one room to the next answering questions or providing information. A few notes were made during the instrument and at the conclusion. Notes on the interview segment were usually recollections of the participants' demeanor and ability to answer the questions.

Investigator Observations on Tape

After viewing a soccer game, the observer is left with a general impression combined with recollections of specific situations. The amount of information is limited and influenced by subjective evaluations, even for the most experienced mentor (Bangsbo, 1994). Therefore, the use of the videotape is a very important part of the study.

The tapes were played in the exact order they were filmed. The initial viewings were to extract the tactical and technical data counts on players and in an effort to be accurate they were played several times. The second viewings were to elicit any trends in verbal and non-verbal behavior, make comparisons with field notes and note any relationships to interview responses. Also, the researcher looked at other indicators of session understanding and the participants' contribution and involvement in the sessions.

Reilly (1994) purports that analysts in soccer prefer either to examine activity among a group of players in the immediate vicinity of the ball or to track a single player in an effort to examine individual or collective actions. The team or group analyses are practical when the

patterns of play or the group performance is the subject matter of the research. This method will also serve in the clarifying socio-dynamic factors within the team by identifying favored connections between players in passing distribution of the ball. Therefore, for the purposes of evaluating tactical learning and insight it was deemed appropriate and convenient to film the training sessions for immediate and future investigation.

Transcribed Individual and Group Interview Recordings

All group interviews were taken after a field session was complete. Normally three questions were posed to the group. Everyone who attended the session was allowed to speak or give an opinion. The individual interviews were given as to the participants depending upon their availability. The interview session would last a minimum of 30 minutes and a maximum of 45 minutes. The participant was given instructions on the scope of the interview and advised that there was no incorrect answer. Furthermore, they were made aware that the researchers presence was to ask questions only and not to have the respondent provides answers that would placate him.

Written Observations of Taped Field Sessions

Frankel and Wallen (1993) advocate the use of videotaping to overcome obstacle such as missing something of meaning or having the ability to show the film to another expert for additional insight. The tapes would provide a permanent record of certain kinds of behaviors that can be compared to later or different samples.

Compilation of the Internet Generated TAIS Instrument Analysis Report

As indicated earlier the TAIS inventory was taken on the Internet at www.thewinningmind.com. An account was set up and a login and username was given to the researcher. The participants were briefed prior to taking the 144-question inventory and completion of a registration form was necessary. The participants were advised that the reports would be sent via e-mail to my home computer. After completing those details the players would take the questionnaire. There was no set time required to take the inventory and most of the students completed the assignment in 45 minutes. The testing at the office was done between 3pm and 5pm. Upon my arrival home; I would save the 4 reports for later inspection. The reports were printed in full and contained the following: The TAIS Business Report; the TAIS Scale Report; TAIS Basic Scale Report; and the TAIS Athlete's Mental Edge Inventory Report.

Tactical and Technical Assessment of Taped Practice Sessions

Charts were made prior to screening the film. The charts would allow me to catalogue how many times each individual touched the ball, and that touch would be catalogued as a poor or good touch for technical comparisons. I could also assess the players receiving skill and the correct weight and touch on passes they had made. Then each individual contribution could be compounded and formulated to provide group numbers. Tactically, the player with the ball was assessed on what particular option he/she had used and if he/she had contributed in keeping possession or losing possession. Again those figures were totaled for group scores.

Interview Protocols

The interview process was analogous to the review of literature. The scheme was to touch on each important aspects of the literature and determine the importance of the area under discussion. Furthermore, the possibility existed that insightful information would surface that would add to the legitimacy of the work. Each participant was interviewed individually, and the group was interviewed after both the training sessions and the aerobic and anaerobic combined testing. The time taken for the individual interviews was in the range of 25 to 45 minutes. The tête-à-tête format in all discussions was identical with the interviewer posing a question and getting a response from the participant. An occasional deviation did take place if the researcher felt that the response was particularly interesting. The females had 22 questions to respond to, 13 of which were elicited from the review of literature, and 7 questions referenced a similar study completed by (Flintoff, 1998; Flintoff & Scraton, 2001) in England. That study had some interesting and controversial remarks by some of the female participants. The intention of the researcher was to determine if indeed any correlation existed between the other studies and the present research. The last questions were solicited in an attempt to clarify that instruction and retention of information did transpire during the study, and if there was corresponding benefits to both the female and the male participants. The males were asked 20 questions with the theme very similar to their female counterparts. A Sony hand held cassette tape recorder was used to collect the data. Finally, the tapes were labeled then transcribed for examination. In addition, a paragraph on Attribution Theory was assigned to the female participants; they were asked to read and respond in writing to the paragraph. Attribution theory is concerned with what the individual attributes his or her successes or failures.

Summary

This chapter has described the nature and the processes the used to implement, carry out and complete the field study. The data from competitive training sessions where the components of soccer: psychology, skill, decision-making and fitness are observed, catalogued and measured to determine outcomes. The subjects were required to participate in training sessions that covered an assortment of skill enhancement exercises, decision-making games, and compete against all the other participants in speed and endurance tests. The psychological aspect of soccer was investigated through the completion of the Test of Attentional and Interpersonal Style (TAIS) inventory, an assessment instrument to assist in providing feedback in performance relevant constructs. The predictions and feedback are useful in determining how a person will react under stress. In addition, formulating assessments and extracting opinions from the co-ed interactions after events were made available through interview questions that were solicited after training sessions. This was to establish whether or not the athletes had considered the training sessions had provided opportunities to learn and add to their soccer knowledge base. Individual interviews were also a part of the study, given to ascertain personal accounts or input that might have been left out of the preceding group interviews. Several of the training sessions were videotaped to supply the researcher with data for more valid analysis of the sessions.

Finally, some pertinent issues had surfaced during the research that influenced and eventually changed the initial design of the study. I believe I entered the project somewhat naïve, never thinking that the routine is subject to change at any point in time. However, as the research moved along I became much more prepared and flexible in dealing with unseen outcomes and to adapt without experiencing debilitating anxiety.

CHAPTER 4: RESULTS

Introduction

In the following pages are found the results of the endurance run and sprint tests presented in Tables 1 through 13. Table 1 shows the outcomes of the Yo-Yo Endurance Test (Level 1). (See Appendix K)

Aerobic Speed Specific Tests

Table 1
Yo-Yo Endurance Test (Level 1) – 20 Meter Repeated Timed Interval Run

Male	n = 6	n = 5	Female	n = 9	n = 10
	Pre-test	Post-test		Pre-test	Post-test
CT2	18/1	16/12	CA1	15/1	14/4
SH2	17/1	15/12	CS1	16/0	14/1
DA2	16/7	14.12	LI1	15/1	15/9
EL2	15/4	14.10	LA1	15/1	14/12
MG2	16/1	16/6	TD1	15/1	8/4**
TR2	17/12	18/2	RA1	13/2	12/0
NS1	14/2	-	AG1	12/8	12/1
			MA1	12/2	4/3*
			HT1	11/9	12/10
			SA1	-	10/2
Mean	16/4	13/10		14/4	12/6

Note: (-) Athletes listed as absent were not available at the time of the tests.

* The athlete had just returned to activity after a period of illness.

** The athlete had experienced cramping during the test and retired.

In both pre and post-tests the males as a group ran continuously for longer periods of time to an average level 16:4 compared to the females. This means on average the males completed 3100 meters without stopping; which is equivalent to 65.8 (ml oxygen per minute per kg b. m.) in the pre-test. The females average was level 14:4 and they completed 2580 meters; which is equivalent to 58.7 (ml oxygen per minute per kg b. m.). However, five of the females had better individual times and covered more distance than one of the males. The best result for males was 3620 meters or level 18:2; 72.6 (ml oxygen per minute per kg b. m.) and the best result for the females was 3060 meters at level 16:2; 65.2 (ml oxygen per minute per kg b. m.).

In the post-test the males ran less 2480 meters at level 13:10; 57.1 (ml oxygen per minute per kg b. m.) but still averaged a better score than the females 2160 meters at level 12:6: 52.6 (ml oxygen per minute per kg b. m.). Again, one of the females reached 2980 meters and lasted to level 15:10; 63.9 (ml oxygen per minute per kg b. m.). This performance did surpass one of the males. The fastest male reached 3620 meters at level 18:2; 72.6 (ml oxygen per minute per kg b. m.). Again, the males posted higher average levels than the females in pre and post-tests, however times for both the males and females decreased in post-testing.

Anaerobic Sprint Tests

Table 2 indicates the Pre-test results of the Anaerobic Speed Off the Mark - 10 Meter Sprint Test (see Appendix K).

Table 2
Speed off the Mark – 10-Meter Sprint Test

Male	Female						
	Sprint 1	2	3				
CT2	-	-	-	CA1	2.1	2.1	2.0
SH2	1.95	2.0	2.0	CS1	2.0	2.2	2.2
DA2	-	-	-	LI1	-	-	-
EL2	1.9	1.9	1.8	LA1	-	-	-
MG2	1.9	2.0	1.95	TD1	1.9	1.9	1.9
TR2	1.9	2.0	1.95	RA1	2.2	2.2	2.1
NS1	1.9	1.95	1.9	AG1	2.0	2.1	2.3
JU1	1.85	1.95	1.95	MA1	2.1	2.0	2.0
ES1	1.9	1.9	2.0	HA1	-	-	-
BE1	2.0	1.95	1.9	SA1	2.0	1.85	2.0
Mean	1.91	1.96	1.93		2.04	2.04	2.07

The male mean scores in the 3 trials were higher than the females' scores. The difference in Sprint 1 was .13 seconds. In the 2nd sprint the gap closed to .08 of a second and in the final trial the males' score was .14 of second. Individually we had a female SA1, and a male JU1, sprint the fastest time at 1.85 seconds. The slowest sprint for females was AG1 at 2.3 seconds

and 4 males, SH2, TR2, ES1, MG2 and BE1 clocked at 2.0. TD1's three scores bested 7 of the males at 1.9 seconds in the 3 trial. The best mean trial was the first one for both males at 1.91 seconds and the females at 2.02 seconds.

The scores listed below are from the Post-test Speed Off the Mark – 10 Meter Sprint

Test:

Table 3
Speed off the Mark – 10-Meter Sprint Test

Male				Female			
	Sprint 1	2	3		Sprint 1	2	3
CT2	2.2	1.8	2.1	CA1	2.2	2.2	2.2
SH2	2.0	2.0	2.0	CS1	2.0	2.2	2.2
DA2	2.1	2.1	2.1	LI1	-	-	-
EL2	1.9	2.0	2.0	SA1	2.2	2.1	2.0
MG2	2.0	2.0	2.0	TD1	2.2	2.2	2.2
TR2	1.8	1.8	1.9	RA1	2.5	2.3	2.1
NS2	-	-	-	AG1	2.2	2.2	2.3
JU2	-	-	-	MA1	2.3	2.45	2.25
Mean	2.0	1.95	2.01		2.23	2.24	2.18

The post-test scores mirrored the pre-test as the males' mean scores in the 3rd trial were higher than the females' scores. The difference in Sprint 1 was .23 seconds and in the 2nd sprint the gap closed to .29 seconds and in the final trial the males' score was .17 lower. Individually we had 2 females, SA1 and CS1 post the fastest female time at 2.0 seconds, and in the male group TR2 sprinted the fastest time at 1.8 seconds. The slowest sprint was a female MA1, at 2.45 seconds. TR1's mean score bested all of the females at 1.83 seconds in the combined 3 trials. The best mean trial was the second one for males at 1.95 seconds and the females at 2.18 seconds. Both mean scores were less than the pre-test.

The results listed on Table 4 are the Pre-test and Table 5 Post-test scores on the 30 Meter Acceleration Sprint Test.

Table 4
The 30-Meter Acceleration Sprint Test: Pre-test

Male						Female					
Sprint	1	2	3	Avg.	Fastest	Sprint	1	2	3	Avg.	Fastest
CT2	-	-	-	-	-	CA1	5.2	5.2	5.1	5.17	5.1
SH2	4.5	4.7	4.6	4.6	4.5	CS1	4.95	5.0	4.85	4.93	4.85
DA2	-	-	-	-	-	LI1	-	-	-	-	-
EL2	4.3	4.25	4.3	4.28	4.25	LA1	-	-	-	-	-
MG2	4.6	4.45	4.53	4.5	4.45	TD1	4.4	4.65	4.65	4.57	4.4
TR2	4.5	4.2	4.25	4.32	4.2	RA1	5.2	5.1	5.2	5.17	5.1
NS2	4.45	4.45	4.45	4.45	4.45	AG1	5.0	5.0	4.85	4.95	4.85
JU2	4.45	4.5	4.45	4.47	4.45	MA1	5.3	5.45	5.2	5.32	5.2
ES2	4.1	4.5	4.15	4.23	4.1	HA1	-	-	-	-	-
BE2	4.5	4.5	4.6	4.53	4.5	SA1	4.7	4.5	4.45	4.55	4.45
Mean	4.43	4.45	4.43	4.42	4.35		4.96	4.99	4.9	4.95	4.85

The males 3 mean trial scores were faster than the females. The males scored mean scores of 4.43, 4.45 and 4.43 seconds. TD1 and SA1 were the top individual scorers for the females and posted times that bettered several males at 4.4 and 4.5. The top male TR2 scored a 4.2 second run and the best female TD1 was 4.4 seconds. The 1st and 3rd trial were the fastest for the males at 4.43 seconds. The females' best time was the last trial at 4.9 seconds.

Table 5
The 30-Meter Acceleration Sprint Test: Post-test

Sprint	1	2	3	Avg.	Fastest	Sprint	1	2	3	Avg.	Fastest
Male						Female					
CT2	4.1	4.25	4.3	4.22	4.1	CA1	4.7	4.6	4.6	4.63	4.6
SH2	4.4	4.4	4.4	4.4	4.4	CS1	-	-	-	-	-
DA2	4.8	4.9	4.5	4.73	4.5	LI1	-	-	-	-	-
EL2	4.3	4.1	4.1	4.17	4.1	LA1	-	-	-	-	-
MG2	4.0	4.2	4.5	4.23	4.0	TD1	4.6	4.9	4.8	4.77	4.6
TR2	4.1	3.85	4.2	4.32	3.85	RA1	5.1	5.0	5.3	5.13	5.0
NS2	-	-	-	-	-	AG1	5.0	4.8	4.9	4.9	4.9
JU2	-	-	-	-	-	MA1	5.0	4.9	5.1	5.0	4.9
ES2	-	-	-	-	-	HA1	-	-	-	-	-
BE2	-	-	-	-	-	SA1	4.3	4.5	4.45	4.42	4.3
Mean	4.28	4.28	4.33	4.34	4.16		4.78	4.77	4.86	4.81	4.72

Tables 6 and 7 present the Pre-test male and female individual scores and Tables 8 and 9 illustrate the Post-test male and female individual scores.

Table 6
Repeated 10 Meter Sprint Test

Males								
	Sprint	1	2	3	4	5	Average	Best
CT2	-	-	-	-	-	-	-	-
SH2	2.0	2.0	2.0	2.0	2.0	1.9	1.98	1.9
DA2	-	-	-	-	-	-	-	-
EL2	1.9	2.0	1.9	1.9	1.9	2.1	1.96	1.9
MG2	2.0	2.0	1.8	2.0	2.0	2.0	1.96	1.8
TR2	1.4	1.5	1.6	1.7	1.9	1.9	1.62	1.4
Mean	1.82	1.87	1.9	1.92	1.97	1.97	1.88	1.75

The athlete is required to sprint (5) times repeatedly over a distance of 10 meters with a 10 second rest period between each trial. The fastest mean score was 1.82 seconds clocked in the first trial. The slowest mean score was reached on the 5th trial. The fastest heat by an individual was 1.4 seconds run by TR2. On the other hand, the slowest heat was run by EL2 at 2.1 seconds. The average of all scores was 1.88 seconds.

Table 7
Repeated 10 Meter Short Sprint Test

Females							
Sprint	1	2	3	4	5	Average	Best
AG1	1.9	2.0	2.0	2.2	2.2	2.06	1.9
MA1	2.1	2.2	2.35	2.3	2.2	2.23	2.3
CS1	1.9	2.2	2.3	2.3	2.3	2.2	1.9
TD1	2.0	2.1	2.1	2.0	2.3	2.1	2.0
CA1	1.9	2.1	2.1	2.2	2.2	2.1	1.9
RA1	2.0	2.1	2.1	2.2	2.1	2.1	2.0
SA1	2.1	1.9	2.0	2.0	2.2	2.04	1.9
Mean	1.98	2.08	2.13	2.17	2.21	2.12	1.9

The athlete is required to sprint (5) times repeatedly over a distance of 10 meters with a 10 second rest period between each trial. The fastest mean score was 1.98 seconds clocked in the first trial. The slowest mean score was reached on the 5th trial at 2.17 seconds. The fastest heat by an individual was a three-way tie at 1.9 seconds run by SA1, AG1 and CS1. On the other hand, the slowest heat was run by MA1 at 2.35 seconds. The average of all scores was 2.12 seconds. The best time mean score was 1.98 seconds.

Table 8
Repeated 10 Meter Short Sprint Test

Males							
Sprint	1	2	3	4	5	Average	Best
CT2	1.9	1.8	1.9	1.8	1.9	1.86	1.8
SH2	1.9	2.0	2.0	2.0	2.0	1.98	1.9
DA2	2.0	2.0	2.1	2.3	2.0	2.08	2.0
EL2	1.9	1.8	1.9	2.0	2.2	1.96	1.8
MG2	1.6	1.8	1.8	1.9	1.8	1.8	1.6
TR2	1.9	1.8	1.9	1.8	1.9	1.86	1.8
Mean	1.87	1.87	1.93	1.98	1.97	1.92	1.81

The athlete is required to sprint (5) times repeatedly over a distance of 10 meters with a 10 second rest period between each trial. The fastest mean score was 1.87 seconds clocked in the first trial. The slowest mean score was reached on the 4th trial at 1.98. The fastest heat by an individual was 1.6 seconds run by MG2. Conversely, the slowest heat was run by DA2 at 2.3. DA2's time was expected, as his position on the team is goalkeeper. The average of all scores was 1.92 seconds and the best mean score was 1.81 seconds.

Table 9
Repeated 10 Meter Short Sprint Test

Females							
Sprint	1	2	3	4	5	Average	Best
AG1	2.1	2.1	2.0	2.1	2.0	2.06	2.0
MA1	2.0	2.3	2.1	1.9	2.2	2.1	1.9
CS1	-	-	-	-	-	-	-
TD1	2.2	1.9	2.0	2.1	2.2	2.08	1.9
CA1	2.1	2.0	2.2	2.0	1.9	2.04	1.9
RA1	2.2	2.1	2.1	2.2	2.2	2.16	2.1
SA1	1.9	1.8	1.9	1.9	2.0	1.9	1.8
Mean	2.08	2.03	2.05	2.03	2.08	2.06	1.93

The pre-test Speed off the Mark sprint results indicated the males were faster off the mark with an individual 1.4 second fastest male time compared to the female at 1.9 seconds. The mean score for the males was 1.88 seconds and females were 2.12 seconds confirming the individual sprint times of males as being faster.

Results on the Speed off the Mark sprint post-test indicated the fastest male was 1.6 seconds and the fastest female registering a time of 1.8 seconds. The mean score for the males were 1.92 seconds and the females were the slower at 2.03 seconds. The best mean score posted

by females is 1.93 seconds. These scores indicated that in terms of power related to the first and second steps in sprinting the males as a group was faster and this was applicable in both pre and post-tests. However, it is important to note that several of the girls had faster individual heat times than the males, indicating individual females were faster off the mark than individual males in pre and post-test trials. There was no discernable pattern in time deficits for males or females in fatigue regarding the overall times of trials. Surprisingly, the scores indicated the males were faster in the pre-test sprints than their posttest sprints. While the females' scores were faster in post-test trials. This could have been a result of over training due to the concluded high school season, where the males are likely to do more running in training and in games.

Tables 10, 11, 12 and 13 reveal the Pre-test and Post-test scores for the 44 Meter Sprint Recovery Sprint Test.

Table 10
44-Meter Sprint & Recovery Sprint Test

Male Pre-test										
Sprint	1	2	3	4	5	6	7	Avg.	Fast	Fatigue
CT2	-	-	-	-	-	-	-	-	-	N/A
SH2	7.7	8.0	8.0	8.35	7.7	7.9	8.2	7.97	7.7	.65
DA2	-	-	-	-	-	-	-	-	-	N/A
EL2	7.7	7.9	8.1	7.9	7.9	8.5	8.1	8.01	7.7	.8
MG2	7.8	7.8	7.7	7.8	7.8	8.0	8.1	7.85	7.7	.4
TR2	7.65	7.55	8.0	7.9	8.3	8.3	7.5	7.88	7.5	.8
Mean	7.71	7.81	7.95	7.82	7.92	8.17	7.97	7.93	7.65	.66

The pre-test 7 x 44 meter sprint and recovery best mean score was the 1st trial at 7.71 seconds. The poorest mean time was 7.97 seconds and this was the 7th and last trial. The average mean of all scores was 7.93 seconds. The fastest individual time was clocked by TR2 on the 1st trial and the slowest individual was 8.5 seconds by EL2. The fatigue means score for all participants were .66 seconds. Also, the best mean in terms of fatigue was .4 seconds posted by MG2.

Table 11
40 Meter Sprint & Recovery Sprint Test

Male – Post-test										
	Sprint 1	2	3	4	5	6	7	Avg	Fast	Fatigue
CT2	7.3	7.4	7.8	7.4	7.4	7.6	7.9	7.54	7.3	.6
SH2	7.7	7.8	7.7	8.1	7.8	8.1	8.0	7.88	7.7	.4
DA2	8.6	8.4	8.7	8.6	8.8	8.8	8.9	8.68	8.4	.5
EL2	7.8	7.9	7.8	8.0	8.1	8.1	8.2	7.98	7.8	.4
MG2	7.8	7.8	7.65	8.2	7.5	7.8	7.6	7.76	7.5	.7
TR2	7.3	7.2	7.3	7.45	7.5	7.7	7.4	7.41	7.2	.5
Mean	7.75	7.75	7.88	7.96	7.85	8.03	8.0	7.87	7.65	.51

The post-test 7 x 40 meter sprint and recovery best mean score was the 2st trial at 7.75 seconds. The poorest mean time was 8.03 seconds and this was the 7th and last trial. The average mean of all scores was 7.65 seconds. The fastest individual time was clocked by TR2 on the 1st trial at 7.2 and the slowest individual was 8.9 by DA2. The fatigue means core for all participants was .51 seconds. Also, the best mean in terms of fatigue was .4 seconds posted by SH2 and EL2. The scores would have been better had the goalie times been excluded.

