THE INFLUENCE OF FAMILY ENVIRONMENT ON CHILDREN'S GOALS IN SPORT

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DECLARATION

I declare that this thesis is my own original work. All other sources of references have been acknowledged.
Abstract

The relationship of family environment and children’s goals in sport is not a well-established area of research and although findings to date are equivocal, links between various dimensions do appear to exist. The aim of this study was to explore the relationship between family environment, particularly the perception of achievement orientation within the family, and the youth participants’ goal orientation in hockey.

The sample consisted of fifty-five female senior school hockey players, as well as their parents, that attended independent girls’ schools in the Pietermartizburg and Durban areas. No significant relationship was found between the perception of achievement orientation in the family and the youth participants’ goal orientation in sport. However, indications that other aspects of social climate within family environment, as perceived by the participants, influence youth goal orientation in sport. Findings also revealed links between positive parental involvement and intrinsic motivation, and perceived parental pressure and pressure experienced by the hockey players. The results are discussed in terms of the literature reviewed, and the implication and the limitations of the study are discussed, concluding with recommendations for future research.
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1. INTRODUCTION

This chapter aims to provide a context for the study of the influence of family environment on children's goals in sport.

Achievement Goal Theory has been the focus of recent research into motivation processes and achievement behaviour patterns. This theory assumes that they are two goal perspectives that operate in achievement contexts: task (mastery) and ego (performance) goal orientation (Roberts, Treasure & Balague, 1998). Nicholls (1984, as cited in Roberts et al., 1998) contends that two conceptions of ability are embedded within these two orientations and that they are reflected in an achievement context. There is evidence in support of achievement behaviour being consistent with goal orientation within the sport context (Roberts et al., 1998).

According to Singer, Murphy and Tennant (1993) identifying the contributors to and correlates of motivation in young athletes is central to understanding youth sport behaviour. These authors suggest that achievement goal preferences and motivation orientation is likely to be influenced by parents, but that there has been little research on this relationship.

Research in both sport and academic areas has supported current theories that children's self-perception characteristics are important mediators of the motivation patterns (Harter, 1978, 1981; Nicholls, 1984, 1989, both in Singer et al., 1993). These self-perceptions during their sport involvement are likely to be heavily influenced by adults because of their involvement in youth sport. Children also prefer to assess their ability by using adult sources of feedback (Freize & Bar-Tal, 1980; Horn & Hasbrook, 1986, 1987, both in Singer et al., 1993).
Findings of some previous studies have indicated that parental influence and pressure does have an impact on children’s motivation orientation (Elliot & Harackiewics, 1994; and Escarti, Roberts, Cervello & Guzman, 1999). Bilden (1999) however, in a study that investigated the relationship between parent styles and achievement motivation in sport, provided evidence that does not support research that has revealed significant relationships between the two.

Although there has been little research on achievement orientation and goal orientation, findings have suggested that the performance or mastery focused goals on intrinsic motivation varied as a function of achievement orientation (Senko & Harackiewicz, 2002).

According to Singer et al. (1993) the relationship between achievement behaviour and children’s motivation processes, has not received much attention with regards to research. The unequivocal results in this area of research also suggest that further research is needed.

In this study the aim is to study a South African sample of adolescent female hockey players and to identify whether family environment influences their goal orientation in sport.
2. LITERATURE REVIEW

2.1 Introduction to Motivation

According to Roberts (1992) motivation is one of the central issues in human affairs and that the role of motivation in individual lives is very important. Roberts defined motivation as 'those personality factors, social variables, and/or cognitions that come into play when a person undertakes a task at which he or she is evaluated, enters a competition with others, or attempts to attain some standard of excellence.' According to this author, in such situations there is a challenge for the individual who is responsible for the outcome of the task. It is also assumed that these situations influence human behaviour in achievement situations, as they facilitate various motivational dispositions. Furthermore, it has been hypothesized that approach and/or avoidance motives, incentive values and cognitive assessments of success and failure, and expectancies determine achievement behaviour.

According to Roberts (1993) motivational theories are assumed to explain achievement behaviour. Motivation in sport is inferred from assessments of behaviour which study when participants try harder and for longer, concentrate and pay more attention, perform better, and practice and participate in sporting activities for longer periods (Roberts, 1992).

The motivational theories that have been proposed to explain achievement behaviour will be discussed briefly.
2.1.1 Theoretical Approaches to Understanding Motivation and Achievement Behaviour

Need Achievement Theory
This theory has been most influential in this area of research, especially in research within sport contexts. In this approach the central constructs of the theory are formed by motive to achieve success and motive to avoid failure, and these motive states are the mainsprings of action. Although such research in sport generally has been inconclusive, the approach has been important to the understanding of motivation (Roberts, 1992).

The Test Anxiety Approach
This theory is based on research relating test anxiety to achievement in task performance. The theory focuses on the evaluative aspects of the school situation where the major motivational variable was anxiety with evaluation. Although this research has produced evidence that performance in such situations is influenced by motivational factors, this approach has not been popular in sport contexts (Roberts, 1992).

Expectation of Reinforcement
This theory is based on social learning theory and theorists of this approach emphasize overt behaviour as opposed to motives. Achievement behaviour is viewed as behaviour directed towards the attainment of self approval and the approval of others, depending on criteria for performance competence. In this approach the major motivational variable is the individual’s expectancy of reinforcement. Although this is a major school of thought in motivation, little research of this nature has been conducted in the area of sport achievement (Roberts, 1992).
The Cognitive Approach: Attribution Theory

This approach is now dominant in the study of motivation and focuses on the way knowledge is acquired, represented, and used by humans. According to these theorists, cognitions and beliefs mediate behaviour in sport. According to this approach human action is determined by the human as an active information processor with higher mental processes. Attributional models have been important in the theory of motivation from a cognitive perspective but are not comprehensive in explaining achievement behaviours (Roberts, 1992).

Social Cognitive Approaches

This theory draws from past theories and assumes that the choice and attainment of achievement goals are mediated by sets of affective, cognitive and value-related variables. There are three mini-theories in the social cognitive approach, which have all been used extensively in sport research (Roberts, 1992).

Self-efficacy

In the investigation of motivation in sport, this has been the most extensively used theory. It is based on Bandura’s theory of Self-Efficacy, which is concerned with one’s assessments of what one is capable of as a result of their abilities (Roberts, 1992).

Perceived competence

These theories focus on the perception of the competence of the participant. Harter, a major theorist in this area, explains that perceived competence motivates an individual in cognitive,
social and physical domains. Achievement striving is seen to increase from perceived competence and intrinsic pleasure that is gained from success in these domains (Roberts, 1992).

Achievement goal approaches

According to the achievement goal approach, the major focus of individuals in achievement contexts is to demonstrate competence or ability. This ability has two conceptions that lead to two major goal perspectives. Roberts (1992) uses the term competitive goal for the first achievement goal but others have also labeled it as performance goal or ego orientation (Duda, 1992). This goal drives participants to perceive their ability in comparison to the abilities of others. Success or failure is dependant on this comparison with others. The second achievement goal is termed mastery goal but the terms, learning goal or task orientation has been used by others (Duda, 1992). Individuals perceive abilities according to improvement or learning and are self-referenced (Roberts, 1992). According to Roberts, there is considerable data to support this approach in sport and this approach will be considered in greater detail in the following sections.

A Goal Perspective

Motivation research has recently focused on a goal perspective analysis of motivational behaviour (Duda, 1992). According to the major theorists in this area of research, Nicholls, Ames and Dweck, these approaches have given us the most insight into the motivation of children (Roberts, 1993). As discussed in the previous section, goal perspective theorists of achievement motivation assume that there are two major goal perspectives operating in achievement contexts, which relate to the ways that individuals perceive their level of competence. Although these two goal perspectives have been given a number of labels in
research, they will be termed ego orientation and task orientation in this study as the instrument used to measure goal perspective refers to ego and task goal orientation. This approach maintains that important interrelationships exist between goal perspectives, perceived ability and behaviour (Duda, 1993). Ames (1992) maintains that task goal orientation promotes motivational patterns that place value on learning and effort. Adaptive patterns are more likely to evolve when this goal orientation is adopted. If an individual is ego-involved and therefore compares their ability and success to those of others, maladaptive behavioural patterns are expected. According to Steenkamp and Steyn (2001) while task orientation is linked with high levels of enjoyment and interest in sport, ego orientation is linked with low levels of enjoyment and interest.

According to recent theories of achievement motivation, situational and individual differences affect which goal perspectives are dominant (Duda, 1992). Ames (1992) argues that parents, teachers and coaches create goal structures which influence participants in achievement contexts. These motivational climates convey certain goals to children, which influence their goal adoption and in turn their motivational patterns. According to the work of Nicholls (1989, in Duda, 1993) it is also assumed that individuals differ in dispositional goal orientation as a result of socialization experiences within achievement contexts.

**Orthogonality of goal orientations**

Nicholls (1989, cited in Roberts, 2001) argued that goal orientations are orthogonal, that they are independent and that an individual can be high or low in each or both orientations at the same time. Literature in this area of research has largely been supported (e.g., Duda & Whitehead, 1998 cited in Roberts, 2001).
Stability of goal orientations

The stability of goal orientations refers to situational stability or generalisability. Hardy (1997, cited in Roberts, 2001) conducted a study among professional golfers that provided evidence for the instability of goal orientations in the sport domain. The study indicated that individuals can fluctuate in their emphasis on ego and task goals across situations. According to Roberts (2001) there are discrepancies in such studies and further research is needed to resolve these.

2.1.2 Measurement of the Individual Differences in Goal Perspectives

Determining individual differences in orientations to sport achievement has received considerable interest (Duda, 1992). The Task and Ego Orientation in Sport Questionnaire (TEOSQ) assesses individual differences in the emphasis placed on task- and ego-involved goal perspectives in sport (Duda, 1993). This instrument developed by Nicholls and Duda requests individuals to consider when they feel most successful in sport and then to identify with items either reflecting task- or ego-involved criteria (Duda, 1992). This author also mentions that psychometric research on the TEOSQ has provided insight into the nature of these two goals in the sport environment. Firstly, ego- or task-orientated individuals are both considered to be competitive, but the difference between the two is the importance of the competitive process in relation to the outcome, along with the devastation of losing. Both groups are also equally goal-directed but the difference lies in the perceptions and criteria that underlie subjective goal attainment. Thirdly, both ego- and task-orientated individuals are concerned with playing well but they differ in their perceptions of whether they played well or not. Roberts, Treasure and Balague (1998) developed and validated The Perception of Success Questionnaire which is
another measure of achievement goals in sport according to an individual's perception of success in sport. According to the authors this instrument, like the TEOSQ, has demonstrated acceptable reliability and validity to be used in sport contexts.

2.1.3 Goal Perspectives, Perceived Competence and Behaviour in Sport

As mentioned previously, the goal perspective approach maintains important interrelationships exist between goal perspectives, perceived ability and behaviour (Duda, 1993). This theory is based on research on motivation in educational settings which has more recently been examined in the sport setting (Duda, 1992). According to Duda two research strategies have been adopted to investigate the impact of goal perspectives in sport. The first has been to determine the degree and direction of the relationship between goal orientation and related cognition and affect. The second has been to determine subjects cognitive and affective responses in situations that have been manipulated to be either more or less task- or ego- involving.

2.1.4 Behavioural Correlates of Goal Orientation in Sport

According to Duda (1993) studies investigating the behavioural correlates of goal perspectives have found that goal orientations relate to exerted and sustained involvement in athletic settings. While an emphasis on task- orientated goals have been found to positively influence exerted and sustained involvement, ego-orientation is correlated with lack of persistence. According to Roberts, Treasure and Kavussanu (1997) one of the most consistent findings in this area of research is the link between task orientation and satisfaction, experienced enjoyment, and interest during participation in physical activity. According to these authors achievement goals have been found to be related to affective experiences such as trait and state anxiety. Although these
findings do not indicate a causal relationship between individual differences in goal perspectives and behaviour in sport, the evidence suggests that this approach is useful in this area of research.

2.1.5 Situational Aspects of Achievement Goals

Research on achievement goals in the context of physical activity has indicated that different motivational processes are associated with both individual differences and situational differences (Roberts et al., 1997). The situational perspective focuses on how the individuals' experiences and interpretations influence how they perceive a mastery or performance climate within a context, which is likely to induce a particular achievement state of involvement (Roberts et al., 1997). The influence of parents in the development of youths' achievement motivation has been included in the area of research (Roberts et al., 1997). According to Nicholls (1989, as cited in Roberts et al., 1997) goal orientations are developed during childhood through socialization experiences and parents play an important role in this process.

