

A Study of the Leadership and Coaching
Behaviours of High Level Hurling Coaches

Paddy McCormack

Master of Arts in Sports Studies

W.I.T. 2007

A Study of the Leadership and Coaching Behaviours of High Level
Hurling Coaches

By

Paddy McCormack

Department of Health, Sport & Exercise Science

Waterford Institute of Technology

2007

Supervisor: Gerry Fitzpatrick

Submitted for the Award of Master of Arts in Sports Studies

DEDICATION

To my parents, who have had the greatest influence on me as a person.

ACKNOWLEDGEMENTS

I wish to express my debt of gratitude to all those who supported me during this study. In particular, I wish to express my deep appreciation to the following:

- ❖ My supervisor Gerry Fitzpatrick, for his patience and encouragement. His expertise, enthusiasm and consistent support were a valuable source of inspiration throughout the last two years.

- ❖ Jim Stack, for his valuable statistical assistance.

- ❖ Sandra Molloy, who contributed so much in terms of encouragement and guidance along the way.

- ❖ My colleagues at Tipperary Institute:
 - Maura Maher for her administrative support and generosity of time.
 - Mairead Clohessy for her statistical advice.
 - Philip Hennessy for his interest and goodwill.

- ❖ The research participants, for their cooperation, time and honesty.

- ❖ My wife, Ruth, and my children, Patrick, Barry, Shane and Jennifer, for putting up with me throughout the study.

- ❖ The Department of Health, Sport & Exercise Science in W.I.T. for giving me the opportunity of a lifetime.

TABLE OF CONTENTS

List of Tables	i
List of Figures	ii
Abstract	iii
CHAPTER ONE: INTRODUCTION	1
CHAPTER TWO: LITERATURE REVIEW	5
Leadership Theories	12
Leadership Behaviours	23
Measurement of Leadership Behaviour	30
Leadership Styles and Roles	34
Coaching Efficacy	43
Coach Education	48
GAA Coaching	53
CHAPTER THREE: RESEARCH METHODOLOGY	55
Purpose of Study	56
Hypothesis	56
Research Question	56
Procedures	56
Analysis	58
Limitations	59
CHAPTER FOUR: RESULTS	60
Coach Profile	61
Main Reason for Coaching	61
Main Role of the Coach	62
Elements of the Coaching Role	62
Measurement of Success	63
Coach Education Courses	64
Sources of Information	64
Analysis of Variance	64
Leadership Behaviours and Age	65
Leadership Behaviours and Inter-County Playing Experience	66
Leadership Behaviours and Inter-County Teams Coached	66
Leadership Behaviours and Inter-County Coaching Experience	67
Leadership Behaviours and Club Coaching Experience	68
Leadership Behaviours and Coach Education	70
CHAPTER FIVE: DISCUSSION	71

CHAPTER SIX: CONCLUSIONS & RECOMMENDATIONS	79
Conclusions	80
Recommendations	81
 BIBLIOGRAPHY	 83

APPENDIX 1: Research Questionnaire	
APPENDIX 2: RLSS Questionnaire	
APPENDIX 3: Letter of Introduction	
APPENDIX 4: Letter of Informed Consent	
APPENDIX 5: Modifications to RLSS	

LIST OF TABLES

Table 1: Reasons for being involved in coaching & training inter-county teams	61
Table 2: Roles of responsibility of the head-coach	62
Table 3: Importance of elements of the coaching role	63
Table 4: How do you judge your success?	63
Table 5: Sources of information	64
Table 6: Leadership behaviours & age group analysis results	65
Table 7: Leadership behaviours & inter-county playing experience analysis results	66
Table 8: Leadership behaviours & number of inter-county teams coached analysis	67
Table 9: Leadership behaviours & inter-county coaching experience analysis results	68
Table 10: Leadership behaviours & club coaching experience analysis results	69
Table 11: Leadership behaviours & GAA coach education analysis results	70

LIST OF FIGURES

Figure 1: Main reason for coaching	61
Figure 2: Main role of the coach	62
Figure 3: Elements of the coaching role	62
Figure 4: Measurement of success	63

ABSTRACT

The purpose of the study was to examine the various factors which have an impact on the leadership and coaching behaviours of high-level hurling coaches. A considerable gap exists between the importance assigned to athletic leadership and the efforts to understand it (Reimer & Chelladurai, 1995). Inter-county senior hurling coaches ($n = 35$) were surveyed on a demographic questionnaire and their self-perception of leadership and coaching behaviours were analysed using the Revised Leadership Scale for Sport (Zhang, Jensen, & Mann, 1997). Descriptive data was collected on motives for coaching, roles of the coach, criteria for measuring success, sources of coach education and development. An analysis of variance (ANOVA) was conducted on quantitative data on the relationships between age, experience, coach education, and leadership. Results showed a significant relationship between age and situational consideration ($P = .001$), club coaching experience and training instruction ($p = .020$), and between inter-county coaching experience and training instruction ($p = .023$). The study demonstrated the value of experience in leadership and coaching behaviour and has implications for the future direction and content of coach education programmes.

Keywords: Leadership Behaviour, Coaching Experience, Hurling

Chapter 1

Introduction

INTRODUCTION TO THE STUDY

It is easy to point to examples of great leaders, but it is a lot more difficult to determine what makes them such great leaders (Weinberg & Gould, 2003). Colin Powell, former United States Secretary of State describes great leaders as great simplifiers, who have the ability to cut through arguments, debates and doubts to offer a solution everybody can understand (Harari, 2002). While efforts to study leadership have been sparse and sporadic across the array of sports (Reimer and Chelladurai, 1995), Gaelic games i.e. hurling and football, has not yet lent itself to such investigation. Research from the sport psychology literature suggests that coaching is an important leadership competency because it has been found to have important effects on performers' attitudes (Smith & Smoll, 1997).

Early interest in leadership concentrated on the traits or abilities of great leaders, but since then, leadership research has evolved from an interest in the behaviour of leaders to the idea of situation-specific leadership (Williams, 1998). A number of different personal attributes have also been investigated in terms of their impact on coaches' expectations and behaviours (Weinberg & Gould, 2003). Streat, Senecal, Howlett, & Burgess (1997) argue that individual differences such as self-reflectiveness, critical thinking aptitude, decision-making abilities and knowledge bases can influence coaches' expectations and behaviours. Other research by Feltz, Chase, Moritz, and Sullivan (1999) reported that coaches who possessed a high degree of coaching efficacy gave more positive feedback. Sports organisations sometimes believes that it has ready-made leaders that will come to the top naturally, make all the right decisions and take the right initiatives because of their sports involvement (Watt, 1998). This poses interesting questions on how these coaches acquire the required skills and abilities, and to what extent can coaches be educated

and developed? It could be hypothesised that the Gaelic Athletic Association (GAA) Coach Education Programme would attend to the development of these aspects with regard to county senior hurling coaches. Interestingly, this creates further questions: how many county senior hurling coaches have undertaken any of these courses, and what, if any, benefits do they accrue from them? Or is it a combination of playing experience, early experience of coaching and working under or alongside other coaches that forms the basis for the shaping of their leadership behaviours and coaching styles? Findings from a study by Larkin, Duffy, and O’Leary (2007) which traced the development process and needs of NCDP (National Coaching Development Programme) certified Irish coaches, representing novice to elite coaches and in a variety of different sports, support the notion that coaches undergo many years of pre-coaching experience as athletes. Coaches highlighted the importance of non-formal methods of coach education and development e.g. observing other coaches, mentoring and coaching experience.

In studying behaviour, the sport context allows for a somewhat structured and controlled setting without the need for a laboratory (Sullivan & Kent, 2003). The purpose of this present study is to examine the leadership and coaching behaviours of inter-county senior hurling coaches. The study sets out to examine the behaviours of those that coach at the highest level in the game of hurling, as well as expanding the body of knowledge pertaining to leadership and coaching behaviours.

The purpose of the next chapter (Chapter 2) is to present a literature review of the variables of leadership and coaching behaviours pertaining to this study. The chapter reviews leadership theories, leadership behaviour, measurement of leadership, leadership styles and roles, coach efficacy, coach education, and GAA coaching. Chapter 3 presents the methods and procedures by which the study will be carried out.

Descriptive and statistical results of the study are outlined in Chapter 4. Chapter 5 presents a discussion on the study, and conclusions and recommendations are presented in Chapter 6.

Chapter 2

Literature Review

LITERATURE REVIEW

The study of leadership by psychologists has been ongoing for decades (Weinberg & Gould, 2003). About 35,000 research articles, magazine articles, and books have been written dealing with the subject (Dubrin, 2001). Bass and Stogdill's Handbook of Leadership (1990) contain about 7,500 citations on leadership (Weese, 1994). Over 3,500 leadership studies have been published and researchers continue to investigate the factors associated with effective leadership (Weinberg & Gould, 2003).

Over time leadership has been defined in terms of individual traits, leader behaviour, interaction patterns, role relationships, follower perceptions, influence over followers, influence on task goals, and influences on organisational culture (Yukl & Van Fleet, 1992). Barrow (1977, p. 232) defines leadership as the "behavioural process that influences individuals and groups towards set goals". This definition encompasses many dimensions of leadership in sport which include decision-making processes, motivational techniques, giving feedback, establishing interpersonal relationships and directing the group or team confidently (Weinberg & Gould, 2003). Leadership is described by Jones, Wells, Peter's, & Johnson, (1993) as the quality of getting members to think and behave in the same way as the leader and getting them to agree that the leaders way is the right path to follow. According to Cole (1996) leadership occurs when one individual in a group situation influences the other group members to contribute voluntarily in order to achieve group tasks in a given situation. Linking leadership with behaviour Cole (1996) suggests leadership as something more than just personality, accident, or appointment. According to Colin Powell, who rose through the American army to become U. S. Secretary of State, leadership requires moral, physical, mental and spiritual courage (Harari, 2002). Despite the

many studies, investigations and interpretations that appear throughout the literature there appears to be no universally accepted definition of leadership (Bennis & Nanus, 1985).

While an immense literature base is devoted to leadership in occupational psychology and organisational behaviour (Jones, 2002) a scarcity of research and conceptual literature exists about leadership in sport situations (Murray and Mann, 2002). This does not correspond with the growth of the whole sport environment (Beam, Serwatka, & Wilson, 2004). This lack of interest in sport leadership is in direct contrast to the high media interest that exists and the heated discussions among fans regarding athletic leadership (Riemer & Chelladurai, 1995).

The coach, through their presence, actions and speech, are instrumental in an athlete's physical and psychosocial development (Jowett & Cockerill, 2002; Martens, 1997; Smith & Smoll, 1996). Certain authors (Lyle, 1993; Woodman, 1993) have defined coaching as a dynamic and systematic process that involves a number of various steps. These steps include observation, assessment, development of a plan of action, implementation of the plan and reassessment. The coach is placed in the role of a leader with many specific roles and parts to play (Jones, Wells, Peters, & Johnson, 1993). Regardless of what level or grade of sport an athlete is involved in, the coach can have a profound impact on the life of the athlete (Baker, Yardley, and Cote, 2003). In addition, the quality and success of an athlete's sport experience is determined by the important role that the coach plays (Kenow and Williams, 1999). However, despite the importance and responsibility of the coaching role, there exists little research that identifies optimal coaching behaviours and factors which influence the effectiveness of particular behaviours (Kenow and Williams, 1999). Dubrin (2001) suggests that coaching is a dyad: like leader/group member, or director/actor, it

cannot exist without at least two participants, where the interaction of the two personalities influences the coaching outcome.

The profession of coaching has been surrounded by myths and misconceptions for decades (Case, 1987). A number of these misperceptions about coaching have been identified by Cunningham and Honold (1998). One false belief is that coaching only applies in a one-to-one situation, where in reality, the team or group can also be coached. Another myth identified is that coaching is mostly about providing new knowledge and skills to members and followers. However, athletes often need more help with underlying habits than with knowledge and skills. Another stereotype deals with an important ethical issue; if coaches go beyond giving instruction in knowledge and skills, they may be in danger of getting into psychotherapy. The counterargument to this is that coaches should simply follow the model of effective parents, which involves listening to the other person, attempting to understand his or her real concerns, and offering support and encouragement. Another misperception is that coaches need to be expert in some area or very successful in order to perform the role of coach. Dubrin (2001) uses the sports analogy that a good coach doesn't have to be an outstanding and successful athlete in order to perform a coaching role. A final myth identified by Cunningham and Honold (1998) is that a coach must work on an interpersonal basis. While this one to one or face to face approach facilitates the coaching process, problems however that arise with regard to time and distance can be overcome through useful alternatives such as telephone and e-mail (Dubrin, 2001).

The term coaching is now very popular in the business world, with many executives and those in leadership positions applying the coaching analogy to develop personally and enhance performance (Jones, 2002). Coaching from a business context is described, by Weinberg & McDermott (2002), as the help and mentoring given to

an employee by a more experienced individual. The whole notion of effective leadership is consistently discussed by corporate leaders as important for success (Jones, 2002). An estimated 22 per cent of the 45 billion dollar annual corporate training budget in the U.S. is invested in managers, with about 10 per cent of this 9 billion devoted to programmes aimed specifically at developing leaders (Dubrin, 2001). Developing relationships between employer and employee is seen as essential to success (Beattie, 1994). Trust, vision, communication skills, and having the ability to handle pressure are referred to by Covey (1990) as specific to leaders in the business world. From a sporting context Jackson (1995) refers to value-based leaders enlisting the heart of employees through inclusion and participation. Holtz (1998) highlighted the importance of sound relationships within organisations and the importance of consideration as leader behaviour. This nurturing type of leadership is identified by Starr (2003) as the preferred way of improving employee performance as employees learn more and perform better.

The type of leadership styles and leadership behaviours displayed by those in positions of responsibility are seen as crucial to organisational success (Jones, 2002). A large body of literature from a number of diverse areas including business and sport, have found that those occupying leadership positions (e.g. teachers, managers, and athletes) can influence the performance of members (Brophy, 1983; Eden, 1990; Eden and Shani, 1982; Horn and Lox, 1993). In a survey to discover the level of interest in sport among business leaders, Noble (1994), reported that about 30% of business executives first look through the sports section of newspapers, whereas only 2% start with the business section. To date, no studies have been found that have directly compared the views of those in business roles to sports leadership roles, in what it takes to become a successful business organisation (Jones, 2002).

Nevertheless, the empirical and theoretical literature on leadership suggests that effective leaders have a number of traits and skills that help make them effective, although no particular trait has been universally identified as necessary for success (Chelladurai, 1999; DePree, 1992; Zimmerman, 1997).

The data obtained in research carried out by Jones (2002), appears to support the notion that there are some traits and approaches that are related to success. The study found that the leadership behaviours of consistency and decisiveness were characteristic of leaders from both sport and business. However honesty was deemed more important in business than in sport, while the interaction with a variety of people was seen as more important in sport than it is in the business world. Regardless of what type of organisation was involved, the type of leadership style that would be most effective would be dictated by the situation. This is consistent with much contemporary leadership theory which is more situationally oriented (Chelladurai, 1999; Waterman, 1994). The same study by Jones, (2002), found that the skill of communication was an important element and essential to success in both sport and business domains. The importance of having good listening skills, paraphrasing the message and giving consistent non-verbal cues, were cited as being critical to organisational success. This is consistent with some of the observations of DePree, (1992), Drucker, (1992), and Waterman, (1994). From the perception of leaders, these preliminary findings, which focussed on the factors of leadership, cohesion, and communication, the authors concluded that there are many similarities between success in sport and business.

The importance of communication is referred to by coaches as one of the most important skills to master if one wants an effective organisation (Parcells, 1995; Shanahan, 1999). According to Waterman (1994) many top executives have

repeatedly stated that clear lines of communication and open door policies are important for the success of the organisation. In line with this, and from a sports context, psychologists have emphasized the critical importance of communication between players and management in the effective management of a team (Yukelson, 1997). The degree of success or failure experienced by coaches, exercise leaders and teachers is often due to effective or ineffective communication levels. (Weinberg & Gould, 2003).