Table 12
40-Meter Sprint and Recovery Sprint Test

Females – Pre-test											
Sprint	1	2	3	4	5	6	7	Avg	Fast	Fatigue	
MA1	8.9	8.8	8.8	8.7	9.0	9.1	8.9	8.88	8.7	.4	
CA1	8.5	8.1	8.5	8.5	9.1	9.1	8.75	8.65	8.1	1.0	
TD1	8.2	8.5	9.2	9.6	10.1	10.2	10.2	9.42	8.2	2.0	
CS1	8.3	8.1	8.65	8.75	8.5	8.65	8.9	8.55	8.1	.8	
AG1	8.3	8.7	8.7	9.2	8.8	9.0	9.2	8.84	8.3	.9	
RA1	8.9	8.8	8.5	8.55	8.6	8.65	8.5	8.57	8.5	.4	
SA1	7.9	7.8	8.5	8.0	8.2	8.6	8.2	8.17	7.9	.8	
Mean	8.42	8.4	8.69	8.76	8.9	9.04	8.95	8.72	8.26	.9	

The females' pre-test 7 x 40 meter sprint and recovery best mean score was the 2st trial at 8.4 seconds. The poorest mean time was 10.2 and this was the 7th and last trial. The average mean of all scores was 8.26 seconds. The fastest individual time was clocked by SA1 on the 2st trial at 7.8 and the slowest individual was 10.2 by TD1. The fatigue mean score for all participants was .9 seconds. Also, the best mean in terms of fatigue was .4 seconds posted by RA1 and MA1.

Table 13
40-Meter Sprint & Recovery Sprint Test

Females – Post-test										
	Sprint 1	2	3	4	5	6	7	Avg	Fastest	Fatigue
MA1	9.0	8.6	8.8	8.7	9.0	9.1	8.9	8.87	8.6	.5
CA1	8.2	8.2	8.2	8.2	8.2	8.2	8.0	8.17	8.0	.2
TD1	8.2	8.5	9.2	9.6	10.1	10.2	10.2	9.42	8.2	1.0
CS1	8.1	8.3	8.8	8.6	8.6	8.6	9.0	8.57	8.3	.9
AG1	8.8	8.5	8.5	9.0	9.0	9.2	9.8	8.97	8.5	1.3
RA1	8.6	9.1	8.8	9.2	8.3	9.2	8.9	8.87	8.3	.9
SA1	8.0	8.2	8.8	8.7	8.8	8.6	8.8	8.55	8.0	.8
Mean	8.41	8.48	8.72	8.97	8.86	8.96	9.08	8.77	8.27	.8

The females' post-test 7 x 40 meter sprint and recovery best mean score was in the 1st trial at 8.41 seconds. The poorest mean time was 9.08 and this was the 7th and last trial. The average mean of all scores was 8.77 seconds. The fastest individual time was clocked by SA1 on the 2st trial at 8.0 and the slowest individual was 10.2 by TD1. The fatigue mean score for all participants was .8 seconds. Also, the best mean in terms of fatigue was .2 seconds posted by CA1. Finally, the best mean average score was 8.27.

Perceptions and Observations on Testing

Having limited experience in the field of qualitative research, day one began with much anxiety. My first duties were in making sure that all the details, equipment and The participants would be there to make the testing session operate smoothly. Earlier, I had reached the field and made the necessary measurements and placed the markers for the sprint tests. Unfortunately, two of the girls did not show after both the parents and the athlete had made the commitment to join the study.

The participant absenteeism precipitated a change in the procedure to guarantee that I would get a full compliment or a workable group of players for the research, I had an interesting comment after one of the sessions sent to me via e-mail from player who did not come to practice on a regular basis, preferring to kick field goals for his high school team. “How can you expect your male players to improve or develop by incorporating females in the training session?”

This was ironic because this same player, two years earlier had pleaded with me to remove him from a very physical soccer game. He was upset and asked me to remove him from the game because an opposing player had threatened him. At the time of this incident this particular player was close to 6 feet tall. What he could have done was given me the benefit of explaining what in fact I was doing at this session. However, his real motivation lay elsewhere and would not be appropriate in this work.

Tables 14 and 15 present the Pre-test and Post-test the results of the Sequence Passing Scheme II drills and summary of comparative results.

Table 14
Sequence Passing Scheme II – Pre-test

Passing Technique	Athletes (n =18)	Male	%	Female	%
1. Positive forward		17	71%	25	63%
2. Positive back		4	100%	18	86%
3. Positive square		1	25%	10	83%
4. Negative forward		7	29%	15	37%
5. Negative back		0	0%	3	14%
6. Negative square		3	75%	2	17%
7. Passes that continue possession		27	67%	64	67%
8. Passes that result in loss of possession		13	23%	20	23%
9. Positive first touch pass		5	62%	4	37%
10. Negative first touch pass		3	38%	7	63%
Total Passes		40	100%	84	100%

Note: There were 6males and 12 females in this game and they were equally distributed. One of the males was a goalkeeper and those ball touches were not used. Also, this game was played in three phases and only the last stage game condition statistics were compiled.

Table 15
Sequence Passing Scheme II – Post-test

Passing Technique	Athletes (n = 18)	Male	%	Female	%
1. Positive forward		15	78%	33	73%
2. Positive back		11	100%	27	87%
3. Positive square		4	80%	9	50%
4. Negative forward		4	13%	12	27%
5. Negative back		0	0%	4	13%
6. Negative square		1	20%	9	50%
7. Passes that continue possession		40	80%	75	70%
8. Passes that result in loss of possession		10	20%	32	30%
9. Positive first touch pass		10	66%	6	46%
10. Negative first touch pass		5	34%	7	54%
Total Passes		50	100%	107	100%

Note: It should be known that the pressure on the athletes was not 100% or at game standard. Again, this type of drill is to improve the decision making of the player with the ball. Success must occur, otherwise the exercise is useless, therefore, the ball limits of two and one touch adds significant pressure on the decision maker. This particular drill includes the technical aspect of soccer as well as being very similar to the 11 versus 11 game. All of the soccer components are included in this training exercise.

Tables 16 and 17 illustrate the Pre-test and Post-test scores in a 6 versus 2 tactical games, the comparative summaries of results are also available.

Table 16
Tactics 6 versus 2

Post-test					
Decisions	Athletes (n = 8)	(5) Male	%	(3) Female	%
1. Positive passes		164	91%	16	9%
2. Negative passes		13	8%	3	2%
3. Positive passes into space		12	100%	1	100%
4. Negative passes into space		0	0%	0	0%
6. Providing an option for a pass		5	100%	2	66%
7. Not providing an option for a pass		0	0%	1	33%
8. Prepared body position		12	92%	1	25%
9. Unprepared body position		1	8%	3	75%
Total Passes		177	100%	19	100%

Six versus two

The (2) grids were set up adjacent to each other and were approximately 15 meters x 15 meters. There were (2) groups. The object of the exercise is for the (6) players who are placed on

the outside of the grid to keep possession and not allow the (2) middle players to steal the ball. Although two groups carried out the activity, the group session directly in front of the video camera was the focus of the cameraman. This group had (3) males and (5) females. One of the males was the goalkeeper, who normally is limited to using his feet in a match. The event lasted 15 minutes, and during that time there were 361 passes by the players on the outside near the grid lines. On the insides, two players would constantly harass or attempt to dispossess the outside players by applying pressure. If a player made a bad pass he or she would immediately change with an outside player. The game is intended to be a warm up-type exercise, balls are placed nearby the grid so that the game is a continuum.

Table 17
Tactics 6 versus 2

Decisions	Post-test				
	Athletes (n = 8)	(5) Male	%	(3) Female	%
1. Positive passes		121	90%	211	92%
2. Negative passes		12	10%	17	8%
3. Positive passes into space		17	74%	19	68%
4. Negative passes into space		6	26%	9	32%
5. Providing an option for a pass		1	8%	0	0%
6. Not providing an option for a pass		11	92%	19	100%
7. Prepared body position		10	83%	4	36%
8. Unprepared body position error		2	17%	7	64%
Total Passes		133	100%	228	100%

The Attentional and Interpersonal Style Inventory (TAIS)

The Attention and Interpersonal Style Inventory (TAIS) measures constructs vital to effective performance, particularly performance in elevated pressure circumstances. The instrument has been used as support for the training and selection in business, sport and the military. The TAIS results emphasize how athletes are likely to react under stressful conditions

and will illustrate how pressure affects the athlete's ability to focus, remain motivated, and communicate proficiently.

The TAIS inventory is inimitable in that it integrates concentration skills along with intra and interpersonal traits in its overall assessment of performance. To focus effectively, you need to be able to shift both the width and direction of your attention in response to the varying load in performance situations. The attentional scales on TAIS measured (2) items:

- Your capacity to develop the dissimilar categories of concentration necessary
- to perform effectively
- Your capability to shift back and forth between the different channels of
- concentration at apposite times.

Tables 18 and 19 show the results of the Pre-test and Post-test TAIS Inventory scores of the following components: awareness, external distractibility, analysis, internal distractibility, action, reduced flexibility, information processing, orientation towards rules and risk, control, self-confidence, physically competitive, decision-making style, extroversion, introversion, expression of ideas, expression of criticism and anger, expression of support and affection, self-critical, focus over time and performance under pressure.

Table 18
TAIS Instrument - Pre-test

	Male	Female	Differences
1. Awareness	70.2%	71.2%	Increase 1.0%
2. External Distractibility	50.4%	46.1%	Decrease 4.3%
3. Analysis	84.4%	52.1%	Decrease 32.3%
4. Internal Distractibility	46.4%	36.9%	Decrease 9.5%
5. Action	69.6%	62.9%	Decrease 6.7%
6. Reduced Flexibility	44.2%	42.9%	Decrease 1.3%
7. Information Processing	70.2%	64.1%	Decrease 6.1%
8. Orientation Toward Rules and Risk	67.8%	58.9%	Decrease 8.9%
9. Control	89.5%	81.3%	Decrease 8.2%
10. Self Confidence	87.4%	80.6%	Decrease 6.8%
11. Physically competitive	84.6%	79.8%	Decrease 4.8%
12. Decision Making Style	63.2%	53.3%	Decrease 9.9%
13. Extroversion	74.2%	76.0%	Increase 1.8%
14. Introversion	45.2%	26.1%	Decrease 19.1%
15. Expression of Ideas	69.2%	70.6%	Increase 1.4%
16. Expression of Criticism & Anger	55.2%	33.8%	Decrease 21.4%
17. Expression of Support & Affection	77.6%	73.8%	Decrease 3.8%
18. Self Critical	57.8%	24.0%	Decrease 33.8%
19. Focus Over time	42.6%	48.3%	Increase 5.7%
20. Performance Under Pressure	55.4%	40.4%	Decrease 15%

Table 19
TAIS Instrument Post-test

	Male	Female	Differences
Awareness	61.8%	57.7%	Decrease 4.1%
External Distractibility	47.2%	46.1%	Decrease 1.1%
Analysis	77.0%	66.7%	Decrease 10.3%
Internal Distractibility	71.0%	34.0%	Decrease 36.0%
Action	49.0%	69.4%	Increase 20.4%
Reduced Flexibility	66.0%	43.6%	Decrease 22.4%
Information Processing	67.0%	68.7%	Increase 1.7%
Orientation Toward Rules & Risk	88.0%	43.1%	Decrease 45.1%
Control	81.6%	86.1%	Increase 4.5%
Self Confidence	85.0%	80.9%	Decrease 4.1%
Physically competitive	81.8%	81.4%	Decrease 0.04%
Decision Making Style	60.6%	63.6%	Increase 3.0%
Extroversion	76.5%	81.8%	Increase 5.3%
Introversion	64.8%	33.4%	Decrease 31.4%
Expression of Ideas	51.2%	77.2%	Increase 6.5%
Expression of Criticism & Anger	46.0%	43.3%	Decrease 2.7%
Expression of Support & Affection	80.3%	72.4%	Decrease 7.9%
Self Critical	62.0%	53.0%	Decrease 9.0%
Focus Over time	38.0%	60.0%	Increase 22.0%
Performance Under Pressure	49.0%	48.3%	Decrease 0.7%

Awareness

With regard to low scorers in this category they show little vigilance of what is going on outside of their immediate task, and may fail to make the necessary adjustments to aid performance. On the other hand, high scores are aware of and can cope with several tasks and they are sensitive to subtle interpersonal cues, but may have the inclination to be reactive in situations. In the Pre-test, the male mean score for awareness was 70% compared to the females' score of 71%. These scores placed them within normal limits, however, the testing group provides a comparison group named world champions and their mean score was 77%. The post-test scores for males were 63% compared to 58% for females. The comparison group did not post-test and remained at 77%. The males posted a 7% decrease in the post-test, while the females' posted a 9% decrease. Also, it was significant that one of the females scored way below average in this category scoring only 20%. The range of scores for males was 31% pre-test to 90% and in the posttest 20% to 82% and the individual scores of the athletes remained stable. The females' range was 20% pre-test to 94% post-test. However, the individual female athletes show more variability in their posttest scores in the negative direction.

External Distractibility

This category measures how easily a player can be distracted based upon external stimuli, like noise, disruption or disturbance. Cox, (1985) defines distractibility as a condition that occurs with high arousal, in which the individual's attention focus moves randomly from cue to cue, resulting in reduced performance. Testers who score low are not easily distracted and are able to keep focused on their task. On the other hand, high scorers are fairly easily distracted and are more at ease in single interpersonal situations. Also, the high scorer has the tendency to avoid

busy or chaotic conditions. The Pre-test mean score for males was 43% and the females attained 46%, and the comparison group mean score was 36%. The post-test indicates the males score of 47% and females again scored 46%, no change for the females but a 4% increase indicating slightly more distractibility. The males' range of scores pre-test was 10% to 67% and post-test 10% to 94% showing in most cases variability in both higher and lower percentages. The females' range of scores on pre-test was 5% to 79% and post-test 19% to 84% with very small percentages of variability in individual scores.

Analysis

The subsequent measurement was analysis that evaluates the person's capacity to engage in full-size picture analysis, preparation and complex problem solving. Low scores in this category tend to react to events in now, rarely making arrangements for the future. The elevated scores type an individual that considers all aspects of a situation and are able to place events in a macro context. Also they have an affinity for solving conceptual and intricate analytical problems. On the pre-test the males scored 65% and the females scored 52% with the comparison norm group besting both the males and females at 80%. In the post-test the males scored 77% while the females also increased their score to 67%. Bangsbo and Peitersen (2000) claim that good soccer players are quite perceptive and analyze the game situation very quickly. This ability has been developed through countless situational interpretations and experiences. Syer and Connolly (1984) claim that analysis of your opponent and gathering information prior to competition can be effective in neutralizing an opponent. The range of scores pre-test for females was 1% to 96% and the boys was 13% to 94% and post-test the females scored 13% to

90% and the males 38% to 94%. The females indicated players going in both directions and the boys scores showed an inclination towards the higher percentage in the post-test.

Internal Distractibility

The next category on the instrument was an assessment of a player's susceptibility to be distracted by emotions and extraneous thoughts. Poor scores indicate clarity of focus on their immediate task without the intrusion of irrelevant thoughts or emotion. In contrast, high scores lose their current train of thought easily by focusing on immaterial thoughts and feelings, and may experience their own thoughts happening so quickly that they become perplexed. The pre-test mean score for the males was 36% and the females also scored 36% and the comparison group scoring 38%. The post-test showed the males climbing to 51% and the females dipping to 34%. The males' pre-test scores ranged from 7% to 67% to post-test scores of 20% to 96% and the females range of scores in pre-test was 15% to 59% and post-test 10% to 67% with much variability in either direction on the scale. The males overall scores showed a tendency to go toward the higher percentages.

Action

The measurement of this characteristic purports to assess the individual's capability to narrowly focus attention on a single item; this requires mental discipline and the assurance not to be sidetracked. Wulf, McNevin, Fuchs, Ritter & Toole (2000) reported in their research on attentional focus in complex learning that it was now clear that the learner's attentional focus induced by the instructions can have dramatic effects on performance and learning. The males'

pre-test scores ranged from 55% to 95% and post-test at 47% to 96% with both ranges leaning toward higher percentages. The female pre-test scores were 31% to 95% and in post-test 24% to 95% with the individual scores varying widely.

Normally, low scorers on this scale will not have an extended attention span and will fall short of following through with detailed assignments. Conversely, high scorers can sustain attention for long periods of time and are enthusiastic enough to conclude boring routines and be relied upon to be detail oriented. The males' pre-test score in this category was 76%, while the females scored 63% and the comparison group scored 90%. The post-test elicited a score of 71% for the males and 69% for the females.

Reduced Flexibility

The next scale item to be measured examines the individual's propensity to make errors due to the narrowing of attention. This produces deficits in other relevant mental factors such as concentrating on extraneous thoughts or emotions. Individuals who score low seldom make mistakes because they do not transfer attention from external to internal thoughts or vice versa. In contrast, high scores indicate errors are made because they do not move attention externally to internally, consequently making errors due to lack of information. Also, they do find themselves compared to people with tunnel vision. The male pre-test score was 31% and the females reached 43% with the comparison group reaching 40%. The post-test revealed the males increased their score to 49% while the females remained at 43%. The pre-test range in scores for males was 13% to 45% while the post-test scores showed 18% to 84% with both scores varying widely. The females score 10% to 79% in the pre-test and 18% to 73% post-test scores that varied widely.

Information Processing

Occupations differ with respect to the number of tasks performed and the information processed. Employees can feel strained if they are overworked and conversely become unproductive when not busy. In the category of *Information Processing*, low scores indicate that people with too many tasks simultaneously will experience stress. Also, a low scorer will prefer doing one task as opposed to many, this characteristic is not unlike a craftsman who prefers to carefully finish a project. On the other hand, high scorers prefer multi-tasking, experience boredom when there are few tasks and like to manage many tasks at once. The males mean score in pre-test was 62% compared to 64% for the males and the comparison group scored 77%. In post-test the males' scores increased to 66% and the females' scores increased to 68%. The range in the pre-test for males was 28% to 90% and the post-test was 45% to 85% with scores tending towards the higher Percentages. The females scored 15% to 94% in the pre-test and 33% to 97% in the post-test. The female range of scores was consistently wide on both tests.

Orientation toward Rules and Risk

The instrument measured the chance of stringent adherence to a set model of thought or behavior. The high end of the scale are individuals, who are likely to act spontaneously, take risks and think and behave in eccentric ways. In essence, they live by their own rules. They feel uncomfortable when they are restricted to predefined boundaries. Low scorers abide by rules and regulations, are responsible and conformists. Irresponsible behavior would cause anxiety in this type of individual. The score on the pretest for the comparison group was 47% while the males' mean score was 60% and the females reached 59% on the pre-test. The post-test showed an increase for the males at 67% and the females decreased to 43%. The males' range of scores on

the pre-test was 30% to 91% and on the post-test was 23% to 87% and indicated a wide difference in scores. The females range of scores in the pre-test was 6% to 82% and on the post-test scores of 9% to 77% and also differed in scores as individuals.

Control

This attribute points out how much the players prefer to control others and actually assume a leadership role. Scores in the lower scale prefer not to manage others and might be uncomfortable when placed in a leadership role. High scorers want to be in authority, seek out leadership responsibilities and might be uncomfortable when not leading. The mean score for males was 90% and the females attained a mean score of 81%, the compare group scored 89%. In the post-test trial the males scored 88% and the females reached 86%. The range in control pre-test scores was 78% to 99% and 64% to 99% in post-test scores with the scores in the higher percentage ranges. The males' scores were similar on pre-test at 6% to 99% and the post-test at 48% to 98% with one low score being the exception and also leaning toward the high percentage rate.

Self Confidence

This trait in the individual determines how they think of themselves and their ability; moreover, it influences how self-critical they are. This important category often is the determining factor of the actual performance produced by the player in a game. High scores point out confidence, self-belief and a speedy recovery from error. Low scores show a lack of confidence, self-doubt and a slow recovery from blunders. The pre-test showed the males at 79% and the females at 80% while the compare group mean score was 88%. The second trial

demonstrated only a slight increase for the males at 80% and the females and at 81%. The range of scores in pre-test was 53% to 98% and 53% to 96% with scores at the higher percentages. The females scored 33% to 99% on the pre-test and 53% to 99% on the post-test ranges indicating a definite high percentage rate scores for individuals.

In his book *Sporting Excellence*, Hemery (1986) asks, to what extent was the mind involved in playing your sport? The unanimous responses were typified in words and sentences that summed up the psychological aspect of sports as, 'That's the whole game,' 'You play with your mind,' 'That's where body movement begins.'

Physically Competitive

Individuals who delight in challenges are called aggressive and they attempt to dominate the environment by using their physical attributes. Obviously, soccer is a contact sport and this dimension is a necessary feature of the individual's game. Players who shy away from contact will score low in this scale, and they are not driven easily by measured results. High scorers are individuals who actually 'take opposition numbers' and are intent on repaying a physical challenge. This form of physical assertiveness is perceived through body language. Hemery (1986) also comments on this characteristic as viewing competition in two ways. One way to describe the opposition is a kill or be killed situation. You tread on your opponent within the regulation guidelines of the game to reach the next stair on the steps to success. Indeed, this is a hostile and cutthroat version of sport at the higher levels. At times this is the way things are, however, athletes must be astutely cautioned that you had better be gracious to your opponents on the way up because you will meet them again on your way back down. The males' score was 82% and the girls were 80% in the pretest while the comparison group was quite high at 92%.

In the post-test the males climbed to 85% and the females showed virtually no change at 81%. This category had the males scoring 67% to 93% on pre-test and 73% to 93% on post-test indicating a higher percentage scores. The females scored 53% to 98% pre-test and 67% to 98% on the post-test indicating individual scores toward higher percentage scores.

Decision Making

The ability to make the correct choices when under pressure of an opponent is often crucial in soccer and those lacking in this trait will be placed at a distinct disadvantage. Tactical ability (decision making) proceeds from the player's option of action in a continuum of certain game situation. The scale provides the speed at which he or she makes decisions. The higher scorer will make decisions more unhurriedly in an attempt to substitute accuracy for speed. The lower scorer will make quick decisions and as a consequence makes errors. Also, the lower score has an inclination to be impatient. The mean score for males in this category was 56% and the females 56% and the compare group score lower at 52%. The post-test showed the males increasing to 61% and the females also increasing to 63%. The males scored on the pre-test 33% to 98% and on the post-test 12% to 91% with individual scores at the higher numbers. The females scored on the pre-test 7% to 74% and on posttest 33% to 85% with a much-varied difference in the individual scores.