An Interactionist Approach

The research on situational influences suggests that the perceptions of motivational climate created by significant others may be critical in the understanding of motivation (Roberts, 2001). According to Roberts, although Achievement Goal Theory states that both this perception and dispositional goal orientations are dimensions of motivation that interact to affect behaviour, research has only investigated their independent affects. It has been suggested therefore that an interactionist approach seeking to understand both variables will provide for a more insightful understanding.
2.1.6 Conclusion

Although a number of motivational theories have been proposed to explain achievement behaviour, motivation research has recently focused on a goal perspective analysis. According to the Achievement Goal Theory, the major focus of individuals in achievement contexts is to demonstrate competence or ability. This ability has two conceptions which lead to two major goal perspectives: ego orientation and task orientation. These goal perspectives have been argued to be orthogonal and unstable across situations. This approach maintains that important interrelationships exist between goal perspectives, perceived ability and behaviour. Studies investigating the behavioural correlates of goal perspectives have found that goal orientations relate to exerted and sustained involvement in athletic settings. Situational factors, especially the motivational climate created by parents have been found to influence goal orientations. More recently the Interactionist approach has been proposed to investigate the impact of both situational and dispositional goal orientations. Consequently, the investigations of children's goal orientations and their determinants have been the focus in recent research.

The next section will review literature on the influences of significant others and the family on youth sport and children's goal orientation in the sport context.
2.2 Influence of Significant Others on Youth Sport

2.2.1 Influence of Significant Others in Sport Socialization of Children and Adolescents

Greendorfer and Lewko (1978) examined the role significant others play in influencing children's active sport involvement. Results indicated parents had the most significant influence on children's sport participation; more specifically it was only the father that served as a significant influence.

Higginson (1985) investigated the influence of socializing agents on female participants in the sport context. The results were supportive of Greendorfer and Lewko (1978) who indicated that the family unit demonstrated the most significant influence on sport participation. Furthermore, the findings indicated that socializing agent influences change across life-cycle states. According to the results of the study, parents were most influential at the under-13 life-cycle, changing to mostly coach/teacher orientated during junior and senior high school years.

Greendorfer and Lewko (1988) reported that more recent studies have indicated that the father does not emerge consistently as the most influential for both sexes, and that peers and other social systems have a joint effect on the process. The article does however acknowledge the importance of family in the sport socialization of children. It also emphasizes the need to understand how family relations affect children's involvement, persistence and/or withdrawal and desire to excel in sport.
Parental Pressure in the Sport Environment

Singer et al., (1993, p.193) suggested that 'Harter's (1981) model of competence motivation proposes that the nature of parental response to children's mastery efforts directly impacts on children's perception of competence and control, and subsequent intrinsic/extrinsic motivation orientation'. A study assessing the influence of perceived 'parental pressure' on intrinsic motivation of 145 children playing soccer revealed that higher perception of affective support (i.e. lower perceived pressure) predicted high intrinsic motivation (Brustad & Weigand, 1989 in Weigand, 2000).

McElroy (1982) examined the consequences of perceived parental pressure on self-esteem in youth sport participants. It was hypothesized that in cases in which children's values of sport performance differ from that of their parents and in addition, self-esteem would be considerably lower than when parent-child sport value perceptions are similar. Results suggested that self-esteem was related to sport value orientations of boys but not for girls. A non-significant relationship indicated that self-esteem was not related to different parent-child interactions.

Lewthwaite and Scanlan (1989) investigated the effects of parental pressure as one of the predictors of competitive trait anxiety in male youth sport participants. Results indicated that cognitive anxiety symptoms involved worries about failure and about adult expectations and evaluation. Frequent adult-related worries were predicted by greater personal upset for poor performance and perceptions of greater parental and coach shame, more negative adult evaluations, and greater parental pressure to participate.
Hellstedt (1990) investigated early adolescents' perceptions of parental pressure in the sport environment. Questionnaires were completed by 104 13-yr-old skiers regarding their perceptions of the amount of parental pressure on sport participation and their subjective response to this pressure. Participants perceived that the pressure exerted on them by parents to be moderate to strong, particularly paternal pressure, both to compete and not to withdraw. The results indicated a relationship between low levels of parental pressure and positive affect and a relationship between high levels of parental pressure and negative affective response.

O'Connell and Zin (1996) examined how self-assessment of seasonal soccer performance was affected by parental attitudes and motivational climate of youth soccer players. Participants were 60 girls and boys between the ages of 8 to 13 and their fathers. According to the results of this study parental pressure to win was negatively related to self-performance assessment. They also revealed that participants who expressed higher levels of self-assessment perceived that their parents were most interested in them having fun and improving as a player. According to the authors the results suggest that for a positive motivational climate for youth sport participants, parents and coaches should provide an environment where improvement, learning and having fun is promoted.

In response to such claims that parents are a source of pressure on children in sport, a study was designed to explore how it may be exerted (MacLean, 1997). Male (n=34) and female (n=48) competitive swimmers completed responses about the behaviour of their parents with regard to their swimming activities. They were asked to elicit responses identifying the frequency with which certain behaviours were exhibited by and desired of their parents. Results revealed that
discrepancies between desired and perceived behaviour and levels of pressure participants desired, predicted pressure experienced. These results indicated that parental behaviour is critical in provoking feelings of pressure.

2.2.2 Influence of Significant Others on Youth Sport Motivation and Achievement

Recently youth sport motivation research has investigated the mediating of socialization agents on the motivation of youths in physical activity (Weigard, 2000). According to Weigard, researchers in this area have found that parents, teachers and peers can influence children's motivation in sport.

Escarti, Roberts, Cervello and Guzman (1999) examined the relationship of goal orientations to adolescent athletes' perceptions of the criteria used by significant others to assess their sport success. Boys and girls, who were involved in tennis and track and field, completed the Perception of Success Questionnaire to measure goal orientation. The perception of significant others' criteria of achieving sport success was measured by using the Perception of Significant Others' Success Criteria Questionnaire. The results of the study supported the general hypothesis that there is a meaningful relationship between the two. Two goal orientated profiles were found amongst the athletes, one that was task orientated and one that was high in both ego and task orientation. This finding is not consistent with most other studies that found participants were either ego or task orientated. The authors explain the difference as possibly a result of cultural dynamics, as Spanish students, opposed to North American students who were the participants in previous studies, were used in the study. In previous research (Duda & Hom, 1993, in Escarti et al., 1999) it was found that children who were higher in task orientation perceived their
significant parent to be higher in task orientation. However in this study, it was found that task orientated participants, perceived that their peers used task involving success in sport but not the adults. The athletes who were task orientated perceived that the adults were ego involving and not task involving in their criteria of success. The athletes who were high on both goal orientations perceived that both adults and peers had criteria of success that were high in both ego and task involving criteria. The findings of this study support previous research that suggest that parents, coaches and peers play an important role as socializing agents of goal orientations.

Weigard and Carr (2002) explored whether differences in motivational climate correspond to differences in personal goal profiles in children in physical education. The study investigated differences in perception of motivational climate emphasized by teachers, peers and sporting heroes and the influence they have on children’s task and ego orientation. Based on the work of Ames, the motivational climate emphasized by such social agents are determined by that agent’s own goals, emphasized evaluation and reward processes, and task, authority and grouping structures of the environment. The achievement climates of social agents can be detected by individuals who interact with them. Surveys on personal goal orientations for P.E. and perceptions of the motivational climate emphasized by P.E. teachers, peers and sporting heroes, were completed by 266 secondary school pupils in the United Kingdom. Results supported the study’s hypothesis that children with a high task/low ego profile for P.E. would perceive the climate emphasized by significant others to be more task involving. It was also found that children with a high ego/low task profile tended to internalize perceptions of a more ego involving climate from others, as hypothesized. Results of the study also indicated that those with a high task orientated goal profile tended to internalize higher perceptions of a learning
climate from teachers than those with a low task orientated profile. Children with a high ego orientated profile tended to internalize higher perceptions of a comparison climate from these individuals than those with lower ego orientation. While teacher promotion of a learning climate related most with task orientation, peer promotion of a comparison climate related most with ego orientation. This study indicated the important role that significant others play in the development of children's goal orientations.

**Family Role in Sport Motivation**

The social cognitive perspective of motivation used in research of goal orientations in the sport context has been based on findings of studies that support the impact of goal perspective in educational environments (Duda, 1992). Epstein (1989) discusses the family's role in motivating children to learn. The author discusses the motivation in terms of a student's willingness and desire to engage and persist in academics at school, and the home is included as one of the main influential settings where this motivation is developed. Key structures in families that are parallel to those in school setting are identified. The six major structures at home that affect children's motivation to learn are Task (children's activities), Authority (increasing independency), Reward (parents' reaction to good or bad behaviour), Grouping (Children's social groups), Evaluation (parents' judgments of children's progress) and Time (time children and parents spend together). According to Epstein, positive family environments influence children's motivation to learn, whereas negative environments can set up emotional or cognitive barriers to success and reduce motivation. It was also concluded that motivation is characterized by a number of qualities such as attribution of success and failure, high interest in achievement, self-esteem and confidence.
Different treatments, opportunities, interactions and experiences that occur under the family structures identified at home, influence these qualities of children’s motivation.

O’Donnell (2002) examined the relation between children’s achievement orientations and parental behaviours in dyadic situations. The purpose of the study was to demonstrate a link between specific parental behaviours and the manner in which children face challenges. According to the author, mastery and learned helpless orientations have been linked to differential outcomes in children. While mastery children tend to approach challenges with enjoyment, helpless children tend to have low persistence and are focused on their competence. Forty-six dyads of 4-6 year old children and their parents were placed in a variety of situations in which parental behaviours could be observed and coded for warmth/responsiveness, provision of structure and intrusiveness. The children were placed into either the mastery of learned helplessness category. The study hypothesized that parental provision of warmth/responsiveness and structure would be related to mastery orientations, while intrusiveness and low structure would be related to helplessness. While there were no significant results indicating a relationship between mastery orientation and warmth/responsiveness and structure, parental intrusiveness combined with low structure were associated with the helpless pattern. The results therefore confirm previous findings of the effects of parental behaviours on children’s motivation.

**Parent Influence on Children’s Goal Orientation in Sport**

Weitzer (1989, in Brustad, 1993) examined the relationship between levels of parental involvement and children’s sport related achievement orientations. Parent’s involvement was operationalized as the encouragement the children perceived to receive from their parents as well
as from parents' participation in their sport. Although no relationship was found for boys, it was found that maternal involvement was related to mastery (task) goal orientation for the girls. Duda and Horn (1993, as cited in Roberts et al., 1997) found however, in a study examining the relationship between parent and self-reported goal orientation, that children's goal orientations were related to their parent's involvement.

Roberts and Treasure (1994) conducted a study extending the research of Ames and Archer (1987, in Roberts & Treasure, 1994) which proposed that parents provide an important context for the development of children's motivation processes and their goal orientation influence the context that they provide. Roberts and Treasure extended this academically based research into the sport context, focusing on the linkages between the achievement goals of parents and their beliefs concerning the competitive-sport experience of their child, including the relative importance that they place on trying hard versus achievement.

The study hypothesized that a parent's achievement goal orientation will determine their interpretation of their child's sport experience. It was predicted that task orientated parents would perceive success in sport in personal improvement and hard work. They were also expected to endorse tasks that focused on challenge and effort. Ego orientated parents were expected to perceive success as winning, to judge performance in comparison to others and endorse tasks that ensured success. The sample consisted of 96 parents whose children were in their first year in a secondary school in the United Kingdom and parents goal orientations were measured by their responses to the Perception of Success Questionnaire (Roberts & Balague, 1991). The authors recognizing that this relationship may be mediated by other factors examined the impact
of the gender of the child, the type of sport the child competed in, and the gender of the parent on parental goal orientation. No significant relationships were found allowing for a group of children and a group of parents to be used in the analysis.

Achievement goals were found to affect the meaning of success in sport. Parents high in ego orientation defined success according to normative standards while parents low in ego orientation indicated that winning was less important in interpreting success. Parents' goal orientation however, did not influence the type of tasks they endorsed for their children. Parents high in ego orientation were expected to endorse tasks that ensured success but it was found that all parents encouraged perseverance with the task. The results of this study indicate how parent's goal orientations can affect the way children perceive their experience and success in sport and influence their attitudes toward the sport.

White (1996) examined the relationship between goal orientation and the perceptions of the motivational climate initiated among female volleyball players. According to the author, it has suggested that the motivational climate created by adults has a significant influence on the child and adolescent adopting either an ego or task orientation. The purpose of the study was to examine this relationship using the Parent-Initiated Motivational Climate Questionnaire (PIMCQ-2). The PIMCQ-2 and the Task and Ego Orientation in Sport Questionnaire (TEOSQ) were completed by 204 female volleyball players, ranging in age from 14 to 17 years. It was hypothesized that the Learning/Enjoyment Climate subscale of PIMCQ-2 would be a significant predictor of task orientation, and that the subscales Worry-Conducive Climate and Success-Without-Effort Climate would best predict ego orientation. Stepwise multiple regression
analyses were used to determine the relationship between goal orientation and the predictor variables. Overall the results indicted that the participants’ perceptions of what their parents prefer and consider being important was related to their dispositional goal orientation. The hypothesized relationship between several of the predictor variables and task orientation was supported by the correlational results and therefore climates fostered by parents that focused on learning/enjoyment were found to predicted task orientation.