A number of common elements have been identified by Jones (2002) that can be drawn between sport and business. In addition to leadership, these include organisational issues, high-performing-teams, one-to-one coaching/consulting, and stress. Occupational stress within the helping and administrative professions (Sauter & Murphy, 1995) results in burnout, fatigue, aggression, illness, low productivity, and both emotional and physical withdrawal from the work setting (Burke and Greenglass, 1991; Greenglass, 1991; Schaufeli, Maslach, and Marek, 1993). To date, no researcher in the area of sports has investigated the manner in which relevant individual and organisational factors interact to influence the levels of job stress experienced by athletic personnel, such as coaches, trainers and administrators (Ryska, 2002). However, gender, marital status, coaching experience, type of sport and team record are factors that have been associated with elevated stress levels among sport coaches. (Caccese, 1983; Caccese & Mayerberg, 1984; Hunt, 1984).

From experiences in applying performance excellence in sport to business a number of significant conclusions are drawn by Jones (2002). Performers from both contexts i.e. sport and business, are highly motivated to succeed and determined to find new ways to move forward. They are very challenging, very rewarding to work with, and within both environments, organisational issues have the biggest impact on

performance. As effective leadership is the lifeblood of both sport and business organisations, Jones (2002) proposes that the principals of elite performance in both domains are easily transferable. Not all researchers however, feel that the comparison between sport and business is appropriate. Spitzer and Evans (1997) discussed the futility of comparing sport and business leaders. Thus the whole notion of effective leadership crossing over between sport and business needs further elaboration and study (Jones, 2002).

Leadership Theories

Throughout the 20th century researchers have utilised different approaches to the study of leadership. During the 1920s and 1930s leadership research focused basically on leader traits, which Robbins & Coulter (2002) describe as characteristics that might be used to differentiate leaders from non-leaders. The trait theory has its origin in the great man theory of leadership (Williams, 1998), and assumes that leaders are born and not made (Mullins, 1999). The trait theory suggests that successful leaders possess certain personality characteristics that make them ideally suited for leadership, no matter what situation they are in (Weinberg & Gould, 1999). In the 1920s researchers tried to determine what characteristics or personality traits were common to great leaders in business and industry. Leadership traits that were considered to be relatively stable personality dispositions included intelligence, assertiveness, independence and self-confidence (Weinberg & Gould, 1999). In a study of trait theory research up to 1940 Byrd (1940) found that only 5% of the traits that studies had identified as the difference between the leaders and the led were common to four or more of the studies. A further study by Jennings (1961) concluded

that fifty years of research had failed to produce one personality trait or set of qualities that could be used to differentiate between leaders and non-leaders.

Later studies have identified some relationship between leadership and certain personality traits. Intelligence, supervisory ability, initiative, self assurance and individuality in the manner in which the work was done, had a significant correlation between them and leadership effectiveness (Ghiselli, 1963). Effective leadership traits included drive, the desire to lead, honesty and integrity, self-confidence, intelligence, and job related knowledge (Kirkpatrick & Locke, 1991). Stogdill (1974) in reviewing 33 previous studies discovered that leaders possessed more intelligence than followers. The results found that the average person who occupied a position of leadership exceeded the average member of the group in characteristics such as intelligence, scholarship, dependability in exercising responsibility, originality, social participation and socio-economic status. However, one significant finding from this study was that extreme intelligence differences between leaders and followers might be dysfunctional.

Other personality traits associated with leadership effectiveness were reported by Ghiselli (1963). He found that the ability of the respondent to imitate action independently was related to the respondent's level within the organisation, and that self-assurance was also related to the respondent's hierarchical position within the group. Ghiselli also reported that the most effective leaders were those that exhibited individuality. Shortly after Stogdill (1948) published his review and conclusions of 124 trait-related studies, the decline in the trait leadership theory began, with social scientists starting to discredit the universal trait theory of leadership (Williams, 1998). These conclusions demonstrated that it simply was not possible to demonstrate that successful leaders possessed a universal set of leadership traits (Williams, 1998).

Despite its shortcomings, Kirpatrick and Locke (1991) found evidence that the trait approach is not completely invalid. Their review of the literature suggests that drive, motivation, ambition, honesty, integrity and self-confidence are key leadership traits. They also found that effective leaders are different from other people and don't have to be great intellects to succeed.

Throughout the period from the late 1940s up to the mid-1960s research concentrated on the preferred behavioural styles that leaders demonstrated (Robbins & Coulter, 2002). During this period researchers began to explore the notion that how a person acts determines that person's leadership effectiveness (Ivancevich & Matteson, 1999). The driving force behind this approach to leadership came from two different sources at approximately the same time: Ohio State University and the University of Michigan. This approach believed that effective leaders had certain universal behaviours and once these behaviours were identified, they could be taught to potential leaders everywhere. Contrary to the trait approach, the behavioural belief was that leaders are made, not born (Williams, 1998). The Ohio State University studies identified two important dimensions of leader behaviour – consideration and initiating structure (Stogdill & Coons, 1951). Consideration refers to leader behaviour that is indicative of friendship, mutual trust, respect and warmth between the leader and followers (Williams, 1998). A leader who was high in consideration treated all group members as equals, helped them with personal problems, and was friendly and approachable, (Robbins & Coulter, 2002). A leader high in initiating structure behaviour refers to leaders who clearly define the relationship between the leader and followers and tries to establish well-defined patterns of organisation, channels of communication and methods of procedure (Williams, 1998). These include

behaviours that involve attempts to organise work, work relationships, and goals (Robbins & Coulter, 2002).

Two separate questionnaires are used to measure the dimensions of consideration and initiating structure: the Leadership Opinion Questionnaire (LOQ) and the Leader Behaviour Description Questionnaire (LBDQ) (Ivancevich & Matteson, 1999). The LOQ assesses how leaders think they behave in leadership roles, while the LBDQ measures perceptions of subordinates, peers, or superiors (Ivancevich & Matteson, 1999). Results that showed a high degree of consideration and a high degree of initiating structure (High-High) were originally thought to be most desirable (Ivancevich & Matteson, 1999). However, the evidence is not conclusive and much seems to depend upon situational factors (Mullins, 1999). More-complicated interactions of the two dimensions began to emerge from a study carried out by researchers at International Harvester (Ivancevich & Matteson, 1999). In addition to having more employee grievances, supervisors who scored high on initiating structure also had high proficiency ratings from superiors. With regard to the dimension of consideration the study found that a higher consideration score was related to lower proficiency ratings and lower absences (Fleishman, Harris & Burt, 1955). A literature review of studies that examined how male and female leaders utilise initiating structure and consideration found that male and female leader's exhibit equal amounts of initiating structure and consideration and have equally satisfied followers (Dobbins & Platz, 1986). When these various theories were applied to the sport setting, training for competitiveness, providing social support and being rewarding were identified as the behaviours of coaches most desired by athletes (Chelladurai & Saleh, 1978). According to the Universal Behaviour Theory of Leadership individuals can be taught to be effective leaders by learning how to exhibit

the behaviours of consideration and initiating structure in the proper proportions (Williams, 1998).

The research objective of the studies carried out at the University of Michigan's Survey Research Centre at about the same time as those being done at Ohio State were similar. They set out to identify behavioural characteristics of leaders that were related to performance effectiveness (Robbins & Coulter, 2002). The purpose of most leadership research at the University of Michigan was to discover the principles and methods of effective leadership (Ivancevich & Matteson, 1999). Two distinct styles of leadership, referred to as job-centered and employee-centered, were identified by researchers through interviewing leaders and followers (Ivancevich & Matteson, 1999). The emphasis of the job-centered leaders was mainly on the technical or task aspects of the job. They were concerned with accomplishing their group's tasks and regarded group members as a means to that end. The employee-centered emphasised interpersonal relationships, accepted individual differences among group members and they took a personal interest in the needs of their followers (Robbins & Coulter, 2002). According to Mullins (1999) both the Ohio State studies and the University of Michigan studies appear to support the idea that there is no single behavioural category of leadership which can be classified as superior and that leadership effectiveness is dependent upon the variables in any given situation.

The focus of situational leadership is on the behavioural and situational factors of effective leadership. A number of prominent leadership models utilised this approach which included Fiedler's Contingency Model (Fiedler, 1967) Vroom & Yetton's (1973) Normative Model, Hersey & Blanchard's Life Cycle Model (Hersey & Blanchard, 1977), and House's Path-Goal Model (House, 1971). The contingency theories of leadership are based on the belief that there is no single style of leadership

appropriate to all situations (Mullins, 1999). The first contingency model on leadership was developed by Fred Fiedler (Fiedler, 1967). This model proposed that effective group performance depended on the proper match between the leader's style of interacting with his or her followers and the degree to which the situation allowed the leader to control and influence. Fiedler's theory (1967) is based on the notion that leaders possess personality dispositions that will help them to be effective leaders in one situation, but not in another. The difference between Fiedler's Theory (1967) and most other situational theories is that the emphasis is on relatively stable personality traits, as opposed to behaviours (Williams, 1998). Fiedler suggests that leadership style is a stable personality characteristic that is well established and that a leader's style results from the leader's own needs and personality. The key is to define those leadership styles and the different types of situations and then to identify the appropriate combination of style and situation (Robbins & Coulter, 2002).

In order to measure the attitudes of the leader, Fiedler (1967) developed a Least Preferred Co-worker (LPC) scale, which measures the rating given by leaders about the person with whom they could work least well. Low scores on the LPC are thought to reflect a task-oriented, or controlling, structuring leadership style, while high scores are associated with a relationship-oriented, or passive, considerate leadership style (Ivancevich & Matteson, 1999). Fiedler proposes three situational factors which determine how favourable the leadership environment is: leader-member relations, degree of task structure, and power-position of the leader. Leader-member relations refer to the degree of confidence, trust, and respect the followers have in their leader. The leader's influence over the followers was enhanced through a strong relationship. Task structure refers to the extent to which the tasks the followers are engaged in are structured and understood. Position power refers to the power

inherent in the leadership position, which involved the degree of control over rewards and sanctions and the degree of authority over group members. These three contingency variables (member relations, degree of task structure, and power-position) were used to evaluate each leadership situation. (Robbins & Coulter, 2002). Mixing these three variables produced eight possible situations in which a leader could find him or herself (Robbins & Coulter, 2002).

Fiedler (1967) studied 1200 various groups in order to define the specific contingencies for leadership effectiveness. In this study he compared relationship-oriented versus task-oriented leaders in each of the eight situational categories. Results showed that task-oriented leaders tended to perform better in situations that were very favourable to them and in situations that were very unfavourable. On the other hand, relationship-oriented leaders seemed to perform better in moderately favourable situations. Studies conducted in sport settings using Fiedler's approach to leadership have provided interesting results. Danielson (1978) found that the most effective coaching in ice hockey was person orientated rather than task orientated. While a study by Bird (1977) involving successful women's volleyball coaches, operating in the more skilled Division 1 programmes, were person orientated, whereas the results were the opposite in the less skilful Division 11 programmes.

Another contingency model of leadership, The Normative Model, is provided by Vroom and Yetton (1973). They base their analysis on two aspects of a leader's decision; its quality and its acceptance. Quality is the effect that the decision has on group performance and acceptance refers to the motivation and commitment of group members in implementing the decision. According to Vroom and Jago (1988) the normative decision model proposes leadership as a decision-making process and specifies what a leader ought to do in a given situation. Normative refers to the idea

that the leader should follow certain prescriptions indicated in the model (Dubrin, 2001). However, the leader participation model has changed as further studies continue to provide additional insights and understanding of effective leadership style (Vroom & Jago, 1988). A current model reflects how and with whom decisions are made and uses variations of the same leadership styles identified in the original model (Robbins & Coulter, 2002).

Two situation specific behavioural theories are the Path-Goal Theory (House, 1971; House & Dessler, 1974) and the Life Cycle Theory (Hersey & Blanchard, 1977). The theories in this section view leadership as a function of the interaction between leader behaviour in a specific situation and the situation itself and are based on the idea that specific behaviours will help an individual be an effective leader in one situation but not another (Williams, 1998). The main work on the path-goal model of leadership theory has been undertaken by House (1971) and House & Dessler (1974). This model states that it's the leader's job to assist his or her followers in attaining their goals and to provide the direction or support needed to ensure that their goals are compatible with the overall objectives of the group or organisation (Robbins & Coulter, 2002). The theory is designated path-goal because it focuses on how the leader influences the follower's perceptions of work goals, self-development goals, and paths to goal attainment (House, 1971). The early path-goal work led to the development of a complex theory involving four specific styles of leader behaviour – directive, supportive, participative, and achievement – and three types of subordinate attitudes – job satisfaction, acceptance of the leader, and expectations about effort, performance, reward, and relationships (House & Dessler, 1974). The directive leader lets subordinates know what's expected of them; the supportive leader is friendly and shows concern for the needs of followers; the participative leader consults with group

members and uses their suggestions before making a decision and the achievement-oriented leader sets challenging goals and expects followers to perform at their highest level. The Path-Goal Theory proposes that leader behaviour will be motivational to the extent that it helps subordinates cope with environmental uncertainties. The leader is considered a motivator if they can successfully reduce the uncertainties of the job, resulting in an increase in the subordinate's expectations that their efforts will lead to desirable rewards (Ivancevich & Matteson, 1999).

A situational leadership theory that has appealed to many managers is the situational theory developed by Hersey and Blanchard (1977). This Life-Cycle Theory suggests that an appropriate leadership style for a specific situation is determined by the maturity of the followers. Hersey and Blanchard (1977) define maturity as the ability and willingness of people to take responsibility for directing their own behaviour. Regardless of what the leader does effectiveness depends on the actions of his or her followers (Robbins & Coulter, 2002). This Life Cycle Theory uses the same two leadership dimensions that Fiedler identified: task behaviour (termed initiating structure) and relationship behaviour (termed consideration). However Hersey and Blanchard go a step further by considering each as either high or low and then combining them into four specific leadership styles: telling, selling, participating, and delegating. Telling (high task/low relationship) is where the leader defines roles and tells people what, how, when, and where to do various tasks. Selling (high task/high relationship) is where the leader provides both directive and supportive behaviour. Participating (low task/ high relationship) allows the leader and follower to share in decision making where the main role of the leader is facilitating and communicating. Delegating (low task/low relationship) is where the leader provides little direction or support. Research efforts to test and support the theory have been disappointing

(Fernandez & Vecchio, 1997). However, with leadership continuing to command attention in organisations, the situational leadership theory (SLT) appears to remain a popular way to express what leaders should be doing at work (Ivancevich & Matteson, 1999).

The Multidimensional Model of Sport Leadership was developed by Chelladurai (1978, 1990) specifically for athletic situations. Earlier theories of leadership, which included Fiedler's (1967) contingency model of leadership effectiveness, Evan's (1970) and House's (1971: House & Dressler, 1974) path-goal theory of leadership, Osborne and Hunt's (1975) adaptive-reactive theory of leadership, and Yukl's (1971) discrepancy model of leadership, focused mainly on one aspect of leadership (i.e. the leader, the member, or the situational context) (Chelladurai & Reimer, 1998). The Multidimensional Model brought all these aspects together and considered each as equal. The model drew upon foundations set out in those earlier leadership theories and extended them to the athletic context (Chelladurai & Reimer, 1998). Chelladurai's Multidimensional Model conceptualizes leadership as an interactional process, whereby in a sport setting the effectiveness of the leader is dependent on the situational characteristics of both the leader and the group members. In the multidimensional model group performance and member satisfaction are the results of the interaction of three components of leadership behaviour: required, preferred, and actual (Chelladurai & Reimer, 1998). In this model, required leader behaviours are those that conform to the established norms of the organisation. Preferred leader behaviours are those behaviours that are preferred by the athlete. Perceived leader behaviours are those behaviours that the leader exhibits, irrespective of the norms or preference of the team. The antecedents of these three aspects of leadership consist of the characteristics of the leader, the athletes, and the situation

(Silva & Weinberg, 1984). Chelladurai (1978, 1990) maintains that a positive outcome occurs if the three aspects of leader behaviour agree. If the leader behaves appropriately for the particular situation and these behaviours match the preferences of the group members, they will achieve their best performance and feel satisfied. General support for Chelladurai's Multidimensional Model has been forthcoming on several fronts. The notion that congruence among the three types of leader behaviour leads to improved athlete performance and satisfaction is well established (Riemer & Chelladurai, 1995). Another well established notion derived from the model is that coaching behaviours lead to either satisfaction or dissatisfaction (Allen & Howe, 1998). While considerable attention has been concentrated on the development of the Multidimensional model to explain coach/athlete interaction, a complete profile of this relationship is not available (Baker, Yardley, & Cote, 2003).