Extroversion and Introversion

The next two categories measure the extent to which people seek out and enjoy the company of others. The high scorer or extrovert is outgoing, likes to be the center of attention while scorers in the lower range tend to be shy. Introversion measures the need for solitude and

personal space. Scores in the high range indicate people who enjoy time alone. On the other hand, low scorers will experience anxiousness when alone for periods of time. A mean score of 80% was noted for the males and the females graded at 76% in pre-test while the compare group attained 70%. The post-test showed the males falling to 76% while the females increased to 82%. The introversion pre-test score for males was 46% and the females was only 26% and the compare group scored 50%. In post-test the males dropped to 39% and the females increased to 33%. On the extroversion scale the males scored on pre-test 60% to 99% and 43% to 96% on post-testing indicating individual scores in the higher percent rates. The females scored similarly on pre-test 37% to 98% and on post-test 53% to 96%. On the introversion scale the scores drifted to the lower scores with one individual scoring high for both males and females. The ranges were 12% to 86% for males in pre-test and on post-test 8% to 86%, while the females' scores were quite similar on pre-test 8% to 81% and on post-test 2% to 96%.

Expression of Ideas

This scale item measures the individual's willingness to speak up in front of others. A high scale score shows the athlete prefers to express one's thoughts and ideas. The higher the score the more talkative you are; low scorers find themselves stressed by situations that requires them to speak up in front of others. The score for both males and females in pre-test was 71% while the compare group was 53%. In post-test the females' score increased to 77% and the males decreased to 65%. Pre-test range scores for the males were 43% to 94% and on the post-test 43% to 97% and a tendency for higher percent scores. The females' result on the post-test was 5% to 98% and post-test 51% to 98% with higher percent scores the norm.

Expression of Anger, Support and Affection

The willingness to confront others, to set limits and express your anger is communicative qualities of irritation. The more challenging and confronting you are the higher your score will be. The lower your score the less likely you are to saying no. The males mean score in pretest was 46% and post-test increased to 51%. The females scored 34% in pre-test and increased in posttest to 43%. The compare group was 50%. The pre and post-test for males were 7% to 97% and 23% to 93% with a wide range of individual scores. The females' results on pre and post-test were 3% and 98% and 2% to 99% with a definite leaning toward low scores.

The affection low scores indicate little need to receive or give support and the capability to work well in surroundings that do provide constructive reinforcement. Players who are supportive to those around them will score high and have an optimistic view of life events. Also, these types of individuals tend to be productive in a positive setting. The females pre-test mean scores were 73% and 72% in post-test. The males' respective scores were 78% pretest and 80% post-test. The compare group's mean score was 71%. The males' results on pre and post-tests were 48% to 99% and 48% to 98% with a wide range of individual scores. The females' pre and post-tests were 11% to 98% and 22% to 99% with tendencies toward higher percent scores.

Area of Self Critique

In this category individuals who do not reflect on actions, and appear confident in their abilities will score low. Those people who are too hard on themselves and reflect on transitory problems will score high. The compare mean score was 50% and the males' means scores were 68% in pre-test and 62% post-test. In contrast, the females scored 24% in pre-test and 53% in post-test. Males' results on pre and post-test range scores were 50% to 97% and 31% to 93% and

a wide variation in individual scores. The female pre and post range scores were 11% to 98% and 22% to 99% with higher percent scores than the comparison group.

Focus Over Time

Syer and Connolly (1995) describe concentration as a state of being that all sports competitors identify as the prerequisite leading to a high-quality performance. It is a determined attentiveness of a specific subject to the momentary exclusion of other subjects and it may vary in intensity. Also measured is the ability to stay concentrated and pay attention to details, shut out internal distractions (thoughts) and external distractions (noise). Low scorers may not put in enough time into their sport; conversely high scores will place sport commitments above all else. The compare means score was 44%. The males' and females' pre-test scores were 42% compared to 48%. In the post-test the mean scores were 38% for the males and 68% for the females. The male pre and post-test results were 15% to 54% and 15% to 75% with tendencies toward lower individual scores. The females scored 1% and 85% on pre-test and 1% to 90% on post-test and a wide range of individual scores on both tests.

Performance under Pressure

One of the most important characteristics for any athlete is the ability to perform under pressure. The athlete on occasion has to perform in an event that is more relevant and has significant meaning. A championship match with many spectators or the case of a professional scout observing the player. Low scorers will be very anxious in those situations and not perform at their best. They will be in awe of the event. On the contrary, high scorers relish the pressure,

the bigger the event the better. This type of individual will not shy away from taking a penalty shot in a game of extreme importance. The males' mean scores were 43% pre-test and 49% post-test. The females' scores were 40% pre-test and 48% in post-test. The compare groups mean score was 57%. The males' results on pre and post-tests were 5% to 65% and 17% to 74% and more often leaning towards lower percent scores. The females' pre and post-test scores were 8% to 74% and 8% to 75 % with individual scores tending towards lower percents.

Nideffer and Sagal (2001) provide the researcher with some interesting pointers on how to identify the kind of profile of a subject who attempts to fake well on the instrument. People who take TAIS usually are not aware that the inventory measures 20 different concentration and interpersonal skills. When they fake, their response set is fairly simple. They read an item and ask themselves, "Would it be good or bad to endorse this item?" It's almost an all or nothing response set. There also will be many inconsistencies between the profile of someone faking well and what you know about the individual and about the demands of their sport. The researcher found one such case.

Participant Interviews

In methodological literature it is commonly stated that questions have to be posed in an impartial manner. That is, without giving cues about which response is expected and without making response alternatives more salient to the respondent (Smit, Dijkstra & Van der Zouwen, 1997). The interviewees were advised to respond in a manner (written or verbal) that would shed light on a topic and at no time to feel that a given response was inappropriate.

The female participants were asked to respond in writing to the following paragraph that reads as follows:

There are gender differences in attributions. Women, compared with men, tend to evaluate their abilities as lower or less. Women often consider their own sex inferior, and those who do so attribute the outcomes of their performances to luck and task difficulty, which are external. Relative to men, women frequently see success as less important. Women consider their tasks to be easier than men's and consequently they have much greater shame for their failures. This continues to compound, for there is greater shame associated with an easier task, and the shame turns to guilt. For women to make such attributions, it is extremely difficult to flow, 'let go' and play with confidence. They are too concerned with their mistakes and the shame and guilt associated with those mistakes. (No Author)

However, only one of the females completed the assignment and this was her response:

I disagree with this paragraph. I, as a female evaluate myself as equal to my peers and to other male athletes. I do not consider the female inferior, and I believe that we are just as capable as males are to accomplish a given task. Success, to me, is very important and it is just as hard for females to accomplish as it is for males. We work just as hard, and we should not be considered inferior to males. Our confidence levels are pretty high, and although we become weighed down somewhat with mistakes, we recover and build our confidence up again. (CS1)

Both groups were asked what they felt were impediments to learning. The responses ranged from lack of support and opportunity, family constraints, teammate negativity, and diminished self-confidence. A most interesting response from a female athlete:

I think sometimes emotions, female hormones, kind of get in the way, worried about making friendships, instead of worrying about winning the game. Friendships are important and chemistry on the team is important but sometimes winning is the purpose we're out here for competitively, so I think emotions get in the way. (MA1)

A second female response on this question indicated that:

There's sometimes more bias against female athletes in their sport isn't as intense or as exciting, so usually holds us back from like audiences and crowds (spectators) and, I'm assuming, other players, mostly male players. (AG1)

A follow-up question was asked of this participant on the importance of friendships:

Could this possibly add pressure to conform, otherwise you could be labeled or face recrimination from the group and not be accepted?

No, I think friends are important on the team because it not only gives you somebody to play with but somebody to play for, not only for yourself, but you are doing it for them, also. You're putting in all your efforts to help the team out. (MA1)

However, in a literature review by Health Education Authority (1997) peer pressure was found to influence young people's participation in physical activity. This was particularly true as the child reached adolescence, when the influence of adults – be they parents, teachers, coaches or doctors –decreases and peer group pressure and the sense of belonging to a group becomes increasingly important. Boyfriends and friends have been found to have a particularly strong influence on girls' motivation for taking part in sports.

The current social climate was an area of investigation that was deemed highly relevant to teenage athletes. How did the study members' peers perceive them? The fact of the matter that the research participants were athletes; to a large extent they are encouraged and venerated by the modern athletic culture. Did society in general have different expectations of the athletes compared with non-athletes? This particular question appeared to spur agreement with all the study members as the responses although worded differently, in essence, stated the same thoughts on the issue. However, this response was answered differently by one of the female participants on social or societal implications indicating a sexuality issue:

In high school, like, all the soccer players, I guess, have a reputation but I like it. I think it's a pretty good reputation. It's like all the girls at our school are really involved in the school and make good grades and are really athletic and, I don't know, just have a reputation for being pretty good, average students. And then like societal, that word, I don't think any more girl soccer players have the reputation for being lesbians. I think that everyone recognizes a girl soccer player as being a really athletic person and recognizes that it's a lot of work and think that they...like, don't see a lazy person. (RA1)

Obviously, competitiveness both within and across gender was important aspects of the study. All of the respondents found that there were spirited and challenging bouts across gender, but competitiveness existed in the same gender where there was a constant desire to perform and

better sprint times in test races. On answering the question related to competitiveness within her gender a female athlete stated:

Definitely. I always want to be like better than everyone else, especially like in the speed or something that I think I'm good at. Not a lot of times, like, if I'm weak in an area, I'm not so worried about that, but an area I feel I should be strong in I definitely want to be better than people. (TD1)

In contrast, one of the male players attempted to identify his position as not being sexist in his response to cross-gender competitiveness when he reported that:

I don't want to be sexist or anything but like I think it's pretty common knowledge those guys are more naturally faster and stronger than most females so there wasn't really any big competition there. But, yes, sometimes if one of the girls would get a big score or something, it would be like, 'All right, then, I guess we're gonna have to beat that'. (CT2)

The review of literature did discuss feminist questions and the relationship those issues had to athletics. The consensus of the male response was that feminists wanted an equal opportunity to participate, however, one female presented this opinion regarding some feminists:

I think in some ways a man-hater. I think that women have plenty of opportunities to succeed in their sport and in business. It's getting better than it was and I think if you have the right mindset; you can do whatever your heart desires. Whatever you want to do. (CA1)

This male response on this issue was an attempt to clarify and be sympathetic:

I think feminists have their agenda in sports issues; however, I think their agenda in their mind is different. I think to other people, other than feminists, they do not have an agenda and they're just trying to stir things up. (MG2)

On further questioning, (TR2) answered a query on the 'rights of passage' whereupon females might covet something or be part of something, but they are not be prepared to pay their dues, and feel that they have a God given right to jobs, status, etc. because they employ 'jumping up and down' tactics, like young children displaying temper tantrums.

Yeah, I think there can be truth in that that they feel like some things are just owed to them because they're women and because maybe in the past that they haven't been given the full opportunity that men have been given so they feel we owe it to them and they don't need to do anything to earn what they get.

Regarding participation motivation, most of the participants responded to what makes them play now. Playing for their teammates, having fun, staying in good physical shape and developing a real attraction for the game was the gist of most answers. One of the male participants mentioned his father had played soccer in South America. Therefore, it would be a normal chain of events to follow in his father's footsteps. After a female responded to the question and pointed out why she plays now, I followed up asking where the earlier impetus came from:

Why did I start playing soccer? Well, I did gymnastics and then I did karate for like two lessons, and then I just tried something else. I was in third grade and really didn't know any . . . I just thought it would be fun. (RA1)

This sentiment was echoed by (TD1) as she stated:

Well, my motivation is pretty much . . . well, it was in the beginning I liked it and had fun, but I think now that I'm good and I think if you're, like, bad then you have no motivation, but if you are good and you feel that you're actually accomplishing something, and you're still having fun with it, I think that's why I stay with it.

However, the male responses indicated love of the game and family traditions as well as experiencing the very positive spiritual and physical effects of enjoyment. This raises the question of what athletes perceive as an ideal male or female in today's society:

The ideal man, to me anyways, would be very, like I say, competitive person, but also a good sport when he plays the game doesn't play dirty. He just plays the game 'cause he wants to win. And, outside of the game, the same way. I think he should be very ethical in what he does in all parts of his life. (TR2)

These female participants were queried on their perception of the female ideal and this provoked answers that were quite dissimilar and are in contrast with the observation of what the female ideal is or should be:

I would think it would be for a girl to walk into a room full of boys or a field of boys and just be seen as another player, besides another. ... instead of another girl playing. I think it would be more like here's another soccer player to play with, rather than thinking they're inferior, thinking they would play less or . . . (AG1)

Although the elicited response was very direct and sobering and at the same time this could be an assumption, and I decided to explore this issue because it appeared that the males' behavior had been condescending.

Do you think that is the case? (Researcher).

That boys feel that way? Yes. But I think you can tell, like in the beginning of practice like we are going to warm up or something and we are going to be playing with the boys, they would seem a lot more laid back and, like, kind of goofing off instead of like when they would be practicing by themselves, they're all really serious. (AG1)

Sexuality and gender are continual areas of controversy in sport. The literature has intimated that even an association with sport indicates sexual deviance in some females. Furthermore, although gender equity has provided a forum for female issues in sport and closed the gap in women's rights there still exist areas in athletics where females are sexually coerced, and stigmatized as sexually deviant.

Since there were several pages devoted to feminist perceptions and ideas regarding sport, the participants were asked if they felt feminists had legitimate issues with regard to equality in sport or was this just a case of people stirring up trouble.

Well, I think feminists are looking for an equal opportunity, but I'm not sure it can really be obtained (in sport) due to the physical make-up of males versus females. I'm not sure females can compete on a physiological standpoint because men have always (generally)

been bigger and stronger than women, and I just don't know if they can ever be equal on that level. (TR2)

However, one of the female participants responded in this manner to that same question:

I think in some situations they have legit reasons, but most of the time I think society has become pretty like evened out and girls have almost just as much right as guys with jobs and going to school, and just stereotyped family home isn't really . . . A guy goes out and works and girls stay home and cooks, anymore I think that they kind of overdo or exaggerate the problems that are really there. (RA1)

With regard to possible replication of the study, a female was asked if she thought this plausible in other Environs.

I think it is workable. I thought the males could be considered as 'teachers' because sometimes when you have somebody playing with you that are more advanced, it is a little easier for you. And, you can see how things work better. (MG2)

The question relating to male domination in sport was queried. However, the answer was not quite what the researcher was looking for. In essence, the question can be perceived differently if not specific in content.

I think it depends on the sport, definitely football. I'd say soccer too, I mean you sometimes see, like, the women's national team go and play a very good 21-year-old-team, and the male team just dominates them. (MG2)

I rephrased the original question to provide understanding.

In terms of domination, I also mean economically. So for example, in the sports world, is it tough for a woman to get into that environment, to work as an executive in the sports management field. That's what I mean by "male domination." Do they want them (females) out of there? It's kind of like a country club atmosphere where something happened to the golfer Sorenson, or whatever her name was, that they don't want them involved. Do you feel that? (Researcher).

Yeah, I think there might be some of that, I've seen for example . . . you never see women broadcasters at a football game or a baseball game or something like that, and it's just maybe they don't want women to become part of male dominated sports. (MG2)

According to Felshin (1974) women in sport have devoted themselves tirelessly to demonstrating that female athletes are real women. The apologetic has been served in countless

ways from an insistence on ‘heels and hose’ as a suitable off the court costumes to the sacrifice and exile of some women athletes whose non-conforming attitudes or appearance endangered the desired image of femininity. In this regard, the following question was posed to one of the male participants: Do you think that sports participation inhibits femininity?

I don’t think so. I think.... I’m attracted to many athletes, so I think that sports are just an aspect of femininity. I don’t think it inhibits it at all. (SH2)

Can the study environment be duplicated, replicated? By that, I mean, can . . . like you played at Lake Mary High School last year. Could that work at Lake Mary? Could that work . . . you’re going to Rollins College next year. Could that work at Rollins on a . . . not on a full-time basis where you’re always doing it together, but sparsely?

Yeah, you definitely could because all it really took was some female athletes and some male athletes and some dedication, really, are all you need, and the players and the coach. (SH2)

Schunk (2000) has examined the definition of learning in depth. One criterion that meets that definition is behavioral change or change in the capacity for behavior. The term learning is used when people become capable of doing something differently. Learning involves developing new or modifying existing behavior and a changed capacity to behave in a given situation because people often acquire skills, knowledge, beliefs or a behavior without demonstrating them at the time learning occurs. With this definition in mind, I asked if they learned anything from the study.

Yeah, the girls taught me a few things, and we taught the girls a few things, especially. We had to learn to be much more open and ready to do whatever was needed. (SH2)

The response from the female athlete seemed to be more thought out as she considered both the male and female perspectives:

I think on the female side, I think the girls learned to play quicker and be stronger against an opponent. I think we ran more and we worked harder and we pushed each other more. But I think for the males, I don’t know if they learned as much or more as they became calmer and kind of, I guess, maybe learned to wait on the ball and see where the

opportunities are to pass it and more possessions 'cause they had more time on the ball. (AG1)

Also, another male response indicated that some of his teammates learned new behaviors and the girls had an introduction to the manner in which the game should be played:

Yeah I do, from a soccer standpoint, the girls...we, the boys played a different type of soccer. We play a lot quicker, sometimes a lot fewer touches. I think they could have learned from us in that aspect. I think I learned quite a bit about my other teammates, as they acted differently. I might have myself, I'm not sure, but I think they acted differently. When we play with the girls, they have a kind of swagger and a little bit of motivation, I guess, to show off. And it may help them in some ways. It may make them play better and they think they need to show themselves for them. But I think everyone learned something in the study. (TR2)

I feel soccer could be a priority, an emotional attachment, during these years and might hurt academics. Could you comment on this? (Researcher)

I can see how that would be, especially if you're taking time out of studies and schoolwork just to go out and practice or if you're getting too tired. Like, during the high school season, we have practice every day for a few hours and it will get very taxing on the emotions and the physical and we would end up going home and I didn't want to study or do anything. But I got good grades anyway, but some of the guys definitely falter when soccer season comes around in high school. (SH2)

I agree. It's all about your priorities and you have to have to balance yourself between your practices and your homework and your studying, and I know I can say I have a lot of homework and a lot of studying to do. When my practices are very intense and I come home and I don't want to sit down and start focusing and doing homework. I'd rather just lie down and play on the computer and go to sleep and not work as hard. But I think that, the more attached you are to the sport, and then it does impair your academics. But I think you just need to keep your priorities straight and really focus on what you want to do. Do you want to become a professional soccer player or do you want to continue your academics? (AG1)

Was there anything negative from the females in the study, behaviors that should not occur in practice sessions? (Researcher)

The girls, I think, sometimes got a little bit silly because they're trying to show off for us, be funny for us, or whatever, and they sometimes took it less seriously than the guys wanted. (RA1)

Was there anything negative from the males in the study, behaviors that should not

occur in practice sessions? (Researcher)

The second answer to this question to the females was a point of view taken by several of the females.

Negative. No. (RA1)

Sometimes' but I think that's true that it was kinda...they would do it toward the boys and towards the girls. If they passed the ball and a girl didn't trap it well and they lost the ball, or if they passed it to another boy and they didn't trap it well, and they lost the ball, there's always a little like turning away and putting their head down and, you know, mumble something under their breath. (AG1)

This study was also an attempt to teach using a methodology that introduced the boys as additional teaching resources. In other words, I feel they are ahead of you and, from my perspective, work harder. What do you think about this idea? (Researcher)

Yeah, I think we definitely were more skilled and worked more at practice. But it wasn't because.... I think it's just because boys are naturally physically superior most of the time. As I said, some of the girls would be faster than me sometimes, but yeah, we would always be better and dominate. But the girls tried. They did well. (SH2)

I think we did learn with the group of boys, because when we scrimmage within ourselves with the girl, we split up into two teams, the competition isn't as hard and it's not as quick and they're not...the players aren't on you as fast, but when you are playing against the boys, there is always the quick, get open, and when you get the ball, pass it quick. Otherwise the boys will jump on you and they'll kick you, so I think you learn to play quicker and smarter with the ball. (AG1)

I think this is true. I think the idea is a good one, especially when we got involved into a more serious drill because I think that, if both men and women are playing seriously, the guys are more advanced and they have more experience on the field and they know how to make the run and play the ball in certain areas that are more effective. And girls can look at this time and maybe take a thing or two from it. I definitely think it's a good idea. (MG2)

Definitely, teachers. Vocally, lot of communication. They were more focused. The girls tended to get flaky and not concentrate on the game and getting better focus not only during the games but during practice, the whole time, the quickness, just the runs on and off the ball, and just the knowledge of the game was teaching us a lot. (CA1)

You mentioned flaky before; what did you mean by that? (Researcher)

Well, I think some of the girls would act differently around the guys than they would us and try to put on a show or act stupid, instead of like being able to talk or concentrate and work hard and said like, “Oops, I made a mistake,” but that always happens. (CA1)

Do you think they were looking for attention? (Researcher)

Yes, most definitely. I think some of them were trying to look for attention; some of them didn't know better. They didn't really know that they were doing it, I think. But I think it's an attention thing. (CA1)

Using a slightly different format during an interview I discussed a few disruptive occurrences by the female group. However, to be fair the study members were joined in those practical study sessions by the rest of the female team. This complaint was initiated from one of the males and he did indicate that he might have a confidence problem (in the soccer arena). His criticism was, that he had to work really hard to make up deficiencies in his foot skills, and although he may not have been there that particular evening he did experience this lack of discipline in the females. This had taken place during the second half of the study, and the females.... they were giggling big time. They had trouble absorbing the lesson and I asked if she could provide the reason for this behavior.

With girls, it's just so . . . it's different. Like, guys come to play. They come, they're focused, like practice is serious and I'm not saying that girls' practices weren't serious, but there's a lot of other things involved. Like, you get the emotion in there and then you through in if they had a bad day or a good day or if something happened with, you know their boyfriends or their friends or whatever. And then a lot of the time it's the whole, like, flirting with the guys. Like we'd be talking about, “Oh, look at him today,” and then they'd all giggle and that would cause problems. And then the guys aren't stupid so they knew that we were talking about them or one of their teammates, and so, it might have caused . . . it definitely ceased the absorbing of the lesson because we weren't focused, weren't paying attention. You can't learn anything if you're not paying attention to it. (CS1)

Getting back to the feminine ideal, let me give you a quote from a book about what this author, who is a male, feels about males. He feels that males are the same as animals and all they care about is eat, sleep, and maybe even sex. He feels that they operate on a lower level. They do not strive to reach their potential. And when we have this kind of thing, what drives them is ego. So let's say we have this in the female. Let's say we start

going this way with the female. Do you think that we could make that statement about females maybe twenty years from now (Researcher)?