Results also indicted that children who perceived their parents to prefer a climate where success without effort was emphasised, were higher in ego orientation than in task orientation. White discusses the indication from previous studies that the adoption of an ego orientation tends to lead to maladaptive motivational behaviour in the individual. These include low persistence, aggressive acts, cheating and participating in sport in order to gain recognition and status. According to the author, parents therefore need to be careful in how and what they tell children when discussing skill development and need to promote skill mastery and improvement in place of success and low levels of effort.

White (1998) in a study using female and male adolescent participants of organized sports teams found that sports participants high in ego orientation and low in task-orientation would perceive parent-initiated motivational climate to be ego involving. It was also found that high levels of task orientation were related to tasks involving perceptions of the parent-initiated motivational climate. This investigation provided evidence that what parents are perceived to value and deem important in the learning of physical skills is related to the child’s dispositional goal orientation.
Bilden's (1999) study of the relationship of parenting styles to goal orientations and beliefs in fathers and goal orientation in adolescent athletes did however, not reveal significant results. The study examined the relationship between parenting styles and achievement motivation in a sport context using 79 fathers and their adolescent sons. It was predicted that both fathers' and sons' goal orientations in sport would be related to fathers' parenting styles. Although the methodological limitations of the study were recognized, a regression analysis indicated that there was no significant relationship.

Steenkamp and Steyn (2001) conducted a study with the purpose of understanding how the goal orientation of the competitive sports participant is formed in the social interaction process with parents and coaches. The study used seven in-depth interviews which were analyzed to understand how goal orientations are shaped by the social climate. The main aim of the study was to clarify the role and the impact of the parent and the coach by focusing on the complex interaction between the three. Secondly, it aimed to acquire an understanding of the role of these interpersonal relationships in relation to goal orientation. Results of the study indicated that the influence of parents and coaches impact on goal formation of sport participants and those participants strongly imitate their parents and coaches' goal orientations. Although there are cases where the participant chooses to form new constructive task goal orientation despite orientations of parents and coaches, generally the results indicated that the goal orientation of the child is influenced by those of parents and coaches.
2.2.3 Conclusion

The literature reviewed has indicated that the family unit has demonstrated significant influence on children’s sport participation, persistence and desire to excel. Studies investigating parental pressure, perceived by children as a result of parental behaviours, have provided evidence that suggests that high parental pressure can be related to children’s negative affective responses, anxiety and self-assessment. Findings of research in the area have indicated that significant others influence children’s motivation and goal orientations in sport. The role of family and parents in youth sport motivation was discussed more extensively, demonstrating the influences of family structures and parental behaviour on children’s goal orientations, the motivational climate and their perceptions of their sport experience.

In the next section literature reviewing the effects of achievement orientation on motivation will be of focus.
2.3 Achievement Orientation

2.3.1 Achievement Orientation and Intrinsic Motivation

Epstein and Harackiewicz (1992) conducted a study investigating the effects of competition and achievement orientation on intrinsic interest. An individual's achievement orientation seemed critical in determining their intrinsic interest in a competitive sport context.

A later study (Elliot & Harackiewics, 1994) investigated the interactive effects of achievement orientation and task specific goals on intrinsic motivation for university undergraduate students in an enjoyable pinball game. The study hypothesized that individual differences in achievement orientation would moderate the effect of performance (ego) and mastery (task) focused goals on intrinsic motivation. Results indicated that individual differences in achievement orientation appear to predispose individuals to be more responsive to certain types of goals. While participants that were low in achievement orientation responded most positively to mastery goals, individuals that were achievement orientated showed positive responses to performance-focused goals. These results supported findings from a previous study by these two authors where it was found that only performance achievement goals raised interest for achievement-orientated individuals.

2.3.2 Effects of Achievement Orientation on Performance Goals

In order to resolve the mixed findings that past research on performance goals have yielded, Senko and Harackiewicz (2002) conducted two experiments examining the moderating role of context and individual differences in achievement orientation. In the first study, female and male participants pursued either a performance goal or no goal while solving enjoyable puzzles. All
participants received positive feedback but some completed the puzzles in an evaluative context and the others in a non-evaluative context. Results indicated that for participants low in achievement orientation, pursuing performance goals in an evaluative context undermined their interest. The second study was an extension of the first by manipulating the nature of the feedback. Although negative feedback given in an evaluative context had no effect on those who were low in achievement orientation, it undermined interest for people high in achievement orientation. These results indicated that an individual's achievement orientation and the context affect an individual's interest in completing a task.

2.3.3 Conclusions

Literature on the effects of achievement orientation on motivation indicates that an individual’s achievement orientation impacts on intrinsic interest and goal orientations. Available literature in this area is however limited and it must be recognized that the research discussed was not conducted in the sport context.
2.4 Implications of literature for future research

Singer et al. (1993) have emphasised that it is likely that children's motivational processes will be influenced by parents, given the importance they attach to achievement in sport. Findings in this area of research of goal orientation in the sport context have been consistent in the indication that goal orientation is related to intrinsic interest, satisfaction, or enjoyment (Roberts et al., 1997). According to these authors there is little doubt that enjoyable and more satisfying activities are more meaningful to an individual, and therefore promoting intrinsic interest in the sport context is important.

More recent studies (Weitzer, 1989; Roberts & Treasure, 1994; White, 1996; White, 1998; Escarti et al., 1999; Roberts et al., 1999; Steenkamp & Steyn, 2001; Weigand & Carr, 2002) have provided evidence of a relationship between children's motivation processes and goal orientation, and parental influences in the sport context. Achievement orientation has also been indicted to affect goal dispositions of individuals completing tasks in both evaluative and non-competitive contexts (Elliot & Harackiewicz, 1992; Senko & Harackiewics, 2002). The study conducted by White (1998) further expanded on the notion that parents play an important role in socializing children in sport, by demonstrating that a child's perception of what they think their parents value and emphasize in the motivational climate was related to dispositional goal orientation. According to White, future studies therefore need to enable a better understanding of how parents determine what is to be emphasized in the motivational climate experienced by children.
According to Roberts (2001) task orientation in sport has consistently been associated with desirable cognitive and affective responses and in order to increase motivation, task involvement needs to be promoted.

This study will aim to further investigate the influence of family environment, specifically achievement orientation as perceived by families, on children’s goal orientation in sport. Literature on the effects of achievement orientation in families on children’s goal orientations is limited and therefore further research in this domain is needed. Further research in this area will have implications for the motivational climate that needs to be created by parents, coaches and teachers for children’s sport experiences.
3. METHODOLGY

3.1 Aims and Rationale

The main aim of the study was to investigate whether there is a relationship between family environments (as measured by The Family Environment Scale) as perceived by both parents and children, and children’s goal orientation (as measured by The Perception of Success Questionnaire) in a particular sport. In a study of parent-child differences in perceptions of family climate, it was found that there were small but systematic differences in how parents and adolescents saw their families (Moos & Moos, 1986). It is for this reason that both parent’s and children’s perception of their family environment will be measured.

More specifically, the study questioned whether children within family environments that are perceived to be achievement-orientated, will tend to demonstrate higher levels of ego goal orientation.

The aim was to test the following hypotheses:

Hypothesis 1: Children within family environments that they perceive to be achievement orientated will tend to demonstrate higher levels of ego goal orientation.

Hypothesis 2: Children within family environments that they perceive to be less achievement orientated will tend to demonstrate higher levels of task goal orientation.
Supporting hypothesis: Children who perceive their family environment to be achievement orientated, with parent/s who perceive their family to be less achievement orientated will tend to demonstrate higher levels of ego-orientation.

It is likely that children's motivational processes will be influenced by parents, given the importance they attach to achievement in sport (Singer et al., 1993). More recent studies that have been reviewed in the previous section have provided evidence of a relationship between children's motivation processes and goal orientation, and achievement orientation and parental influences. Further research would allow for a more comprehensive understanding of youth motivation processes and behaviour in sport. Such research could be used to inform parents and coaches on how they influence their children's motivation and direct parental response in order to develop youth's task goal orientation.

3.2 Research Design

A survey research design, using structured questionnaires, was used to measure the variables. The independent variable in this study will be the achievement orientation perceived by the youth sport participant within the family environment as measured by The Family Environment Scale (Moos, 1986). Choosing a specific sample population controlled for the effects of the extraneous variables of age, socio-economic status, education, the type and level of sport they compete in. The dependant variable was the youth sport participant's goal orientation in the sport context as measured by The Perception of Success Questionnaire (Roberts, Treasure, & Balague, 1998). The questionnaires were self-report measures and in order to control for the effects of
socially desirable responding, participants completed a shortened form of The Marlowe-Crowne Social Desirability Scale.

3.3 Sample Characteristics

The sample population were 55 female pupils from private girls' schools in the Pietermaritzburg and Durban regions of Kwa-Zulu Natal. This population was chosen for location and procedural convenience and in order for the pupils to have similar characteristics in terms of education and social economic status. The participants were members of the school's first, second or under 16 hockey teams so that the pupils were also similar in terms of age. The age range was 16 years to 18 years with a mean age of 17 years. The youth participants therefore also competed in the same sport and the level of competition is also homogenous. Questionnaires were distributed to the pupils, and their parent/s, and data was collected from those families who were willing to participate in the study.

One methodological difficulty in this study was the weak generalisability of the results to the broader population because of the nature of the sample. Various extraneous variables were however, controlled for in this study, reducing the possibility that significant relationships between variables existing as a result of the influence of uncontrolled extraneous variables (Bryman & Cramer, 1997 in Myers, 2000).
3.4 Instruments for Assessment

In the present study, four psychometric instruments were administered to and, completed by all youth respondents. These instruments were: a Biographical Information Questionnaire for Youth Sport Participants (created by researcher, 2003); the Family Environment Scale (Moos & Moos, 1986); a shortened version of the Marlow-Crowne Social Desirability Scale (Reynolds, 1982); and the Perception of Success Questionnaire (Roberts, Treasure & Balague, 1998).

The parent/s of each youth participant completed three psychometric instruments. These instruments were: a Biographical Information Questionnaire for Parents (created by researcher, 2003); the Family Environment Scale (Moos & Moos, 1986); and a shortened version of the Marlow-Crowne Social Desirability Scale (Reynolds, 1982).

3.4.1 Biographical Questionnaire for Youth Sport Participants

A biographical questionnaire (Appendix A) was completed by each of the youth sport participants in order to obtain brief demographic details for each of these participants. The questionnaire also required certain information regarding their sport participation. The questionnaire inquired as to what hockey team they are members of, whether they were members of other sport teams and if so which sports team. The participants were asked to indicate whether they had previously been selected to represent any of the following: a school first team, a regional team, a provincial team or a national team.
Participants were asked to rate on a scale from 1 to 5 the pressure they feel to perform in sport from each of the following: father, mother and themselves. Finally, their perception of the amount of practical support (for eg. transporting and watching) and emotional support (for eg. understanding and encouraging) they receive from their father and mother was again rated on a scale of 1 to 5.

3.4.2 Biographical Questionnaire for Parents

A biographical questionnaire (Appendix A) was completed by each of the youth sport participants' parent/s in order to obtain brief demographic details for each of these participants.

Separate sections of the questionnaire were designated to both father and mother requiring responses regarding their participation in sport at present, participation in sport at school and whether they have previously been selected to represent any of the following: a school first team, a regional team, a provincial team or a national team.

The parent/s were also asked to rate on a scale of 1 to 5 the amount of pressure they consider they put on their child to perform in sport. Finally, their perception of the amount of practical support (for eg. transporting and watching) and emotional support (for eg. understanding and encouraging) they give to their child was again rated on a scale of 1 to 5.