The various models for examining situation leadership are similar in that they focus on the dynamics of leadership and have stimulated research on leadership. However, they remain controversial either because of measurement problems, limited research testing, or contradictory research results (Ivancevich & Matteson, 1999). Fiedler's (1967) view of leader behaviour centres on task- and relationship-oriented tendencies and how these interact with task and position power and are the most controversial (Ivancevich & Matteson, 1999). The path-goal approach emphasises the instrumental actions of leaders and four styles for conducting these actions, while the situational variables discussed in each approach differ somewhat (Ivancevich & Matteson, 1999). There is also a different view of outcome criteria for assessing how successful the leader behaviour has been: Fiedler discusses leader effectiveness and the path-goal approach focuses on satisfaction and performance (Ivancevich & Matteson, 1999).

Leadership Behaviours

The leadership behaviours of coaches are one of the most frequently discussed and least understood aspects of coaching (Case 1987). According to Mullins (1999) many people are involved in leadership positions without their roles ever being clearly defined. Belbin (1997) suggests that there is a clear implication that leadership is not part of the job but a quality that can be brought to it.

While coaches may exhibit a number of leadership behaviours during the course of a competitive season a review of the sport literature indicates that both task and relationship behaviour are the two leadership behaviours most often mentioned (Cratty, 1973: Sage, 1973: Straub, 1978: Carron, 1980). Previous studies have examined the relationships among coaching behaviours and satisfaction in many areas including different sport groups such as basketball players (Weiss & Friedrichs, 1986), track and field athletes (Schliesman, 1987), tennis players (Reimer & Toon, 2001) and field hockey players (Allen & Howe, 1998). Different competition levels have also been investigated. Terry (1984) examined coaching behaviours and athlete satisfaction in elite athletes, while Reimer and Toon (2001) researched coaching satisfaction among university level athletes. The indications from both studies are that the behaviours demonstrated by the coach are important determinants of athlete satisfaction.

The research on differences between team and individual athletes across different types of sports has identified some significant differences in preferred coaching behaviours (Baker, Yardley and Cote, 2003). Athletes involved in team sports have been found to prefer more autocratic coaching styles (Terry, 1984; Terry and Howe, 1984) and greater emphasis on physical training behaviours (Chelladurai & Saleh, 1978; Terry, 1984; Terry and Howe, 1984) than individual sport athletes.

Baker, Yardley, & Cote (2003) conducted a study which examined the relationship between coach behaviours and athlete satisfaction in team and individual sport athletes. University and club athletes from fourteen different sports were involved in the study. The researchers contended that interdependent and independent sports differ in the level of reliance among athletes. Team sports were classified as those that demonstrated a high degree of inter-dependency (i.e. basketball, hockey, soccer, and volleyball). Individual sport athletes (i.e. swimming, athletics, gymnastics, wrestling, golf, triathlon, badminton, and squash) were those athletes that demonstrated primarily independence. Coaching satisfaction was measured by the Scale of Athlete Satisfaction (Chelladurai, Imamura, Yamaguchi, Oinuma, and Miyauchi, 1988). Measurement of athlete satisfaction was obtained by using the Coaching Behaviour Scale for Sport (Cote, Yardley, Hay, Sedgwick & Baker, 1999). Results from the study indicated that individual sport athletes reported greater satisfaction with their coaches than team sport athletes. The results also demonstrated that as the frequency of coaching behaviours (technical skills, goal setting, mental preparation, physical training, competition strategies, and personal rapport) increased, coaching satisfaction increased. On the other hand, as the frequency of negative personal rapport behaviours increased, satisfaction with coaches decreased. These results support previous research which identified relationships among coaches' behaviours and their athletes' satisfaction (Chelladurai, 1984a; Schliesman, 1987). The findings of this study extend previous research by examining the moderating role of sport type on the coaching behaviour-coaching satisfaction relationship (Baker, Yardley, & Cote, 2003). The results are also consistent with Chelladurai and Reimer's (1998) notion that tasks that are variable and interdependent (i.e. team sports) will require greater control over structure and logistics by their leader. Results from the study highlight

the importance of negative and positive factors in all sports, particularly in team sports (Baker, Yardley, & Cote, 2003)

Coaching behaviours have also received considerable attention in the sport psychology literature (Giacobbi, Jr., Roper, Whitney, & Butryn, 2002). Researchers have investigated compatibility between the coach and athlete (Horne & Carron, 1985; Carron & Bennett, 1977), team climate (Fisher, Mancini, Hirsch, Proulx, & Straurowsky, 1982), strategies used by coaches to increase the self-efficacy of athletes (Gould, Hodge, Peterson, & Giannini, 1989; Weinberg, Grove, & Jackson, 1992) and leadership styles and decision making (Chelladurai & Arnott, 1985; Chelladurai, 1980; Chelladurai, & Saleh, 1978; Gordon, 1988).

In more recent times researchers have examined the structure of coaching knowledge (Cote, Salmela, Trudel, Baria, & Russell, 1995), the pre and post competition routines of expert coaches (Bloom, Durand-Bush, & Salmela, 1997) and the mental skills training techniques used by junior tennis coaches (Gould, Damarjian, & Medbery, 1999). In addition sport psychology researchers have utilized systematic observational techniques to examine coaching behaviours at various levels of competition (Horn, 1985; Lacy & Darst, 1985; Langsdorf, 1979; Smith, Smoll & Hunt, 1977; Smoll, Smith, Curtis & Hunt, 1978; Smith, Zane, Smoll, & Coppel, 1983; Tharp & Gallimore, 1976).

Martens (1987) and Orlick (1986) provided guidelines for coaches to help themselves and their athletes prepare psychologically and deal with various competitive situations. The importance of communication was emphasised, particularly with regard to changing a game plan or dealing with a loss (Bloom, Durand-Bush, and Salmela, 1997). Weinberg and Gould (2003) note the importance for teachers, coaches, and exercise leaders of understanding how to send effective

messages, both verbally and non-verbally. Martens (1987) recommends that coaches help their athletes make appropriate, constructive attributions through a general post competition debriefing and suggested that they direct this meeting based on the outcome and performance of their athletes (Bloom, Durand-Bush & Salmela, 1997).

The results of the study by Bloom, Durand-Bush and Salmela (1997) on the pre- and post competition routines of coaches proposed that competition routines were an extension of the work done in the other two primary areas of coaching: organisation and training. The study also showed that expert coaches put a great deal of emphasis on their own preparation, with their game-day routine including spending time alone in the morning, preparing and mentally rehearsing the game plan, arriving early at the game site, and keeping busy during the warm-up. With athletes having various needs and different arousal levels with which to contend, this study found that the theatrics of the pre match pep talk was deemed often inappropriate. Support for this in literature comes from Martens (1987) and Cox (1994), who discouraged the use of the traditional pep talk as a pre-game strategy to get the team ready to perform.

The study by Bloom, Durand-Bush and Salmela (1997) outlined the approach of coaches before competitive games. Reinforcing three or four of the most important points stressed in the previous week's preparation, the coaches adopted an even-tempered approach in their final address before a game.

Beyond the differences in style, however, there appears to be some universal truths in how coaches can help athletes perform at their best (Buckingham & Coffman, 1999). Athletes receive rewards for outstanding performance in the form of praise, acknowledgement of effort and recognition (Williams, 1998), where an enthusiastic pat on the back' is characteristic of compatible coach-athlete pair (Horne & Carron, 1985; Kenow & Williams, 1999). This coach-athlete relationship has the

potential to positively and negatively impact the athletes training processes, performance outcomes and personal lives (Butt, 1987; Coakley, 1990; Martens, 1987). Watt (1998) discovered that staff, particularly volunteers, cannot just be ordered about and must be involved in the decision making and in agreeing a course of action. An interpersonal relationship implies a two-way reciprocal set of interactions and thus, the athlete-coach relationship also impacts coaches with both limited and extensive professional experience (Ogilvie, 1994; Sands, 1984).

Another leadership paradigm that was proposed in the 1970s (Burns, 1978) and was further developed in the 1980s (Bass, 1985) was the transactional-transformational model of leadership. According to Burns (1978) transactional leadership is the traditional form of leadership in the context of organisations (Weese, 1994; Yukl, 1989). This involves leader-subordinate exchange relations in which the subordinate receives some reward related to lower-order needs in return for compliance with the leader's expectations (Doherty & Danylchuck, 1996). On the other hand, it is believed that transformational leaders will motivate subordinates to pursue higher-order goals by transforming commitment to higher ideals and values instead of self-interests in order to benefit the organisation (Doherty & Danylchuk, 1996; Sourcie, 1994; Yukl, 1989). Bass (1985) extended the transactional-transformational model on the basis of Burns' (1978) earlier efforts. According to Yukl (1989), Bass offered a more detailed theory of transformational leadership as well as further differentiating transformational leadership and transactional leadership. Bass (1985) viewed transformational leadership from the perspective of leaders' influence on their subordinates. Subordinates, influenced by transformational leaders, are motivated to do more than what they are originally expected to do (Yukl, 1989). Bass (1985) argued that transactional leadership and transformational leadership are

two distinct dimensions rather than opposite ends of one continuum (Doherty, & Danylchuk, 1996): they are distinct but closely related parts of leadership (Yukl, 1989; Weese, 1994). In addition, Bass (1985) pointed out that transformational leadership is the augmentation and extension of transactional leadership. According to Bass all leaders, to some extent, are considered transactional, exchanging rewards for performance, but some leaders are also transformational, going beyond simple leader-subordinate exchange relations (Doherty & Danylchuk, 1996). According to Doherty & Danylchuk (1996) Bass's argument was supported both empirically and theoretically by other researchers' studies.

In discussing the transformational leadership of sports teams coaches, Armstrong (2001) laid out four main characteristics of transformational leadership: ethical behaviour, sharing a vision and goals, improving performance through charismatic leadership and leading by example. This shows a simplified version of the components of transformational leadership provided by Bass (1985), which also has four elements – intellectual stimulation, individual consideration, inspirational leadership, and idealised influence (Doherty & Danylchuk, 1996; Weese, 1994). Intellectual stimulation refers to a leader's capability to stimulate his or her followers to be more curious and creative in thinking and problem solving (Doherty & Danylchuk, 1996; Weese, 1994). Individualised consideration involves relationships between leaders and followers on two dimensions: developmental orientation and individual orientation (Doherty & Danylchuk, 1996). In developmental orientation, leader's assign tasks that will enhance an individual's potential, abilities, and motivation (Doherty & Danylchuk, 1996). In individual orientation the leader emphasises mutual understanding and familiarity via one-on-one relations and two way communication (Doherty & Danylchuk, 1996). Inspirational leadership refers to

the idea that transformational leaders inspire and encourage subordinates to create greater emotional attachments to leaders and greater identification with leaders' visions of organisational goals (Doherty & Danylchuk, 1996; Weese, 1994).

Many researchers in the area of leadership have argued in support of effective leadership having a positive impact on behaviours within organisations, especially transformational leadership's role in improving many factors of organisations (Weese, 1994). The organisational behaviour and occupational psychology literatures have identified an important distinction between transactional and transformational leadership (Jones, 2002). Transactional leadership involves using rewards for good performance and tending to maintain existing work methods unless performance goals are not being achieved. Transformational leadership augments transactional leadership by developing, inspiring, and challenging the intellect of followers to go beyond their self-interest in the service of a higher collective purpose, mission, or vision (Arnold, Cooper, and Robinson, 1998; Burns, 1978). Although these two forms of leadership are not mutually exclusive, the distinction is an important one (Jones, 2002). Transactional leadership is more appropriate to relatively stable conditions in the performance environment, in which management by exception and a reliance on bureaucratic processes can prove functional (Bass, 1990). However, the legacy of transactional leadership can be over control and risk-aversion (Adair, 1990). In transformational leadership, the emphasis is on leaders with vision, creativity, and innovation who are capable of getting people to share their dreams (Jones, 2002). This form of leadership is effective and required in organisations that are responding to a rapidly changing environment (McKenna, 1994; Tichy and Devanna, 1986).

Research by Podsakoff, Mackenzie, Moorman, and Fetter (1990) showed that six transformational leadership behaviours (identifying and articulating a vision,

providing an appropriate model, fostering the acceptance of group goals, high performance expectations, individualised support, and intellectual stimulation) and one transactional leadership behaviour (contingent reward behaviour) predicted employee behaviours, but only through the employee attitudes of job satisfaction, organisational commitment, and trust in and loyalty to leaders. Thus, leadership behaviours do not impact directly on behaviours and subsequent performance in the model, but do have a direct effect on people's attitudes (Russell, 2001).

Research from the sport psychology literature suggests that coaching is an important leadership competency because it also has been found to have important effects on performers' attitudes (Smith & Smoll, 1997). As suggested by Jones (2002), leaders are the people responsible for the performance of organisations and teams; they get hired and fired based on their people's performance and they need to exhibit emotive aspects of themselves, which will inspire everyone to follow. Such a process makes leaders highly visible and exposed (Kakabadse, 1982, Kakabadse & Kakabadse, 1999). Overall the study of individual and group behaviour within the sport context has been a varied and enlightening endeavour (Sullivan & Kent, 2003).

Measurement of Leadership Behaviour

A number of instruments to measure leadership behaviour and effectiveness have been developed. The Leadership Behaviour Description Questionnaire (LBDQ) is a leadership instrument administered to athletes to assess the perceived task and relationship behaviours of their coaches. Developed at the Ohio State University it is used to measure the leadership dimensions of initiating structure (task behaviour) and consideration (relationship behaviour) (Case, 1987). Vos Strache (1979) used the

Leader Behaviour Description Questionnaire to examine aspects of House's (1971) Path-Goal Theory and Hersey and Blanchard's (1977) Situational Leadership Theory.

The Coaching Behaviour Scale for Sport (CBS-S) was created as a result of a comprehensive line of research (Gilbert & Jackson, 2004). This instrument allows athletes to evaluate a coach's effectiveness along seven dimensions of coaching: technical skills, competition strategies, personal rapport, physical training and planning, mental preparation, goal setting, and negative personal rapport. However, the CBS-S is similar to other questionnaires designed to measure coaching styles in that effective coaching is based on athlete perceptions and subjective evaluations of their coach (Gilbert & Jackson, 2004).

In an effort to address the limitations of relying on a single method for making judgements on coaching effectiveness, a Multidimensional Performance Appraisal Model was proposed by Cunningham and Dixon (2003). This new model includes objective and subjective methods for measuring coach effectiveness along six dimensions of coaching performance: athletic outcomes, academic outcomes, ethical behaviour, fiscal responsibility, recruit quality, and athlete satisfaction. Although proposed specifically for intercollegiate sport, the model provides a framework for evaluating coach effectiveness in any context (Gilbert & Jackson, 2004).