With the guys, like, ego is definitely a big thing, like that is their motivation. There's competition between guys themselves to be the best one, to show off, et cetera, and at times females can be the same way. A lot of girls when they start getting recognized, it goes to their head and they think they're all like superior to everyone else, when, in fact, they're not the same. They're not good but it's just ego. It can play a factor in both male and female. It's not again something that's just male, although it did start with them and that was a main thing for them, but I can see it in the females as well as the males. Like, it's not something that females never encounter and never have experience. Like, I know personally, like, something good happens to me, I try not to let it get to my head but often I know I can be a little like, "Ohhhh, look at me, I'm better than you," but it goes both ways. (SH2)

And seeing that, when I was younger, I feel that at ages 16 through 18 or even maybe 15 through 19, that soccer if you're emotionally attached to it can be detrimental to your academic life. How do you feel about that? (Researcher)

I've actually seen that happen. A lot of people get too wrapped up into it, like, almost over committed, that they don't have time for anything else and soccer is all they do, which isn't like a bad thing that you're committed, but there has to be a balance? Like you can't shut yourself out and always be like, "Oh, my God, I have to work out, I have to work out," or "I'm not in shape enough, don't have enough muscle mass," and that can be unhealthy. You start not eating right; you get worried about muscle mass and this kind of thing and you push yourself almost too far where it can be harmful. And as far as academics, you find that unimportant and you push that completely aside and you lose track of everything else. Like, it's good to be both, to have focus on soccer and your athletics and your commitment to that, as well as having focus on school and academics. (CS1)

Was there anything negative from the males in the study? (Researcher)

Sometimes, but I think that's true that it was kinda . . . they would do it towards the boys and towards the girls. If they passed the ball and a girl didn't trap it as well and they lost the ball, or if they passed it to another boy and they didn't trap it well, and they lost the ball, there's always a little like turning away and putting their head down and, you know, mumble something under their breath. (AG1)

In contrast, analysis on research of constraints and opportunities in women's leisure (see e. g., Dowling et. al., 2002) revealed that it was not just physical harm that women feared. A guardedness for psychological security (harassment or abuse) also existed:

I used to jog a lot but there are loads of kids in the area now that think it clever to shout things. I wouldn't have done anything a year ago before I lost weight. (p. 5) (no name)

I had asked one of the male participants to respond to female behaviors during practice. I felt that this young man, after he had given the answer, appeared to be somewhat lacking in self-confidence. He felt that when he was playing with the girls that his confidence level raised dramatically, but he also mentioned that in playing with the girls, there were times when their behaviors were inappropriate. He observed that they did not listen to the coach at times and there was too much giggling.

As a researcher, I'm trying to determine why those potential college athletes or elite players reconcile that they can reach a high goal by actually giggling and fooling around. You mentioned this yourself that a transformation occurred when you went from the female team to working with the boys; there suddenly was an impetus to work harder. (Researcher)

Well, I would agree with what he said that the girls are less focused than the boys. I know because, when I practice with the girls separate and I practice with the girls with the boys, and there's always that little more goofing around from the girls, more giggling. That's just like the girls' personalities, that we take things less seriously. We joke around with each other more and we laugh more, rather than the boys. And I think, well, I don't know because I don't know the boys' relationships outside of their practice, but I know there's a lot of.... some of the girls have become really good friends so we have a lot of inside jokes, or we just.... I don't know. I don't want to say, "get along better," because I know the boys get along as well. I'm just saying, outside of practice the girls, I think, probably have more relationships and friendships than the boys. I'm not sure. (AG1)

An inquiry related to academic study was asked of the male participants.

Would you be in agreement if I stated that during late adolescence in high school and the college freshman and sophomore years that, if you are emotionally attached to the sport and that's what you live for, this emotional attachment can impede your academic studies? (Researcher)

I agree. It's all about priorities and you have to balance yourself between your practices and your homework and you're studying, and I know I can say because I have a lot of homework and a lot of studying to do. When my practices are very intense and I come home and I don't want to sit down and start focusing and doing homework. I'd rather just lie down and play on the computer and go to sleep and not work as hard. But, I think that, the more attached you are to the sport, and then it does impair your academics. But I

think you just need to keep that in check and keep your priorities straight and really focus on what you want to do. Do you want to become a professional soccer player or do you want to continue your academics? (AG1)

I would like to read a statement from a female interviewed in a similar study done in England. Would you care to discuss her perspective? (Researcher)

Girls obviously don't want to play soccer and it is not that they don't want to; they know that the boys will have control over the game, and they are not going to get anywhere, so they do basketball. Then there are loads of people in basketball and you just get bad attitudes from the boys. A game like that, you should just want to enjoy it, and it should be fun, but it ends up as a full-scale war because someone shouting across the court, 'Oh, give me the ball and they give you loads of attitude. (Fiona, School 4)

I don't agree with that very much. When we played with the girls, it was always, yeah, the guys on the team controlled the play, but no one ever looked down on the girls because they were a key part of the game as well. And everything that we did, it was all pretty equal as far as competition goes. We split up the guys and girls on different teams and it always ended up that the guys would.... yeah, they would get the ball, but the girls also would call for the ball and they would also want the ball, and it was equal as far as that goes. So I think I disagree with what that says. (SH2)

According to Bandura's social learning approach an individual's belief that he or she can successfully execute the behavior required producing the desired outcome. This theory is particularly useful in explaining behavior as it incorporates the judgments made by the individual regarding the gains from exercise and the perceived ability to exercise, two significant variables for explaining behavior in exercise settings (Doganis & Theodorakis, 1995)

Interview Comparison: The Flintoff and Scraton Study

After reading some of the literature of gender studies in England I thought it was important to get the viewpoint of the American male and female athlete.

Another female participant (AG1) in the present study was asked to comment when advised of a similar gender study in England and how the English females' reacted to the male participants intimidating behavior. The females in that study were more or less dominated by the

males who seized complete control of the game and reduced the females' involvement, and the girls were treated rudely and were constantly berated and ridiculed. In effect, the females would not participate in this activity after this experience.

Well, I don't agree with what she said about it being male dominated and don't even try, just go ahead and play a different sport. I don't think it's that serious that you have to play another sport because of the male domination. I think, when you scrimmage against boys, I don't think it's a war, because you have to keep in perspective that you are playing girls and boys, and I think girls and boys' soccer is completely different. The boys being much faster, physical, and the girls are much more let's pass here, pass there, you know, made more plays rather than . . . (AG1)

What are your thoughts on this comment: "Well, you get this from the teachers...that they are only interested in the males and not to like PE [for the girls] it's like...it's kind of acceptable in a way...it is definitely seen as OK to be that...for the girls not to like PE." (Researcher)

I think it's true that it is awkward for a boy not to like PE class and a girl to like. I think a majority of boys like PE and the majority of girls probably wouldn't like PE. I think it all depends on the level. I think in elementary they teach the whole group. I think in middle school they teach the whole group. In high school and in college, I assume, is where the segregation starts, but there's not PE for high school and college. But I think, club-wise, I don't think that it's true that the male coaches segregate between girls and boys. I think, like with you, I think they're equally determined to both teams. You know, you try to balance between how many games you go to between the girls and the boys and practices between the girls and the boys. (AG1)

Could you comment on this female's perception on attire: "It's a lot better now without the boys this year...you don't feel as if they are watching you—you know, in your skirt and that." (Researcher)

I think that's just like how boys are. They just are always looking at girls and I think the same thing goes for the girls. The girls are always looking at the boys and so I think there is a difference when the boys aren't there. Then there's not that, or you don't sense that someone's watching you always so you can't mess up. (AG1)

Again taking a response from the Scraton and Flintoff's study and this was asked earlier regarding the teachers, the coaches, and physical education: The teachers appear only to be interested in the males and prefer female exclusion from physical education. However, this exclusion is acceptable in a way...it is definitely seen as okay to be that...for the females not to enjoy physical education? (Researcher)

That may be. I don't think I've ever really seen a serious case of that, but I can definitely see how that might happen, just because the boys are more eager to do things like sports and things like that. But there will be one or two, or however many girls who really enjoy physical education and if they were turned away, then that would be sad, but I don't think I've ever really seen that. (SH2)

I don't feel that really should matter that teachers care. If you want it and you think its fun or you like it, why should you care what the teachers think? (TD1)

A comment from a female on mixed physical education in the English study:

It depends on what you are doing. Gym and aerobics are not good, 'cause it is like the boys are there, they are watching you, and if you are on your own, you can't do what you want to...you just feel small around them. On your own you can do things and you can be yourself. When the boys are there, you change, you become quieter, you say nothing, and they just take over. You know that they are immature and they will say something to embarrass you."

Yeah, I can see how that would happen, definitely, especially in the early teenage years, but once, I think, the boys have matured somewhat, they would actually start to try and help the girl in what she's doing, whereas, definitely in the 13, 14, 15 years old, there would be sarcastic comments yelled, just to try and look cool. (SH1)

This response was echoed by several of the females.

I don't think this happens at all. I think the person that said that probably dealt with lower self-esteem or if something that any of the girls here, or like, just wasn't nearly as comfortable with the guys because the girls her didn't even really care what the guys thought because it was like we were all in the same yoke. You know, like the oxen thingy. Like the same level and participating together and not worried, not so incredibly concerned about if someone saw you screw up, you know, if you screwed up, you just kept going and it wasn't that big of a deal because everyone did it. And everyone was mature enough to accept people's flaws and not have to be worried about screwing up and looking bad or something. (RA1)

I guess I don't agree with that. I think, I know when I'm with boys I'm quieter but that's because I'm more focused and 'cause I play harder. But I do what I want to do, and I just, when I play, I work harder and I think I become a better player when I'm playing with boys rather than if I'm training by myself or with a group of girls because there's always that, more joking around and if you mess up, it doesn't matter, but if you're with boys, it does matter. So it makes you work harder. So, you do what you want to do but you're working harder, I think. (AG1)

Do you think that's a cultural thing because she's from Britain, or do you think it's a personal problem? (Researcher)

I think it's a personal problem. I think it's just personal insecurity. If you're sure of yourself, you'll act the same around everyone. (AG1)

This study was also an attempt to teach using a methodology that introduced the males as additional teaching resources. In other words, they are ahead of you and, from my perspective, work harder. What do you think about this idea? (Researcher)

I think we did learn with the group of boys, because when we scrimmage within ourselves with the girls, we split up in two teams, the competition isn't as hard and it's not as quick and they're not.... the players aren't on you as fast, but when you're playing against the boys, there's always the quick, get open, and when you get the ball, pass it quick. Otherwise the boys will jump on you and they'll kick you, so I think you learn to play quicker and smarter with the ball. (AG1)

What do you feel they learned from you? (Researcher)

I think soccer-wise, I think they learned to be more.... to pass the ball around more because we put pressure on them but not as much pressure as in a game, so it's more like a learning tool. So I think they learned to be more.... they become sensitive to, you know, being angry when someone messes up and I think they learned more about girls like as a whole about when our emotions would swing and those kinds of things, and they learned how to deal with that and stuff. (AG1)

The word "perve" in England means the male gaze, looking at women as sex objects. Did you feel this was a problem in the study? (Researcher)

I don't think so. I don't think many of the boys are perverted, because I don't even think some of the boys are very attracted to our team or the girls, so I don't think that was there. I didn't feel that ever. (AG1)

No! was the very direct reply from SA1.

Well, it's not like they just check you out in the gym. Guys check you out all the time, so it wouldn't be anything different. It was nothing that.... I don't know what they'd want to check out when I'm sweating or gross, so it didn't really bother me. (CA1)

The researcher asked if there was anything akin to this with females.

I'd say girls do the same thing to guys as guys do to girls. Maybe they don't obsess about it as much or anything like that. Like a guy may hang all over the idea of being with this girl or anything like that, whereas a girl, if they see someone who's really cute or hot or something like that, then they'll recognize that they are attracted to this person but don't continue to "undress" them with their eyes, at least not in my experience. (RA1)

Group Interview

The following group interview had taken place after the first day of sprint testing. The participants were asked if they felt any competitiveness existed between participants in their own gender and cross-gender:

I felt like I was in competition with SA1. (ES2)

I thought it was a good combination but I figured it would be better if you were going against each other at the same exact time rather than one after another. (JU2)

I didn't feel any competition, because women just ain't as good as males. (MG2)

I found that, whenever the girl behind me was getting the same times as I did, that I needed to go a little faster. (SH2)

I liked competing with guys because I like beating them and seeing their reactions. (SA1)

Was there any personal based motivation? (Researcher)

My personal motivation was to stay alive throughout the entire process and do my best. (RA1)

I found myself competing with myself to get the best time I could. (TR2)

All my teammates think I'm slow but I found out that I'm just as fast as them, so there was competition 'cause I wanted to beat them. (MG2)

We always feel like we have to beat the other person so we always push each other more by encouraging ourselves. (ES2)

After the sprint, everyone was asking each other their times if they wanted to beat them, and there was a lot of competition. (TR2)

I think girls want to show off for guys and guys want to show off for girls, and that's just the way it is. (JU2)

Was there any hint of overt or covert males versus females' attitudes? (Researcher)

I felt like, although we're supposed to stretch together during the first warm-up, or stretching and stuff like that, the girls are, like, in an open circle, trying to talk with the guys and they kinda made their own little circle, so that was kinda hard. (MA1)

I think the comments . . . it makes sense. I understand where they're coming from, how

they think that our team is much slower, but I think they can still learn how to have composure over the ball. I think the girls may be more tactically better for our age and so I think we can show them more, like, passes. (AG1)

The following questions were asked during the shooting at goal session. I would simply call a participant over to my vantage point and asked them what differences if any did they notice during the session in comparison to a single gender session.

Yes, I do think that training with the guys helped us and accomplished what they were supposed to do because it made us more competitive towards one another and wanting to do better than them. (DT1)

Yeah, I think the sessions did accomplish very well what they were intended to be, like tonight, October 21st....we did feel pressure and I think we accomplished that very well. The boys did motivate me and I wanted to show them that I could stick with them for most of it. I improved my score since last time. I think.... just because I ran with the guys and not just all girls, and I think the running exercises like the first practice team that came out here, we kinda showed the boys that we can stick with them and that they're not really stronger than us. (MA1)

I decided to introduce a question that had described the attitude of the male player who left a practice session and failed to find any value in the co-ed sessions. Three of the study members were asked if they could train together and make the outcome more beneficial.

I think that the training with the guys was more beneficial than just training with girls because it made you do things better, because they were harder to play against. (DT1)

I think the sessions that we've been doing with the boys have been very beneficial and bring the girls to a higher level, 'cause men play a lot faster and I think that throughout the sessions, the girls' games have been more focused and more based on soccer. The boys were a little distracting, but I think it was a positive thing and that's about it. (CA1)

I feel that I'm kinda in-between on this. I agree with some aspect of it and disagree with some. For one thing, the boys offer a competitive level that girls can't, but another thing, there are different aspects of the competition that you would miss out on if you only played with boys or you only played with girls. For instance, sometimes you feel like you need to play harder when you're with the girls to show off for them, et cetera, whereas with boys, it's more of a.... less competitive in that aspect and I feel that the statement is close-minded in a lot of ways. (SH2)

Motivation to improve and excel in sport is considered a desired emotional trait in athletes and I asked the participants if that emotion was satisfied during the training sessions.

This session has motivated me as a player 'cause I want to do some things better than the guys because they get cocky. (DT1)

I thought that the drill we did over here where we had three yellow players in separate quadrants.... I thought that was effective in getting the players free pretty much. The session would have been more effective in the sense that it would have been a little more intense, I thought; however, I think I had a little bit more fun when the girls are here because it's a little bit more lighthearted and there are a lot of cute girls here that a guy likes to look at and play with, too. I don't know. It all depends on what effect that you're looking for still. The session did motivate me as a player, I thought. It is a personal goal of mine to try and get the ball over the line in the drill where there were three yellow players in separate sections. It was definitely competitive in a fun way that tends to motivate me pretty well. (MG2)

Yeah, I think the sessions did motivate me better, just because the guys are here just to prove that we're better than them, kinda to prove to them and to myself, and I think that, just 'cause they're guys and we're girls, I think there's really always an attraction there, no matter what, even if it's just in soccer competition and stuff like that. So I think it did motivate us. (MA1)

These sessions definitely motivated me or benefited me personally very well. It made my game go faster and I want to become a better player definitely. (CA1)

The male players were considered by the researcher to be advanced in the soccer components. With that assertion in mind, I queried the boys if a level of frustration existed while playing with females and was there ever a desire to comment on poor passing.

I don't feel that it is possible for that to happen, maybe because there's a certain level of respect that the gentlemen would have for the ladies when playing with them I think there's an understanding that, as a whole, the guys are more highly skilled and more competitive than the girls and so, when the girl would lose the ball, it would be different than when a guy would lose the ball, 'cause it would be a much bigger deal if a guy was repeatedly losing the ball because his level.... his potential is much higher than that of the girl. (SH2)

I decided to follow up on the last question with a female. When participating in ball possession exercises in the training sessions, I inquired if she made a poor pass would she expect any special treatment from the boys.

No, because we're playing with a higher level of players, and when I personally play with higher-level players, my game comes up and I become more competitive and I want to become a better player. (CA1)

Personal Perceptions on the Interviews

Some of the questions were not quite understood by the participants. Consequently, at times I had to ask it again sans tape. There was also much more dialogue from the players and that gave me an opportunity to find out their viewpoint on other subject matter. The fact that I did coach the players didn't give me a lot of time to converse with them at length. Time constraints due to travel, employment and personal chores reduced the time I had with the athletes to practice, games and not much socializing.

CHAPTER 5: DISCUSSION

Introduction

The raison d'être of this study was to determine through the process of competitive co-educational soccer training sessions what the perceptions and attitudes the athletes would have regarding integrated training. Another objective was to determine if the male participation in the study provided additional learning tools for the females and if the females reciprocated through teaching the males in some capacity. Using soccer specific field component testing, a psychological inventory, observations, interviews and video-taped sessions, data were collected from 13 coed athletes as they proceeded through 2 separate, 3 month, twice-a-week training sessions in the fall of summer of 2002 and the spring of 2003.

Involvement by females in soccer has increased enormously in recent years and in several countries is the fastest emergent competitive sport. Not until the 1980's was the female game actively encouraged. The female game gained international credibility in 1991 when the first World Cup for women's teams was held in China. While there has also been a sharp rise in women's club soccer throughout the nineties, in many of the countries women's participation in sports, particularly field games, is restricted by cultural, domestic and economic circumstances (Wells & Reilly, 2001; Bernstein, 2003).

It is therefore not surprising that research on women's soccer has lagged behind studies of the men. With the improved focus given to physical groundwork for soccer, fitness appraisal of female soccer becomes important. This applies to laboratory testing of aerobic power, anaerobic power and muscle strength and their field-based counterparts where suitable (Wells & Reilly, 2001).

Male and Female Differences in Soccer Components

Soccer Specific Aerobic and Anaerobic Analysis

I had used the Yo-Yo test prior to the study. The players had become familiar with the test and the energy output required to demonstrate fitness. Therefore, the presence of the tape player unsettled the group as they became aware that they had to endure the shuttle-run test. This particular test becomes very demanding on the athlete as he/she progresses to the higher levels of the test.

Performance analysis of sport has been primarily used to inform the coaching process. Objective information about an athlete's performance is used by the coach to plan the practice environment and later to, aid in the modification of athletic behavior. Instruction can be provided in various modalities and at particular times according to Hodges and Franks (2002). An illustration could be a visual demonstration to the player prior to any experience with the related skill, verbal instruction provided during or after execution, possibly relating to the whole skill, or focusing in on specific aspects of the skill. However, it is important to note that due to a player's variation in activities and the different playing styles, many observations, on a player and on dissimilar types of players need to be made in order to be representative of the actions in soccer.

During the aerobic endurance run, some of the participants would finish earlier than their teammates and the other gender. After completing the Yo-Yo Test the players did not leave the test area preferring instead to view their teammates continue the test run. The second group of 7 then proceeded to take the test. Initially, teammates were cheered by their own gender, and then if players displayed good fitness both the male and female participants cheered them regardless of gender. Recognition was given by their teammates upon completion of the test for performing

well on the test run. This could have been the beginning of cohesiveness within the male and female group.

According to Widmeyer and colleagues (1985) there are two key distinctions to be made when defining group cohesiveness. First, there is the distinction between the individual and the group. The individual aspect of group cohesion is encapsulated in the notion of individual attraction to the group; that is, the extent to which the individual wants to be accepted by group members and remains in the group. The group aspect is represented by perceptions of the group as a whole (referred to as group integration), which is the degree of closeness, similarity, and unity within the group? The second distinction is between task and social cohesiveness. Social cohesiveness refers to the motivation to maintain and develop relationships within the group, whereas task cohesiveness is the extent of the group's motivation achieving goals and objectives (Carless & DePaola, 2000).

Williams and Reilly (2000) contend that motivation, commitment and hard work are prerequisites for exceptional performance. But, the authors provide a caveat stating: "This environmentalist view is contrary to empirical evidence supporting the contribution of genetics." (p. 663) My interpretation of the aerobic and anaerobic test results indicate:

- A work pattern disparity. The boys' scores indicated more endurance, power and acceleration in all the necessary criteria. This higher work load is attributed to the males application and understanding of the requirements of a soccer player
- It must be noted that a few of the girls had bested some of the male scores in each of those tests. This would indicate that not all, but some of the girls, meet the necessary criteria for work ethic
- The sprint and endurance tests also confirmed overall differences for both groups in their positional roles in the respective teams.

There were definite speed (anaerobic) and endurance (aerobic) differences that existed in both the male and female participants associated with their positional responsibility on the field of play. Pace players who play in forward roles and the defensive counterparts were faster and the midfielders and outside flank players demonstrated more endurance. Todd, Scott and Chisnall (2002) had already been documented these findings in their research analysis, by player position and competitive standard in England.

Helsen et al., (2000) claim that as soccer players develop, they routinely devote more hours of practice each week. However, this is not consistent with other domains, but also essential and advantageous. In essence, to optimize the standard of play an increase in the absolute amount of practice per week from an age of 16 and throughout the player's career is considered most beneficial.

According to Dyer (1982) male athletes are generally stronger, speedier and more powerful than sportswomen: they can run faster, jump higher, throw longer. Females have a comparatively lesser muscle mass, more body fat, shorter and less dense bone, a smaller lung volume and total chest capacity, and on the average are more agile and flexible, though slower and less strong than men. They also must accommodate in their sports to the physiological changes that occur during menstruation, pregnancy, childbirth and menopause. However, although women on the average are slower and less powerful than men, it does not follow that events demanding speed and strength are suited specifically to men. There are far greater differences within a sex than between sexes, and the fitness factor and levels of skill, agility and co-ordination can outweigh the sex factor anyway. However, Dyer (1989) claims that: "It is my assertion, based on the analysis of data with all the shortcomings and difficulties I have hinted at,

that women's performances are improving faster than men's in virtually all events in all sports and will continue to do so for the foreseeable future." (p. 284)

Finally, Hargreaves (1994) alludes to the contention that in various ways, men and women are constantly being compared to in sports, and the dissimilarity between male and female levels of performance is an index of 'natural' ability. Men are typically taller, stronger and heavier than women, with broader shoulders, narrower hips and a higher center of gravity. They have more muscle mass, a superior lung capacity, larger hearts, and therefore provide a more efficient delivery of oxygen to the working muscles.