3.4.3 The Family Environment Scale

This social climate scale (Moos & Moos, 1986) was designed to assess family members' perceptions of their social environment. The Family Environment Scale (FES) has four forms:
Real, Ideal, Expectations and a children’s version. The real version was used in this study. The FES contains 90 items that are responded to by true or false answers. There are 10 subscales, each of which contains 9 items that are in statement form:

1) Cohesion (COH)
2) Expressiveness (EXP)
3) Conflict (CON)
4) Independence (IND)
5) Achievement orientation (AO)
6) Intellectual-Cultural Orientation (ICO)
7) Active-Recreational Orientation (ARO)
8) Moral-Religious Emphasis (MRE)
9) Organization (ORG)
10) Control (CTL)

As this study was investigating the influences of achievement orientation within a family environment on sport goal orientation, the Achievement Orientation subscale was of primary focus in this study. The inclusion of this subscale in the FES was the major criteria for the selection of this instrument in this study. The manual defines this subscale as measuring the extent to which activities are cast into an achievement oriented or competitive framework (Moos & Moos, 1986). The other subscales are given the following descriptions in the manual:

- Cohesion: the degree of commitment, help, and support family members provide for one another
- **Expressiveness**: extent to which family members are encouraged to act openly and to express their feelings directly
- **Conflict**: the amount of openly expressed anger, aggression, and conflict among family members
- **Independence**: the extent to which family members are assertive, are self-sufficient, and make their own decisions
- **Intellectual-Cultural Orientation**: the degree of interest in political, social, intellectual, and cultural activities
- **Active-Recreational Orientation**: the extent of participation in social and recreational activities
- **Moral-Religious Emphasis**: the degree of emphasis on ethical and religious issues and values
- **Organisational**: the degree of importance of clear organization and structure in planning family activities
- **Control**: the extent to which set rules and procedures are used to run family life

Plake and Impara (2001) review the technical properties of the scale. The review proposes that the internal consistency and test-retest reliability are of accepted standards. The review also discusses that various studies have addressed construct and discriminate validity of the FES and that it demonstrates sufficient evidence of acceptable validity. In order to build validity, items were chosen on the basis of empirical criteria such as item intercorrelations, item-subscale correlations, and internal consistency analyses (Moos & Moss, 1986). Plake and Impara (2001) also merit the scale on the theoretical context that has informed it, a conceptual framework that is grounded in stress and coping theory. This framework includes the family environment concept, a set of determinants and a set of outcomes. The manual (Moos & Moos, 1986) discusses the research applications demonstrating the broad-based use of the FES. The Form R Subscale
Internal Consistencies, Corrected Average Item-Subscales Correlations, and Test- Retest Reliabilities (Moos & Moos, 1986) are reflected in the table below:

Table 1. Form R Subscale Internal Consistencies, Corrected Average Item-Subscales Correlations, and Test- Retest Reliabilities

<table>
<thead>
<tr>
<th>Subscales</th>
<th>Internal Consistency (N= 1067)</th>
<th>Corrected Average Item-Subscale Correlations (N=1067)</th>
<th>2-Month Test-Retest Reliability (N=47)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohesion</td>
<td>.78</td>
<td>.44</td>
<td>.86</td>
</tr>
<tr>
<td>Expressiveness</td>
<td>.69</td>
<td>.34</td>
<td>.73</td>
</tr>
<tr>
<td>Conflict</td>
<td>.75</td>
<td>.43</td>
<td>.85</td>
</tr>
<tr>
<td>Independence</td>
<td>.61</td>
<td>.27</td>
<td>.68</td>
</tr>
<tr>
<td>Achievement Orientation</td>
<td>.64</td>
<td>.32</td>
<td>.74</td>
</tr>
<tr>
<td>Intellectual-Cultural Orientation</td>
<td>.78</td>
<td>.44</td>
<td>.82</td>
</tr>
<tr>
<td>Active-Recreation Orientation</td>
<td>.67</td>
<td>.33</td>
<td>.77</td>
</tr>
<tr>
<td>Moral-Religious Emphasis</td>
<td>.78</td>
<td>.43</td>
<td>.80</td>
</tr>
<tr>
<td>Organization</td>
<td>.76</td>
<td>.42</td>
<td>.76</td>
</tr>
<tr>
<td>Control</td>
<td>.67</td>
<td>.34</td>
<td>.77</td>
</tr>
</tbody>
</table>

3.4.4 The Marlowe-Crowne Social Desirability Scale

A shortened form of The Marlowe-Crowne Social Desirability Scale (Reynolds, 1982) (Appendix A) was administered to each pupil and their parent/s to control for any social desirability effects on their responses in the two previously mentioned instruments. A factor analysis on the response of 608 students to the original 33-item Marlowe-Crowne Social Desirability Scale, was used to produce this shortened version (Crowne & Marlow, 1960: as cited in Reynolds, 1982). The instrument consisted of 13 true-or-false items. According to
Reynolds (1982) a reliability coefficient of .76 was obtained during its development and a correlation of .93 (p< .001) with the original scale supported concurrent validity. A mean of 5.67 (SD = 3.20) for the scale was also reported (Reynolds, 1982). Reynolds (1982) therefore recommended this shortened form of the scale as a viable substitute for the original form, due to its shorter administration time, its increased ease of administration and favourable psychometric properties.

3.4.5 The Perception of Success Questionnaire

The Perception of Success Questionnaire (Roberts, Treasure & Balague, 1998) (POSQ) (Appendix A) was designed as a measure of achievement goals in sport. As this instrument assesses task and ego orientations in the sport context it fulfilled the criteria for a suitable instrument. The POSQ has two forms: an adult and children’s version. Participants in the present study completed the adult version. The questionnaire consists of 12 statements which elicit responses on a scale ranging from strongly agree to strongly disagree, regarding feeling successful when participating in sport in a given situation.

According to Roberts et. al (1998) construct validity is the most important psychometric property to be demonstrated in the development of any instrument, which involves testing the adequacy of theoretically derived relationships. There research has focused on three sets of personal beliefs: purposes of sport, beliefs about the causes of success and sources of satisfaction. This research has indicated responses from the POSQ can be conceptually associated with different beliefs about sport. The authors report research that supports the construct validity of the POSQ confirming the relationships derived from achievement goal theory.
In the development of the POSQ, Roberts et al. conducted their own study in order to demonstrate the construct validity by using factor analysis to confirm research that indicated the existence of a two-factor structure in their instrument. The confirmatory factor analysis supported previous research. Cronbach alpha was used to determine the internal consistency of the subscales that were .87 for task orientation and .84 for ego orientation, indicating a high reliability of the POSQ.

To further determine the construct validity, the authors examined the degree to which task and ego achievement goals were related to beliefs about the causes of success in sport and preference for challenging tasks. The findings confirmed the hypothesized relationships and the data provided further support for the construct validity of the POSQ. It was therefore concluded that the POSQ is a reliable and valid measure of task and ego goal orientations in sport.
3.5 Procedure

A letter requesting permission to conduct research with pupils in their schools was sent to the head teachers of six private girls’ schools in the Pietermaritzburg and Durban Regions of KwaZulu Natal (Appendix A). Once permission had been granted, appointments were made at each of the schools to present the nature and purpose of the study to the pupils who would be suitable participants for the study. The pupils were assured of the confidential nature of the study and that parental permission to participate was necessary before they voluntarily completed the questionnaires for the purpose of the study. The pupils and head teachers were offered the option of feedback on the results of the study once the study had been concluded. After the presentation, questionnaires for the pupil and their parent/s were administered to the pupils to take away with them. Letters were also sent home with the pupils for their parents, requesting their permission for their child to participate in the study (Appendix A). Subsequent meetings were organized to collect questionnaires from the pupils who had permission and who had completed the questionnaires.

The initial response from the participants was very poor and therefore further presentations were conducted at others schools in order to increase the amount of data collected. When the response was again poor, a third attempt was made to collect further data by approaching players in the U/16 age group, with the aim of creating a second comparison group. Once again, there was a poor response. In order to create the largest sample group possible, it was decided to combine the groups.
The poor response can perhaps primarily be assigned to the fact that the parents weren't as informed about the study as the youth participants, as they were not present at the initial presentation. This could have affected their motivation to complete the questionnaires in their own time. The girls were also required to complete the questionnaires in their own time because they needed to obtain permission from their parents before they could do so, which may also have hindered the response rate. In retrospect it would have been more beneficial to organize a meeting with parents and their children, with time to complete the questionnaires before leaving. There may, however, be practical barriers in organizing such a meeting.
3.6 Data Analysis

The statistical package SPSS (SPSS-X, 1983) was used for the analysis of data.

A Cronbach alpha reliability was run for each of the subscales of the three measures used for the youth participants and for the two measures completed by the corresponding adult participants.

Correlation analysis, using Pearson’s correlation, was conducted on the youth’s scores on the subscales of the FES and the corresponding parent scores to ascertain whether the two groups had similar perceptions of their family environments.

Correlation analysis was also performed on both youth and parent FES scores with the youth’s responses on the POSQ to investigate whether there were any significant relationships between their perceptions and their goal orientation.

Factors from the biographical questionnaire were included in a correlation matrix to correlate results of perceived parental pressure and support with goal orientation, achievement orientation and perceived self-pressure of the hockey players.

Factor analysis was used to explore whether there are overlaps of the FES scales in both youth and parent results. The extraction method used was a principal component analysis and the rotation method was Varimax with Kaiser Normalisation.
Youth and parent factors that emerge were correlated to explore any similarities that might exist between the two participant groups. These factors were also correlated with the subscales of the POSQ.

Multiple regression analysis was then used to explore whether a significant combination of predictors existed, based on a wide range of biographical factors other than those extracted from the FES. The task subscale of the POSQ was chosen as a dependant variable and the stepwise method was used in the regression analysis.

Cluster analysis is an alternative method that was used to investigate structure in the FES by looking for similarities between the items assigned to clusters by SPSS and the items assigned to the FES scales.

Finally, Canonical correlation analysis was considered to explore the overlap between the two separate sets of FES scores to produce possible pairs of scores.

It was accepted that participant numbers are low for the above three multivariate analyses, but it was thought of interest at least to inspect the outcomes.
4. RESULTS

The results of the data analysis need to be considered in light of the low response rate of the selected participants. While approximately 350 questionnaires were distributed, only 55 were returned. The low return rate of approximately 15.7 percent therefore needs to be acknowledged.

Using the Statistical Package for Social Science (SPSS), a t-test on the two groups, the first and second team participants and the U/16 participants, was performed in order to check the feasibility of treating the two age samples as a single group. The means for the older group on the FES and the POSQ, were slightly lower than those of the second group (Appendix B). The results of the t-tests indicated that the only scale of the FES that showed a significant difference between the two age groups was the Intellectual-Cultural Orientation (ICO) subscale \( t(53) = -2.030; 0.047 \), providing support of treating the two age samples as a single group (Appendix B). According to Howell (1997) there are a number of methods for testing for heterogeneity of variance but a simpler one advocated by Levene can be used. Using SPSS, Levene’s Test for Equality of Variances also found no significant differences between the groups for the FES subscales. The results indicated the following significances for the subscales: Expressiveness (EXP) (.407), Conflict (CON) (.232), Independence (IND) (.159), Achievement Orientation (AO) (.206), Intellectual-Cultural Orientation (ICO) (.661), Cohesion (COH) (.094), Active-Recreational Orientation (ARO) (.251), Moral-Religious Emphasis (MRE) (.757), Organisational (ORG) (.15) and Control (CTL) (.617). The test also indicated no significant differences between the groups for the POSQ subscales: Ego Orientation (.649) and Task Orientation (.103).
4.1 Reliability

A Cronbach alpha reliability analysis was run for each of the subscales of the three measures used for the youth participants and for the two measures completed by the corresponding adult participants. The Alpha model is the default model in procedure reliability (SPSS-X, 1983). A reliability of > 0.7 is considered to indicate good reliability (Lowenthal, 1996). The initial reliability results indicated poor internal reliability for a number of the subscales on the FES and the Marlow-Crowne Scale. As the FES is of considerable importance, the reliability procedure was executed again deleting the eight items with the weakest correlations with the remaining items, from the ninety-item FES questionnaire. The results are tabled below:

Table 1. Cronbach alpha reliability of subscales

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Youth</th>
<th>Youth (items removed)</th>
<th>Parents</th>
<th>Parents (items removed)</th>
<th>Original reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FES</td>
<td>POSQ</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COH</td>
<td>.6130</td>
<td>.5875</td>
<td>.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXP</td>
<td>.6034</td>
<td>.6198</td>
<td>.5527</td>
<td>.5379</td>
<td>.69</td>
</tr>
<tr>
<td>CON</td>
<td>.7881</td>
<td>.6721</td>
<td>.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IND</td>
<td>.2574</td>
<td>.0574</td>
<td>.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AO</td>
<td>.3066</td>
<td>.4451</td>
<td>.3071</td>
<td>.3173</td>
<td>.64</td>
</tr>
<tr>
<td>ICO</td>
<td>.6876</td>
<td>.6912</td>
<td>.6093</td>
<td>.6235</td>
<td>.78</td>
</tr>
<tr>
<td>ARO</td>
<td>.4879</td>
<td>.5386</td>
<td>.4222</td>
<td>.4607</td>
<td>.67</td>
</tr>
<tr>
<td>MRE</td>
<td>.7069</td>
<td>.5934</td>
<td>.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ORG</td>
<td>.6204</td>
<td>.6358</td>
<td>.6985</td>
<td>.7130</td>
<td>.76</td>
</tr>
<tr>
<td>CTL</td>
<td>.7030</td>
<td>.5532</td>
<td>.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ego</td>
<td>.8745</td>
<td>.1083</td>
<td>.76</td>
<td></td>
<td>.84</td>
</tr>
<tr>
<td>Task</td>
<td>.8826</td>
<td></td>
<td>.87</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In comparing the small differences in the Cronbach alpha results with low correlation items removed as seen in Table 1, it did not appear to be necessary to delete the low correlation items for the remainder of the data analysis.
The internal reliability of the FES subscales in this study was variable, which differs from the original internal consistency analysis by Moos & Moos (1986). As seen in Chapter 1, Moos and Moos provided evidence of acceptable reliability for all subscales. The above table reflects the following subscales that maintained good internal reliability for both youth and parent groups: Conflict (0.7881 & 0.6721), Organisational (0.6204 & 0.6985), Control (0.7030 & 0.5532), Moral-Religious Emphasis (0.7069 & 0.5934), and Intellectual-Cultural Orientation (0.6876 & 0.6093). While the Cohesion (0.6130 & 0.5875) and Expressiveness (0.6034 & 0.5527) subscales maintained moderate internal reliability, Achievement Orientation (0.3066 & 0.3071), Active-Recreational Orientation (0.4879 & 0.4222) and particularly the Independence (0.2574 & 0.0574) subscale, reflect poor internal reliability.