The Coaching Behaviour Assessment System (Smith, Smoll, & Hunt, 1977) was developed over several years by observing and recording behaviour of youth soccer coaches during practice and game sessions (Chelladurai & Riemer, 1998). Transcriptions of the behaviour descriptions were then content analysed and an initial set of scoring categories was developed. Subsequently, the system has been used to observe the behaviours of basketball, baseball and football coaches (Chelladurai & Riemer, 1998). Results indicated that the scoring system was sufficiently

comprehensive to incorporate the vast majority of coaching behaviours and that individual differences in behavioural patterns can be discerned. In addition the coding system could be used easily in field settings (Smith, Smoll, & Hunt, 1977). Coaching behaviours are categorised into 12 behavioural dimensions and classified as either reactive or spontaneous (Smith, Smoll, & Hunt, 1977a). Reactive behaviours include responses to desirable performances, reactions to mistakes or responses to misbehaviours, whereas spontaneous behaviours are either game related or game irrelevant (Chelladurai & Riemer, 1998). The actual leader behaviour is a measure of the frequencies with which the coach exhibits each of the twelve categories of leader behaviour during practice or game or both and record the observed behaviour into one of the 12 categories (Chelladurai & Riemer, 1998). Because the details provided regarding the data collection and analyses that led to the derivation of the twelve categories are meagre, it makes it difficult to evaluate not only the methodology and procedures employed but also the validity of the system (Chelladurai & Riemer, 1998).

Other leadership measurement instruments include the Scale of Athlete-Satisfaction (Chelladurai, Imamura, Yamaguchi, Oinuma, & Miyauchi, 1988) and the Medford Player-Coach Interaction Inventory (Thorpe & Medford, 1986). The Scale of Athlete-Satisfaction (SAS) assesses satisfaction with various aspects of leadership in athletics and the outcomes of athletic participation that can be associated with leadership. The SAS contains ten items related to leadership in athletics and the respondents are asked to indicate his/her satisfaction with the content of each item using a 7-point Likert scale. The Medford Player-Coach Interaction Inventory (MPCII) assesses positive interactions of the coach with his /her team. Subjects are

asked to respond to twenty three adjectives using a 7-point Likert scale. Two forms are available: a player's form and a coach's form.

The Leadership Scale for Sport (LSS) instrument, which was developed by Chelladurai and Saleh (1980) for measuring coaching behaviour in sport, provides data on athlete and coach perceptions of actual and preferred leadership style. It is composed of forty items and measures five coaching behaviours: training behaviour, autocratic behaviour, democratic behaviour, social support and rewarding behaviour. Autocratic behaviour limits the involvement of athletes and uses commands and punishments. Democratic behaviour allows participation of athletes in decision-making. Positive feedback compliments athletes for their performance and maintains their level of motivation. Social support provides for the welfare of the athletes and satisfies their inter-personal needs. Training and instruction advises on skills, techniques and tactics of the sport in order to improve the performance of athletes. Athletes completing the questionnaire determine preferred and actual behaviours, according to the coaching behaviours they prefer or according to the coaching behaviours they observe in their coach. Prescribed coaching behaviours are determined by the coaches completing the inventory relative to how they believe they coach. The scale has been used to measure a) athlete's preference for specific leader behaviours, b) athletes' perceptions of their coaches leader behaviours, and/or c) coaches' perceptions of their own behaviour (e.g., Chelladurai, 1984; Chelladurai & Carron, 1983; Chelladurai et al 1988; Chelladurai et al 1987; Dwyer & Fischer, 1988b; Garland & Barry, 1988; Gordon, 1986; Horne & Carron, 1985; Lieukkonen & Salminen, 1989; Riemer & Chelladurai, 1995; Robinson & Carron, 1982; Schlesman, 1987; Summers, 1983; Terry, 1984; Terry & Howe, 1984; Weiss & Friedrichs, 1986). The LSS has demonstrated validity for a variety of purposes, including to depict

perceptions of coaching style (e.g., Garland & Barry, 1988), preferences of coaching style (e.g., Schliesman, 1987), and self-perceptions of coaching style (e.g., Dwyer & Fischer, 1988b). Three different samples were used in the development of the Leadership Scale for Sport and the relative stability of the factor structure across the different samples confirmed its factorial validity with the interpretation of these factors establishing the content validity of the LSS (Laughlin & Laughlin, 1994). The Leadership Scale for Sport has since being revised by Zhang, Jenson and Mann (1997), with the number of dimensions being increased. The Revised Leadership Scale for Sport (RLSS) now composes sixty items measuring six behaviours, which includes the original five plus situational consideration behaviour. Situational consideration considers individual athletes maturity and skill level and reflects situational factors in behaviour. The RLSS has been used to examine differences between male and female coaches at different coaching levels (Jambor & Zhang, 1997).

Terry and Howe (1984) indicated that research in sport leadership has been retarded for two reasons, namely, the lack of sport specific measurement devices for quantifying leader behaviour and the use of leadership strategies from other fields of human endeavour to explain coaching behaviours. While these research limitations were identified some time ago, little headway has been made in the development of relevant tools for measuring leadership in sporting contexts (Baker, Yardley, & Cote, 2003).

Leadership Styles and Roles

The University of Iowa studies conducted by Kurt Lewin and his associates explored three leadership styles (Lewin & Lippitt, 1938). The autocratic style

described a leader who typically tended to centralise authority, dictate work methods, make unilateral decisions and limit employee participation. The democratic style described a leader who tended to involve employees in decision making, delegate authority, and encourage participation in deciding work methods and goals and use feedback as an opportunity for coaching employees. Finally, the laissez-faire style leader generally gave the group complete freedom to make decisions and complete the work in whatever way it saw fit. In researching which style was most effective, results from Lewin and associates seemed to indicate that the democratic style contributed to both good quantity and quality of work (Robbins & Coulter, 2002). Later studies of the autocratic and democratic showed mixed results. The democratic style sometimes produced higher performance levels than the autocratic style, but at other times, it produced lower or equal performance levels (Robbins & Coulter, 2002). More consistent results were found, however, when a measure of subordinate satisfaction levels were used. Group member's satisfaction levels were also generally higher under a democratic leader than under an autocratic one (Bass, 1981).

With regard to the coach's role in developing champions, Dieffenbach, Gould, & Moffett (2002) researched the important roles and areas of influence that coaches were found to have on the development of an elite group of U.S Olympic champions. In the study, some of the most successful U.S. Olympic champions, representing nine different sports, participated in confidential interviews. Overall, six main areas of coach influence were emphasized by these Olympic champions: coach-athlete relationship: competent coaching style: multiple coach goals: coach-created motivational climate: coach support: and coach teaching.

A quality coach-athlete relationship was characterized by mutual trust, confidence in each other's abilities, good communication (especially good listening skills) and a sense of collaboration or working together.

A knowledgeable, competent coaching style and characteristics included a balance between strictness and kindness, personal dedication, passion for the sport and coaching, discipline, enthusiasm, organisation and displaying a professional coaching style with parents and athletes.

Multiple coach goals for athletes were described as a situation where coaches have definite goals for the athletes they coached. The three goal focus categories included fun, development and winning.

A coach-created, individualised, motivational climate was a situation where coaches used many motivational techniques. One was where coaches exposed athletes to elite achievers. This allowed athletes to see these elite athletes as regular people and to recognise that the same status was possible for them. Others created a motivational climate by pushing the athlete, providing a positive environment with opportunities and appropriate challenges. Another coach indicated that he challenged athletes in a fun way and let them rise to the challenge. The motivational techniques coaches used were individualised to meet the needs of each particular athlete.

Coach Support was where coaches simultaneously provided athletes with unconditional support that did not pressurise them. Coaches demonstrated support by backing athletes' decisions and goals, showing pride in their athletes, being present at practice, expressing concern about athlete's well-being after a loss, bragging about their athlete's accomplishments and being there emotionally for their athletes.

Coach teaching involved the coach teaching, directly and indirectly, the various skills and characteristics that athletes' thought were important to their

achievement of elite accomplishments. Coaches emphasised high expectations and standards that athletes were expected to achieve and helped athletes realise that the expectations and standards were attainable. They also emphasised and expected hard work and self-discipline in training. Athletes received positive and constructive feedback and criticism from their coaches on how to correct mistakes and improve skills. Coaches were also credited with teaching athletes how to keep success and disappointments in perspective and how to balance other aspects of life such as academic and career goals with striving for personal accomplishment.

McCann (2005) looks at the role of the coach's personality in shaping the way coaches interact with their athletes. In his article entitled 'What is your coaching personality, and how does it impact the job you do?' he examines the four different coaching types that are derived from a combination of subscales of one of the most frequently used measures of personality in team and business settings. The first type is the 'stabilizer' who is very good at seeing and understanding the facts of the situation, but needs to see evidence before changing. However the 'stabilizer' can become rigid and inflexible under pressure, unwilling to change even though it is obvious to everyone around him or her that a change is necessary. The 'trouble-shooter' style is an excellent observer of detail and technique and likes to try new things. A big picture coach is the 'visionary'. This style enjoys thinking and acting in new and creative ways and admires breakthroughs in coaching. They can revolutionize coaching technique in their sport. While good with the big picture, the 'visionary' may be unable to accomplish critical little things that matter at big competitions. The visionary may be seen as a dreamer, not grounded in the details, which can erode athlete's confidence. The 'catalyst' style is creative, energetic; gets athlete's excited about a vision and has a contagious intensity and passion for their sport. Can be a very

motivational speaker or simply have a powerful impact on one athlete. However, the ‘catalyst’ can become overly emotional under pressure, when cool and calm is called for. The catalyst can get pulled into people issues, when staying focused on the competition would be more useful. McCann goes on to state that most excellent coaches understand that personality issues with athletes are always a two-way street and that the very best coaches are aware of their own needs, preferences and the impression they create upon others. (McCann, 2005).

Sabock (1985) also categorizes five types of sports coaches, where some might fit into more than one category in varying degrees. The ‘idealist’ is the coach who enjoys coaching and has a very deep conviction about the value of the athlete and fair competition, while the ‘rolling stones’ are the ones who move from athlete to athlete or team to team without any apparent goal in sight. ‘Climbers’ are coaches whose only goal is to reach the top in their coaching profession. They possess little or no ethics and will do anything to win. ‘Ambitious’ coaches are a combination of the above while the final category ‘hangers on’ are coaches who overstay their welcome. They tend to remain in office; afraid they will miss out despite the fact that they are no longer enjoying it. While the styles of leadership may vary, research has shown that there is no good or bad style, just appropriate and inappropriate ones (Sabock, 1985).

In a case study involving a youth ice hockey coach Wilcox & Trudel (1998) found that winning and player development were the two central principals of the coach’s belief system. While according to Gilbert & Trudel, (2004) some coaches may place a greater value on winning and technical skill development, while other coaches may be more concerned with fun and social development. In discussing the interpersonal relationship between coach and athlete Jowett and Ntoumanis (2003)

refer to findings by Hemery's (1996) that demonstrate the significant role of the coach in an athlete's development. Interviews by Hemery (1996) with some of the greatest athletes in the world revealed that 11 % of them were not sure if they could have reached the level they had without their coach, 18 % said that they could have reached the top, but it would have taken much longer and finally, 68 % reported that they simply could not have made it without the support they received from their coach.

Coaches have been encouraged to adhere to a philosophy of coaching that not only values physical excellence but also encourages athletes to develop in a way that will ensure a balanced integrated individual (Dubin, 1990). The close relationships that athletes develop with coaches suggest that coaches often become role models for athletes and ideally a role model who will foster the democratic principals of society (Kanaby, 1990). The most important successful factor of a coach is to help athletes to improve their athletic skill in a wide range of tasks from sequential development and mastery of basic skills for beginners, to the more specialized physical, technical, tactical and psychological preparation of elite athletes (Martens, 1987). The type of leadership behaviour displayed by the coach can have a significant effect on the performance and psychological well being of the athlete (Horn, 1993).

While examples of successful coach styles can be identified across a range of sports, Silva and Stevens (2002) have listed a number of key roles of the elite coach in the development of talent. Among these are that elite athletes should be treated with mutual respect by coaches who should stimulate and motivate athletes to excel beyond their perceived capabilities. Training sessions should be innovative, enjoyable and informative and coaches must understand and respect their athlete's goals and aspirations, both inside and outside the sport. Coaches are encouraged to understand that athletes need to enjoy their sport if they are to perform well and the effective

coach should know how to set learning conditions that enhance the chances of their athletes achieving “flow” experiences. Top coaches should have a genuine love and devotion for what they are doing and should play an important role during competition. Elite coaches should practice maintaining emotional control during sporting contests and should understand the importance of incorporating mental training techniques into their athletes. Coaches should be aware that research on talent development discounts the popular notion that outstanding achievement is innate or genetically inborn. They conclude that the coach, as the educated director and with the team striving to reach a defined goal, drives the team intelligently towards that goal.

Leadership roles are a subset of the managerial roles studied by Henry Mintzberg (1973). A role in this context is an expected set of activities or behaviours stemming from one’s job (Dubrin, 2001). Dubrin (2001) outlines nine roles that researchers have classified as part of the leadership function of management. The figurehead is one who spends some part of their time engaging in ceremonial activities. The spokespersons emphasis is on formally reporting to individuals and groups outside the manager’s direct organisational unit. The negotiator tries to make deals with others for needed resources. The effective leader takes the time to coach team members. The team builder takes on the role of building an effective team. The team player, related to team builder, sees him or herself as part of the team. The technical problem solver plays a particularly important role in helping team members solve technical problems. The entrepreneur takes responsibility for suggesting innovative ideas. Finally, the strategic planner, as a top level manager, engages in strategic planning, usually assisted by input from others throughout the organisation.

A common thread in the leadership roles of a manager is that the managerial leader in some ways inspires or influences others (Dubrin, 2001). An analysis in the

Harvard Business Review concluded that the most basic role for corporate leaders is to release the human spirit that makes initiative, creativity, and entrepreneurship possible (Bartlett & Ghosal, 1995). An important practical implication is that managers at every level can exercise leadership (Dubrin, 2001). Effective coaching behaviour varies across specific contexts as the characteristics of the athletes and the prescribed situation change (Chelladurai, 1978). Similarly, specific behaviour by the coach may be more productive for certain outcomes than others (Tinning, 1982). If a coach adapts his or her behaviour to comply with the athletes' preferred behaviour, the athlete may be more readily inclined to repay the coach through an improved performance (Chelladurai & Carron, 1978). In line with this Feltz, Chase, Moritz & Sullivan (1999) found that more confident coaches displayed more use of praise and encouragement.

The concept of personality arises from the fascinating spectrum of human individuality, where it's observed that people differ meaningfully in the ways they customarily think, feel and act (Passer & Smith, 2001). One group of theorists noted, each of us are in certain respects, like all other people, like some other people, and like no other person, who has lived in the past or will exist in the future (Kluckhohn & Murray, 1953). The concept of personality also rests on the observation that people seem to behave somewhat consistently over time and across different situations, and from this perceived consistency comes the notion of "personality traits" that characterise individuals' customary ways of responding to their world (Passer & Smith, 2001). Although only modest stability is found from childhood personality to adult personality, as adulthood approaches consistency becomes greater (Caspi & Roberts, 1999.) Self-esteem is related to many positive behaviours and life outcomes. (Passer & Smith, 2001). Men and women are found not to differ in overall level of

self-esteem (Feingold, 1994). In the development of self-esteem, one study showed that when children with low self-esteem were exposed to highly supportive youth coaches who gave them much positive reinforcement and encouragement, the children's self-esteem increased significantly over the course of the sport season (Smoll, Smith, Barnett & Ecerett, 1993).

Humour is a crucial part of every day that can be a simple response to comedy, a cathartic mood-lifter, or a social vocalization that binds individual's together (Province, 2000). Humour has been seen to aid in the establishment of developing relationships (Weaver & Cotrell, 1988) and in creating an open and relaxed atmosphere (Gilliland & Mauritsen, 1971). Studies have examined the effectiveness of teachers who use humour (Grauner, 1966, 1967), student learning outcomes (Kaplan & Pascoe, 1977; Nussbaum, Comadena, & Holladay, 1985; Terry & Woods, 1975) and teacher evaluations (Bryant, Comisky, Crane, & Zillmand, 1980). These studies have shown that teachers who use humour in their classroom are viewed by the students as very approachable, are able to develop a positive rapport with students and seem to be evaluated highly (Neuliep, 1991). Furthermore, students have identified humour as an important teacher trait (Weaver & Cotrell, 1988). One of the few studies which researched the use of humour in coaching examined college volleyball players' perceptions of their coaches' humour (Burke, Peterson, and Nix, 1995). In this study, a significant relationship between the player's perceptions of their coaches and liking the coaches was illustrated, and that volleyball players liked their coaches more if the players felt their coaches had a sense of humour (Burke, Peterson, and Nix, 1995).