Technique Analysis

The primary characteristic of soccer technique is that skill can be observed directly, technique is perceptible. Therefore, since technique is a direct experience, players are only too keen to acquire and develop this facet of the game. The drills and practice sessions associated with technique provide a greater sense of pleasure than the tough physical component of football (Csanadi, 1963). Historically, observational learning has been of interest to those who teach and study motor skills. It is a well known fact that if people practice a particular task, then performance does not diminish, as it would in a mechanical apparatus built to execute the task in question, but rather becomes more dependable, skillful, dexterous, and enduring in the course of practice (Beek, 2000). In its traditional form observational learning consists of the reproduction of a novel pattern of action following the visual observation of one or more correct performances of the new motor movement (Doody, Bird & Ross, 1985).

The soccer skills required by players to maneuver during match play are basically the same. However, there are different styles of play and the field condition, weather, nation and

personal temperament that have an effect on how a player uses technique. This produces different priorities on what techniques should be employed. Receiving is an important skill and players must have the ability to bring the ball under control from a number of positions, with and without the pressure of an opponent. In particular, weighted passes that arrive to the head, foot, thigh or the chest area. Associated with this, players must understand under what conditions they should bring the ball under control with their initial touch, and under what conditions players should play the ball away with on the first touch. Another technique that is crucial for a successful player is the capability to dribble or run with the ball and go past opponents. Passing, crossing and shooting are similar and differences can be attributed to distance, position on the field and again the weight placed on the kicking action. Finally, heading is also an exceptional skill used in both defending and attacking areas on the field. Luhtanen, Vanttinen, Hayrinen and Brown (2002a) consider technique invaluable as they state it can be appreciated that knowledge of how tactical situations should be solved is not enough if the abilities for executing skills of the game are inadequate. This point of view can also apply to work-rate in a soccer match and MCGregor, Hulse and Strudwick (2002) consider work-rate to be insufficient for success unless allied to and coordinated with fundamental skills.

At the technical session onset the group was asked one question: Which group would dominate the test? Both males and females indicated their group would have the best scores. At the conclusion another question was asked. Did the whole group accomplish the purpose of the training session to pass the ball to teammates, while advancing the ball toward the other goal? The opinion from all the participants was unanimous. The study members had much to talk about their experiences over the weekend and games they had participated in. The progression of the

drill was successful, because certain coaching points were stressed and the conditions attached to the drill (the number of touches per player) were met and aptly performed.

In the sequence passing drill, on both pre and post-test the females had more passing opportunities. Again, this was due to the larger numbers of females. However, this was not quite as lopsided as the tactical drills. I feel that the girls had better success here because the field size was much larger, permitting them more space to play and the inclusion of 3 boys on each team. This game too provided more touches per participant and was made more rapid by limiting each player's number of ball touches to three. Finally, in both the pre and post-test, the sequence passing drill was played in three phases. Only at the end during the match phase were passing attempts compiled. The 1st and 2nd phases are introduced without real pressure from your opponent assuring success from the participants in passing the ball. From the performance data I have assembled and analyzed, I concur with Atkinson (2003) as he declares that judgment on the minimal effect in sports performance research is far from certain. What is known about minimal worthwhile effect for sports performance is that it is likely to be too small, since the elite tend to be relatively homogenous in performances. The following descriptions of technique are in my opinion quite necessary acquisitions for the competitive soccer player.

- The acquisition of skill at an early age is vital during the development stages. Skill acquisition is not difficult, it is merely the performing of a task through repetition
- The constant action of touching the ball with the correct body surfaces will allow the player to cope with tactical and physical realities presented farther down the line. If the player lacks technique then there will be a serious deficit to that player's ability to make decisions or solve problems in soccer
- Technique is the athlete's ability to maneuver with the ball while under pressure from an opponent. Moreover, individual skills range from the fundamental basis for possession of the ball, for keeping it under control in difficult match situations, and for using it to good advantage

- Good technical skill adapted to any particular situation enables the player to avoid losing the ball too frequently and then having to expend more energy attempting to regain possession.

Individual skill is not a singular element, which can be explained, in conclusive terms; in fact, it is constantly developing. (Luhtanen, 1994). It also should be noted that the other skill tools such as heading, 1st touch receiving, receiving to shield the ball from an opponent and the player's ability to place 'touch' on passes are also important abilities.

Conversely, Lees (1999) cautions that for many complex skills, a simple mechanical analysis is inadequate for identifying key performance variables, and the complexity may make a logical approach impossible. In those circumstances, an attempt is made to identify key measurement variables by measuring a large number of performance variables and identifying those that relate to performance outcome using statistical techniques. MCGregor, Hulse and Strudwick (2002) support this sentiment as they claim that there is a sparse amount of research on factors like fatigue and the effects on skill performance. Moreover, they too allege that it is difficult to assess skill performance in a reliable way.

Based on experience I would be inclined to disagree with this assertion because you can measure skill performance. Observing the athlete's reception skills, passing skill with the correct 'touch' and dribbling ability can assess skill performance. Each technical skill can be quantified Luthanen et al., (2002). Game performance has been analyzed in soccer by Luhtanen using quantitative (number of executions) and qualitative (percentages of successful executions) game performance. In essence, the researcher employed both a qualitative method (observation) and a quantitative one (descriptive statistics) to provide a numerical tally of the players' involvement in match conditions.

Lastly, Lees (2002) considers it understood in the concept of technique that if a skill is performed with correct technique rather than improper technique, performance will be improved. However, he mentions that vigilance should be used when using performance as a gauge of technical skill. Other factors and variables can affect performance; therefore in some cases good technique customarily does not mean a good performance. Hochmuth (1984) confirms this assertion by insisting that other factors including psychological, anthropometrical and neuromuscular characteristics affect performance. Finally, Arend and Higgins (1976) report that the teacher (coach) who is a trained analyzer and observer of human movement will be better equipped to enhance the process of skill acquisition in their students.

Tactical Analysis

Tactics in football apply to a whole range of areas that can be described as the decision making process in soccer. Tactics apply to a single player, a small group of players or the whole team. The system or alignment of players that best suits the team is based tactically on your players' attributes, the opponent, the game location, the field condition and dimensions and the weather. Also, the team's approach on how to defend or attack the opponent is tactical preparation.

The pre-test results on the tactical 6 versus 2 indicated that the males had touched the ball more. There were two reasons for this kind of ball distribution:

- This particular day only 3 females showed for the session. Consequently, the females would not have that many touches on the ball
- After reviewing the video, I do believe the boys intentionally kept the ball away from the girls. If you make a poor pass you find yourself in the middle of the drill defending and chasing after the ball. The boys definitely wanted to demonstrate their superiority, because in every tactical category they out-performed the girls.

This adeptness is related to the knowledge and nuances of how soccer is played. Emphasis is on possessing the ball, the male players are fully aware of the consequences of losing the ball. The team not in possession of the ball has to run more and this becomes both physically and psychologically tiring. AG1 added confirmation on this point as she responds in her interview to this question: “Was there anything negative from the males in the study?”

Sometimes, but I think that’s true that it was kinda.... they would do it towards the boys and towards the girls. If they passed the ball and a girl didn’t trap it as well and they lost the ball, or if they passed it to another boy and they didn’t trap it well, and they lost the ball, there’s always a little like turning away and putting their head down and, you know, mumble something under their breath.

The post-test indicated the girls had improved, however, the number of male and females in the exercise were reversed from the pre-test. I had two groups playing simultaneously and chose to view the group with more females.

- Many of the passing sequences attributable to this group of 5 females and 3 males were impressive. Passing options were the correct choices that produced a good number of possessions.

Two particular deficiencies of the game had stood out in the 6 versus 2 from a biomechanical and tactical standpoint.

- The athlete's incorrect body position to receive or play a pass, combined with their lack of support in providing their teammate with a passing option.

Many countries now have national teams, regional and national leagues for women’s teams and there is the popular professional league in the United States. The league has players from around the globe. The women’s game is being taken more seriously, and as such, has established its own niche in an otherwise male-dominated game (Brewer & Davis, 1994).

McPherson (1990) discusses the importance of skill analysis and how this relates to research:

Advanced technology has enabled biochemists to gather very accurate measurements on many of the parameters associated with human movement. High-speed movie film, for example, has been used extensively to examine in great detail the movements of the body that occur too fast for the human eye to detect. In many of the elite sport training and research institutes around the world, force platforms have been installed below the supporting surfaces in an attempt to analyze the various forces applied during high caliber sporting events. While these analysis tools have done much to improve our understanding of movement and the performance of athletes, the analytic tasks faced by the coach are predominately qualitative in nature. (p. 1)

- On lost and continuum possessions both the males and females were culpable of playing a more difficult option when an easier one would suffice.

Franks (1988) would consider a detailed analysis of these lost possessions as helpful in understanding what the structure of the game was and also allowing a meaningful description of the game to be made.

Henry and Comeaux (1999) indicate that there is clear evidence to substantiate male dominance in coed play and lesser opportunities for women to participate completely. Men are more likely to dominate the play, which, in soccer, means controlling the ball. In order to assess the involvement of men and women in play in their study they tallied passes. They recorded as a pass an attempt where a player demonstrated clear intent to send the ball to another player who would attempt, successfully or not, to gain possession; throw-ins and passes to and by the goalkeeper were totaled. Furthermore, they computed the number of passes (n=499) from men to men, women to women, men to women and women to men in 6 games.

They found the greatest proportion (42 percent) of passes took place between men and the smallest (8 percent) between women. Cross gender passes were quite evenly distributed

between man-to-woman (27 percent) and woman-to-man (22 percent). They consider this data as representing coed sports. It demonstrates once more the domination by men who in addition to numbers, physical make-up, collective skills, positioning, and scoring, are involved in (92 percent) of actions. According to their data it also documents the extent of cross-gender interaction; women are clearly involved in the game (58 percent of actions) although less than men; cross gender passes and single passes are equal (both 50 percent) (Henry & Comeaux, 1999).

Finally, Bangsbo and Lindquist (1992) have stated that to be useful soccer related test must have a high validity, which can be demonstrated by a strong relationship between the test results and the physical performance of the players during games. However, this comparison is complicated by the fact that a single measurement obtained from match analysis may not express the soccer specific endurance capacity. Moreover, the real physical ability of a player may not be demonstrated in any given match due to tactical limitations.

Psychological Attitudes

The psychological domain becomes very important once the player has fully developed. In essence, it is the most important component in the athlete's repertoire. Without the mind there is no activity, whereas you can have a decrease in the other components of soccer and still be functional.

Two contending theories have been proposed to account for decrements in skill performance under pressure. Distraction theories suggest that pressure creates a distracting environment that shifts attentional focus to task-irrelevant cues, such as worries about the situation and its consequences. This transfer of focus changes what was a single-task

performance into a dual-task situation in which controlling execution of the task at hand and worrying compete for attention. Self-focus theorists suggest that pressure elevates self-consciousness and anxiety about performing appropriately, which increases the attention paid to skill process and their step-by-step control. Attention to execution at this step-by-step level is thought to disrupt a well-learned or proceduralized performance (Beilock & Carr, 2001). Moreover, Williams (2000) stresses that effective anticipation in soccer requires that players focus visual attention on the most relevant sources of information at the appropriate time; that is, knowing 'where' and 'when' to look is an important aspects of a skilled performance.

Intuitively, it is thought that productive soccer players are distinguished from less productive ones on the basis of psychological factors. The assumption is that a gifted player possesses personality traits that facilitate learning, training and competition. Although managers, coaches and scouts may dispute that creative and less creative players can be categorized on the basis of their psychological 'make-up', investigators have yet to identify accurate personality characteristics, or an overall psychological profile that predicts success in sport (Williams & Reilly, 2000).

The TAIS Inventory provided some excellent data on the participants. Upon examination of the twenty categories on the pre-test, the female scores showed decreases in what I perceive to be more critical attributes in a soccer athlete. The attributes of note on the instrument include: analysis; expression of criticism and anger; self-critique and performance under pressure. Although scores in the post-test grading soared in each category from as much as 15% to more than 20%. To synthesize those attributes and to examine what affect they can have on a soccer player will provide confirmation that the females can have the same status as the male in this sport:

- Analysis is the ability to engage in a full-size picture of the environment and the capability of complex problem solving. This was demonstrated in the tactical-technical training sessions when they could not comprehend the session's content
- Expression of criticism and anger is basically a leadership quality. If female players are having a giggle, none of their teammates will confront them regarding their disruption
- The ability to be critically constructive about your own performance is also lacking in some of the females. The scores on the category of Self-critique indicate that some of the females are not remotely concerned with their performance. Based on my experience over a 4-year period with the girls the ability to Play under Pressure is not scored in true perspective by the females. Although, I must credit them with much improvement in this attribute. After the study, I know of only 3 opponents that have beaten them over a yearlong period.

Young athletes in today's society simply lack passion for sports. Recalling my own youth experience, players would always be ready to play no matter what the conditions. Furthermore, if a game were to be televised no young players would be out on the street. And, if you had an opportunity to go to view a live match you would jump at the chance. Over the past ten years I have had the opportunity to coach at a number of camps in United States. The program usually includes games of interest previously taped, usually upon viewing these tapes the campers get real restless after 20 minutes. In essence, the would-be students have had enough and the rowdiness is a message for the counselors that it is time to move on. Accordingly, there is a real distinction in terms of what children would discard today and in the era that I played soccer in my youth. From personal experience, adolescents today seem to have little regard for their equipment. Moreover, they often lose their shirts, shoes, shorts or water containers but the parents provide a remedy and that is to buy them new equipment.

Commitment is a term that many of us are accustomed to using and seeing in a range of circumstances. Often, it is not only used by social psychologists but also by sociologists, anthropologists, psychiatrists, and even popular writers. Commitment is constantly used on a

daily basis in our society, with all the emotional overtones, special meanings, and hidden implications that suggest (Kiesler, 1971). Farred (2002) appropriately describes commitment as he describes his favorite soccer player Graeme Souness, the ex-Scottish international. He tackled with menace, his presence instilled fear in his opponents; losing was not in his vocabulary. And, anyone who plays with or for me should be a bad loser. This is confirmed by Dowling-Naess (2001) in her interviews with young Norwegian athletes. She indicated they talked of sacrificing their social lives and education in the name of training their bodies:

The constant training can get quite monotonous and boring. You miss out on a lot of social activities among your peers, too. But you've either got to give 100% commitment or forget it. Now that I've given up all hope of making it in downhill skiing, I'm concentrating on my schoolwork. It was impossible to train and study, although the 'ski school' proclaimed that as one of its virtues. It was simply about getting the fastest times and improving your technique. (p. 132)

Shah (1980) discusses this aspect of commitment for a learner in his symposium in New York. Stating, "You do not have to be obsessional about what you are pursuing, but to be fair, give what you purport to be important the amount of time it needs to be effective."

The very idea of commitment is the most important aspect of reaching the pedestal that places the athlete in a distinguished group. This is the point of separation, between the soccer purist and someone who pays lip service to an endeavor and only imagines that he/she is a student. However, this response from a female participant is contrary to my opinion but seemed to meet her criteria of a committed athlete.

I think the girls worked a lot harder when we were playing with the boys. Maybe, I guess I'm assuming it's more to impress them or to make them feel the workout wasn't that bad. But there was a lot more competitiveness and the girls wanted to stand out better and play and work harder, run more. (AG1)

The layman's view of commitment comprises a motivational aspect. Once committed, an individual is spurred into activity; one forges forward, grimly resolute, with one's spirit renewed,

and various other clichés that imply some increased motivation (Kiesler, 1971). However, experts in research study do not hold this point of view.

The following interviews by Thing (2001) are noteworthy in that what is expressed could be considered as a European attitude to playing soccer. And, incidentally a most appropriate one for a competitive soccer player. A female soccer player Inge states:

I am very often an incredibly aggressive player. If not, I wouldn't play. It is all the time a challenge. You play face to face with the opponents and it is a fight. Can I beat you, or can you beat me? If you do not have this aggression in you, the feeling of showing off, the desire to show I am the best of us, and then you will be nobody. So the aggressive part is there all the time.

Another female soccer player comments on the same issue of aggressiveness:

Aggression is something you 'do' right from the beginning of the match. If you make an 'aura' round which says: 'I am the best. You cannot pass me – you are nothing'. If you choose that kind of war, and then it is much easier to make a good defense. (p. 281)

This attitude is corroborated by a prospective study by Helland, (1998) on motivation predictors of high performance among talented teenage athletes. The study indicated that high performance in all types of sport could be predicted from high scores of competitiveness and physical competence in sport attributed to self and to sport mates from ages 15 through 18. In addition, Cox, (1985) defines achievement motivation as the player's inclination to approach or avoid a competitive situation and the author relates this to Larry Bird (former professional basketball player), who has been accused of not having the physical attributes to succeed, but his intense internal desire allows him to participate and surpass the finest athletes. The author emphasizes that he is addressing a psychological construct that is much more than merely getting psychologically aroused or motivated for a single competitive event. He is discussing the fundamental internal drive that motivates athletes to literally commit a large portion of their lives to achieve a particular goal.

However, several authors have written that females are far less competitive than males. In a comprehensive review, Lenney (1977) singled out competition as a situation likely to elicit sex differences in self-confidence, one of the most consistent predictors of success (Gill, 1986). Sex differences in achievement orientation and competitiveness are widely cited in both everyday conversation and psychological literature. Several investigators have probed the psychological aspects of gender roles and achievement, and have provided important insights. However, research specifically directed to competitiveness and sport achievement is sparse. In addition, Theberge (1994) renders the issue of comparative performance between male and female athletes, simply because she perceives this as favoring the male and this would further consolidate the perception of men's natural superiority.

Accordingly, I am in agreement with Williams (2000) who claims that a player's knowledge of specific situational probabilities could be improved by viewing not only opponents play but also studying the present professionals live or on video. The more exposure to opponents and professional games, the more accurate they will become in anticipating opposition actions. If two of out of eighteen present day players view a full game of soccer that could be a record breaker.

It would be an exaggeration to claim that the All-stars were noticeably superior to all of the teams they had played after the study sessions, but there was no denying the self-belief that threaded its way through the entire team. After the fall 2002 sessions, the All-Stars won two prestigious tournaments. The success was continued in the spring of 2003 when they won the Countryside Easter Tournament and went unbeaten in the Florida State Cup. This phenomenon was not only linked to team efforts, college scouts noticed individual players. This was a sure

indication that the program had worked. Because some of the athletes were freshmen and sophomores, that would normally not be sought by college coaches.

Finally, after the pre-test all the players reverted to playing in high school soccer. The competition is poor and all of these girls would excel in the sport. Much more attention is fostered on them and this is a possible reason for their increased scores on the post-tests.

Participant Interviews Analysis

Laberge and Albert (1999) point out that in their previous research they detected that it was difficult to get young adults to articulate their genuine opinions in face-to-face interviews. Adolescents are often reticent to express themselves, either because they are afraid they might give the wrong answer, or they feel uncomfortable in this artificial form of interaction. I did not find this to be a problem, however, I did infer from some of the answers to questions that at times the question was misunderstood. This was due to the interviewee's apprehension.

This was not the case when one of the males in the study provided a clear and concise response to a query regarding any obstacles that held him back from participating: "No, I really don't think there's much that holds me back, playing soccer. I take every opportunity that is given to me, and I make the most of it." (TR2)

This response was confirmed by Weinberg, Tennenbaum, McKenzie, Jackson, Anshel, Grove, and Fogarty (2002) as they stated that several gender differences had existed in sports including the finding that males tended to be motivated by competition itself, whereas females favored social/affiliate and fitness reasons for their participation in sport. Motivation is at the heart of sport's most interesting problems, both as developmental outcome of social environments such as competition and coaches' behaviors, and as a developmental influence on

behavioral variables such as persistence, learning and performance (Pelletier, Fortier, Vallerand, Tuson, Briere & Blais, 1995).

At the conclusion of a male interview, I asked another question:

It's because of your answer to the previous question, was quite interesting. One of the girls on the female team.... here is a hard worker but was not involved in the study.... had told me that, when she goes out in front to pace, to get people to close the gap, to bring them up to her level, that she is kind of ridiculed. She's accused of not being a team player. Could you comment on that?

Well, we give _____ a hard time; too, when he gets out in front and he takes off, but at the same time, we know that we can do that. If we.... we can really try. And so, at least for me personally, I try to always keep up with the fast people, you know, even if I'm not. I always try to be up there and I think maybe it's just the guys' competitive spirit, whatever, that we want, we don't want coming up showing us, so if they're gonna run, well, the rest of us can go up. We should be able to do the same thing, kinda thing, and yeah, sometimes it makes us mad when we're tired and just not running, but we know that we're not that far behind. We may be 30 seconds behind them and that's about it. (DA2)

However, this attitude ran adrift of Jambor and Weeks (1996) case study on a female athlete who conclusively shared with Masters athletes the fitness-related motivation to participate in rigorous physical activity.

However, this response from CS1 after asking this question was quite alarming:

This is from one of the boys and he may have a self-esteem problem. And he may not have been there that night. This was the second half of the study. But the girls.... they were giggling big time. They had trouble absorbing the lesson. What would be the reason for that?

With girls, it's just so.... it's different. Like, guys come to play. They come, they're focused, like practice is serious and I'm not saying that girls' practices weren't serious, but there's a lot of other things involved. Like, you get the emotion in there and then you through in if they had a bad day or a good day or if something happened with, you know their boyfriends or their friends or whatever. And then a lot of the time it's the whole, like, flirting with the guys. Like we'd be talking about, "Oh, look at him today," and then they'd all giggle and that would cause problems. And then the guys aren't stupid so they knew that we were talking about them or one of their teammates, and so, it might have caused.... it definitely ceased the absorbing of the lesson because we weren't focused, weren't paying attention. You can't learn anything if you're not paying attention to it.

This response answers many questions and in particular the females' failure to achieve in the higher levels of competition. Lewis and Linder (1997) prefer to state the problem this way, as pressure to perform is increased, individuals commonly perform worse than when there was no pressure ("choking under pressure"). Two mechanisms have been proposed to account for this effect – distraction, wherein pressure distracts attention from the task, and self-focus, wherein attention shifts inward interfering with performance.