A possible explanation for these results may be the cultural differences between the American participants of the original study by Moos and Moos (1986) and the South African participants in the present study.

The responses given in the Marlow-Crowne Social Desirability Scale (Reynolds, 1982) by the participants reflect poor internal reliability (0.3683 for youths and 0.1083 for parents) for this measure in the present study, in comparison to the reported reliability coefficient of 0.76 obtained during the development of the scale.

A high reliability was indicated for both the Ego (0.8745) and Task (0.8826) Orientation subscales of the POSQ. These were similar to the internal consistency reported in the
development of the POSQ (Roberts et. al. 1998) which was .84 for the Ego Orientation subscale and .87 for the Task Orientation subscale, reflecting the suitability of this measure for this study.
4.2 Correlations

4.2.1 Youth and Parent FES Scores

Correlation analysis, using Pearson's method (SPSS-X, 1983) was conducted on the youths' scores on the subscales of the FES and the corresponding parent scores to ascertain whether the two groups had similar perceptions of their family environments. Correlation analysis is used for the purpose of obtaining a statistic expressing the extent of the relationship between two variables. A 'p' value of < .05 was used in this case as the acceptable level of significance. The closer to 1 the correlation coefficient is, the stronger the relationship between the two variables (Howell, 1997). Results indicated that 7 of the 10 score-pairs correlated significantly (Appendix B). The scores of the two groups correlated significantly on the following subscales: of Conflict (.653, p=.000); Moral-Religious Emphasis (.576, p=.000); Intellectual-Cultural Orientation (.516, p=.000); Organisational (.469, p=.000); Control (.294, p=.029); Active-Recreational Orientation (.283, p=.037); and Cohesion (.354, p=.008) (SPSS has only produced three printing positions so p as quoted as .000 should be understood as no less than p =.0005). The insignificant results are influenced by the poor reliability statistics of the measure within this sample group.

The correlation results indicated that the strongest child-parent correlations were for the FES subscales that demonstrate highest internal reliability.

4.2.2 Goal Orientation and FES Subscales

Correlation analysis of the youth FES scores with their responses on the POSQ is shown in table 3 below. A significant correlation (.271, p=.046) was found between the Moral Religious Emphasis scale and Task Orientation. A negative significant correlation (-.298, p=.027) was
found to exist between the Organisation subscale and Ego goal orientation. There were no significant correlations between the Achievement Orientation subscale and Ego Orientation as was hypothesized. Furthermore Achievement Orientation and Task goal were not significantly correlated as hypothesized.

Table 3. Correlations of youth FES subscales and youth goal orientation

<table>
<thead>
<tr>
<th>Goal Orientation</th>
<th>Youth FES Subscales</th>
<th>COH</th>
<th>EXP</th>
<th>CON</th>
<th>IND</th>
<th>AO</th>
<th>ICO</th>
<th>ARO</th>
<th>MRE</th>
<th>ORG</th>
<th>CTL</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGO</td>
<td></td>
<td>-.153</td>
<td>.055</td>
<td>.001</td>
<td>.234</td>
<td>.068</td>
<td>.044</td>
<td>.050</td>
<td>-.296</td>
<td>-159</td>
<td></td>
</tr>
<tr>
<td>N=55</td>
<td></td>
<td>.296</td>
<td>.886</td>
<td>.997</td>
<td>.086</td>
<td>.620</td>
<td>.662</td>
<td>.750</td>
<td>.718</td>
<td>.027*</td>
<td>.246</td>
</tr>
<tr>
<td>TASK</td>
<td></td>
<td>.097</td>
<td>.185</td>
<td>-.211</td>
<td>.081</td>
<td>.138</td>
<td>-.065</td>
<td>.271</td>
<td>.163</td>
<td>-.002</td>
<td></td>
</tr>
<tr>
<td>N=55</td>
<td></td>
<td>.481</td>
<td>.177</td>
<td>.122</td>
<td>.555</td>
<td>.316</td>
<td>.176</td>
<td>.835</td>
<td>.046*</td>
<td>.234</td>
<td>.991</td>
</tr>
</tbody>
</table>

*The two figures per correlation are the correlation (above) and the significance (below).
**p<.05
***COH= Cohesion, EXP= Expressiveness, CON= Conflict, IND= Independence,
AO= Achievement Orientation, ICO= Intellectual-Cultural Orientation, CTL= Control
ARO=Active-Recreational Orientation, MRE= Moral-Religious Emphasis, ORG= Organisation

Correlation analysis of the parent FES scores with corresponding youth responses on the POSQ is shown in the table below. A significant negative correlation (-.266, p=.050) was found between their perception of Active-Recreational Orientation in the family and Ego Orientation of the youth participants. A negative correlation (-.307, p=.022) was also found between parents' perception of Active-Recreational Orientation and the Task Orientation of the youth participants.
Table 4. Correlations of parent FES subscales and youth goal orientation

<table>
<thead>
<tr>
<th>Goal Orientation</th>
<th>COH</th>
<th>EXP</th>
<th>CON</th>
<th>IND</th>
<th>AO</th>
<th>ICO</th>
<th>ARO</th>
<th>MRE</th>
<th>ORG</th>
<th>CTL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO</td>
<td>-.068</td>
<td>-.214</td>
<td>.080</td>
<td>-.235</td>
<td>-.143</td>
<td>-.202</td>
<td>-.266</td>
<td>.152</td>
<td>-.042</td>
<td>.013</td>
</tr>
<tr>
<td>N=55</td>
<td>.623</td>
<td>.116</td>
<td>.560</td>
<td>.084</td>
<td>.296</td>
<td>.139</td>
<td>.050*</td>
<td>.268</td>
<td>.759</td>
<td>.924</td>
</tr>
<tr>
<td>TASK</td>
<td>-.074</td>
<td>-.211</td>
<td>-.046</td>
<td>-.041</td>
<td>-.083</td>
<td>-.118</td>
<td>-.307</td>
<td>-.036</td>
<td>.140</td>
<td>.112</td>
</tr>
<tr>
<td>N=55</td>
<td>.594</td>
<td>.122</td>
<td>.737</td>
<td>.785</td>
<td>.548</td>
<td>.392</td>
<td>.022*</td>
<td>.785</td>
<td>.307</td>
<td>.417</td>
</tr>
</tbody>
</table>

*The two figures per correlation are the correlation (above) and the significance (below).
**p < .05
***COH= Cohesion, EXP= Expressiveness, CON= Conflict, IND= Independence,
AO= Achievement Orientation, ICO= Intellectual-Cultural Orientation,
ARO= Active-Recreational Orientation, MRE= Moral-Religious Emphasis, ORG= Organisation
CTL= Control

4.2.3 Correlations of Perceived Parental Pressure and Support with Youth Goal Orientation, Achievement Orientation and Perceived Self Pressure

A large number of self-report items were included in the correlation matrix (Appendix B). The items included the hockey players perception of pressure from father, their perception of pressure from mother, perception of self-pressure, perception of practical support received from father, perception of practical support received from mother, perception of emotional support received from father, perception of emotional support received from mother, their perception of achievement orientation in the family, ego orientation and task orientation. Although there is the possibility that some of the correlations take their measured values only by chance, the significant results need to be considered in light of the study’s hypothesis. The significant correlations have been tabled in table 5 below:
Table 5. Significant correlations of perceived parental pressure and support with youth goal orientation, achievement orientation and perceived self-pressure

<table>
<thead>
<tr>
<th></th>
<th>Mother pressure</th>
<th>Father practical support</th>
<th>Mother emotional support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-pressure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.540</td>
<td>-.276</td>
<td>.308</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.026</td>
<td>.042</td>
<td>.022</td>
</tr>
<tr>
<td>Task orientation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.269</td>
<td>.308</td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.047</td>
<td>.022</td>
<td></td>
</tr>
</tbody>
</table>

A positive significant correlation (.540, p=.026) was found between the amount of pressure mothers saw themselves putting on their daughters and the self-pressure perceived by the hockey players. A significant negative correlation (-.276, p=.042) existed between the practical support fathers felt they gave their daughters and the self pressure the young girls perceived they put on themselves. The amount of practical support fathers perceived to give their daughters correlated significantly (.269, p=.047) with the youth's tendency towards task goal orientation in sport as measured by the POSQ. Emotional support mothers perceived to give to their daughters correlated significantly (.308, p=.022) again with the youth's tendency towards task goal orientation as measured by the POSQ.

The poor reliability of the Marlow-Crowne Scale discouraged the inclusion of analysis of correlations of parent and youth social desirability.
4.3 Factor Analysis

The aim of this study was to test the hypotheses that children in family environments that are perceived to be achievement orientated, will tend to demonstrate higher levels of ego goal orientation; and that children within family environments that are perceived to be less achievement orientated, will tend to demonstrate higher levels of task goal orientation.

Since results produced no significant correlations between perceived achievement orientation in the families and youth's goal orientation, it seemed worthwhile to explore the overlap of the FES scores with factor analysis. Factor analysis is a method that might reduce a number of scores to a smaller number of combination scores that would cover the bulk of the variation of the original input scores. The factors computed can be used as new variables. Their meanings are judged from the input scores, which were highly weighted in combination (SPSS-X, 1983). This was performed on the data of both the youth participants and their parents.

Although 55 cases might be considered minimal for a factor analysis of ten input scores, it was decided to explore it in order to investigate any possible relationships. However, the results should be interpreted with caution considering the limitations of using this data analysis method.

4.3.1 Factor Analysis of Youth FES Scores

As seen in the figure below, the results of the factor analysis of this sample of youths' FES scores indicate that two factors emerged from the analysis of the data.
Figure 1. Scree plot of components

The scree plot shows the amount of total variability that is removed, factor-by-factor, from the complete correlation matrix (SPSS-X, 1983). SPSS uses an Eigenvalue of >1 as a default for the number of factors. A simple alternative method is to decide on the number of factors, is to look for the last substantial fall in the scree plot. The last substantial fall in the above graph was between the Eigenvalues of components 2 and 3, indicating that two factors be used.

The components of each factor can be seen in the rotated component matrix below:
## Table 6. Rotated component matrix of factor analysis of youth FES scores

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>IND</td>
<td>-0.585</td>
<td>-0.223</td>
</tr>
<tr>
<td>AO</td>
<td>0.042</td>
<td>-0.226</td>
</tr>
<tr>
<td>ICO</td>
<td>0.171</td>
<td>0.546</td>
</tr>
<tr>
<td>ARO</td>
<td>-0.355</td>
<td>0.262</td>
</tr>
<tr>
<td>MRE</td>
<td>0.673</td>
<td>0.078</td>
</tr>
<tr>
<td>ORG</td>
<td>0.229</td>
<td>0.175</td>
</tr>
<tr>
<td>CTL</td>
<td>0.775</td>
<td>-0.050</td>
</tr>
<tr>
<td>COH</td>
<td>0.151</td>
<td>0.827</td>
</tr>
<tr>
<td>EXP</td>
<td>-0.444</td>
<td>0.513</td>
</tr>
<tr>
<td>CON</td>
<td>-0.087</td>
<td>0.596</td>
</tr>
</tbody>
</table>

The extraction method used was principal component analysis. The rotation method was varimax with Kaiser Normalization. According to SPSS-X these are the default models used (1983).

The first factor comprised of the following subscales: Control (.775), Moral-Religious Emphasis (.673), Expressiveness (-.444) and Independence (-.585). This factor will be given the name 'Conforming' for the purpose of interpreting the results. The second factor was comprised of the Intellectual-Cultural Orientation (.546), Expressiveness (.513), Cohesion (.827), and Conflict (-.596) subscales. Factor 2 will be given the name 'Expressiveness' for interpretation purposes.

### 4.3.2 Factor Analysis of Parent FES Scores

As seen in the figure below, the results of the factor analysis of the parent's FES scores indicate that three factors emerged from the analysis of the data.
Although the results indicated that three factors were above the Eigenvalue of 1.0, a rotated component matrix was produced for only 2 factors in an attempt to make it comparable to the number of factors indicated for the youth FES scores. The components of each factor can be seen in the rotated component matrix below:

**Table 7. Rotated component matrix of factor analysis of parent FES scores**

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>COH</td>
<td>.736</td>
<td>.324</td>
</tr>
<tr>
<td>EXP</td>
<td>.688</td>
<td>-.042</td>
</tr>
<tr>
<td>CON</td>
<td>-.316</td>
<td>-.579</td>
</tr>
<tr>
<td>IND</td>
<td>.004</td>
<td>.571</td>
</tr>
<tr>
<td>AO</td>
<td>.277</td>
<td>.443</td>
</tr>
<tr>
<td>ICO</td>
<td>.616</td>
<td>.194</td>
</tr>
<tr>
<td>ARO</td>
<td>.575</td>
<td>.068</td>
</tr>
<tr>
<td>MRE</td>
<td>-.003</td>
<td>.398</td>
</tr>
<tr>
<td>ORG</td>
<td>-.128</td>
<td>.684</td>
</tr>
<tr>
<td>CTL</td>
<td>-.649</td>
<td>.237</td>
</tr>
</tbody>
</table>
The same methods used in the previous factor analysis were used for this analysis.