Coaching Efficacy

In studies of both coaches and athletes various personal attributes have been investigated by researchers in attempts to explain and predict phenomena in sport. Results from these studies have identified self-efficacy as one attribute that has been found in many settings to influence behaviour (Sullivan & Kent, 2003). Bandura's (1986) construct of self-efficacy is a component of his social cognitive theory, a broad based explanation of human motivations, behaviours, and attitudes within the context of individual and environmental factors. Sullivan and Kent (2003) refer to self-efficacy as the situation-specific belief that one can act to successfully produce a given outcome. Bandura (1986) outlines six primary sources of self-efficacy; mastery experience, vicarious experiences, imaginable experiences, verbal persuasion, physiological arousal and emotional arousal. Mastery experience has been repeatedly shown to be the most influential of all these sources (Bandura, 1997; Feltz & Chase, 1998). According to Bandura (1997) behaviours such as success, effort and persistence, in addition to thought patterns such as goal setting and attributions are influenced by self-efficacy. This construct has obvious practical and theoretical value within sport and is supported by a rich research tradition within sport and physical activity, including extrapolations to specific roles and sporting teams (cf Feltz & Chase, 1998).

Coaching efficacy has been defined as "the extent to which coaches believe they have the capacity to affect the learning and performance of their athletes" (Feltz, Chase, Moritz, & Sullivan, 1999, p. 765). Coaching efficacy was introduced to the sport literature by Feltz, Chase, Moritz and Sullivan (1999). They devised a model of coaching efficacy based upon Denham and Michael's (1981) model of teacher efficacy and Bandura's (1977) self efficacy theory. Their concept of coaching efficacy

included four dimensions: game strategy, motivation, technique and character building efficacy. Strategy efficacy refers to the confidence displayed by coaches during competition and their ability to lead the team or group to a successful performance. Motivation efficacy refers to the confidence coaches have in their ability to alter the psychological states and abilities of athletes. Teaching technique efficacy deals with the amount of confidence coaches have in their own diagnostic and teaching skills. Finally, character building efficacy involves coaches' perception of their ability to influence their athletes' personal maturation and positive sporting attitudes. Feltz, Chase, Moritz, & Sullivan (1999) found support for a variety of the proposed relationships which were specifically mentioned in the model. These relationships included coaching experience/preparation, prior success, perceived skill of athletes and school/community support. In a study of 517 high school coaches, they found that previous experience, success and community support were significant predictors of coaching efficacy, particularly game strategy and motivation efficacy.

Further support was received from Malete & Feltz, (2001) following a study on coaches who underwent a coaching training programme. Results from the study found coaching efficacy to be greatly improved following the programme. Thirty six coaches participated in the Programme for Athletic Coaches Education (P.A.C.E.), a voluntary programme designed to increase coach's knowledge in a variety of areas in accordance with national standards. The efficacy responses of these coaches were compared with 24 coaches who had not attended any formal education programme. Statistical analysis found a significant difference in coaching efficacy both pre-test to post-test within the educated coaches and between those coaches and the control groups. Specifically, post education confidence scores on all four sub-scales were

significantly greater than pre educated scores, as well as significantly greater than the control group's scores.

According to Singer, Hausenblas, & Janelle, (2001) a lack of research exists with regard to the examination of the roles that coaches play in building either the efficacy beliefs of their athletes/teams, or the efficacy beliefs of coaches themselves to carry out their roles. However, some research examining the strategies that coaches use most to develop efficacy in athletes exists (Gould, Hodge, Peterson, & Giannini, 1989; Weinberg, Grove, & Jackson, 1992; Weinberg & Jackson, 1990). At the elite level, intercollegiate wrestling coaches and U.S. national coaches reported encouraging positive as opposed to negative self-talk, modelling confidence themselves, using instruction and drills to ensure performance improvements and using rewarding statements liberally to be most effective ways to enhance self-efficacy in their athletes (Gould, Hodge, Peterson, & Giannini, 1989). High school and age group coaches reported using similar techniques to enhance self-efficacy. They also reported using verbal persuasion as an efficacy-enhancing technique (Weinberg, Grove, & Jackson, 1992; Weinberg & Jackson, 1990). These strategies (i.e. performance accomplishments, vicarious experiences (modelling) verbal and self-persuasion) are all based on the major sources of efficacy information as identified in Bandura's (1977) theory. Observations of coaches were not conducted to determine the actual use of the self-efficacy technique or whether these techniques were effective in enhancing the confidence of their athletes and improving performance (Singer, Hausenblas, & Janelle, 2001). When U.S. Olympic athletes were asked to list the best coaching actions to enhance athletes' performance, providing support and confidence was ranked second (Gould, Hodge, Peterson, & Giannini, 1989).

Chase, Lirgg, and Feltz (1997) specifically examined the relationship between coaches' efficacy for their teams and team performance. Coaches of four intercollegiate women's basketball teams were queried before their games as to their confidence in their team's ability to perform specific basketball skills. Coaches were also asked to rate the importance they placed on these skills, the perceived control they felt over the outcome and opponent ability (Singer, Hausenblas, & Janelle, 2001). Results showed that coaches who had higher efficacy beliefs for their teams perceived themselves to have higher control over their teams' outcomes. Also, the higher the perceived ability of the opponent, the lower the coach's efficacy in his/her team.

A second purpose of the study was to determine what coaches used as a basis in forming efficacy judgements of their teams. Inductive content analysis was used to identify both high and low efficacy sources. Factors that resulted in high efficacy expectations included good past game and practice performances, favourable comparison with opponents, return of an injured player and hearing negative comments from players on the opposing team. Coaches also identified good performance preparation by themselves, their staff, or their players as contributing to high efficacy expectations in their teams. One interesting finding was that many coaches cited past poor performance as a reason they were confident in their teams because they believed in their team's ability to bounce back. Low-efficacy factors were similar to high-efficacy factors: past poor game and practice performance, injured or tired players and comparisons to better opponents. Other factors that contributed to coaches' low efficacy expectation for their team included their perceptions that the players themselves had low efficacy and also the team's inconsistent prior performances. The researchers reasoned that that if indeed players

are aware of the efficacy expectations coaches have for their teams, a situation occurs similar to the 'Pygmalion Effect'. According to this effect, a coach first forms expectations of his or her team. The coach then acts in ways that are consistent with those expectations. Athletes then perceive and interpret those actions and respond in a way that reinforces the original expectations. If this happens, coaches with low-efficacy expectations for their teams may inadvertently contribute to low player efficacy and those who believe their teams are capable may contribute to high efficacy (Singer, Hausenblas, & Janelle, 2001).

In addition to the coaching efficacy model, Feltz, Chase, Moritz, and Sullivan (1999) developed the Coaching Efficacy Scale (CES) to measure the multidimensional aspects of coaching efficacy. They concluded that the psychometric properties of the CES were sound. The confirmatory factor analysis supported the four factor solution structure and marginal support was found for one overall coaching efficacy factor using various global fit indices. Feltz, Chase, Moritz, and Sullivan (1999) also tested the proposed sources and outcomes of CES. These tests identified that past winning percentage, years in coaching, perceived team ability, community support, and parental support were significant predictors of coaching efficacy, with coaching experience and community support been the most important sources. They also found that higher efficacy coaches had significantly higher winning percentages, greater player satisfaction, used more praise and encouragement behaviours, and used less instructional and organizational behaviour than lower efficacy coaches.

Sullivan & Kent (2003) carried out research that examined the relationship between the efficacy of intercollegiate coaches and their leadership style. Specific predications between the multidimensional nature of efficacy and leadership were made. An international sample of 224 coaches (165 male, 58 female) completed Feltz,

Chase, Moritz, & Sullivan's (1999) Coaching Efficacy Scale, and the Leadership Scale for Sports (Chelladurai & Saleh, 1980). Two of the three regression models were significant, with coaching efficacy accounting for up to 42% of the variance in leadership style. Motivation and technique efficacy served as significant predictors for both models. These results are in accordance with the frameworks of coaching efficacy and leadership within sport and offer further validity to the construct of coaching efficacy (Sullivan & Kent, 2003). With the growing support for coaching efficacy as a concept and the CES as a scale, the stage is set for much conceptual and applied research (Sullivan & Kent, 2003).

Coach Education

Life activities such as education, experience as a leader and mentoring, can help people prepare for a comprehensive process such as leadership. (Dubrin, 2001). Gould, Gianini, Krane and Hodge (1990) investigating the area of expert coaching, surveyed a number of expert American coaches to assess issues such as coach education, coach-development and the use of psychological strategies (Gould, Giannini, Krane, and Hodge, 1990; Gould, Hodge, Peterson, and Giannini, 1989; Gould, Hodge, Peterson, and Petlichkoff, 1987). A significant finding from this study was that coaches believed there were no definite set of concepts or principal's to follow in their profession. From observing the workings of other successful coaches, and through their own coaching experience, was how these coaches acquired most of their knowledge. (Gould Gianini, Krane and Hodge, 1990).

In a study examining the knowledge of expert team sport coaches Salmela (1995) found that their early sporting and novice coaching experiences were instrumental in shaping their future operational tactics in training and competition.

Bloom, Salmela and Schinke (1995) investigated the methods for training future coaches and found that high-level coaches believed there was a need for a more formalised mentoring programme. High levels of youth participation in amateur sport (Sport Canada, 1994; Weiss & Gould, 1986) and the increased role of amateur coaches in youth development (Ross, Dotson, Gilbert, & Katz, 1985; Telama, 1982; Trudel, Cote, & Bernard, 1996) have resulted in a global expansion of coach education programmes (Campbell, 1993). The effectiveness of using many course tutors to train a large number of coaches in different sports has not been evaluated and their effectiveness has been questioned. (Douge & Hastie, 1993; Siedentop, 1990; Woodman, 1993). The needs of amateur coaches are also generally neglected in the design of courses (Douge & Hastie, 1993; Haslam, 1990; Houseorth, Davis & Dobbs, 1990). This further illustrates that evaluation of coach education programmes has become one of the most pressing issues in sport science research (Douge & Hastie, 1993; Woodman, 1993).

Although large scale coach education programmes are designed with specific time and content guidelines (Gilbert & Trudel, 1999), consistency in course delivery may vary widely among instructors (Campbell, 1993). This issue has been addressed by coaching associations through the development of structured resource packets and the training of course conductors (Coaching Association of Canada (CAC), 1989). These measures, however, do not guarantee that any two groups of coaches graduating from the same programme will have been exposed to the same material (Gilbert & Trudel, 1999). While there is no single authoritative model for showing coaching effectiveness (Claxton, 1988; Claxton & Lacy, 1986; Douge & Hastie, 1993; Gould, Giannini, Krane, & Hodge, 1990), the problems found in sport science are similar to that found in the education literature (Gilbert & Trudel, 1999).

In the education literature, development of reliable measures of teacher effectiveness has long been advocated (Isaac & Michael, 1981). The only consensus to emerge from these efforts is that there is no across-the-board effective teacher (Gilbert & Trudel, 1999). Although Feltz, Chase, Moritz, and Sullivan (1999) assessed coaching experience in terms of years in coaching; they did not assess the extent of coaching preparation. Coach education/preparation is a source of efficacy information that is based on personal mastery experiences (Malete & Feltz, 2000). According to Malete & Feltz (2000) an effective, well-designed coach education program should enhance the level of coaching efficacy, especially at the novice level where previous experience has been minimal. In the teacher education literature, studies have found teacher efficacy to be influenced by training and experience (Ashton, 1984; Hoy & Woolfolk, 1990). In support, Corcoran and Feltz (1993) demonstrated that coaches who received educational information on a particular topic had higher levels of efficacy about using that information in their coaching than coaches who did not receive this training. The domain of teaching has been rationalised (Dunkin & Biddle, 1974), and Csikszentmihalyi, Rathunde, and Whalen (1993) propose that whenever a domain is structured it becomes easier to measure performance in it and therefore to recognise promising talent.

Coaching preparation may not be as formal as teacher certification programs, but some coaches may prepare more for their coaching job than others by taking courses, going to workshops and clinics, reading coaching manuals and assisting a head coach before taking their own head coaching position (Malete & Feltz, 2000). In addition, a study carried out by Malete and Feltz (2000) investigated the effect of successful completion of a coach education programme on the level of coach efficacy compared to a no education control group. Despite the limitations of not having a

retention test to determine if results were temporal or if the effect could be maintained across a coaching season, the findings suggest that coaching education programmes can influence the coaching efficacy beliefs of coaches. This in turn has implications for the content of coaching education programmes (Malete & Feltz, 2000). Programmes that use approaches to help increase confidence in coaching should produce higher confident coaches (Malete & Feltz, 2000). In examining coaches' previous athletic participation, coaching assignments and education, Curtin (1977) discovered that these experiences did not affect player perceptions, suggesting that the value of previous coaching assignments is over rated. However, Weiss & Friedrichs (1986) found that in addition to success, coaching experience was related to feedback. Coaches with less experience offered more rewards and social support which were related to greater athlete satisfaction (Solomon, Dimarco, Ohlson, & Reece, 1998).

Sinclair and Vealey (1989) studied a sample of elite field hockey teams and found that the high expectancy athletes received more specific and individual instruction, while the low expectancy athletes were issued greater amounts of evaluate feedback. A study by Solomon, Dimarco, Ohlson, and Reece (1998) supports these findings by Sinclair and Vealey (1989). The study also supports findings by Solomon, Stregel, Eliot, Neon, Maas, & Wayda (1996) that demonstrate coaches do provide high expectancy athletes with more instructional and praise feedback than their low expectancy team-mates, regardless of years of coaching experience. This refutes previous research (e.g. Horn, 1984). Coaches can enhance credibility by offering explanations of feedback instead of relying on their reputations to provide reasons for athletes to follow instructions (Solomon, Dimarco, Ohlson, & Reece, 1998). Coaches are often hired for positions based on their athletic and coaching backgrounds, which can include years of coaching experience (Solomon, Dimarco, Ohlson, & Reece,

1998). Contrary to this, Weiss and Friedrichs (1986) discovered that athletes preferred less experienced coaches.

A pocket of research has recently emerged questioning the effectiveness of coach education programs and the theories, if any, applied in their design (Douge & Hastie, 1993; Gilbert & Trudel, 1999; Siedentrop, 1990; Woodman, 1993). A consistent finding from this research highlights the value of experience in coach development. The Gaelic Athletic Association (GAA) Coach Education Programme comprises of the Foundation Level (underage/juvenile coaches), Level 1 (adult club coaches), and Level 2 (senior county coaches). These courses cater for both hurling and Gaelic football coaches. They are administered by trained personnel in an effort to develop the skills of coaching behaviour and apply the principals of good coaching in the proper manner. It is hypothesised that some county senior hurling coaches have never undertaken any of these courses and that a combination of playing experience, early experience of coaching and working under or alongside other coaches forms the basis for the shaping of most coaching styles and methods. In Ireland most sports organisations run coach education programmes which cater for the particular levels within their respective sport. In particular, field sports, such as rugby, soccer and Gaelic games, operate programmes from the very basic (underage level) right up to the top level (e.g. Senior Inter-County Coach). At the same time many private organisations and academic intuitions run sport-specific courses and provide facilities to enable coaches to improve their knowledge and skills.

Those involved in coaching are often referred to as being part of the coaching profession. Woodman (1993) claims that coaching is rapidly evolving as a profession. Peter Davis (2003), Osco's Director of Coaching and Sports Sciences, questions the fact of it being termed a profession in the true sense like a teacher or doctor.