The physical education attire was another key issue of criticism. Having been the focal point of the male gaze made the young women feel extremely uncomfortable, particularly when their bodies were on exhibit, as in swimming, or when they had to wear a short skirt. In the interview on Women's Perceptions of Active Lifestyles (e. g., see Scraton & Fintoff, 2001) this comment on attire was elicited:

It's a lot better now without the boys this year...you don't feel as if they are watching you - you know, in your skirt and that. (Tina, School2) (p. 13)

Yeah, I can see how there has been some pressure on them when we were around, just to play well, but.... and to look good, I guess. And now that's gone, then that pressure would also be gone and at the same time the relief of pressure might help them, but it could also hurt them because then we wouldn't be there to encourage them, in a sense, just to play better and to play up to our level. (SH1)

Cheerleading has an enormous impact on females participating in youth, college and professional sports in the United States. The girls and women involved in the sport are very popular and receive much attention. Adams and Bettis (2003) both females, discuss some aspects of their study on female cheerleaders that appear to be in disagreement with some of the girls in the Flintoff and Scraton study. For the girls in this study, one of the primary joys of being a cheerleader derived from the knowledge that cheerleaders are the objects of everyone's gaze – not just males.

Researcher Analysis on the Interviews

Some of the questions were not quite understood by the participants. Consequently, at times I had to ask it again sans tape.

This was just a personal observation from the researcher on several of the interviews that I've just done. I think that this has been an education for me because in just over maybe an hour, an hour and a half of interviewing, I've learned much more about my players than I had known prior to this, and probably it would have been a good idea to discuss with the player things like this to get to know the athlete. There was also more dialogue from the players and that gave me an opportunity to find out their viewpoint on other subject matter. The fact that I did coach the players didn't give me a lot of time to converse with them at length. Time constraints due to travel, employment and personal chores reduced the time I had with the athletes to practice, games and not much socializing.

Locke (2003) noted that using interview data from high level athletes, what becomes apparent through analysis is that athletes maintain that specific emotions such as nervousness is common in sporting performance. In contrast, when accounting for failure, the athletes construct their build-up to the competition as containing no experience of these emotions.

As a researcher, I consider athletes to be somewhat different from their non-competitive counterparts. Typically, athletes' lives are more stretched and stressed; they are probably under constant pressure to perform and have to deal with a myriad of events that other non-athletes might never encounter.

This response from one of the female athletes, I consider a most appropriate review of the study. She summed up all that I hoped the participants would obtain from the study. Most

importantly, for all of us that had participated we had a positive learning and motivational experience and this response indicated that the study was a successful endeavor:

The study was a good experience, it gave me extra training and I got to learn new things in also see the way the guys play as compared to the way my teammates and I play. The guys in general, like, they worked very hard. At first it was kind of like, oh, my God, they're so good; they're so much bigger than I am. But I have always been used to playing with boys because I grew up with my guy cousins and they're the ones who got me started in soccer and sports and so it was actually normal. It wasn't intimidating. It was just like...kinda fun.

Females.... some of us didn't like playing with guys, but for me personally it was fun. It was like competition, it was kinda like, oooooohhh, if I took the ball from a guy, it was kinda like, yeah, I scored the boy, you know, and vice versa. But it was good and it was interesting to see how the boys played the game and how the tempo was a lot of faster with their game compared to ours. Like, ours wasn't bad or anything but just in comparison they had it a lot faster. They ran around and everything and the tempo was way, way, way faster than ours. Males and females together.... we played well at times and then at other times we got frustrated with each other because the boys would lose the ball by themselves; the girls would lose the ball by themselves. It was just, like, it would be frustrating at times but again the competition was good.

I learned a lot. There was different drills that we did and different examples that provided, you know, different aspects of the game, like from a boy's point of view, from a girl's point of view, impediments, just being intimidated, being concerned about everything else that's going on during the practice or during the session besides soccer, you know, the talking and whatever the latest gossip that comes up since a lot of us went to the same schools. Other than that, everything went pretty smoothly. (CS1)

Coaching Implications

Coaching is clearly a method of assisting athletes meet specific needs and problems during and in preparation for competition. Before the mentor can act to aid competitors to meet their needs and predicaments the student must recognize them. As a result, coaching is as much involved in defining and analyzing problems as it is in solving them. It is clear that coaching is not a disorganized; trial and error occurrence but involves a series of arranged, consistent steps. There is a specific coaching process to be followed for organizing coaching actions (Fairs, 1987).

This last paragraph opens up a series of issues on co-education groupings. In Flintoff's (1993) dissertation, she discusses some decisions made by the head of the physical education department at Heydonfield, whereby; he abandoned initial attempts at mixed sex major games classes. In practice, mixed soccer had provided him with a number of problems and this was due partly to the wide range of ability in the group. Also, he felt that the male's physical abilities in the game – tough, competitive and aggressive play – had to be artificially controlled with female participation:

I always finish up with a game and I wouldn't have the girls playing with the boys on the grounds that I thought...some of these lads are nutcases you know...and they would think nothing about thinking it would be a good idea to crunch some girl, and I mean from self preservation, I don't think so much of the girl, if the girl finished up in a hospital with a broken leg, I mean I would say that would be a liability on my behalf. I couldn't trust our boys, especially if one of the girls by chance or whatever, took a ball off 'em' that they wouldn't just crunch them as they would do if it was a boy...so I used to finish off, after doing this great thing together with girls playing four-a-side, and the boys playing the full game, you know. (Steve, Head of PE at Heydonfield, taped interview) (p. 189)

Flintoff (1993) claims that there are a lot of issues raised here, including important questions about the nature and aims of practical work in physical education ITE (Initial Teacher Education) and how well students are prepared to teach mixed ability groups, as well as questions about the role of competitive sports in the reproduction of ideologies of masculinity. In addition, a comment from a teacher in Flintoff's (1993) study attempted to clarify male aggressiveness and the teacher's attempt at a remedy, there might be differences in ability between the male and female and regardless with what group I train or coach I remove this 'crunching' element from my practices. What purpose does 'crunching' serve? Whether it is against another teammate or the other gender it only leads to injury or altercation? This attitude described by the coach was very provincial and it appears those boys do not respect him or

anything else. If they did respect him and he instructed them to remove this aggression from their game, those boys would be more disciplined and adhere to his instructions.

An assertion by Chambers (1983) indicates that a large majority of the coaches in North America would be unqualified as coaches according to Soviet standards. Most of the professional and amateur coaches elsewhere would not be allowed to coach at any level, other than recreational, in the Soviet Union due to their lack of technical and academic training. According, Flintoff's claim about the preparation of physical education teachers could easily fit into the category described by Chambers.

Observation Synthesis

Surveillance Analysis

Franks and Miller (1986) have commented on the paucity of research in observation analysis. During sporting activities coaches find themselves acting as critical observers and as such use those observations to assist them in their pre-game, interval and post game discussions concerning individual, team tactics and performance variables. There are valid reasons for using observation within the coaching and teaching process, however what has been accomplished in the specific area of observation is scarce. One conclusion that was drawn from the work of Franks and Miller (1986) is that skilled coaches do not appear to have a routine system of monitoring performance, and therefore a problem-solving strategy that can be used to train pre-service and in-service coaches, remains as yet ambiguous.

Miller (1989) in his Master's thesis makes a comparison between criminal and sporting events and states:

...it is apparent that there are differences but, interestingly enough, there are also many similarities. For example, during competition, the coach's arousal level does fluctuate depending upon the sequence of events in the game (i.e., if the game action is concentrated around one of the goal areas, then the possibility of a goal being scored or conceded and the arousal level will increase). (p. 6)

The accurate analysis of competition is fundamental to the entire coaching process and underlies improvement in performance (Franks & Miller 1986). Also, of interest is the biases a coach brings to a sporting event can distort the perception of the event. Finally, coaches can often remember the goals that were scored in a game but not the conditions leading up to a goal (Franks, 1989). In summary, the key factors of behavior observation appear to be the inconsistency with which individuals segment their observations of critical features and the development of a specific set of prognostic features for the use in these observations. Therefore a coach, in order to more accurately recognize and remember events, needs to develop a systematic and specialized set of predictive features for utilization in observational accuracy (Miller, 1989).

Hughes and Bartlett (2002) have concluded that through the analysis of game structures and the performance indicators used in recent research in performance analysis, basic rules emerge in the application of performance indicators to any sport. In every case, success or failure in performance is relative, either to the opposition or to previous performances of the team or the individual. Furthermore, they assert that to enable a full and objective interpretation of the data from the analysis of performance, it is necessary to compare the collected data to aggregated data of a peer group of teams, or individuals, which compete at an appropriate standard.

Session Observations

After several minutes, the whole group was instructed to stop and perform flexibility exercises on their own. When females practice in their environment this time is usually spent on a busy period of talking. Some of the females would move closer to their teammates and the discussion would begin. Topics for discussion would range from dating to boyfriends, upcoming events, inside and outside school experiences: the discussion never focused on what the upcoming soccer program would be. The boys on the other hand would not talk as much and if so the dialogue was usually on soccer. Interestingly, the females would not go through a series of stretching exercises limiting the stretches to one or two.

During a particular session on possession and pressing I observed the girls to be highly motivated, and engage in play with much more focus, however, as the 3 stage warm-up exercise progressed the players were instructed to pass the ball over distances the range of 40 to 50 yards. The girls struggled with this due to inaccurate leg strength that affected their passing accuracy. On the other hand the boys, had no problems lifting the ball to complete the distance. However, over the whole session the girls were positive, competed and acquitted themselves excellently. The boys played fast and on several occasions attempted some aggressive tackles. Therefore, several of them needed to be cautioned. I was quite satisfied because the session had been productive. It accomplished the desired goal of the session of learning how to 'Press' and play possession soccer in the *Multi-faceted Tri-Box Possession Game*. In essence, the session had a business like approach. No silliness or lack of focus surfaced and limited amount of socializing during breaks or when performing stretching exercises.

There was some talk between the males and females about the forthcoming weekend events; however, in this particular session the girl's work ethic was of the highest standards.

Obviously, one indicator would be all of the shirts were wet with perspiration. Furthermore, to the girls' credit it must be admitted that there were moments of inventiveness and incisiveness for the girls that had the boys as worried as a soldier's parent. However, there was one male who showed an unnerving sense of superiority, almost haughtiness, about the way he interacted and played during the sessions. In fact, he used the girls' participation as a reason to justify his quitting the boys' team. Using an e-mail message he questioned the validity of the training session, not knowing that what in fact was taking place was a co-ed study.

In the speed training session most of the group was very disciplined keeping a nice shape, each pair five meters behind from the next pair. Most of the girls worked diligently in this workout, however, 2 of the girls not in the study group could be seen to do some of the exercises half-heartedly. This observation was noticed on the videotape.

In closing, my comment on this issue is appropriately discussed by MacDonald (1988) as he refers to the fourth perceptual error on his inquiry on player selection and evaluation. He names this central tendency and relates this inaccuracy to an assessment of a poorer player that elevates their value, while the assessment of a better player is diminished. Other coaches' opinions on these two players is quite high, therefore I think this concept could easily be applied to the two players opting not to give their all in the session, while other players less recognized worked appreciably more.

Learning

According to Gredler, (1997) the noted psychologist B. F. Skinner pointed out that the educational system is extremely important because the welfare of any society depends upon it. A culture is no stronger than its capability to transmit its skills, beliefs, and practices to the

subsequent generation and this responsibility belong to education. But contemporary education faces three major obstacles in completion of this mission. Skinner asserts that education occurs in an artificial setting, and that students are prepared for a world that lies in the future. Furthermore, he states that so little of the world can be made available during 12 years of schooling, and that educators are unable to bridge the gap between initial learning and potential real world possibilities. The second problem is the student to teacher ratio upon reaching 30 to 1 personal attention is sporadic and brief, at best. Lastly, the problem is a consequence of the other two. Because students are placed in groups to read and listen to events rather than experience them, the individual seldom does anything that might be construed as successful. Skinner concludes that educators have resorted to aversive control that results in students completing their work mainly to avoid the consequences of not doing so.

Learning is a complex set of processes that may vary according to the developmental level of the learner, the nature of the task, and the context in which the learning is to occur. As already indicated, no one theory can capture all the variables involved in all learning (Gredler, 1997). However, Albert Bandura's Social-Cognitive Learning Theory can be easily identified and linked to the process used in the research study. In particular, there are three major assumptions that support the principles of social cognitive theory according to Gredler (1997).

They are:

(1) That the learner's cognitive processes and decision making are important factors in learning; (2) that the three-way interaction between the environment, personal factors, and behavior are responsible for learning; and (3) that the outcomes of learning are visual and verbal codes of behavior. (p. 297)

In conclusion, I am in agreement with Williams (2000) who claims that a player's knowledge of specific situational probabilities could be improved by viewing not only

opponents' play but also studying the present professionals live or on video. The more exposure to opponents and professional games, the more accurate they will become in anticipating opposition actions. If two of out of eighteen present day players view a full game of soccer that could be a record breaker.

Research Distinction

The present research provides much information that is both in agreement with and in opposition to earlier research. Furthermore, the study is innovative in the utilization of the male group as an additional learning resource and their presence in the research study could alter their perceptions of the female athlete. The research indicated that both groups motivated each other. Generally speaking the males were highly motivated in the aerobic and anaerobic tests, while the females were constantly attempting to close the gap in all areas of the game. The research interview data makes a comparison with Flintoff and Scraton's (1990) *Stepping into Active Leisure? Young Women's Perceptions of Active Lifestyles and their Experiences of School Physical Education*. The researcher's intent here was not in any ways to demean or condescend that work but simply to use it as a reference to illicit the perspective of the American student-athlete.

In their studies on participation, (see e. g., Butcher, Lindner & Johns, 2002) Longhurst and Spink (1987) found a similar phenomenon; commenting that nearly without exception young sport competitors dropped out of a sport at some point in their histories. The number one reason for attrition was the lack of enjoyment. Furthermore, Brodtkin and Weiss (1990) also found that individuals who are given the opportunity to be actively involved and who perceive their level of satisfaction as above a minimum standard are more likely to remain involved in their present

situation. Of interest here, was the study member (RA1) who stopped playing soccer soon after the study. In addition, Brown, Frankel and Fennell (1989) report in their study that evidence suggests that participation in sport declines more dramatically for females than for males during the adolescent period. One possible answer to this attrition can be found in a female response to a question on societal implications of being an athlete:

If you want to be a dedicated female athlete, there's not enough time for a social life, but it also kinda helps you your social life, I guess, because you meet new people and stuff like that and they'll be interested in me playing soccer and stuff like that. I think as far as.... it's expected that I should be a role model because people will see that . . . for example, people at my church, a lot of them, the younger kids, they look up to me and they get into sports and stuff like that and I think that they want to be athletes, too, and I can encourage them to be better than they are. (SA1)

Harris (1987) substantiates the athlete's statement as she points out that more females are becoming competitive athletes, putting in long hours of workouts, weight lifting, conditioning and training. Furthermore, females have a new attitude towards sports. Gone is the presumption that the female, because of her physical and emotional vulnerabilities, must eschew the all-out quest of excellence in sport. The new breed of female athlete is there to capitalize on her potential and to be successful; she is not there for social interaction and fun alone. Liesen and Muecke (1994) endorsed this view as they assert that in soccer, a player who is trying to reach a higher level of play requires top-level performance or the motivation for one's personal best. Maximum potential needs to be achieved in aerobic capacity, anaerobic alactacid power, aerobic regenerative capability, repair and regenerative (immunological power), creativeness, anticipation, understanding the game, intelligence and personality.

Some researchers acknowledge that physical activity has many physiological, and possibly psychological, effects on the health of young people (Health Education Authority, 1997). In contrast, Hargreaves (1994) points out that women who play rough, physical sports

requiring strength and speed express the sense of satisfaction and exhilaration they get from participation. The following extract is from transcriptions of interviews with a female football player:

Football is fantastic, think of it. Why do you think so many men play it? Why shouldn't women play it? What business is of theirs if they think I'm gay? It's the sport I'm interested in, it's difficult to say why I like it best, maybe because I used to kick a ball around when I was a kid with my brothers. Even my dad would mess around with me. I like the skills of the game and I like to play really hard (to) get really tired, you know, so exhausted you could drop but afterwards it feels so good. (p. 274)

This response was in accord with Nicholls' Developmental Theory on Achievement motivation, that the defining feature of achievement behavior is that the feeling of competence is the major goal (Duda, 1987).

Summary

Balsom (1999) comments on a lack of scientific research in soccer as he elucidates that the impact that science has had on performance improvement is obvious. The modern athletes are now jumping higher and running faster than their predecessors. However, the impact on soccer has not been as noticeable. Much of the soccer methodology applied today is based on tradition. A top European coach asserted that modern players are trained the same way he had been 17 years ago.

However, to compete and reach the pinnacle in soccer, top level performance is consistently required, a higher level of motivation is required to accomplish one's personal best. Maximum potential means meeting the expectancy goals in aerobic capacity, anaerobic alactacid power, aerobic regenerative capability, repair and regenerative (immunological power),

creativity, anticipation, understanding the game, intelligence and personality (Liesen & Muecke, 1994).

The discussion points out the females were weak in certain areas, most noticeably their work ethic and in the psychological area of attention. However, there were many positives, some of the females' bested male scores the exposure to a more intensive environment that would prepare them for competitive play against their own gender. Accordingly, the males had the opportunity to look at the game from a teaching perspective and could also address the finer points of their own game with practice.

CHAPTER 6: CONCLUSIONS AND FURTHER RESEARCH

Introduction

Listed below are the theoretical questions alluded to in the 1st chapter of the study, and the respective findings from the research follow those queries.

Research Questions and Findings

1. What fitness gains were made if any?

On examination of the soccer specific aerobic and anaerobic tests indications were that there was an actual decline in fitness in both the male and female groups. It is very important to note that there was a three-month interval between pre and post-testing. This finding is not in any way an indictment regarding the training methodology used by the researcher. In fact, the results show that while the players participated in high school soccer lower standards of training and coaching are obvious.

2. Which gender would demonstrate greater fitness gains?

Upon assessment of the mean scores in the sprinting and endurance scenarios no significant difference in fitness gains found between the male and females.

3. What gender would show more motivation?

From actually observing all the activities, viewing the videotapes and reading the interview accounts by the participants the females displayed more motivation in this environment.

4. What effect would participation with male soccer players have on female players?

Female match play was enhanced through more pointed focus and concentration that lead to improved technical application. The decision making process was improved (and influenced their urgency in match play).

5. What effect would Theory of Attentional and Interpersonal Style inventory feedback have on participants?

The comprehensiveness of the TAIS inventory was educational and participants became aware of a larger range of variables that could affect performance.

6. Was the female emotionally different?

Through personal observations and discussion with select female participants it seemed that there was a difference. The females indicated 'being upset with some male remarks upon losing the ball'. A female mentioned in the interview, "I think sometimes emotions, female hormones, kind of get in the way." This was in response to possible impediments to learning and playing soccer.

7. What was the difference in the male/female athletic psyche?

Females seemed to display poorer self-esteem and the inability to cope with honest critique. The males were much more resilient mentally, however the male ego was more resistant. This was demonstrated by the males in the pre-test 6 versus 2 game whereby it was evident the females were excluded from play.

8. Was a co-educational environment productive or counter-productive in terms of cooperation between the sexes or does one group inhibit the learning process for the other group?

Over time the co-educational environment enhanced dialogue and productivity between the genders.

9. What role was played in bridging the gap between the sexes that feminists insist has existed because the male has attempted to dominate every aspect of human society?

The co-ed environment or learning activity provided dialogue, understanding, and, tolerance.

Suggestions for Further Research

Below you will find some of the suggested areas for future research that was revealed from this study:

1. Co-educational projects that are well organized and productive and meet the needs of all the participants. Evans (1989) states that any educational project which has parity of the sexes prominent amongst its aims yet remains insensitive to the gender and sex differences which children bring to the classroom context is likely to be ineffective in its undertaking as it is unfulfilling and alienating for some teenagers. The embracing of co-educational physical education is then a challenging initiative and it should go to the heart of how we think about talent, proficiency, the curriculum, teaching, coaching, grouping and the evaluation of performance in the application of physical education.
2. Research of this nature should be carried out in an environment where the participating athletes are in some way obligated to attend. Participants would be required to attend and receive a grade at end of term grade for your commitment. The best-known environments to complete this research would be national teams, professional teams and intercollegiate soccer teams. I would also recommend the possibility of an undergraduate research class at all of our universities.

3. Lefebvre (2002) contends that we must foster participation in co-ed sports, in order that men and women may learn to accept and understand one another better. Sport has historically been a good starting ground for relationships between people of different ethnicities and different creeds, why not enjoin the sexes? In essence, this would mean more quantitative and qualitative research on gender in sport. Greendorfer (1987) writes concerning future research in her article on female socialization into sport that:

As a final consideration, the failure of feminist scholars to include sport as another sphere in social life from which females have been excluded may be perpetuating stereotypical notions pertaining to sport and gender roles. It would seem that the domain of sport has been ignored all too often as a potential source of rich social Learning experiences for females. Because sport participation in childhood and adolescence has implications for more full participation in various social spheres of adult life, it is time to devote more research attention to sport as a viable and natural activity for females. (p. 338)

Hargreaves (1994) has a propensity to utilize ethnography as a research method of choice as she emphasizes attempts to acquire authentic understanding of women's needs, desires, prospects and constraints, feminists have tended to favor ethnographic research in particular, participant observation and interviews. A number of studies of women and leisure fall into this category, but there are remarkably few ethnographic studies of women's sport in Britain. Most examples are male enquiries about male sub-cultures around sports like gambling, horseracing, professional wrestling and football.

Accordingly, I'm in complete accord with the following researchers: Eccles and Harold (1991) have determined that more qualitative research work is needed. Brodtkin and Weiss (1990) call for more studies that should be conducted using a lifespan development approach. Conversely, Lenskyj (1990) points out that while the current expansion of sport-related research on girls and women is a welcome step, it represents only a preliminary stage in the elimination of

gender bias: female subjects are now included, but the research questions, methods and analyses continue to be grounded, for the most part in male experience.

4. The resources to construct a knowledge base and implement usage through an organizational framework for formalizing and distribution of that knowledge. The opportunity to assemble, compare and utilize the knowledge of authoritative sports scientists, researchers and coaches. This system would contain significant data for inquiry and comprehensive performance research and could be accountable in providing this information to all certified sports scientists and coaches. This library would act as a central source for the dispersal of existing knowledge and new techniques. As this data grows and develops, so the knowledge base of the specialist system would be updated. In addition, the scheme could be easily replicated for allocation as an instrument to be used in the training and education of other sports scientists, coaches and athletes (Lapham & Bartlett, 1995).
5. A national body with administrators, staff, and research personnel could be created to work on procuring funding for research (government funding). This would present the foundation as a valid entity. Also, national interest would assist in improving all athletes in all sport. This national body should be comprised of qualified individuals who have more than an informal relationship to the sport.
6. Teaching materials could be enhanced and modernized to upgrade the current coaching methods in soccer. Obviously by increasing the current coaching standards would suffice. There has to be a significant difference between giving a parent or a coaching candidate a certificate to teach just because they paid a fee. Experts or mentors are individuals that have in the past been intricately linked to sports through participation at all levels of sport.