The first factor consisted of the following subscales: Cohesion (.736), Expressiveness (.688), Intellectual-Cultural Orientation (.616), Active-Recreational Orientation (.575) and Control (-.649). This factor will be given the name 'Encouraging' for the purpose of interpreting the results. The second factor comprised of the Organization (.684), Independence (.571), Achievement Orientation (.443) and Conflict (-.579) subscales. Factor 2 will be given the name 'Independence' for interpretation purposes. The components of these factors are seen in table 8 below:

Table 8. Components of youth and parent factors 1 and 2

<table>
<thead>
<tr>
<th>Factor 1</th>
<th>Parent</th>
<th>Youth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Encouraging</strong></td>
<td><strong>Conforming</strong></td>
</tr>
<tr>
<td></td>
<td>+ Cohesion</td>
<td>+ Moral-Religious</td>
</tr>
<tr>
<td></td>
<td>+ Expressiveness</td>
<td>+ Control</td>
</tr>
<tr>
<td></td>
<td>+ Intellectual-Cultural</td>
<td>- Independence</td>
</tr>
<tr>
<td></td>
<td>+ Active-Recreational</td>
<td>+ Expressiveness</td>
</tr>
<tr>
<td></td>
<td>- Control</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Factor 2</th>
<th>Parent</th>
<th>Youth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Independence</strong></td>
<td><strong>Expressiveness</strong></td>
</tr>
<tr>
<td></td>
<td>+ Independence</td>
<td>+ Cohesion</td>
</tr>
<tr>
<td></td>
<td>+ Organizational</td>
<td>+ Expressiveness</td>
</tr>
<tr>
<td></td>
<td>+ Achievement Orientation</td>
<td>+ Intellectual-Cultural</td>
</tr>
<tr>
<td></td>
<td>- Conflict</td>
<td>- Conflict</td>
</tr>
</tbody>
</table>

4.3.3 Correlations of Youth and Parent Factors

The two youth and parent factors were correlated to explore any similarities between the youth and parent factors. The Encouraging factor correlates significantly with the Expressiveness factor (.364, p=.006) The Independence factor correlates significantly with the Conforming factor (.365, p=.006). The correlations can be seen in the table below:
Table 9. Correlations of youth and parent factors

<table>
<thead>
<tr>
<th>Encouraging</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>Independence</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>Conforming</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>Expressiveness</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=55</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encouraging</td>
<td>Pearson Correlation</td>
<td>1</td>
<td>.000</td>
<td>-1.69</td>
<td>.364(***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independence</td>
<td>Pearson Correlation</td>
<td>.000</td>
<td>1</td>
<td>.365(***</td>
<td>2.13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N=55</td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>1</td>
<td>.365(***</td>
<td>2.13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N=55</td>
<td>Sig. (2-tailed)</td>
<td>1.000</td>
<td>.217</td>
<td>.006</td>
<td>.118</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conforming</td>
<td>Pearson Correlation</td>
<td>-.169</td>
<td>.217</td>
<td>.006</td>
<td>.118</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expressiveness</td>
<td>Pearson Correlation</td>
<td>.364(***</td>
<td>.213</td>
<td>.000</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N=55</td>
<td>Sig. (2-tailed)</td>
<td>.008</td>
<td>.118</td>
<td>1.000</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).

4.3.4 Correlations of Youth Factors of FES and Goal Orientation

As seen in table 10 below results indicated that there were no significant correlations between the two factors produced from the factor analysis of the youth FES scores, and Task or Ego Orientation as measured by the POSQ:

Table 10. Correlations of FES youth factor 1 and 2 and goal orientation

<table>
<thead>
<tr>
<th>Conforming</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>Expressiveness</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>EGO</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>TASK</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conforming</td>
<td>Pearson Correlation</td>
<td>1</td>
<td>.000</td>
<td>1.199</td>
<td>.085</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N=55</td>
<td>Sig. (2-tailed)</td>
<td></td>
<td>1.000</td>
<td>1.145</td>
<td>.535</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expression</td>
<td>Pearson Correlation</td>
<td>.000</td>
<td>1</td>
<td>1.148</td>
<td>.207</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N=55</td>
<td>Sig. (2-tailed)</td>
<td>1.000</td>
<td></td>
<td>1.262</td>
<td>.129</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EGO</td>
<td>Pearson Correlation</td>
<td>-.199</td>
<td>-.148</td>
<td>1</td>
<td>.191</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N=55</td>
<td>Sig. (2-tailed)</td>
<td>-.145</td>
<td>.282</td>
<td></td>
<td>.163</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TASK</td>
<td>Pearson Correlation</td>
<td>.085</td>
<td>.207</td>
<td>1.191</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N=55</td>
<td>Sig. (2-tailed)</td>
<td>.535</td>
<td>.129</td>
<td>1.163</td>
<td>.163</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.3.5 Correlations of Parent Factors of FES and Goal Orientation

As seen in table 11 below results indicated that there were no significant correlations between FES parent factors 1 and 2 and goal orientation:

Table 11. Correlations of FES parent factors and goal orientation

<table>
<thead>
<tr>
<th></th>
<th>EGO</th>
<th>TASK</th>
<th>Encouraging</th>
<th>Independence</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGO</td>
<td>Pearson Correlation 1</td>
<td>.191</td>
<td>-.212</td>
<td>-.111</td>
</tr>
<tr>
<td>N=55</td>
<td>Sig. (2-tailed)</td>
<td>.168</td>
<td>.120</td>
<td>.419</td>
</tr>
<tr>
<td>TASK</td>
<td>Pearson Correlation .191</td>
<td>1</td>
<td>-.247</td>
<td>.073</td>
</tr>
<tr>
<td>N=55</td>
<td>Sig. (2-tailed)</td>
<td>.163</td>
<td>.069</td>
<td>.596</td>
</tr>
<tr>
<td>Encouraging</td>
<td>Pearson Correlation -212</td>
<td>-.247</td>
<td>1</td>
<td>.000</td>
</tr>
<tr>
<td>N=55</td>
<td>Sig. (2-tailed)</td>
<td>.120</td>
<td>.069</td>
<td>1.000</td>
</tr>
<tr>
<td>Independence</td>
<td>Pearson Correlation -.111</td>
<td>.073</td>
<td>.000</td>
<td>1</td>
</tr>
<tr>
<td>N=55</td>
<td>Sig. (2-tailed)</td>
<td>.419</td>
<td>.596</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Factor analysis and correlations were re run after the Independence subscale and the eight items were deleted. The difference in the results was not significant and therefore was not explored further.

The factor analysis can be seen to indicate similar trends in youth responses and parent responses. These apparent themes will be discussed in the next chapter but at this stage should be recognized that these trends would have best been identified through a further qualitative study measuring the hockey players’ perceptions.
4.4 Regression Analysis

In spite of the low correlations between test scores, and task and goal orientation, it seemed worth exploring whether a multiple regression analysis would give a significant combination of predictors based on a wide range of biographical factors, other than those extracted from the FES. This method combines predictors to optimally predict some criteria score (SPSS-X, 1983). The predictors included the youths' perception of father pressure, mother pressure, self-pressure, father practical support, mother practical support, father emotional support and mother emotional support. The dependent variable was youth task orientation. Using the stepwise method, only mother's emotional support was retained as a predictor of 'Task' \((f(1,53)= 5.562, p=.022)\) (Appendix B).

4.5 Cluster Analysis of FES Items

Looking for structure in the FES can also be done with cluster analysis of the ninety items. The SPSS defaults were used and output was requested from 8 - 12 clusters. This range was selected roughly to match the number of FES scales claimed by Moos & Moos (1986). There appear to be no striking similarities between the items assigned to clusters and the items assigned to the FES scales and therefore no further efforts were given to this investigation.

4.6 Canonical Correlation Analysis

Canonical correlation is an elaborate analysis that investigates the overlap between two separate sets of scores. Here since FES data is available on both youth and their parents, canonical
correlation can be applied and the analysis will produce pairs of combinations of FES scores (for parents, for youth) until there are no longer any significant results.

Inspecting the loadings for the first canonical correlation, it is of interest that Expressiveness and Moral-Religious Emphasis (MRE weightings being negative) have high weightings for both youth and parents but it should be pointed out that the weightings differ widely between youth and parents for most of the other FES scores. The remaining canonical correlations appear to give even less reason to place a great deal of faith in the output of this very elaborate analysis and therefore no further efforts were given to this investigation.

4.7 Conclusion

The results of this study revealed no significant relationship between perceptions of achievement orientation within family environments and children’s goal orientation in sport as hypothesized. The low response rate and the low internal reliability of the measures in this study need to be recognised.

Although youth and parent scores on the FES correlated significantly on most of the FES subscales, there was no indication that a perception of high achievement orientation in families was linked to higher levels of ego orientation or that a perception of less achievement orientation was linked to higher levels of task orientation. However, a significant relationship was found between the Moral-Religious Emphasis subscale and Task Orientation and also between the Organisation subscale and Ego Orientation.
Significant correlations were indicated between some of the self-report items taken from the biographical questionnaires and these items and the hockey players' goal orientation. Perceived parental pressure and support was linked to pressure the youth's felt they placed on themselves and to their levels of task orientation.

Factor analysis of youth and parent FES scores produced two youth and parent factors that were correlated to explore any similarities between them. Their responses revealed some similar trends that will be further discussed in chapter 5.

Regression analysis, using predictors based on a wide range of biographical factors, indicated mother's emotional support as the only predictor of Task Orientation.

Finally, cluster analysis and canonical analyses were performed both producing insignificant results.
5. DISCUSSION

The results will be discussed in terms of the original hypotheses of this study and in terms of the literature that has been reviewed.

5.1 Reliability

The initial reliability results from a Cronbach alpha analysis indicated poor internal reliability for a number of the subscales on the FES.

This differs from the original internal consistency analysis by Moos & Moos (1986), which provided evidence of acceptable reliability for all subscales. The cultural differences of the sample group and the sample used in the present study could be a factor that needs to be taken into consideration as a possible explanation for the differing internal reliability. In the development of the FES, the sample group was taken from North American Families while the sample group in this study consisted of South African families.

Statements, parts of the statements and words, which were developed using North Americans as a normative sample group, could have been perceived incorrectly by the South African participants. It was therefore decided to explore the individual items of the subscales with the lowest internal reliability and any other items of the FES that may have been understood differently by the participants in this sample group.
The Active-Recreational Orientation subscale was one of the subscales that indicated poor internal reliability in the reliability analysis. In one of the subscales items (Appendix A), the statement included the terms 'Little League' and 'bowling', both activities that are popular recreational activities in the United States but are possibly ones that are unfamiliar to South Africans. Two of the items included in this subscale refer to participation in recreational activities outside of school. It appeared as if most of the girls attended boarding school and therefore their extra-curricular activities would be school based. Private schools, such as the ones used in the present study are also likely to provide such recreational activities at the school.

The Independence subscale also indicated poor reliability. While the statements appear to be uncomplicated, it was possibly the conceptualisation of 'Independence' as positive or negative by participants that may influenced the extent to which the responses were socially desirable.

The following statements are other examples that include words or phrases that may have impacted on the responses, particularly those of the youth participants:

**Item**

11. We often seem to be killing time at home
15. Getting ahead in life is very important in our family
22. It's hard to 'blow off steam' at home without upsetting somebody
61. There is very little group spirit in our family
The reliability procedure was executed again deleting the eight items that had the weakest correlations with the remaining items, from the ninety-item FES questionnaire to explore significant changes. In comparing the little difference in the adjusted it did not appear to be necessary to delete the low correlation items for the remainder of the data analysis.

The responses given in Marlow-Crowne Social Desirability Scale (Reynolds, 1982) by the participants reflects the poor internal reliability of this measure in the present study in comparison to the reported reliability coefficient obtained during its development. The cultural differences, between this sample group and the original sample group used in the development of this instrument, may account for the differences in internal reliability. The scale therefore appeared to be unsuitable for reflecting social desirability in this study.

A high reliability was indicated for both Ego and Task Orientation Subscales of the POSQ (Roberts et al. 1998). These were similar to internal consistency reported in the development of the POSQ, reflecting the suitability of this measure for this study.

5.2 Correlations

5.2.1 Youth and Parent FES Scores

The hockey players and their parents FES scores were analysed to investigate whether the two groups of participants had similar perceptions of their family’s social climate. The scores of the two groups correlated significantly for 7 of the 10 subscales. However the correlations for most were not strong according to Lowenthal (1996) who states that a reliability of > 0.7 is considered to indicate good reliability. This and the subscales that did not correlate significantly could be
attributed to the poor internal reliability of the instrument in this study. Another influential factor may have been participants' tendency to respond in a socially desirable manner. As discussed previously, cultural differences could also be considered as a contributing factor.

5.2.2 Goal Orientation and FES

The present study hypothesized that children within family environments that they perceive to be achievement orientated will tend to demonstrate higher levels of ego goal orientation; and that children within family environments that they perceive to be less achievement orientated will tend to demonstrate higher levels of task goal orientation. The supporting hypothesis stated that children who perceive their family environment to be achievement orientated, with parent/s who perceive their family to be less achievement orientated will tend to demonstrate higher levels of ego orientation. Correlation analysis was used to test these hypotheses.