According to Davis (2003) there is no consistent way to educate, develop or train coaches, no mandatory requirements or minimal standards of preparation and very low ratios of practicing coaches to formally educated coaches. While Davis's argument is mainly referring to coaches within the U.S., it is hypothesised that much of what he is saying could be true of the coach education system in Ireland. With the amateur ethos applying to Gaelic games (hurling and football), sports groups within the organisation are dependent on volunteer workers, particularly in the area of coaching. While the GAA advocate their coaches having accreditation at the different levels in order to coach, because of the demand and lack of suitably qualified coaches this is difficult to enforce to the letter of the law. Davis in the article 'Why Coaches Education?' proposes that coach education programmes need to be consistent and of high quality in order to move coaching to a higher standard.

GAA Coaching

Much discussion has centered on the leadership and coaching behaviours of Gaelic Games coaches in both hurling and football. The debate includes whether successful hurlers and footballers are born or made or because of the high skill level of both codes, whether teaching technical competence promotes success and satisfaction. Since the first National Coaching Course, which was held in Gormanstown in 1964, the GAA has moved towards more structured coaching methods. In recent years the duration of time spent coaching and preparing teams has lengthened. While at one time teams would begin training four to five weeks prior to the championship, it is the norm now for teams to commence in the months of October or November of the previous year. Confusion often exists with GAA coaches with regard to the difference between training and coaching. Lennon (1994) describes training as aimed at the

acquisition and maintenance of fitness while coaching is a method of teaching skills and learning a variety of tactics involving the linking of basic skills.

One of the important learning points from sport relates to the countless examples of teams with reputedly the best individual talent and ability which have fallen short of performance expectations (Jones, 2002). There are lots of kinds of teams and each has its own unique potential to fall on its face (Robbins and Finley, 1998). High performing teams do not necessarily have the best individual talent and ability available, which means that other variables such as motivation, respect, responsibility, and communication, are of paramount importance (Jones, 2002). Coaching is an opportunity for those that enjoy a challenge (Jones, Wells, Peters & Johnson, 1993) and this study attempts to investigate the leadership and coaching behaviours of those that are involved in that challenge at inter-county senior hurling grade.

Chapter 3

Research Methodology

RESEARCH METHODOLOGY

Purpose of Study

The purpose of the study is to examine the leadership and coaching behaviours of inter-county senior hurling coaches. Leadership is one of the key features of sports operations on the field of play, and also the key to successful management of sports practice off the field (Watt, 1998).

The following hypothesis will be tested:

- There is no significant relationship between the dimensions of leadership behaviour and coaching experience of high-level hurling coaches.
- There is no significant relationship between the dimensions of leadership behaviour and age factor of high-level hurling coaches.
- There is no significant relationship between the dimensions of leadership behaviour and playing experience of high-level hurling coaches.
- There is no significant relationship between the dimensions of leadership behaviour and coach education of high-level hurling coaches.

Research Question

- Are there commonalities amongst high-level hurling coaches with regard to motives, roles and responsibilities of coaching?

Procedures

The subjects for the study were high-level hurling coaches. High-level for the purpose of the study were coaches that had served as an inter-county coach at senior

inter-county level. A coach in this instance refers to the person who has full responsibility for all coaching inputs and may be a current or lapsed coach, and encompasses the title of manager. The study was carried out using qualitative and quantitative methods. A structured demographic questionnaire (Appendix 1) was used to determine the coach's age range, coaching experiences, playing experiences, coach education and development. From a structured list of options, the subjects ranked in order their motives for coaching at county senior hurling level, roles and responsibilities as a coach, main elements of the coaching role and criteria for measuring success.

The Revised Leadership Scale for Sport (Zhang, Jenson, and Mann, 1997) was utilised to measure the coach's perception of their own behaviour (Appendix 2). The sixty leadership items contained in the RLSS are distributed among six distinct categories of coaching behaviours that are appropriately relevant for coaches. These different dimensions include decision style factors (Democratic Behaviour: Autocratic Behaviour), motivational factors (Positive Feedback: Social Support), direct task factors (Training and Instruction), and a situational factor (Situation Consideration). The RLSS directions asked participants to answer each item with an honest and spontaneous response on a five point Likert scale. Each item was preceded by the phrase "As a Inter-County Hurling Coach at Senior grade I..." There were quantifications and frequency related wordings for each choice on the scale as follows: Always = 100% of the time, Often = 75% of the time, Occasionally = 50% of the time, Seldom = 25% of the time, and Never = 0% of the time.

The mail packages, which included a letter of introduction (Appendix 3), the two questionnaires, a letter of informed consent (Appendix 4), and a self-addressed stamped enveloped, were sent by post to fifty five subjects (n = 55). In the event there

was a 64% response rate (n = 35). The letter of introduction described the course and study being undertaken, the voluntary nature of participation, and an invitation to partake as a respondent in the research. The Revised Leadership Scale for Sport (RLSS) questionnaires were individually coded, each code representative of a coach's name. The responses to questions 1 to 12 (Democratic Behaviour), 13 to 24 (Positive Feedback), 25 to 34 (Training & Instruction), 35 to 44 (Situational Consideration), 45 to 52 (Social Support), and 53 to 60 (Autocratic Behaviour) of the RLSS were summed and averaged to obtain each dependent variable score.

Analysis

The Statistical Package for Social Science (SPSS) version 15.0 was used for analysis. Respondents were grouped according to age, club coaching experience, inter-county coaching experience, number of inter-county team's coached, inter-county playing experience and Gaelic Athletic Association (GAA) coach education received. The responses to each of the sub-scales (i.e. Democratic Behaviour, Positive Feedback, Training & Instruction, Situation Consideration, Social Support, and Autocratic Behaviour) of The Revised Leadership Scale for Sport (RLSS) were summed and averaged to obtain each dependent variable score. For these analyses smaller values indicated more positive perceptions of the particular behaviour being measured. The different outcome measures were investigated using analysis of variance (ANOVA). The level of statistical significance accepted for this study is $p < 0.05$.

Limitations

- The study was restricted by the population size of subjects who coach at county senior hurling grade.
- In common with a lot of surveys of this nature there is a possible problem with non response bias. In this instance 36% of the subjects (n = 20) did not participate in the survey. The coaches who did not respond may be different from those that did on some or all of the outcome measures.
- The Revised Leadership Scale for Sport (RLSS) is an American version. Some words on this version had to be adapted for cultural reasons

Chapter 4

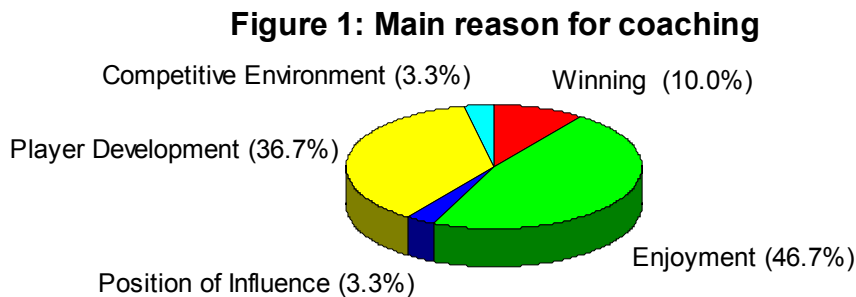
Results

RESULTS

Coach Profile

A total of thirty five (n = 35) male coaches participated in this study. The study attempted a census of the whole population of inter-county senior hurling head-coaches. In the event 64% of the individuals targeted responded. In the analysis, this 64% response rate is treated as a random sample. Descriptive statistics show that 63% of the subjects were more than 50 years of age with less than 3 % in the under 35 years of age range.

The principal motivations of head-coaches involved at county senior hurling grade are displayed in Figure 1.



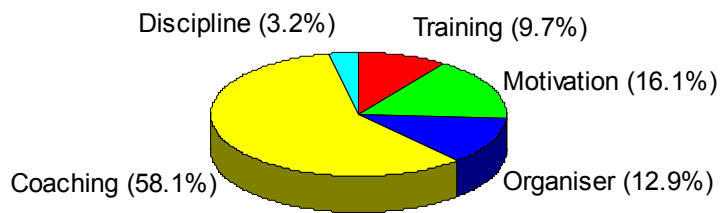
Thirty coaches submitted valid responses. Fourteen coaches identified enjoyment (46.7%) and eleven identified player development (36.7%) as the main reasons for involvement in inter-county coaching. The list of frequencies are displayed in Table 1.

Table 1

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Winning	3	8.6	10.0	10.0
Being in a position of influence	1	2.9	3.3	13.3
Enjoyment	14	40.0	46.7	60.0
Player Development	11	31.4	36.7	96.7
Competitive Environment	1	2.9	3.3	100.0
Total	30	85.7	100.0	
Missing				
System	5	14.3		
Total	35	100.0		

The main roles of responsibility identified by coaches are displayed in Figure 2.

Figure 2: Main role of the coach



Thirty one coaches submitted valid responses. Coaching was identified by eighteen coaches (58.1%) as the main role of the coach. Full list of frequencies are displayed in Table 2.

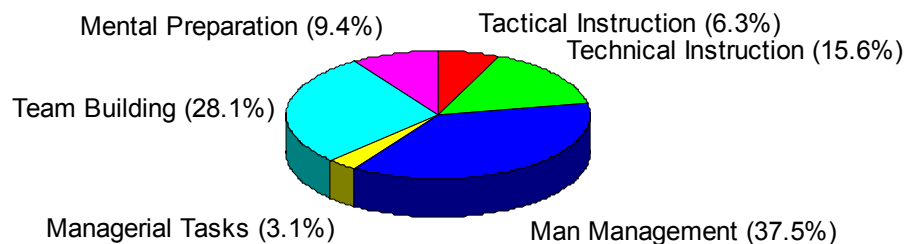
Table 2

Roles of Responsibility of the Head Coach

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Training	3	8.6	9.7	9.7
	Motivation	5	14.3	16.1	25.8
	Organiser	4	11.4	12.9	38.7
	Coaching	18	51.4	58.1	96.8
	Discipline	1	2.9	3.2	100.0
	Total	31	88.6	100.0	
Missing	System	4	11.4		
Total		35	100.0		

The most important elements of the coaching role are identified by coaches and displayed in Figure 3.

Figure 3: Elements of the coaching role



Valid responses were received from thirty two coaches. Man management was identified by twelve coaches (37.5%) as the most important element of the coaching role. The full list of results are displayed in Table 3.

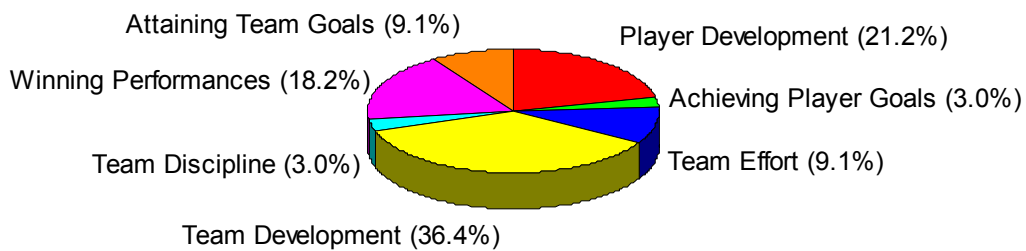
Table 3

Importance of elements of the coaching role

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Team Buliding	9	25.7	28.1	28.1
	Mental Preparation	3	8.6	9.4	37.5
	Technical Instruction	5	14.3	15.6	53.1
	Tactical Instruction	2	5.7	6.3	59.4
	Managerial Tasks	1	2.9	3.1	62.5
	Man Management	12	34.3	37.5	100.0
	Total	32	91.4	100.0	
Missing	System	3	8.6		
Total		35	100.0		

The main criteria by which coach’s judge and measure their own success are displayed in Figure 4.

Figure 4: Measurement of success



A total of thirty three coaches submitted valid responses. Team development was identified by twelve coaches (36.4%) as the main criteria for measuring success. The full list is displayed in Table 4.

Table 4

How do you judge your success

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Player Development	7	20.0	21.2	21.2
	Team Development	12	34.3	36.4	57.6
	Winning Performances	6	17.1	18.2	75.8
	Achieving Player Goals	1	2.9	3.0	78.8
	Attaining Team Goals	3	8.6	9.1	87.9
	Team Discipline	1	2.9	3.0	90.9
	Team Effort	3	8.6	9.1	100.0
	Total	33	94.3	100.0	
Missing	System	2	5.7		
Total		35	100.0		

Coach Education Courses

Thirty one per cent of the participants undertook a GAA coaching course specific to the role of team coach (Foundation level, Level 1, Level 2), while close to 83% of the coaches had no 3rd level sport type qualification. While 80% of those surveyed acknowledged they received benefit from the GAA courses, 20% felt they received no benefit as a result of their involvement. Eighty three per cent of coaches seek information from a range of sources with regard to coaching issues and methods. The range of sources identified by coaches are outlined in Table 5.

Table 5
Sources of information

Source	Percent
Managerial Biographies	34.3%
GAA Coaching Manuals	48.6%
Coaching Colleagues	65.7%
Other Sports Coaching Manuals	14.0%
Internet	25.7%
Other*	28.6%
Do Not Source Information	17.0%

* 'Other' in this instance refers to sources such as GAA workshops, academic coaching material, watching other sports and other coaches, devising own methods, accessing own records and drills, meeting with experts in the field, and personal experiences.

Analysis of Variance

Analysis of Variance (ANOVA) was used to check the effects of age, coaching experience, playing experience; number of teams coached, and coach education, had on the dependent variables of leadership and coaching. Set out below are the results in Table format. The level of statistical significance accepted for this study is $p < 0.05$.

Leadership Behaviours and Age

As there were very few respondents in the lower age groupings, only two age ranges were used for the analysis in Table 6 (50 years or less/over 50 years). The results indicate no statistically significant difference between the factor age group and the dependent variables of democratic behaviour ($p = .985$), positive feedback ($p = .361$), training and instruction ($p = .220$), social support ($p = .087$) and autocratic behaviour (.305). However, the dimension of situational consideration does show evidence of significant difference ($p = .001$). The hypothesis that states there is no significant difference between the dimensions of leadership behaviours and age factor must in part be rejected ($p < 0.05$). There is strong evidence from this survey that coaches in the over 50 years of age group score lower on average with respect to this variable.

Table 6

	Factor: Age Group			
		50 years or less	More than 50 years	p-value
Democratic Behaviour	Mean	3.3333	3.3385	.985
	std. deviation	.69021	.68345	
	Number	11	16	
Positive Feedback		50 years or less	More than 50 years	p-value
	Mean	1.6389	1.4792	.361
	std. deviation	.53576	.37454	
Number	12	16		
Training & Instruction		50 years or less	More than 50 years	p-value
	Mean	1.464	1.305	.220
	std. deviation	.3982	3000	
Number	11	20		
Situational Consideration		50 years or less	More than 50 years	p-value
	Mean	1.8083	1.3500	.001
	std. deviation	.28431	.33825	
Number	12	18		
Social Support		50 years or less	More than 50 years	p-value
	Mean	2.4688	2.1364	.087
	std. deviation	.56439	.50283	
Number	12	22		
Autocratic Behaviour		50 years or less	More than 50 years	p-value
	Mean	3.2708	3.4375	.305
	std. deviation	.36863	.46227	
Number	12	18		

Leadership Behaviours and Inter-County Playing Experience

The factor in this instance is Inter-County Senior Hurling Playing Experience (yes/no). The results (Table 7) indicate no statistically significant difference between the factor and the dependent variables of democratic behaviour ($p = .346$), positive feedback ($p = .251$), training and instruction ($p = .152$), situational consideration ($p = .297$), social support ($p = .825$) and autocratic behaviour ($p = .763$). The hypothesis that states there is no significant difference between the dimensions of leadership behaviours and inter-county playing experience must be accepted.