The current levels of testing and licensing have given too much credence to the lower level aspirants. Candidates that have lower level certificates believe that they have reached elite status in coaching. Unfortunately, this is far from the truth. They are more in need of guidance than the students they are teaching.

7. The introduction of the soccer academy as an institution where the curriculum is multi-faceted. Here, the learner is exposed to a multiplicity of impacts in life sciences and sport. Since the end of the nineteenth century, different authors, (such as Thomas Arnold or Pierre de Coubertin) have pointed out that sport in a positive setting can enhance social and moral education of young people through the development of ‘desiderable’ social values (Cruz, Boixados, Valiente & Capdevila, 1995). The learner would experience growth and knowledge in a sport related educational framework. This would provide the student with the adaptation capability to transition from a school environment to a professional environment (business or sport) and adjust accordingly.

Conclusion

It is worthwhile to report that the researcher observed some of research participants demonstrating soccer talent throughout the study. Although, Franks, Williams, Reilly and Nevill (2002) insist that perceptions of talent are diverse and complex. Talent discovery is the recognition of potential by means of certain measures accepted as markers of future high performance (see Borms, 1996). A talented individual has features, which are distinctive from less talented individuals. These features can be measured to form a base for the prediction of performance. The aim therefore in talent identification is to increase the probability of selection

of a future elite player at an early age. Several of the study participants both male and female surfaced to fit this criteria (SA1, AG1, CA1, TR2, CT2, SH2 and MG2).

However, Helsen, Hodges, VanWinckel and Starkes (2000) claim that it is quite difficult to view top soccer players in highly contested games and not ascribe the cause of their superior skill to a much envied and somewhat mystical attribute of pure, natural talent. How else could players display such excellence unless they were born with a special ability to play soccer? Obviously, practice is necessary to develop that talent, but practice alone is not adequate enough to produce such ability. This opinion is brought into question by the researchers. Hoare and Warr (2000) confirm that talent identification programs have taken on much more meaning as a result of greater competition between sports for gifted athletes, together with an elevation in the standards of performance in both domestic and international phases of competition.

Within the limitation of this study, the following conclusions can be reported: That interesting data on male and female perceptions on gender integration was provided throughout the interview process; that soccer specific testing solidified findings from data acquired from previous studies; that the Test of Attentional and Interpersonal Style provided an array of athletic psychological dimensions that assess the capabilities and deficiencies in the athlete; that feedback assisted the athlete with improvement in many performance variables; and finally, the co-educational environment appeared to enhance the soccer performance skills and motivational levels of both genders and both males and females seemed to enjoy playing together. Consequently, relationships improved because of this type of program setting.

APPENDIX A
DISSERTATION ANNOUNCEMENT

Dissertation Announcement

Subject: Defense Announcement of Francis O'Donnell.

Announcing the Final Examination of Francis O'Donnell for the degree of Doctor of Education.

Date of defense: March 25, 2004

Time and room: 11:00am - 01:00pm Executive Room

Dissertation Title

Coed Adolescent Soccer Players in a COMPETITIVELEARNING Milieu: An ethnographic assessment of GENDER ATTITUDES, Perceptions and sport specific component Testing.

This research study was a conscious effort to study and answer some questions relating to possible gender prejudice and narrow mindedness; particularly unfairness that feeds possible biases that exists in the domain of sport. In modern society for example, does the male athlete still dominate the athletic terrain? Or has the female athlete closed the gap and rendered chauvinism ineffective. In particular, the research looks at the sport of Soccer (football) and young co-ed adolescent athletes that have been participating competitively for most of their lives. The research would provide rich data from competitive training sessions where all the components of soccer: psychology, skill, decision-making and fitness are observed, catalogued and measured to determine what differences if any exist between male and female youth athletes today.

The ethnographic research used in the study is both qualitative and quantitative in nature and the data was provided through utilizing soccer specific testing, participant interviews, field notes, videotapes and the researcher as participant observer. Also, comparisons of similar studies done in Europe were researched and provided some insight into the different perceptions of the American youth athlete with regard to sport.

The study also analyzes male and female athletes in a competitive training environment and interprets adolescent attitudes, opinions and perceptions in that milieu. The subjects were required to participate in training sessions that covered an assortment of skill enhancement exercises, decision-making games, and compete against all the other participants in speed and endurance tests. Also, the psychological aspect of sports was investigated with the study members completing the Attentional and Interpersonal Style (TAIS) inventory, a 144-question assessment instrument to assist in providing feedback in performance relevant constructs. This data could also be of significant value to the athletes as a tool to accurately predict how they would perform in a variety of situations. The predictions and feedback are useful in determining how a person will react under stress. In addition, formulating assessments and extracting opinions from the co-ed interactions after events were made available through interview questions that were solicited after training sessions to establish whether or not the athletes had

considered the training sessions had afforded opportunities for learning to add to their soccer knowledge base. Individual interviews were also a part of the study, given to ascertain personal accounts or input that might have been left out of the preceding group interviews. Several of the training sessions were videotaped to supply the researcher with data for more valid analysis of the sessions. Statistical charts and descriptive data are integrated into the work to provide a complimentary quantitative analysis of events. Finally, a theme runs throughout the document and can be related to the passing down of traditional knowledge. This hypothesis implies that people, place and time are fundamental requirements in learning.

Committee in charge: Outline of Studies

Dr. F.D.Rohter
Dr. J. Deets
Dr. C. Hutchinson
Dr. B. McCarthy
Dr. V. Mumford

Major: Curriculum and Instruction
Educational Career
B. S., 1988 Embry-Riddle University
M. A., 1994 University of Central Florida

(approved by Dr. F.D. Rohter) committee chair.

APPENDIX B
INTERVIEW DIRECTORY

AG1 - Female

SH2 - Male

MA1 - Female

MG2 - Male

CA1 - Female

TR2 - Male

CS1 - Female

CT2 - Male

TD1 - Female

EL2 - Male

RA1 - Female

DA - Male

SA1 - Female

APPENDIX C
INTERVIEW GUIDE

1. Impediments to Athletic Learning

8. Societal implications; male and female athletes
9. Participation motivation
10. Male domination
11. Male behavior

2. Feminism in Sports

- Feminine ideal
- Feminist agenda
- Sports and femininity

3. Learning Environment

- Research replication
- Learning
- Gender competitiveness

4. Study Comparisons

- Respect
- Unwanted
- Attire
- Mixed co-ed
- Constraints
- Co-existence

APPENDIX D
INTERVIEW PROTOCOL 1

1. From a female perspective what do you think are impediments to learning in soccer? For example, is there anything that holds you back?
2. What are the social or societal implications of being a female athlete?
3. Did you experience any competitiveness within your own gender during the study?
4. Did you experience any competitive gender differences in the study?
5. Do feminists have an agenda in sporting issues?
6. What was or is your participation motivation to play soccer?
7. Describe what you feel is the feminine ideal?
8. Does sports participation inhibit femininity?
9. Is there male domination in sports?
10. Can the study environment be duplicated?
11. Did learning occur?
12. Was there anything negative from the males in the study?
13. How much does the gender of the coach affect the female player?

From the Study Perspective

14. Respond to this statement from a similar study in England. “..girls obviously don’t want to play football and it is not that they don’t want to, they know that the boys will have control over the game, and they are not going to get anywhere, so they do basketball. Then there are loads of people in basketball and you just get bad attitudes from them (the boys). A game like that you should just want to enjoy it, and it should be fun, but it ends up as a full scale war because someone shouting across the court ‘oh give me the ball’ and they give you loads of attitude...”
15. Again a response. “..well, you get this from the teachers...that they are only interested in the boys and not to like PE [for the girls] its like...it’s kind of acceptable in a way...it is definitely seen as OK to be that...for the girls not to like PE.
16. Comment on Attire. “It’s a lot better now without the boys this year...you don’t feel as if they are watching you-you know in your skirt and that.”
17. Comment on Mixed PE. “...it depends on what you are doing. Gym and aerobics are not good ‘cause it is like the boys are there, they are watching you and if you are on your own you can do what you want to...you just feel small around them. On your own you can do things, you can be yourself. When the boys are there you change, you become quieter, you say nothing, and they just take over. You know that they are immature and they will say something to embarrass you.
18. This study was also an attempt to teach using a methodology that introduced the boys as additional teaching resources. In other words they are ahead of you and from my perspective work harder. What do you think about this idea?
19. The word “perve” in England means the male gaze. Looking at women as sex objects. Did you feel this was a problem in the study?
20. Is there something akin to this with females?
21. Did you learn anything from the boys in study?
22. What do you feel they learned from you?

APPENDIX E
INTERVIEW PROTOCOL II

1. From a male perspective what do you think are impediments to learning in soccer? For example, is there anything that holds you back?
2. What are the social or societal implications of being a male athlete?
3. Did you experience any competitiveness within your own gender during the study?
4. Did you experience any competitive gender differences in the study?
5. Do feminists have an agenda in sporting issues?
6. What was or is your participation motivation to play soccer?
7. Describe what you feel is the male ideal in and out of sports?
8. Does sports participation inhibit femininity?
9. Is there male domination in sports?
10. Can the study environment be duplicated?
11. Did learning occur?
12. In England, educators feel that participation in soccer aids underachievers. Comment.
13. I feel, soccer could be a priority during these years and hurt academics. Comment.
14. Was there anything negative from the females in the study (Behaviors that should not occur in practice sessions?)
15. How much does the gender of the coach affect the male player?

From the Study Perspective

16. Respond to this statement from a similar study in England. “..girls obviously don’t want to play football and it is not that they don’t want to, they know that the boys will have control over the game, and they are not going to get anywhere, so they do basketball. Then there are loads of people in basketball and you just get bad attitudes from them (the boys). A game like that you should just want to enjoy it, and it should be fun, but it ends up as a full scale war because someone shouting across the court ‘oh give me the ball’ and they give you loads of attitude...”
17. Again a response. “.well, you get this from the teachers...that they are only interested in the boys and not to like PE [for the girls] its like...it’s kind of acceptable in a way...it is definitely seen as OK to be that...for the girls not to like PE.
18. Comment on Attire. “It’s a lot better now without the boys this year...you don’t feel as if they are watching you-you know in your skirt and that.”
19. Comment on Mixed PE. “...it depends on what you are doing. Gym and aerobics are not good ‘cause it is like the boys are there, they are watching you and if you are on your own you can do what you want to...you just feel small around them. On your own you can do things, you can be yourself. When the boys are there you change, you become quieter, you say nothing, and they just take over. You know that they are immature and they will say something to embarrass you.
20. This study was also an attempt to teach using a methodology that introduced the boys as additional teaching resources. In other words they are ahead of you and from my perspective work harder. What do you think about this idea?
21. The word “perve” in England means the male gaze. Looking at women as sex objects. Did you feel this was a problem in the study?
22. Is there something akin to this with females?

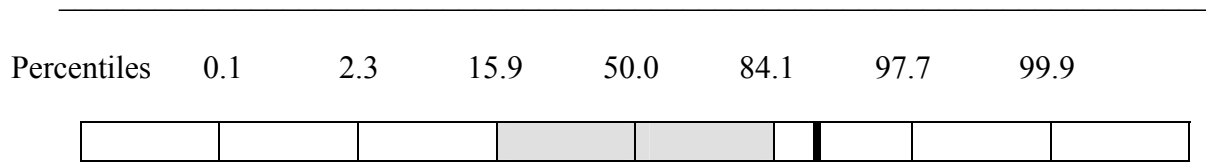
23. Did you learn anything from the girls in study?
24. What do you feel they learned from you?

APPENDIX F
TEST OF ATTENTIONAL AND INTERPERSONAL STYLE

The figure below represents a psychological attribute e.g. *Awareness* the participant answers that particular question; correspondingly his or her score is then place on the scale referencing the scores of a particular population (elite athletes). There are 144 questions on the inventory and the scores are indicated in percentages. The TAIS was developed by Dr. Robert Nideffer a psychologist and founder of Enhanced Performance Systems, a company that develops psychological tools and provides psychological services to help individuals and organizations maximize their potential.

A graphic representation of the Test of Attentional and Interpersonal Style.

TAIS Scale



- Comparison elite athlete group distribution (gray shaded area)
- The above mark at 84.1 would indicate the athlete's score on a particular category.

As most people score towards the center, the graph emphasizes differences at the high and low extremes of each dimension measured (Nideffer & Sagal, 2001). A low percentage does not necessarily mean a poor score.

APPENDIX G
PARENTAL CONSENT FORM

January 6, 2002

Dear Parent/Guardian:

I am a graduate student at the University of Central Florida under the supervision of a faculty member Dr. F.D. Rohter, conducting research on adolescent soccer players. The purpose of the study is to compare performance, perceptions and attitudes of female and male adolescent soccer players during training sessions and scrimmages. The results of the study may help coaches better understand if there are indeed differences in perception, motivation, performance and attitudes between male and female athletes. Furthermore, the ongoing process of the study will be structured to provide benefits in psychology, fitness, tactics, and technique to the athletes involved. The risks involved are mainly in areas of sprains, muscle pulls and dehydration. The researcher will provide inspection on the field of play to eliminate any hazards. The group will be advised in advance on proper equipment for sessions and provided with written literature on nutrition and hydration. Fluids will be provided on site. The warm-up, cool down and flexibility exercises will minimize any muscle injuries.

The study group (team) will consist of a minimum of 8 male and 8 female soccer players. Each participant will be assigned a code name at the beginning of the study and will not be identified by name. Those athletes will be pre and post tested on performance criteria for soccer players. Moreover, participants will be monitored during training and scrimmages. With your permission, your child will be videotaped during some of these sessions. The video will be accessible only to the research team for analysis. At the conclusion of the study the tapes will be erased.

Each participant will also be interviewed in an individual and group context. Those interviews will be taped and the data transcribed. Code names will be used to ensure their identity is confidential to the extent provided by law. The taped material will be accessible only to the research team for analysis. At the conclusion of the study the tape will be erased.

Subjects will take the "Test of Attentional and Interpersonal Style – TAIS", developed by R. Nideffer, PhD. The instrument is researched based and performance relevant. Moreover, the instrument is based on 20 years of research examining the relationship between attentional processes, physiological arousal and performance. This report will remain confidential and a copy will be provided to parents upon request.

Prior to each training session a supervised warm-up and flexibility exercises is necessary, with a cool down and flexibility exercises concluding the session. No ill or injured player will be allowed to participate in any field sessions. Any player who feels pain and cannot complete normal activities (stretching, walking or jogging) will be excused from participation. The researcher will determine the extent of an injury or illness. The parent and player will be asked to give continual feedback on health issues. Each session will be 1 hour in length and separate from regular team practice. A minimum of 12 and maximum of 16 sessions will be required.

You have the right to withdraw consent for your child's participation at any time without consequence. No compensation is offered for participation. Group results of the study will be available soon after the conclusion of the study.

If you believe your son or daughter have been injured during participation in this research project, you may file a claim against the State of Florida by filing a claim with the University of Central Florida's Insurance Coordinator, Purchasing Department, 4000 Central Florida Boulevard, Suite 360, Orlando, FL 32816, (407) 823-2661. The University of Central Florida is an agency of the State of Florida, the universities and the state's liability for personal injury or property damage is extremely limited under Florida law. Accordingly, the university and state's ability to compensate you for any personal injury or property damage suffered during this research project is very limited.

Questions or concerns about research participants' rights may be directed to the UCFIRB office, University of Central Florida Office of Research, Orlando Tech Center, 12443 Research Parkway, Suite 207, Orlando FL 32826. The hours of operation are 8:00 am until 5:00pm, Monday through Friday except on University of Central Florida official holidays. The phone number is (407) 823-2901.

Sincerely,

Francis O'Donnell.

_____ / _____

Parent/Guardian

Date

_____ I have read the procedure described above

_____ I voluntarily give my consent for my child, _____, to

participate in Francis O'Donnell's study on elite adolescent soccer players.

_____ / _____

2nd Parent/Guardian.

_____ I would like to receive a copy of the procedure description.

_____ I would not like to receive a copy of the procedure description.

Participation or non-participation in this study will not affect the player's current status on regular team play.

APPENDIX H
ADOLESCENT ASSENT

Please read this assent document carefully before you decide to participate in this study.

Project Title: A Qualitative Study on Co-ed Adolescent Soccer Players.

Purpose of the research study: The purpose of the study is to compare and examine performance variables, gender attitudes, and perceptions in a highly competitive soccer environment.

What will you be asked to do in the study: At each session start you will perform a warm-up and flexibility exercises. You will be pre and post tested for fitness, strength, flexibility, and speed in soccer. Each training session will address a particular soccer theme:

Dribbling, passing or engaging in tactical games. After some but not all of those sessions a group interview will take place. You will be asked to comment on the session theme, specifically on the gender interaction. Also, some but not all of the training sessions will be videotaped for critique and analysis.

You will be asked to take the TAIS “Test of Attentional and Interpersonal Style”. The test is research based and performance relevant and will examine areas of focus, attention, motivation, leadership and physiological arousal. You will also be asked to participate in an individual interview with the researcher. The interview will be taped and the questions will all be soccer or project related.

Time Required: Training Sessions are One (1) hour.
Group Interviews are ½ hour.
Individual Interviews are ¾ hour.
TAIS is (1) hour.

Risks: You may experience muscle soreness at a period of 24-48 hours after the sessions. An injury or illness will exclude you from participation.

Benefits/Compensation: There is no compensation for participation. Each player should make gains in overall soccer ability.

Confidentiality: Your identity will be kept confidential. You will be assigned a codename. Your name will not be used in any report.

Voluntary participation: Your participation is voluntary. There are no penalties for non-participation.

Right to withdraw from study: You have the right to withdraw from the study at any time without negative consequences. Except your participation in the study may be terminated.

If you have any questions about this research project, please contact me at (386) 673-1816. My faculty advisor is Dr. Frank D. Rohter. Questions or concerns about research participants’ rights

may be directed to the UCFIRB office, University of Central Florida Office of Research, Orlando Tech Center, 12443 Research Parkway, Suite 207, Orlando, FL 32826. The phone number is (407) 823-2901.

Please sign and return this copy of the letter in self-enclosed envelope. A second copy is provided for your records. By signing this letter, you give me permission to report your responses and test results anonymously in the final manuscript to my faculty supervisor as part of my course work.

Sincerely,

Francis O'Donnell.

_____ / _____

Participant

Date

_____ I have read the procedure described above on the Co-ed Soccer Study.

_____ I voluntarily agree to participate in the study

_____ I would like to receive a copy of the interview manuscript.

_____ I would not like a copy of the interview manuscript.

_____ I would like a copy of the generated TAIS.

_____ I would not like a copy of TAIS.

**APPENDIX I
ABOUT THE AUTHOR**

The following account describes the cultural climate under which the researcher spent his first fourteen years in Scotland. Furthermore, there is some historical information added to provide the reader with some insight into Scottish society. Also, the Scottish cultural and economic environment had formulated impressions that became crystallized attitudes in the researcher. Those attitudes will not easily be altered. Therefore, the researcher will have certain prejudices and attitudes that will motivate him.

This background has a relationship to the study; the researcher came from a poor milieu and when readers compare his upbringing to his students today, there are very significant difference in resources, education and the psychology. The researcher experienced deprivation in the paltry living conditions in Scotland. His students on the other hand have all of their needs met, therefore, those students having never experienced hunger, will never appreciate having food to eat. This non-appreciation affects psychology and the modern student lack the drive to be a successful soccer player. The mode of learning about soccer has been replicated in the study. As a teenager, the researcher learned soccer from a number of professional soccer players.

Soccer Magnetism

Soccer is a game that continues to captivate audiences worldwide. It is estimated that the *FIFA* World Cup of 1998 attracted as many as 40 billion television viewers. This event is held every four years after national teams have competed in preliminary group games (Ekstrand, 1994; Lees & Nolan, 1997; Shephard, 1999). Soccer is the number one sport played worldwide and participation in youth soccer organizations in the United States is unprecedented. It has enormous economic and cultural influence. Finally, it is a recognition factor for local, national and international participants (Mean, 2001).

The nature of the game of soccer is such that it does not discourage individuals of different physical stature from competing. This has to be one factor behind the worldwide popularity of the men's game, and should therefore enhance the future development of the women's game (Brewer & Davis, 1994).

According to Dunning (1994) soccer is a generic term, which refers to a whole class of all games, central among them, being association football. This class of ball games also includes Rugby football, American football, Canadian football, and Gaelic football. The name "soccer" is derived from the term "association" and refers to the highly specific association way of playing. The term is said to have been created in the late nineteenth century at Oxford University when a student named Charles Wreford-Brown was asked one day by a friend at breakfast: "I say Charles, are you playing ruggie (Rugby) today?" "No," he replied, "I'm playing socc-er". The practice of adding the suffix "-er" to select terms was apparently trendy among the English upper class at the time. However, Dunning does qualify this narrative as fictional.

It was, in due course, to be the Scottish rather than the English game that would go on to captivate global interest. It emerged as a game that placed its emphasis on skill and cunning and on perfect mastery of the ball rather than force and speed. Soccer soon became popular in many countries; however, each country shaped the game in its own unique image. Consequently, it seems that no sport has ever served as much an accurate paradigm of national character. Interestingly, variations in style remain today. For example, differences in the way soccer is engaged in countries such as Brazil, Argentina, France, Germany and England still exist today (Bangsbo, 1996).

All of the spectators and players in the countries listed above enjoy or participate in soccer for various reasons. The professional is a purest who loves the game and makes his or her

living through involvement. The college player has scholarship possibilities and the amateur plays for fun and fitness. Whereas in third world or poor economic countries soccer provides hope and gives actual meaning to peoples' lives. Van Lingen (1997) writes about the attraction of soccer in the tiny country of Holland. He attributes that country's success in soccer to the age that most of the top soccer players begin to play the game. Usually youngsters begin at 6 or 7 years old and he also praises the parents, volunteers and club officials who have assisted in the development of future players.

This commonality of soccer age group education is confirmed by Cox and Thompson (2000) as they claim the majority of the New Zealand-born respondents started playing soccer between the ages of five and eight years by joining local clubs. In contrast, three of the European-born players were first introduced to soccer playing in the streets with neighborhood boys and girls. This sentiment is also echoed by Scraton, Fasting, Pfister & Bunuel (1999) on females becoming footballers. Those early experiences were generally in informal spaces within local neighborhoods. Concerning those initial experiences many of the women recounted the significance of the street and parks as spaces where they began their soccer careers: "I just started to kick a football in the back streets, it was great fun" (Jane, England). Similarly, "I really wanted to play soccer. I thought that was the most fun. Besides, I have always played soccer with the boys on the streets." (Berit, Norway).