5.2.3 Correlations of youth FES subscales and youth goal orientation

The results indicated that no relationships existed between the hockey players' goal orientation and their or their parents' perception of achievement orientation in the family. The low response rate in this study again needs to be considered when interpreting these results.

These results do not support the results of the study conducted by Epstein and Harackiewicz (1992) that indicated that an individuals' achievement orientation seemed critical in determining their intrinsic interest in a competitive sport context. Their later study (Epstein & Harackiewicz, 1994) provided further evidence that individual differences in achievement orientation appear to predispose individuals to be more responsive to certain types of goals. While participants that
were achievement orientated showed positive responses to performance-focused goals, individuals that were low in achievement orientation responded most positively to mastery goals.

This also opposes the results found in the study by White (1998) in which adolescents' perceptions of parent-initiated motivational climate was related to their goal orientation. Parents whose motivational climate was perceived as ego involving and therefore can be seen to emphasize achievement orientation, related to their children's high levels of ego goal orientation.

The results are at variance with the findings of Senko and Harackiewicz (2002). According to these authors, an individual's own achievement orientation and their context affect their interest in completing a task.

A possible explanation for the present studies results can perhaps be derived from the study by Escarti et al. (1999) in which parents, coaches and peers were found to influence children's goals in sport. The results indicated that task orientated participants perceived that their peers used task involving success in sport but not their parents and coaches. This indicates that it is not only parent's motivational climate that influences goals in sport but also those of other significant figures such as peers. Other significant figures and the perceptions of motivational climates that they emphasize were not included in this study.

This explanation is supported by the study conducted by Weingard and Carr (2002) who investigated differences in perception of motivational climate emphasised by teachers, peers and sporting heroes and the influence they have on children's task and ego orientation. The study
found that the climate emphasized by significant others, other than parents, affected the 
adolescents’ goal orientation.

Results of the correlation analysis of youth FES score and goal orientation indicated a positive 
significant relationship between the Moral-Religious Emphasis scale on the FES and Ego 
Orientation on the POSQ. A possible explanation could be that children that are part of families 
that believe in the ‘correct’ way of doing things, or who have moral values apply this to the sport 
they play. They therefore may aim to play with ‘sportsmanship’ values taking the emphasis off 
competitiveness or playing to win and therefore indicate a tendency towards task orientation.

Results of the correlation analysis of youth FES score and goal orientation also indicated a 
positive significant relationship between the Organisational subscale of the FES and Ego 
Orientation of POSQ. This suggests that the importance of structure and planning in a family 
moulds the ego of the child, which is reflected in their goals in sport. The sense of ‘conformity’ 
that may be encouraged by the importance of organization within a family environment may 
influence their tendency to compare themselves to others. This may be a possible explanation for 
the positive correlation, as Ego Orientation, as measured by the POSQ, assesses the extent to 
which the participant measures their performance in sport compared to others and the extent to 
which they are competitive.

5.2.4 Correlations of parent FES subscales and youth goal orientation

The results of the correlation analysis of parent FES scores with corresponding youth responses 
on the POSQ indicated a significant negative correlation between parents’ perception of Active-
Recreational Orientation in the family and Ego Orientation of the youth participant. This would suggest that families that encourage recreational activities cultivate attitudes that sport participation is for leisure and enjoyment. This would discourage the competitiveness that moulds an individual's ego goal orientation. This is supported by the results of Steenkamp and Steyn (2001) that indicated that ego orientation is linked with low levels of enjoyment and interest.

The significant negative correlation indicated between parents' perception of Active-Recreational Orientation in the family and Task Orientation. This contradicts the findings of Steenkamp and Steyn (2001) who indicated that task orientation is linked with high levels of interest and enjoyment. Perhaps the participants in the present study focus less on improving personal skills or learning aspects of the task orientation and rather on having fun instead. The task orientation subscale of the POSQ is more reflective of the former, perhaps therefore resulting in the negative correlation.

5.2.5 Correlations of Perceived Parental Pressure and Support with Youth Goal Orientation, Achievement Orientation and Perceived Self Pressure

As mentioned previously, a large number of factors were included in this correlation matrix, and therefore it was recognised that some of the correlations may have taken their measured values by chance only. The significant results will however be considered in light of the study's hypothesis.

A positive significant correlation was found between the amount of pressure mothers saw themselves putting on their daughters and the self-pressure perceived by the hockey players.
These results support findings of Greendorfer and Lewko (1988) who reported that more recent studies indicated that the father does not emerge consistently as the most influential for both sexes as was previously suggested. In this study it was their mothers’ pressure, and not their fathers’, that influenced the amount of pressure that the girls placed on themselves to perform.

According to Lewthwaite and Scanlan (1989) the effects of such parental pressure, can lead to competitive trait anxiety. Although their study only investigated male youth sport participants, these results could indicate that parents of both genders may need to be aware of the pressure their children perceive from their parents.

The negative effects of paternal pressure were also indicated in a study by Hellstedt (1990), who investigated early adolescents’ perceptions of parental pressure in the sport environment. Results indicated a relationship between low levels of parental pressure and positive affect and a relationship between high levels of parental pressure and negative affective response.

These results are supported by Maclean (1997) who explored how parents may exert pressure on children in sport. Results revealed that the discrepancies between desired and perceived behaviour and levels of pressure participants desired from their parents, predicted pressure experienced. The study indicated that parental behaviour is critical in provoking feelings of children’s pressure.

A significant negative correlation existed between the practical support fathers felt they gave their daughters and the self-pressure the young girls perceived they put on themselves. The
supportive behaviour of the parent may therefore be seen to create an encouraging environment for the child, reducing their perceived pressure from parents, which in turn would decrease the pressure they would place on themselves. As mentioned in the previous paragraph, Maclean (1997) indicated that parental behaviour is critical in provoking feelings of children's pressure.

The amount of practical support fathers perceived to give their daughters correlated significantly with the youths' tendency towards task goal orientation in sport as measured by the POSQ. Emotional support mothers perceived to give to their daughters also correlated significantly with the youth's tendency towards task goal orientation as measured by the POSQ. These results correspond with the results of a study (Brustad and Weigand, 1989 in Weigand, 2000) assessing the influence of perceived 'parental pressure' on the intrinsic motivation of children. The study revealed that higher perception of affective support predicted high intrinsic motivation.

These results also provide support for Weitzer (1989, in Brustad, 1993) who examined the relationship between levels of parental involvement, which was operationalised as the encouragement children perceived to receive from their parents as well as from parents participation in their sport. It was found that for girls, maternal involvement was related to task goal orientation.
5.3 Factor Analysis

The suitability of this analysis for the present study needs to be considered in interpreting and discussing the results.

5.3.1 Factor Analysis of Youth FES Scores

The factor analysis of this sample of youths FES scores indicated that two factors emerged from the analysis of the data.

The first factor was made up of the following subscales: Control, Moral-Religious Emphasis, Expressiveness and Independence. This factor was given the name 'Conforming' for the purpose of interpreting the results.

According to Moos & Moos (1986), this suggests the extent to which set rules and procedures are used to run family life and the degree of emphasis on ethical and religious issues and values, decreases the extent to which family members are encouraged to act openly, to express their feelings directly, be assertive, be self-sufficient, and make their own decisions. Children who have this perception of their family environment feel that they conform to family rules and values and are restricted from independent action and expression.

The second factor comprised of the Intellectual-Cultural Orientation, Expressiveness, Cohesion, and Conflict. Factor 2 was given the name 'Expressiveness' for interpretation purposes.
This suggests the degree of commitment, help, and support family members are perceived to provide for one another and the extent to which family members are encouraged to act openly, decreases the amount of openly expressed anger, aggression, and conflict they perceive among family members. Family members are able to express their feelings directly, are assertive, are self-sufficient, and make their own decisions. A perceived warm, supportive family environment seems to promote independence and expression, and prevent discord among family members.

5.3.2 Factor Analysis of Parent FES Scores

Although the results of the factor analysis of the parent's FES scores indicated three factors, only 2 factors were selected in an attempt to make it comparable to the number factors indicated for the youth FES scores.

The first factor consists of the following subscales: Cohesion, Expressiveness, Intellectual-Cultural Orientation, Active-Recreational Orientation and Control. This factor will be given the name 'Encouraging' for the purpose of interpreting the results.

This suggests that in families where there is a perception of commitment, help, and support perceived, family members are encouraged to act openly, to express their feelings directly, are assertive, are self-sufficient, and make their own decisions. Parents in families of this type of family perceive themselves to encourage participation in social and recreational activities, and do not believe that set rules and procedures are strictly used to run family life. A perceived warm, supportive family environment that does not focus on rules and procedures, and that encourages leisure and enjoyment seems to promote independence and expression.
The second factor comprised of the Organization, Independence, Achievement Orientation and Conflict subscales. Factor 2 was given the name ‘Independence’ for interpretation purposes.

These results suggest that parents in families that perceived the importance of clear organization and structure in planning, cast activities into an achievement oriented or competitive framework. These parents believed that family members are assertive, are self-sufficient, and make their own decisions and in which set rules and procedures are not the focus of family life.

5.3.3 Correlations of Youth and Parent Factors

The two youth and parent factors were correlated to explore any similarities between them. Similar trends in youth responses and parent responses were indicated. The Encouraging factor correlated significantly with the Expressiveness factor. This correlation therefore suggested that is likely that a child in a cohesive family environment and who receives parental encouragement is related to the child’s perception that they are able to express themselves openly.

The Independence factor correlated significantly with the Conforming factor. This result suggested that family environments that are perceived to be achievement orientated, in which there is clear organization and structure, in which they are able to act independently is related to a more conforming perception in youths.
5.3.4 Correlations of Youth Factors of FES and Goal Orientation

Results indicated that there were no significant correlations between the two youth factors of FES and Task or Ego Orientation. This indicated that child perceptions of family environment had no effect on whether they scored high or low on Task or Ego Orientation of the POSQ.

5.3.5 Correlations of Parent Factors of FES and Goal Orientation

Results indicated that there were no significant correlations between FES parent factors 1 and 2 and the hockey players’ goal orientation. This indicated that parent perceptions of family environment had no effect on whether their children scored high or low on Task or Ego Orientation of the POSQ.

The insignificant results of the previous two correlation analyses support the results of Bilden’s (1999) study of relationship of parenting styles and achievement motivation in a sport context. Neither fathers’ or sons’ goal orientations in sport were related to fathers’ parenting styles, as was predicted in the hypothesis.
5.4 Regression Analysis

Despite the use of a wide range of biographical factors used in this analysis, only 'mother’s emotional support' was retained as a predictor of Task Orientation. Emotional support provided by mother seems to foster a climate of learning and enjoyment for the child in the sport context leading to a higher score on Task Orientation.

This supports the results indicated by White (1998) in which the same method was used to determine the relationship between goal orientation and predictor variables, in a study examining the relationship between goal orientation and perceptions of motivation climate among female volleyball players. It was suggested that the motivational climate created by adults has a significant influence on the child or adolescent adopting either Task or Ego Orientation.

5.5 Cluster Analysis of FES Items

Although insignificant results were produced in this study, this procedure may be useful for exploration in future studies which have more extensive data.

5.6 Canonical Correlation Analysis

This elaborate analysis produced revealed no significant results. This analysis may also be considered for exploration in future studies with more extensive sets of data.
5.7 Conclusion

The poor internal reliability for a number of the subscales on the FES may be explained by the cultural differences of the sample group and the sample used in the present study. While internal reliability was indicated as high for the POSQ in this study, results indicated poor internal reliability for the Marlow-Crowne Scale. The effects of the poor reliability on the results of this study need to be recognized.

The results indicated that no relationships existed between the hockey players’ goal orientation and their or their parents’ perception of achievement orientation in the family, as hypothesized. These results contradicted findings of previous studies that indicated that an individuals’ achievement orientation seemed critical in determining their intrinsic interest in a competitive sport context and that perceptions of parent-initiated motivational climate was related to their goal orientation (Epstein and Harackiewic, 1992; Epstein and Harackiewicz, 1994; Senko and Harackiewicz, 2002; White, 1998).

A possible explanation for the findings of this study could be that the climate emphasised by significant others, other than parents, affects adolescents’ goal orientation. Coaches, peers and sporting heroes may therefore be as, or even more influential than parents as revealed in previous studies (Escarti et al., 1999; Weingard and Carr, 2002).

The youth FES subscales that correlated significantly with Ego or Task Orientation suggested that the importance of structure and planning in a family and the emphasis placed on values and religion, moulds the ego and goal orientation of the adolescent.
The results of the correlation analysis of parent FES scores with corresponding youth goal orientation indicated that families that encourage recreational activities cultivate focus on the leisure and enjoyment of sport participation as opposed to learning and self improvement orientation (task) or competitive orientation (ego).

A significant correlation was found between pressures mothers saw themselves putting on their daughters and the self-pressure perceived by the hockey players, supporting findings of similar previous studies (Greendorfer and Lewko, 1988; Hellstedt, 1990; Lewthwaite and Scanlan, 1989; Maclean, 1997).