Table 7

		Factor: Inter-County Senior Hurling Playing Experience		
		yes	no	p-value
Democratic Behaviour	mean	3.2698	3.5694	.346
	Std. deviation	.68966	.60649	
	number	21	6	
Positive Feedback	mean	1.5133	1.8333	.251
	std. deviation	.45177	.36324	
	number	25	3	
Training & Instruction	mean	1.400	1.160	.152
	std. deviation	.3544	.1517	
	number	26	5	
Situational Consideration	mean	1.5708	1.3833	.297
	std. deviation	.37005	.45250	
	number	24	6	
Social Support	mean	2.2634	2.2083	.825
	std. deviation	.51633	.70119	
	number	28	6	
Autocratic Behaviour	mean	3.3600	3.4250	.763
	std. deviation	.44681	.36012	
	number	25	5	

Leadership Behaviours and Inter-County Teams Coached

The factor is Inter-County Senior Hurling Teams Coached (1 team, more than 1 team). The results (Table 8) indicate no statistically significant difference between the factor and the dependent variables of democratic behaviour ($p = .449$), positive

feedback ($p = .428$), training and instruction ($p = .399$), situational consideration ($p = .498$), social support ($p = .722$) and autocratic behaviour ($p = .552$). Therefore, the hypothesis that states there is no significant difference between the dimensions of leadership behaviours and inter-county playing experience must be accepted.

Table 8

		Factor: Number of County Senior Hurling Teams Coached		
		1 team	More than 1 team	p-value
Democratic Behaviour	mean	3.1944	3.4074	.449
	std. deviation	.84059	.58640	
	number	9	18	
Positive Feedback	mean	1.4621	1.6029	.428
	std. deviation	.53537	.39035	
	number	11	17	
Training & Instruction	mean	1.423	1.317	.399
	std. deviation	.4126	.2813	
	number	13	18	
Situational Consideration	mean	1.5857	1.4875	.498
	std. deviation	.42941	.35379	
	number	14	16	
Social Support	mean	2.2917	2.2237	.722
	std. deviation	.60257	.50273	
	number	15	19	
Autocratic Behaviour	mean	3.3125	3.4097	.552
	std. deviation	.47224	.40630	
	number	12	18	

Leadership behaviours and Inter-County Coaching Experience

As there were very few responses in the lower range only 2 groups were used for this analysis (i.e. 1 to 5 years/6 years plus). The factor in this instance is Inter-County Senior Coaching Experience. The results show that no significant difference was found between the factor and the dependent variables of democratic behaviour ($p = .942$), positive feedback ($p = .969$), situational consideration ($p = .083$), social support

($p = .089$) and autocratic behaviour ($p = .637$) (Table 9). However, a significant relationship was found between the factor and the dimension of training and instruction ($p = .020$). Therefore, the hypothesis that states there is no significant difference between the dimensions of leadership behaviours and inter-county coaching experience must in part be rejected ($p < 0.05$). The sample evidence suggests that coaches with 6 years or more inter-county coaching experience score lower, on average, with respect to this variable.

Table 9

		Factor: Inter-County Senior Hurling Coaching Experience		
		1 to 5 years	6 years plus	p-value
Democratic Behaviour	mean	3.3472	3.3278	.942
	std. deviation	.77836	.60378	
	number	12	15	
Positive Feedback	mean	1.5444	1.5513	.969
	std. deviation	.51454	.37966	
	number	15	13	
Training & Instruction	mean	1.514	1.235	.020
	std. deviation	.4092	.2090	
	number	14	17	
Situational Consideration	mean	1.6643	1.4188	.083
	std. deviation	.41990	.32704	
	number	14	16	
Social Support	mean	2.4118	2.956	.089
	std. deviation	.55861	.48920	
	number	17	17	
Autocratic Behaviour	mean	3.4063	3.3304	.637
	std. deviation	.44371	.42349	
	number	16	14	

Leadership Behaviours and Club Coaching Experience

As there were very few responses in the lower groupings, only 2 ranges were utilised (i.e. 9 years or less/10 years or more). The factor in this instance is Club Coaching Experience at Adult Level. There was no significant difference found between the

factor and the dependent variables of democratic behaviour ($p = .586$), positive feedback ($p = .654$), situational consideration ($p = .096$), social support ($p = .146$) and autocratic behaviour ($p = .309$) (Table 10). The results indicate evidence of a significant relationship between the factor and the dimension of training and instruction ($p = .026$). Therefore, the hypothesis that states there is no significant relationship between the dimensions of leadership behaviours and club coaching experience must in part be rejected ($p < 0.05$). The sample evidence suggests that those with 10 years or more club coaching experience at adult level score lower, on average, with respect to this variable.

Table 10

		Factor: Club Coaching Experience at Adult Level		
		9 years or less	10 years or more	p-value
Democratic Behaviour	mean	3.4479	3.2895	.586
	std. deviation	.74127	.65756	
	number	8	19	
Positive Feedback		9 years or less	10 years or more	p-value
	mean	1.6000	1.5185	.654
	std. deviation	.64166	.31514	
	number	10	18	
Training & Instruction		9 years or less	10 years or more	p-value
	mean	1.323	1.069	.026
	std. deviation	.3317	.2392	
	number	8	23	
Situational Consideration		9 years or less	10 years or more	p-value
	mean	1.7000	1.4500	.096
	std. deviation	.43205	.34412	
	number	10	20	
Social Support		9 years or less	10 years or more	p-value
	mean	2.4375	2.1534	.146
	std. deviation	.61584	.48171	
	number	12	22	
Autocratic Behaviour		9 years or less	10 years or more	p-value
	mean	3.4773	3.3092	.309
	std. Deviation	.41010	.43773	
	number	11	19	

Leadership Behaviours and Coach Education

For this analysis, only those that participated in one or more of the Gaelic Athletic Association (GAA) coach education courses (Foundation Level, Level 1, Level 2) were considered as having received coach education specific to the role of hurling coach. The factor in this instance is GAA Coach Education (yes/no). The results (Table 11) indicate no statistically significant difference between the factor and the other dependent variables of democratic behaviour ($p = .118$), positive feedback ($p = .187$), training and instruction ($p = .665$), situational consideration ($p = .355$), social support ($p = .668$) and autocratic behaviour ($p = .372$). Therefore, the hypothesis that states there is no significant difference between the dimensions of leadership behaviours and coach education must be accepted.

Table 11

	Factor: GAA Coach Education (Foundation Level or Level 1 or level 2)			
		yes	no	p-value
Democratic Behaviour	mean	3.0909	3.5052	.118
	std. deviation	.67542	.63717	
	number	11	16	
Positive Feedback		yes	no	p-value
	mean	1.6607	1.4345	.187
	std. deviation	.43543	.44838	
	number	14	14	
Training & Instruction		yes	no	p-value
	mean	1.388	1.333	.665
	std. deviation	.3202	.3697	
	number	16	15	
Situational Consideration		yes	no	p-value
	mean	1.6000	1.4667	.355
	std. deviation	.33806	.43205	
	number	15	15	
Social Support		yes	no	p-value
	mean	2.2969	2.2153	.668
	std. Deviation	.57530	.52476	
	number	16	18	
Autocratic Behaviour		yes	no	p-value
	mean	3.2946	3.4375	.372
	std. deviation	.48686	.37361	
	number	14	16	

Chapter 5

Discussion

DISCUSSION

In discussing the leadership and coaching behaviours of high level hurling coaches it is important to look at the factors that are influential in determining particular leadership and coaching behaviours. The two most significant leadership styles discussed in sport settings are the democratic style and the autocratic style. Democratic behaviour is described as being player-centered and cooperative while autocratic behaviour is described as a win-centered and command style (Martens, 1987). It is hypothesised that hurling coaches integrate both these styles dependent on the situation. Coaches at inter-county hurling level have to perform many different and difficult leadership and coaching functions both on-field and off-field. The purpose of this study was to examine the effects that various contributory factors have on the leadership and coaching behaviours on these high-level coaches. The factors being measured in this study include age, playing experience, coaching experience and coach education. Further, the study sets out to determine commonalities that exist amongst high-level coaches and the principal elements that contribute to the coaching process. In addition, the intent of the study is to obtain directly coaches motives for involvement in high-level coaching and the various criteria by which coaches measure their own success.

The coaches in this study are considered as performing at an equal level of competition, i.e. head-coach at inter-county senior hurling grade. However, there is still reason to speculate that the competitive and organisational culture, in addition to other situational attributes such as popularity of hurling and the degree of public pressure to perform may be significantly different in each county. The results from this study will be discussed with regard to its contribution to Gaelic games and the sport literature in general,

The descriptive analysis section of the study investigated the commonalities that exist amongst high-level coaches. One of the objectives was to consider the principal motives for coach involvement at a high-level. Enjoyment at 46.7% (Table 1) and player development at 36.7% (Table 1) were cited by subjects in this survey as the main reasons for involvement. Winning was identified by 10% of the subjects (Table 1) as their main reason for acting as head-coach. Findings by Wilcox & Trudel (1998) who, in a case study involving a youth ice hockey coach, found that winning and player development were the main principals of the coach's belief system. This may have implications for the sport literature in so far as it is reasonable to conclude that results from these studies suggest that as coaches progress up the coaching ladder that their philosophy and behaviour towards winning changes. However, evidence from a study by Dieffenbach, Gould, & Moffett (2002) on U.S. Olympic champions and their coaches would seem to contradict this assumption. They found that coaches at the elite level emphasised winning above any other goals.

Results indicate, with regard to the main role of the coach that 58.1% of the respondents identified coaching (Table 2), 16.1% motivation (Table 2), and 12.9% organising (Table 2) as the main role of responsibility of inter-county senior hurling coaches. The high support rating for coaching is in line with the Path-Goal Theory of Leadership (House, 1971, House & Dessler, 1974). In this theory the element of coaching is described as one of the main functions of leadership for effective and satisfying performance.

When ranking the principal elements of the coaching role, subjects reported 37.5% man management (Table 3), 28.1% team building (Table 3) and technical, tactical, mental and managerial tasks accounting for 34.4% (Table 3). This may have some implications for the future direction of GAA coach education. Results from this

study highlight a need to look at course content with regard to providing more valuable in depth information on the principals of man management and team building. This suggestion to consider course content supports the thoughts of Davis (2003) who considers course content as a key factor in a coach education programme.

In judging their own success 36.4% of coaches identified team development as their main criteria of measurement (Table 4) while 21.2% identified player development (Table 4). Success based on winning performances was identified by 18.2% of the coaches as their main source of measurement (Table 4). The results in this survey i.e. man management & player development, may be influenced by the level of success expected by followers, county boards, or players within the particular county been coached. It would be expected that teams from the traditionally strong hurling counties (e.g. Division 1 & 2) would have a greater expectation of success at national level than those in the lower divisions. A direct result of these expectations could be an influential factor in the criteria that coaches use to measure their own success. Success for coaches in the traditionally strong hurling counties may be based on winning performances while in the less traditional counties success may be evaluated through attributes such as player development, team development and team effort.

With regard to sourcing information on help with coaching matters, 17% of the subjects surveyed do not look for help or support (Table 5). However, of the coaches that do, 65.7% (Table 5) of them turn to coaching colleagues for information on coaching and training issues and methods. While coaches access other outlets for coaching information, the high number that turn to coaching colleagues may be attributed to the lack of relevant information in the sport literature about this minority sport and its array of unique skills. This finding is in line with research on the

development process and needs of certified Irish coaches that highlighted the importance of non-formal coach education, such as observing other coaches and mentoring (Larkin, Duffy & O’Leary, 2007). Overall, findings from the descriptive results of the study in hand are broadly in line with findings from other sports studies throughout research.

The hypothesis statements in this study suggest there is no significant relationship between the dimensions of leadership behaviour and the factors of age, previous playing experience, previous coaching experience and coach education. The findings from the study involving the various dimensions and the various factors show evidence of mixed results. In the case of the dimensions of leadership behaviour and age group, the evidence from the analysis shows a significant relationship with regard to the dimension of situational consideration, $p = .001$ (Table 6), which in part rejects the hypothesis statement. The findings suggest that the age profile of the coach has a significant bearing on the dimension of situational consideration. The data from this examination shows that coaches in the more than fifty years of age range scored lower with respect to this variable. This indicates evidence of coaches in this age group exhibiting behaviours appropriate to the task in hand, which is in line with the Path-Goal Theory of Leadership (House, 1971). By facilitating the player’s needs and goals, which are key elements of the dimension of situational consideration, the coaches in this survey are in line with the concept of the Path-Goal Theory of Leadership (House, 1971). The theory indicates that the leader is seen as one who helps and facilitates followers to achieve their goals. Another of the items contained in the dimension of situational consideration is that coaches adapt their coaching style to suit different situations. This facilitates comparison with Hersey & Blanchard’s (1977) Life-Cycle Theory which proposes that effective leaders adjust their style in

response to the needs of the athletes and the specific situation. This approach by the over fifty years of age group in this study is in keeping with much contemporary leadership which is considered situation-specific (Chelladurai, 1999; Waterman, 1994).

When examining the impact that coaching experience at both club and inter-county level had on the various dimensions of leadership behaviour, significant relationships were found with regard to the dimension of training and instruction. The results provide significant evidence that coaches with more experience of coaching scored lower with regard to this variable. The results were similar in both club coaching experience $p = .026$ (Table 10) and inter-county coaching experience $p = .020$ (Table 9). These results in part reject both hypotheses that club coaching experience and inter-county coaching experience has no relationship with the dimensions of leadership behaviour. The indications from these results support findings by Salmela (1995) that coaches early sporting and novice coaching experiences are instrumental in shaping their future operational tactics in training and competition. The results may also be attributed to why coaches are often hired for positions based on their athletic and coaching backgrounds, including years of coaching experience (Solomon, Dimarco, Ohlson, & Reece, 1998). However, the hypothesis statement with regard to the number of inter-county teams coached shows no significant relationship with any of the dimensions of leadership behaviour, and is therefore accepted (Table 8). Belbin (1997) suggests that there is a clear implication that leadership is not part of the job but a quality that can be brought to it. These findings suggest that experience, in the form of years of club and county coaching experience, are important determinants of positive coach behaviours in certain dimensions. The importance of coach behaviours have been identified in the research

findings of Terry (1984) and Reimer and Toon (2001) who demonstrated that coaching behaviours play an important role in athlete satisfaction.

The hypothesis that coach education has no relationship with the dimensions of leadership behaviours is accepted in this study. This has important implications for the future training of hurling coaches. Results outlined earlier in this study demonstrate strong evidence that experience plays a huge part in the coach's development. This is supported by research findings where coaches highlighted coaching experience as an important method of coach education and development (Larkin, Duffy, & O'Leary, 2007). Similar findings by Gould, Gianini, Krane & Hodge (1990) report that coaches acquire most of their knowledge through their own coaching experience and from observing other successful coaches. These findings have implications for the GAA with regard to how hurling coaches are prepared for future inter-county positions. The GAA run a large number of coach education programmes using many course tutors. While this study found no statistical evidence that these courses have an impact on leadership behaviours, nevertheless, according to Gilbert and Trudel (2001) a well-designed training programme for coaches can result in improvements in various areas of coaching. Consideration might be given to a mentoring system similar to that used in other areas such as business settings and professional's bodies. Coaching from a business point of view is described as the help and mentoring given to an employee by a more experienced worker. Parallels can be drawn between GAA coaching and other professions. The British Association of Sport and Exercise Scientists recently introduced compulsory supervision for full accreditation in the various professions. Non-sport settings like clinical psychologists and counsellors undergo supervised experience prior to full qualification. In the business world a mentoring system exists where an experienced employee receives

help and supervision from a more experienced worker. Through a system such as mentoring or supervised experience GAA coaches would have access to valuable experience through personal contact and follow up with their tutor after completion of their course. This, in addition to supervised completion of the coach education log book, facilitates opportunities for self-assessment and reflection on coaches own behaviours. A characteristic of leaders at all levels is the process of continuous ongoing learning (Gilbert & Jackson, 2004). Research findings questioning the effectiveness of coach education programmes highlighted the value of experience in coach development (Dodge & Hastair, 1993; Gilbert & Trudel; Siedentrop, 1990; Woodman, 1993).