One of the most important attributes necessary to participate in soccer is the acquisition of technique. The feet, thigh, head or chest are typical body surfaces used to pass or control a soccer ball. Without question, exposure, learning and acquiring these skills at age 5 or 6 will precipitate an easier path in the athlete's development as player. Repetition is the key in the acquisition of technique; therefore, the persistent playing on neighborhood streets and

schoolyards in western Scotland played an integral part in the development of many young soccer players in the 1950s. Upon entering secondary school development continued, if you were talented, you became a selection for your age group school team. The ascendancy of the soccer culture was reinforced by a strong emphasis by most teachers on sport as a mode of communication. It was used to emphasize school unity and Catholic loyalty. Soccer was the most prized sport in school. It served as a means of social control for teachers and a source of self-esteem for pupils (Walker, 1988). Another feature with regard to player development was living in Greenock and the towns close proximity to Glasgow. Glasgow was Scotland's largest city located approximately 22 miles east of Greenock on the River Clyde. That city accommodated a number of professional soccer teams and among the most noted was Celtic and Rangers. Both clubs were founded in the late 19th century and both clubs had, and still have huge fan support. *Catholics* of Irish decent support Celtic and have political allegiance to the Pope in Rome. The fans that supported Rangers were *Protestants* with historical links to the Queen in England and the Dutch conqueror *William of Orange*.

Diverse cultures contributed strongly to the soccer movement. The Orange Order, the major Protestant brotherhood in Northern Ireland, mounted its largest demonstrations on July 12, 2003 to commemorate a long-ago victory over Irish Catholics. Most of the banners displayed scenes from battles in Ireland from 1689 to 1691, when the Dutch King William of Orange defeated the Catholic James II, an Englishman, to establish two centuries of Protestant ascendancy on this Catholic island. The Order annually recalls the *Battle of the Boyne* fought south of Belfast on July 12, 1690 as the most significant clash (Pogatchnik, 2003). These Orange Order marches still exacerbate hostility in modern day Scotland and Northern Ireland. These two

religious factions gave birth to the name *Religious Sectarianism* and Bradley (1996) offers his opinion on how Sectarianism has permeated the sport of soccer:

Since its foundation, Scottish football has often been characterized by ethno-religious factors, a characteristic which is particularly evident in the case of the two major clubs in Scotland: Rangers and Celtic. Although a number of commentators have stressed the disabling effects of these features, Scotland is not unique in its football acquiring an extra-sporting dimension. (p. 62).

Furthermore, he adds that socially, politically and in relation to life changes, religion has had a varying effect in Scottish society over the course of at least a century and a half. It has traditionally been one of the most prominent factors in Scottish life, though the influence of formal and institutional religion has been falling since at least the early 1960s. This intensity of physical and at times very violent rivalry is evident when Marples (1954) comments on the origins of football in Scotland: *'Hoose again hoose, toon again toon, an if ye meet a man, knock him doon.'*⁷

Murray (1984) writes about sport, religion, economics and politics and how this related to the *'Old Firm'* teams Glasgow Celtic and Rangers. The clannishness, looking after one's own was rife in the industrial sphere in Scotland, and this policy was reflected in the Rangers Football Club. Their success was barely challenged from other teams; they could choose players as the captains of industry appointed and dismissed employees. More to the point, Rangers Football Club were showing themselves as champions of the Protestant cause, and for this they warranted the gratitude, tacit or acclaimed, of Protestants throughout Scotland. Furthermore, Murray (1984) also testifies that the real origin of sectarianism in Scottish football lay in the very formation of the Celtic Football Club and its unprecedented success. The success of Celtic coincided with a

⁷ House against House, town against town, and if you meet a man, knock him down. See E. Dunning in *Football (Soccer)* Bjorn Ekblom (Ed.) (London: Blackwell Scientific Publications, 1994) 2.

resurgence of Catholic militancy both in local matters and Irish national affairs. Every country, he continues, with a large immigrant population goes through the same problems of non-acceptance and prejudice, but in Scotland there was a combination of features that made them more volatile than in any other country outside Ireland. However, Finn (1991) contends that the use of the term sectarian by Murray needs to be examined and clarified:

‘Sectarian’ can refer simply to the adherence to a sect or, as in the more common usage, to bigoted behavior. Furthermore, Murray considerably confuses the analysis of the level, nature and even presence of prejudice by using the term interchangeably he uses it to refer to a team’s origins from within one social group, as well as to aggression directed against another group, but he fails to specify which meaning of Sectarian is being used at any one time. (p. 90)

Furthermore, Bradley (1996) alludes to the historical significance of the Reformation and how this religious faction had affected the countries within Britain. In Scotland, there had developed a strong anti-Catholic culture, which infused many aspects of social and political life. In addition, Bradley (2002) imparts information on the hostility towards the Catholic Celtic supporters’ continuing links with Ireland, the country where many of them and their club originate, has much antagonism within Scottish soccer. Some supporters’ comments show that the Irishness of the Celtic support is not acceptable to many within the Scotland fan base. Celtics’ supporters have long been the object of a disparate but related antagonism and the attitude of one Scotland supporter, in relation to the Irishness of many Celtic supporters that “It’s Scotland they live in. If they don’t like it then get them to f**k” was recurrent on several occasions during Bradley’s research.

In addition, Dunning (1994) informs us about the historical significance of the game of Association Football in Britain:

Whatever their names and whether associated with a specific festival or not, the folk antecedents of modern football were openly emotional affairs characterized by physical

struggle. Such restraints as they contained were loosely defined and imposed by custom as opposed to elaborate formal regulations that are written down, requiring players to exercise a high degree of self-control and involving the intervention of external officials when the self-control breaks down. As a result, the basic game-pattern – the character of these folk games as struggles between groups, the open enjoyment in them of excitement akin to that aroused in battle, the riotousness, and the relatively high level of socially tolerated physical violence – was always and everywhere the same. In short these games were cast in a common mould that transcended differences of names and locally specific traditions of playing? (p. 6)

APPENDIX J
COMMENTARY: IS THERE A FUTURE IN WOMEN'S SOCCER?

The case that women's soccer remains contingent upon the male sporting world for its existence and survival in United States and other European countries. Accordingly, financial resources and facilities appear inferior for women and there is acknowledgment that the progress of the female game relies on integration into men's soccer. It has not been a feasible for women to persevere with their own resources. The rationale for this is complex, but clearly reflects the legacy and continued existence of influential ideologies encompassing female participation that impact on the civic perception of the game and the structure of the sport. This is appropriately summed up by an experienced Norwegian female player in the study conducted by Scraton et al., (1999):

Women's soccer is still very young. If you look at the audience, we don't take in much money, because it is not as popular as men's soccer. We therefore only have to accept that we are second stringers. There is nothing we can do about that. This is just the way it is. Women's soccer is never going to be accepted in the same way as men's soccer. I believe...never. (Wenche) (p. 106)

Brewer and Davis (1994) are in agreement with many significant others that soccer is a rapidly developing game (Coggins, & Foster, 1997; Health Education Authority (HEA) 1997; Health Education Authority (HEA) 1998; Health Education Authority (HEA) 2001; New South Wales Sport and Recreation, 2001; Sport England, 2002) and as such the extent of scientific inquiry into the sport is scarce. However, there is considerable potential for further investigation into all facets of female soccer, and this is required to make available to the coach, player, and the sport scientist with improved in-depth knowledge about the game. The evidence that does exist suggests that female players have a high standard of physical fitness, which is similar to that found in many other female team sports.

Kimmel (2001) has stated that the women's movement is one of the greatest success stories of the 20th century, perhaps of any century. It is the story of a monumental, revolutionary

transformation of the lives of more than half the population. It must be reported that feminists consider an area of concern in sport as the over-emphasis on winning at the expense of enjoying the process of play. According to Birrell and Richter, (1987); Krane, (2001) feminists refuse to elevate winning to the principle of ultimate worth and their refusal to subvert the process of play to the product of winning, and their insistence on measuring the value of the activity for themselves against the joy of playing. They describe this elusive outlook as:

...strongly opposed to an approach to softball that so highly valued winning that friendship, sensitivity to others and safety were disregarded. They wanted to play a highly skilled game, to challenge the skill of their opponents, to play hard and to have a good time. All of that, they felt, could be accomplished whether they won or lost. Thus outcome could become less relevant than the process of play. One woman stated simply, "Winning in an all out way is not as important as actually playing and experiencing the sport." (p. 402)

The above paragraph describes a mind-set, an attitude of someone who has not experienced serious participation in sport. Because, having fun is the experience of fatigue, playing through injury and that you have matched your wits against an able opponent and won. Also, the use of the noun 'goal' in sports is precisely what has eluded this person.

On the contrary, Kretchmar, (1994) states that most sport enthusiasts already know that games are gatherings that present individuals with simulated problems, challenging and usually non-threatening puzzles, self-imposed difficulties. In biological terms, games might be regarded as safe stressors. They stimulate human inquisitiveness and they prolong people's attraction; they challenge contestants; they cast uncertainty on how good or capable performers can get individually and collectively. Games engage people to exercise their capacities for achievement – for learning, for improving, for development, for accomplishing and succeeding.

APPENDIX K
SESSION TESTING EXERCISES AND DRILLS

6 versus 2

This game is played in a square area approximately 15 yards by 15 yards. Two defending players are directed into the center of the grid. The other six players are placed around the outside of the grid. The function of the game is to keep the ball away from the 2 inside defenders by using quick interchanging passes by the 6 players on the outside. The ball is not allowed to leave the square and if the inside players intercept the pass an exchange is now made. One of the outer players now becomes a chasing player. Balls have been placed around the playing area to achieve continuity of play; if by chance a ball on the inside of the grid is played outside the grid. This game is about establishing an offensive rhythm and the players who make an error pick up a colored vest from the departing middle player. A (2) touch maximum is applied to all of the players at the beginning and after good ball movement (1) touch is then limited to one.

DRILL 2

Possession and Counter Attack Drill (Bangsbo)

Some females did not quite understand the nature of this exercise. This could be because when the instructions were given the group, as a whole was not paying attention. Also, several of the females never changed roles and became the 'runners' this is exhaustive training. One female looked pretty lethargic and did not exhibit particularly good work habits. There could have been an injury possibility, however she did not indicate that she was ill or injured. This game is played on the entire field and requires (2) goalkeepers, 4 front players, 4 defenders (these roles change based on possession), and 10 players playing possession in midfield and 2 servers with a supply of balls. The concept of the game is that it never stops and both sets of attackers can go to any goal. These runners are placed in both offensive thirds of the field. Once the ball is in play, they can sprint in any direction to gain separation from the marking players. The ball is played in by a server positioned at mid-field and the group playing in the middle third need to be cognizant of the attackers, when a free attacker is found the middle group passes the ball and enable them to work for a shot on goal. As soon as the middle group passes the ball out of that zone, the server will play another ball to the team that did not pass to the attacking players.

DRILL 3

Multi-faceted Tri-Box Possession Game

This game has all the components of match play, however the field set-up is entirely different. The field lay-out is important, because it allows all the participants to work on their technical and tactical skills and there is varied physical activity where the players are required to 'Press' and defend 4 goals not 2 goals and they are normally required to do. Some exhaustive running is required by the defending group. Both teams get the opportunity to attack and defend.

The (4) goals are a square placed in the center of the playing field. Two of the goalkeepers are responsible for (2) goals at 90°. Two lines of players (4) in each line front one the goalkeeper preventing the offensive players from shooting. The (4) goals are centered within a grid approximately 50 yards x 50 yards. Two offensive players equally distributed are placed on each side of the large grid square. The defensive players cannot leave the large grid and must keep that double block shape and move quickly from each side of the square. The attackers on the outside of the grid move the ball quickly and attempt to get the ball to an open side that the defenders can't cover. If the defenders intercept the ball as it passes through the grid they are allowed to play possession in the large grid. This is the only time the attackers can enter the grid to retain possession and go back outside the grid. They cannot play in the grid. A three-touch limit is in effect (Sky Sports Television, 2003).

DRILL 4

Passing Scheme Drill

This exercise is designed to enhance passing technique. There are two teams of 6 players and each group has a ball. The game is also played in 3 phases:

Phase 1:

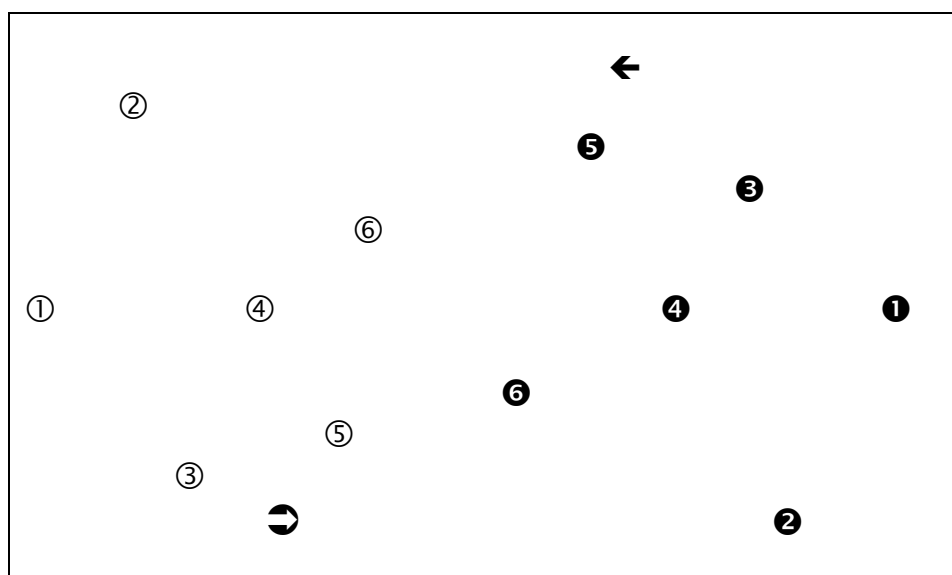
- Starting with the #1 player on each squad, the first pass is played to the #2 player
- The object is to get the ball to the opposing #1 player (goalie) by sequentially passing the ball to each player on your team 1 through 6.
- The other squad work simultaneously but go in the opposite direction
- After passing the ball to the opposing goalie the team returns passing the ball 6 through 1 or back to the base goalie. Each squad must be aware of the other groups' progress. The groups should decrease or increase their tempo to assure both groups are not going in the same direction.

Phase 2:

- Same as phase (1), however you may pass out of sequence. By having to negotiate through your opponents gives the impression of resistance by defenders

Phase 3:

- One ball is removed and we have a game with emphasis on passing. A (3) touch limit is applied to ensure all players have an opportunity to touch the ball.

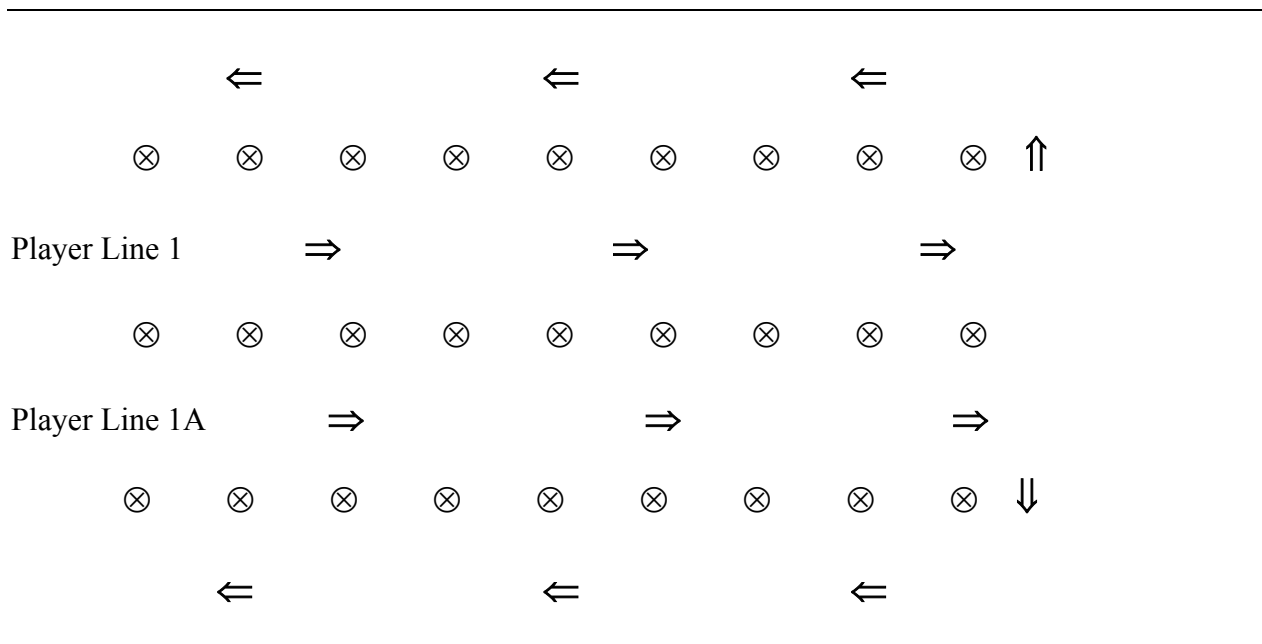


- Solid lines are the perimeter of the playing field.
- The numbers in the white circles represent team one.
- The numbers in the black circles represent team two.
- The black arrow represents the direction of attack. for black team.
- The white arrow represents the direction of attack for white team.
- The small line above and below No. 1 white and black represent goals.

DRILL 5

Speed Training

Speed training can be physically exhausting exercise. The workout combines a number of short sprint work both directional and straightaway with a partner, strengthening exercises are included with ballistic stretching (rigorous movement). The routine has the athletes perform the same task at least four times over a track of 30 to 40 meters. This is a need to train for strength, suppleness, skill and speed. There are 3 tracks set up in a row of 9 plastic cones each approximately 5 yards apart:



The players now will execute a particular exercise and return to the starting position. While keeping a close check on his or her partner on the other line. Line 1 and 1A leave the start position at the same time. The next two players leave after the first two players reach the second

set of cones. There are many variations, whereby Line 1 and Line 1A begin at opposite ends of the course.

⊗ A plastic cone (guideline).

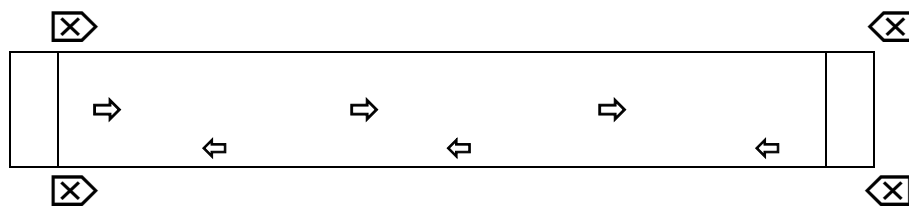
⇒ The direction of the player's path during the exercise.

DRILL 6

Yo Yo Intermittent Test

Four markers (cones) are placed 20 meters apart and the players must run between the two markers, at a steadily increasing running speed. The players' running speed is specified by the acoustic signals from a pre-recorded cassette. Several participants can participate at the same time; the markers must be positioned parallel, so that each participant has a course to run. The course is repeated until the player is unable to maintain the current speed indicated on the cassette. The researcher will follow the progress of the participants and rule whether that shuttle has been negotiated properly in the time frame over 20 meter distance. The speed is increased regularly (approximately every minute), that is, the time between the two signals is decreased. The present speed will continuously be given on the cassette. Again, the aim for the participant is to perform as many 20 meter runs as possible within the given time limits. When the performer stops the last speed and the number of performed 20 meter distances at this speed, including the last one is recorded (Bangsbo, 1994).

The 20-meter track where the athlete is required to have the lead foot on or in the end zones.



The participants run at a given speed based upon the instructions given from a videocassette recorder. They start at A and run to B then return to A, this continues until the

participants are unable to continue. There is a decreasing time factor as the test progresses when the runner traverses from A to B.

DRILL 7

Acceleration – the 30 Meter Sprint Test

Speed off the mark is the player's explosiveness from a standing start to full acceleration. This particular attribute is very important in soccer to a soccer player. The game of soccer is such that many short sprints are required. This test is appropriate for measuring the time required for soccer players to cover the 10-meter distance. Usually this distance is covered in three or four strides (Verheijen, 1998). Also, this test indicates the soccer player's peak power that the Phosphate System can supply.

Test Procedure:

The test requires the athlete to sprint over a distance of 30 meters then resting for a period of 5 minutes before the second and third trials. The trial is run on grass with (2) markers placed at the start position and 2 additional markers placed 30 meters away to indicate the finish position. A non-sprinting player stays next to the researcher to populate times in the appropriate place by the runner's name. The instruction word 'ready' is given to the participant then 'Go' and upon movement out of the gate the researcher starts the stopwatch. When the first forward part of the body is level with the finish line the measuring device is stopped. The time is then called out to the assistant. The measuring device used was a SPORTLINE model #880.

DRILL 8

Forty-four Meter Sprint and Recovery Test

This test was modified for the study group. The variation with regard to Bangsbo's Sprint test is the sprint distance covers 10 meters more. However, the rest period was adjusted to give the participant more time to recuperate more energy.

Test Course:

A lap consists of the player sprinting from starting point (A) straight 10 meters. At his point the player will run diagonally to his/her left through a gate 5 meters from the track. Once through the gate, the player will continue sprinting diagonally to his/her right to the 20-meter mark. From this point is a continued straight sprint. The player has 30 seconds to then return to the starting point and begin the second trial. The test consists of seven laps and the duration of each sprint is recorded.

APPENDIX L
UCF OFFICE OF RESEACH AUTHORIZATION LETTER



Office of Research

March 26, 2002

Francis O'Donnell
8 Edgewood Way
Ormond Beach, FL 32174

Dear Ms Huggins:

With reference to your protocol entitled, "A Qualitative Study on Co-Ed Adolescent Soccer Players: A Comparison of Performance Variables, Personal Attitudes, and Perceptions in a Competitive Environment," I am enclosing for your records the approved, executed document of the UCFIRB Form you had submitted to our office.

Please be advised that this approval is given for one year. Should there be any addendums or administrative changes to the already approved protocol, they must also be submitted to the Board. Changes should not be initiated until written IRB approval is received. Adverse events should be reported to the IRB as they occur. Further, should there be a need to extend this protocol, a renewal form must be submitted for approval at least one month prior to the anniversary date of the most recent approval and is the responsibility of the investigator (UCF).

Should you have any questions, please do not hesitate to call me at 823-2901.

Please accept our best wishes for the success of your endeavors.

Cordially,

A handwritten signature in black ink, appearing to read "Chris Grayson".

Chris Grayson
Institutional Review Board (IRB)

Copies: Dr. Frank D. Rohter
IRB File

Office of Research
12443 Research Parkway Suite 207 • Orlando, FL 32826-3252
407-823-3778 • FAX 407-823-3299
An Equal Opportunity and Affirmative Action Institution

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