A link was indicated to exist between the practical support fathers felt they gave their daughters and the self-pressure the young girls perceived they put on themselves and with the youth’s tendency towards task goal orientation. This provides support for previous studies that revealed links between positive parental involvement and intrinsic motivation (Brustad and Weigand, 1989 in Weigand, 2000; Maclean, 1997; Weitzer 1989, in Brustad, 1993).

Correlations between the youth and parent factors produced, suggest similar trends in youth responses and parent responses. It appeared likely that a youth in a cohesive family environment, who receives parental encouragement, has a perception that they are able to express themselves openly. It was also suggested that family environments that are perceived to be achievement orientated, in which there is clear organization and structure, in which they are able to act
independently is related to a more conforming perception in youths. These trends would best be explored through further qualitative research.

In the present study categories of family environment as perceived by parents and youths did not determine whether their children scored high or low on Task or Ego Orientation of the POSQ. However, emotional support provided by mother seems to foster a climate of learning and enjoyment for the child in the sport context, leading to a tendency to task goal orientation. The implications of these results will be discussed after a summary of this study in the following chapter. The limitations of this study and the recommendations for future research on the influences on children's motivation in sport will also be discussed.
6. CONCLUSION

6.1 Summary

No significant relationship was indicated between perceived achievement orientation in a family environment and children's goal orientation in sport. These results contradicted findings of previous studies that indicated that individuals' achievement orientation and parent-initiated motivational climate was related to youth's goal orientation. The low response rate in the study and the poor internal reliability of the questionnaires used, were suggested as possible influencing factors that need to be considered.

A possible explanation for the findings of this study could be that the climate emphasised by significant others, other than parents, affects adolescents' goal orientation. This is in line with findings of previous studies that suggested that coaches, peers and sporting heroes might be as, or even more influential than parents as revealed in previous studies.

There were however, indications that aspects of social climate within family environment other than achievement orientation, as perceived by the participants, influence youth goal orientation in sport. Findings suggested that organization within a family and emphasis on religion and values and participation in recreational activities influence youth tendency towards ego or task goal orientation.

Findings also revealed links between positive parental involvement and intrinsic motivation, and perceived parental pressure and pressure experienced by the hockey players.
Findings suggested categories of family environments, as perceived by parents and youths, but these did not influence whether the youths scored high or low on Task or Ego orientation of the POSQ. However, emotional support provided by mother seems to foster a climate of learning and enjoyment for the youth in the sport context, leading to a tendency to task goal orientation. It was suggested that it would be useful to explore these trends with a qualitative study. As a result of limitations in this study it was suggested that this be a recommendation for future studies.

6.2 Implications of this Study

The unequivocal results, according to the literature reviewed and the findings of the study, of the influence of parental involvement in their children's sport experiences and goal orientation, implies that further research is needed to gain a more extensive understanding of this relationship.

Previous findings that significant others influence children and adolescents goal orientation in sport, warrant further investigation into the role of coaches, teachers and peers in the sport context of children and adolescent. Such studies could provide further insight to factors that influence their goal orientation.

The evidence of the role of parental involvement and the influence of significant others, in youth sport environments implies that parents, teachers and coaches need to be aware of the impact they may have on youth's motivational processes and sporting experiences.
There is a need to recognize the possible effects of the social climate that is created for youths and the negative experiences that pressure and competitive orientation can seem to elicit. There are also indications to be aware that their personal goal orientations may influence youth’s motivational process and therefore possibly youths’ participation and their experiences in sport.

Indications of the benefits of parental support can be seen to encourage parents to provide practical and emotional support that may lead to more enjoyment and participation for their children in the sporting context. Furthermore, significant others such as teachers, coaches and peers need to be aware of the implications of the support and encouragement they provide to sport participants.

The findings of this study could also be seen to imply the need to understand the relationship between family context and goal achievement as complex instead of assuming a linear and direct relationship. Previous studies of personality in sporting contexts have indicated the complexity that dimensions of personality may add to this area of research (Basson, 2001).

6.3 Limitations of this study

The reliability of the results of this study is limited by the low response rate from the participants. As a result of the large amount of data for each participant, the low number of participants used may have affected the accuracy of the results of this study.
The poor internal reliability of the inventories used in this study also indicated the need for caution when interpreting the results. The questionnaires that revealed poor internal consistency may therefore not have been most suitable for this sample group.

The generalisability and reliability of the results of this study are limited by the factors below:

- The use of only one inventory to measure family environment and goal orientation.
- The use of a small group of participants that were from the same socio-economic background.
- The possibility that responses may have been affected by a tendency to respond in a socially desirable manner.

The scope of the present study did not allow for the rectification of some of the methodological problems that were identified, particularly with the data analysis methods used, again indicating that results should be identified with caution.

The scope of the present study also did not allow for further qualitative study that was suggested to further investigate apparent themes that were indicated from the results of the quantitative data analysis. This limitation prevented a more extensive understanding of the influencing factors that need to be considered in this area of research.

6.4 Recommendations for future research

The above limitations and implications suggest some of the important areas for future research.
Firstly a larger sample would provide more reliable and valid results. An alternative data collection method to the one in the present study would need to aim to ensure a higher response rate in order to provide a larger set of data for analysis.

A study including samples from different socio-economic groups would allow for the results to be more generalisable to the greater South African youth sporting population. The sample would therefore need to not only include participants from independent schools, but to include participants from a variety of non-independent schools.

The use of other inventories similar to the ones used in the study could prove useful and could yield information that might provide further clarification of the relationship between family environment and children's goals in sport. The poor internal reliability of certain inventories used in the present study suggest investigation into others that might be more suitable for the sample group.

The present study indicated that qualitative research may provide greater insight to this area of research. The quantitative results suggested significant trends that if investigated through interview type research, may provide for a more accurate understanding of influencing factors that need to be considered.

Another useful area of research implied would be the investigation of the influence of significant others in children's motivation in sport. Previous research has indicated evidence that teachers,
coaches, sporting heroes and peers can influence youth's goals in sport. Findings however, are not conclusive and therefore further investigation is implicated.
References


Appendix A
Correspondence and Questionnaires used in this study

Consent letter sent to the schools

School of Psychology
Private Bag X01, Scottsville
Pietermaritzburg 3209, South Africa
Telephone (033) 260 5853 Fax (033) 260 5809

8 August 2003

Re: Permission to conduct psychological study

Dear

I am a psychology master’s student at the University of Natal, Pietermaritzburg. In fulfilling my thesis requirements, I am conducting a study investigating the relationship between family environment and children’s goal orientation in sport. Research in this area has emphasized the importance of parental influence on children’s motivational processes. Further research would allow for a more comprehensive understanding of youth motivation processes and behaviour in sport. Such research could be used to inform parents and coaches on how they influence their children’s motivation and direct parental response in order to develop youth’s task goal orientation.

I propose to collect data from participants that attend private girl’s schools in the Pietermaritzburg and Durban regions, who are members of either the first or second hockey teams. I am writing to obtain your permission to approach suitable pupils and their parents to participate in this research. If permission is granted to conduct the research with pupils attending your school, a presentation of the nature of the study will be given to pupils, who would be willing to participate, and to their parents. Questionnaires will be administered to families who volunteer to participate. Consent to participate will need to be obtained from parents. Confidentiality of data is ensured and any personal information will not be accessible to others. Feedback on the results of the study will be provided to the participants and to the school if requested.

The nature of the investigation is not in any way intrusive into very personal information on the family and questions are very general and innocuous in nature.

Your assistance in this matter will be greatly appreciated.

Yours faithfully,
Lisa Dales

Supervised by,
Professor Clive Basson
Consent letter sent to the parents

5 May 2003

Dear Parents/ Parent

I am a psychology master’s student at the University of Natal, Pietermaritzburg. In fulfilling my thesis requirements, I am conducting a study investigating the relationship between family environment and children’s goal orientation in sport. Research in this area has emphasized the importance of parental influence on children’s motivational processes. Further research would allow for a more comprehensive understanding of youth motivation processes and behaviour in sport. Such research could be used to inform parents and coaches on how they influence their children’s motivation and direct parental response in order to develop youth’s task goal orientation.

I propose to collect data from participants that attend private girl’s schools in the Pietermaritzburg and Durban regions, who are members of either the first or second hockey teams. Parents/parent and child will be required to complete questionnaires, if both parties are willing to participate and parental permission is obtained. Confidentiality of data is ensured and any personal information will not be accessible to others. Feedback on the results of the study will be provided to the participants and to the school if requested.

The nature of the investigation is not in any way intrusive into very personal information on the family and questions are very general and innocuous in nature.

Your assistance in this matter will be greatly appreciated.

Yours faithfully,

Lisa Dales

Supervised by,

Professor Clive Basson

We/I ________________ grant permission for ________________
to participate in completing the questionnaires to be used in this study.

Signed ____________________ Date ________________
Biographical Information Questionnaire for Youth Sport Participants

Thank you for completing this questionnaire. You are not required to put your name on the questionnaire and all details will be regarded as confidential. Please complete the following details before completing the questionnaires. Thank you for your assistance.

Age (dd/mm/yy):

Gender (circle): Male Female

Number of Sisters: ______ Brothers: ______

Hockey team (circle): 1st 2nd

Other sport teams:

Have you been selected for any of the following:

a. School 1st team Yes No
b. Regional team Yes No
c. Provincial team Yes No
d. National team Yes No

In your sport how much pressure to perform do you feel from:

A great deal Not much

a. father 5 4 3 2 1
b. mother 5 4 3 2 1
c. self 5 4 3 2 1

How much practical support do you feel you get from:
(transporting, watching, etc)

a. father 5 4 3 2 1
b. mother 5 4 3 2 1

How much emotional support do you feel you get from:
(understanding, supporting, encouraging etc)

a. father 5 4 3 2 1
b. mother 5 4 3 2 1
Biographical Information Questionnaire for Parents

Thank you for completing this questionnaire. You are not required to put your name on the questionnaire and all details will be regarded as confidential. Please complete the following details before completing the questionnaires. Thank you for your assistance.

Questionnaire completed by (circle): Both parents  Father  Mother

Marital status: ____________________________

Occupation of father: ____________________________

Do you participate in any sport at present (circle):  
Frequently  5 4 3 2 1
Not at all

Did you participate in sport at school:  
5 4 3 2 1

Were you selected for any of the following:

a. school 1st team
   Yes  No

b. regional team
   Yes  No

c. provincial team
   Yes  No

d. national team
   Yes  No

Age: ______

Occupation of mother: ____________________________

Do you participate in any sport at present (circle):  
Frequently  5 4 3 2 1
Not at all

Did you participate in sport at school:  
5 4 3 2 1

Were you selected for any of the following:

a. school 1st team
   Yes  No

b. regional team
   Yes  No

c. provincial team
   Yes  No

d. national team
   Yes  No

Age: ______

How much pressure do you think you put on your child to perform in her sport:

A great deal  5 4 3 2 1
Not at all

How much practical support do you feel you give your child (transporting, watching, etc):

A great deal  5 4 3 2 1
Not at all

How much emotional support do you feel you give your child (understanding, supporting, encouraging):  
5 4 3 2 1
The Perception of Success Questionnaire

Perception of Success Questionnaire (Adult Version)

What does success in sport mean to you? There are no right or wrong answers. We ask you to circle the letter that best indicates how you feel.

WHEN PLAYING SPORT, I FEEL MOST SUCCESSFUL WHEN:

<table>
<thead>
<tr>
<th>Perception</th>
<th>Strongly Agree</th>
<th>Neutral</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I beat other people</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>I am clearly superior</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>I am the best</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>I work hard</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>I show clear personal improvement</td>
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The Marlow-Crowne Social Desirability Scale

Marlowe-Crowne Scale

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you. If the statement is true as it pertains to you, then circle the T next to the statement and if it is false then circle the F next to the statement.

1. It is sometimes hard for me to go on with my work if I am not encouraged.

2. I sometimes feel resentful when I don’t get my way.

3. On a few occasions, I have given up doing something because I thought too little of my ability.

4. There have been times when I have felt like rebelling against people in authority even though I knew they were right.

5. No matter who I am talking to, I’m always a good listener.

6. There have been occasions when I took advantage of someone.

7. I’m always willing to admit it when I make a mistake.

8. I sometimes try to get even, rather than forgive and forget.

9. I am always courteous, even to people who are disagreeable.

10. I have never been bothered when people expressed ideas very different from my own.

11. There have been times when I was quite jealous of the good fortune of others.

12. I am sometimes irritated by people who ask favours of me.

13. I have never deliberately said something that hurt someone’s feelings.
## Appendix B

### Data Analysis Results

#### Group Statistics

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* Indicates significance
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* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
*** A.O. is achievement orientation
Regression Analysis

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a Predictors: (Constant), mother-emotional

ANOVA(b)

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<th>df</th>
<th>Mean Square</th>
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<td>Total</td>
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a Predictors: (Constant), mother-emotional
b Dependent Variable: TASK

Coefficients(a)

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<td>B</td>
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<td>Beta</td>
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a Dependent Variable: TASK