The results of the descriptive statistics and the analysis of variance in this study may also have implications, not alone for GAA coaching, but for sports coaching and coach education in general. However, before drawn such conclusions, it warrants more investigation, using the same methodology, across a wider spectrum of sports.

Chapter 6

Conclusions and Recommendations

CONCLUSIONS

In conclusion, the goal of this study was to resolve some of the issues regarding leadership and coaching behaviours and to examine the relationship that age, experience and coach education had on these behavioural dimensions. The findings from the study reveal the significant importance the factors of age and experience have on the respective behaviours of high-level hurling coaches. Results indicate strong evidence that years of coaching experience, at either club or inter-county level, is helpful in enhancing the leadership effectiveness of the direct task factor of training and instruction. The study also demonstrates evidence that coaches in the over fifty years of age range perform more positively in adapting to specific situations. The fact that none of the independent variables (age, experience, coach education) had an impact (positive or negative) with the dimension of democratic behaviour is not surprising since the RLSS items which measure democratic behaviour strongly imply respect for the opinions and input of the players. However, such an argument must be weighted carefully with other factors. The organisational contexts of various teams in each county may be vastly different from each other, and therefore, use of a single estimate of perceived behaviour by coaches from different counties may not be appropriate.

This study in hand has focused on only one aspect of leadership as the important dimension i.e. the leader or coach. This is in line with earlier theories which like the present study focused on the leader, athlete, or the situation (Duda, 1998). Future research may look at the Multidimensional Model of Leadership (Chelladurai, 1978, 1993a; Chelladurai & Carron, 1978) which involves the coach, players and the situation. This approach to the study of leadership and coaching behaviours of high-level hurling coaches would allow for a more complete picture. In this study it is

important to recognise that the response categories in the Revised Leadership Scale for Sport questionnaire refers to the frequencies that coaches engage in particular forms of leadership and coaching behaviour. What are not allowed for in this approach are the characteristics and specific circumstances of each situation. Such differences may impose certain demands and constraints on leadership. These influences specific to a particular team would not be captured by the average over all teams.

With the limited amount of research examining the effects of different factors on the leadership behaviours and styles of high-level coaches, opportunities are open for more enquiries. From a Gaelic Games point of view future research should continue to examine behaviours in different contexts. The following recommendations are presented in order to progress the area of knowledge and understanding of the leadership and coaching behaviours of Gaelic Games coaches at all levels:

Recommendations

- An examination of leadership behaviours and coaching styles of Gaelic football coaches should be conducted in order to allow comparison with the results of the study in hand.
- In light of findings from other team sports future research should examine the coaching behaviour preferences of hurling and football players at inter-county senior grade, and compare them to other team sports.
- An examination of the differences of hurling player's preferred leadership behaviour for their coaches based on the competition level that they are involved in.

- An examination of the differences of Gaelic football player's preferred leadership behaviour for their coaches based on the competition level that they are involved in.
- In order to compare preferences amongst the sexes, a study should be carried out with female sports players in ladies football and camogie to investigate player's preferred leadership behaviours. These results can then be compared with previous results from the men's Gaelic sports (hurling and football).
- Other leadership questionnaires should be used in the study of leadership and coaching behaviours in order to validate the findings from this study.
- Based on the Multidimensional Model of Leadership, a study of the leadership behaviours of high-level hurling coaches, including the player's preference for specific behaviours, player's perceptions of their coach's behaviours, and coach's perceptions of their own behaviour. The Revised leadership Scale for Sport (RLSS) should be used to measure each dimension.

Bibliography

BIBLIOGRAPHY

- Adair, J. (1990). *Great leaders*. Talbot: Adair Press.
- Allen, J. B., & Howe, B. C. (1998). Player ability, coach feedback, and female adolescent athletes perceived competence and satisfaction. *Journal of Sport and Exercise Psychology*, 20, 280 – 299.
- Armstrong, S. (2001). Are you a “transformational” coach? *Journal of Physical Education, Recreation and Dance*, 72(3), 44-47.
- Arnold, J., Cooper, C.L., & Robinson, I.T. (1998) *Work psychology: Understanding behaviour in the workplace*. London: Prentice-Hall.
- Ashton, P.T. (1984). Teacher efficacy: A motivational paradigm for effective teacher education. *Journal of Teacher Education*, 35, 28-32.
- Baker, J., Yardley, J., Cote, J., (2003), Coach behaviours and athletic satisfaction in team and individual sports. *International Journal of Sport Psychology*, 34: 226-239
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioural change. *Psychological Review*, 84, 191-215.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Barrow, J.C. (1977), *The Variables of Leadership*. *Academy of Management Review*, 2, 231-251.
- Bass, B. M. (1981). *Stogdill's Handbook of Leadership*. New York: Free Press.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.

- Bass, B. M. (1990). *Bass and Stogdill's handbook of leadership*. (3rd edition). New York: The Free Press.
- Bartlett, C. A. & Ghosal, S. (1995). *Changing the role of top management: Beyond systems to people*. Long Range Planning, Vol. 28, No. 4, pp. 126 – 126.
- Beam, J. W., Serwatka, T. S., & Wilson, W. J. (2004). Preferred leadership in NCAA division 1 and 11 intercollegiate student-athletes. *Journal of Sport Behaviour*, Vol. 27, No. 1, 3-17.
- Beattie, K. M. (1994). *Listen to employees*. Fund Raising Management, 26, 14-17.
- Bennis, W., & Nanus, B. (1985). *Leaders: The strategies for taking charge*. New York: Harper & Row.
- Belbin, R. M. (1997). *Changing the way we work*. Butterworth-Heinmann.
- Bird, A.M (1977a). Team structure and success as related to cohesiveness and leadership. *Journal of Social Psychology*, 10, 217-223.
- Bird, A.M (1977b). Development of a model for predicting team performance. *Research Quarterly*, 48, 24-32.
- Bloom, G. A., Durand-Bush, N., & Salmela, J. H. (1997). Pre- and post competition routines of expert coaches in team sports. *The Sport Psychologist*, 11, 127-141
- Bloom, G. A., Salmela, J. H., & Schinke, R. J. (1995). *Expert coaches' view on the training of developing coaches*. In R. Vanfraechem-Raway & Y. Vanden Auweele (Eds.). Proceedings of the 9th European Congress on Sport Psychology (pp. 401-408). Brussels, Belgium: Free University of Brussels.
- Buckingham, M., & Coffman, C. (1999). *First, break all the rules: What the worlds greatest managers do differently*. Simon and Schuster, NY.
- Burns, J.M. (1978). *Leadership*. New York: Harper & Row.

- Burke, R. J., & Greenglass, E. R. (1991). A longitudinal study of progressive phases of psychological burnout. *Journal of Human Health and Resources Administration*, 13, 390-408.
- Burke, K. L., Peterson, D., & Nix, C. L. (1995). The effects of the coaches' use of humour on female volleyball players' evaluation of their coaches. *Journal of Sport Behaviour*, 18, 83-90.
- Butt, D.S. (1987). *The psychology of sport: The behaviour, motivation, personality, and performance of athletes*. New York: Van Nostrand Reinhold.
- Brophy, J.E. (1983). Research on the self-fulfilling prophecy and teacher expectations. *Journal of Educational Psychology*, 75, 631-661.
- Bryant, J., Comisky, P. W., Crane, J. S., & Zillman, D. (1980). Relationship between college teachers' use of humour in the classroom and student's evaluation of their teachers. *Journal of Educational Psychology*, 72, 511-519.
- Byrd, C. (1940). *Social Psychology*, Appleton-Century-Crofts.
- Caccese, T. M. (1983). *Differences in perceived burnout of NCAA and AIAW Division I head coaches grouped according to selected demographic variables* (Doctoral dissertation, Temple University, 1983). Dissertation Abstracts International, 44, 103A.
- Caccese, T. M., & Mayerberg, C. (1984). Gender differences in perceived burnout of college coaches. *Journal of Sport Psychology*, 6, 279-288.
- Campbell, S. (1993). *Coaching education around the world*. Sport Science Review, 2(2), 62-74.
- Carron, A.V. (1980). *Social Psychology of Sport*. Ithaca, NY: Movement.
- Carron, A. V. & Bennett, B. B. (1977). Compatibility in the coach – athlete dyad. *Research Quarterly*, 48, 4, 671 – 9.

- Case, B. (1987). Leadership behaviour in sport: A field test of the situational leadership theory. *International Journal of Sport Psychology*, 18: 256-268.
- Caspi, A., & Roberts, B. W. (1999). *Personality change and continuity across the life course*. In L. A. Pervin & O. P. John (eds.), *Handbook of Personality Theory and Research*. New York: Guilford Press, vol.2, pp 300 – 326.
- Chase, M. A., Lirgg, C. D., & Feltz, D. L. (1997). Do coaches' efficacy expectations for their teams predict team performance? *The Sport Psychologist*, 11, 8-23.
- Chelladurai, P. (1978), *A Contingency Model of Leadership in Athletics*, (Doctoral dissertation, University of Waterloo, 1978). *Dissertation Abstracts International*, 40, 1418B-1419B.
- Chelladurai, P. (1980). Leadership in sports organisations. *Canadian Journal of Applied Sciences*, 5, 226-231.
- Chelladurai, P. (1984a). Discrepancy between preferences and perceptions of leadership behaviour and satisfaction of athletes in varying sports. *Journal of Sport Psychology*, 6, 27-41.
- Chelladurai, P. (1984b). *Leadership in sports*. In J. M. Silva & R. S. Weinberg (ed.) *Psychological Foundations of Sport*, Human kinetics, Champaign, IL: Illinois.
- Chelladurai, P. (1990). Leadership in sports: A review. *International Journal of Sport Psychology*, 21, 328-354.
- Chelladurai, P. (1999). *Human resource management in sport and recreation*. Champaign, IL: Human Kinetics.
- Chelladurai, P., & Arnott, M, (1985). Decision styles in coaching: Preferences of basketball players. *Research Quarterly for Exercise and Sport*, 56, 15-24.
- Chelladurai, P., & Carron, A. V. (1978). *Leadership*. Ottawa: Canadian Association of Health, Physical Education and Recreation. (Monograph).

- Chelladurai, P., & Carron, A. V. (1983). Athletic maturity and preferred leadership. *Journal of Sport psychology*, 5, 371 – 380.
- Chelladurai, P., Malloy, D., Imamura, H., & Yamaguchi, Y. (1987). A cross-cultural study of preferred leadership in sports. *Canadian Journal of Sport Sciences*, 12, 106 – 110.
- Chelladurai, P., Imamura, H., Yamaguchi, Y., Oinuma, Y., & Miyauchi, T. (1988). Sport leadership in a cross-national setting: The case of Japanese and Canadian university athletes. *Journal of Sport and Exercise Psychology*, 10, 374-389.
- Chelladurai, P., & Reimer, H. A. (1998). *Measurement of leadership in sport*. In J. L. Duda (ed.) *Advances in Exercise and Sport Psychology Measurement* (pp. 227-253). Morgantown, WV: Fitness Information Technology.
- Chelladurai, P., & Saleh, S.D. (1978) Preferred Leadership in Sports. *Canadian Journal of Applied Sport Sciences*, 3, 85-92
- Chelladurai, P., & Saleh, S. D, (1980). Dimensions of leader behaviour in sports: Development of a leadership scale. *Journal of Sport Psychology*, 2, 34-45.
- Claxton, D.B. (1988). A systematic observation of more or less successful high school tennis coaches. *Journal of Teaching in Physical Education*, 7 (4), 302-310.
- Claxton, D.B., & Lacy, A.C. (1986). A comparison of practice field behaviours between winning high school football and tennis coaches. *Journal of Applied Research in Coaching and Athletics*, 1, 188-200.
- Coaching Association of Canada. (1989). *Course conductor manual: Level 2 Theory*. Ottawa, ON: Author.
- Coakley, J. J. (1990). *Sport in Society: Issues and controversies*. (4th ed.). St. Louis, MO: Times Mirror/Mosby.

- Cole, G. A. (1996). *Management Theory and Practice*. Letts Educational, London. DP Publications.
- Corcoran, J. & Feltz, D.L. (1993). Evaluation of chemical health education for high school athletic coaches. *The Sport Psychologist*, 3, 298-308.
- Cote, J., Salmela, J. H., Trudel, P., Baria, A. & Russell, S. (1995). The coaching model: A grounded assessment of expert gymnastics coaches' knowledge. *Journal of Sport and Exercise Psychology*, 17, 1-17.
- Cote, J., Yardley, J, Hay, J, Sedgwick, W., & Baker, J. (1999). *An exploratory examination of the coaching behaviour scale for sport*, AVANTE, 5 (3), 82-89.
- Cox, R. H. (1994). *Sport Psychology: Concepts and applications* (3rd ed.). Dubuque, IA: WCB Brown and Benchmark.
- Covey, S. R. (1990). *The seven habits of highly effective people*. New York: Simon & Shuster.
- Cunningham, G. B., & Dixon, M. A. (2003). *New perspectives concerning performance appraisals of intercollegiate coaches*. *Quest*, 55, 177-192.
- Cunningham, I. & Honold, L. (1998). *Everyone can be a coach*. *HR Magazine*, Vol. 43, No. 7, pp. 63 – 64.
- Curtin, R. S. (1977). *A study of self-perception, personality traits, and player perceptions of selected male high school basketball coaches*. Dissertation Abstracts International, 38, 1976A (University Microfilms No. AAC7721636).
- Cratty, B.J. (1973). *Psychology in contemporary sport*. Englewood Cliffs, NJ: Prentice-Hall
- Csikszentmihalyi, M., Rathunde, K., & Whalen, S. (1993). *Talented teenagers: The roots of success and failure*. New York: Cambridge.

- Danielson, R. R. (1978). *Contingency model of leadership effectiveness: An empirical investigation of its application in sport*. In F. Landry & W. A. R. Orban (ed.), *Motor Learning, sport psychology, pedagogy, pedagogy, and didactics of physical activity*, Book 7. Miami, FL: Symposia Specialists.
- Davis, P. (2003). *Why coaches education?*. *Olympic Coach*, Vol. 15 (4), 16-17.
- Denham, C. G., & Michael, J. J. (1981). Teacher sense of efficacy: A definition of the construct and model for future research. *Educational Research Quarterly*, 6, 39-63.
- Depree, M. (1992). *Leadership jazz*. New York: Dell.
- Diffenbach, K., Gould, D., & Moffett, A. (2002). *The coach's role in developing champions*. *Olympic Coach*, Vol. 12(2), 2-4.
- Dobbins, G. H. & Platz, S. J. (1986). *Sex differences in leadership: How are they?* *The Academy of Management Review*, Vol. 11, No. 1, pp. 118 – 127.
- Doherty, A. J., & Danylchuck, K. E. (1996). Transformational and transactional leadership in interuniversity athletics management. *Journal of Sports Management*, 10(3), 292-309.
- Douge, B., & Hastie, P. (1993). *Coach effectiveness*. *Sport Science Review*, 2(2), 14-29.
- Dubin, C.L. (1990). *Ethics and morality in sport*. In commission of inquiry into the use of drug and banned practices intended to increase athletic performance (pp. 498-512). Ottawa, Canada: Canadian Government Publishing Centre.
- Dubrin, A. J. (2001), *Leadership, Research Findings, Practice & Skills*, Houghton Mifflin Company, Boston.
- Duda, J. L. (1998). *Advances in Sport and Exercise Psychology Measurement*. Fitness in Information Technology, Inc., Morgantown, USA.

- Dunkin, M., & Biddle. (1974). *The study of teaching*. New York: Holt, Rinehart & Winston.
- Drucker, P. F. (1992). *Managing for the future*. The 1990's and beyond New York: Truman Talley Books.
- Dwyer, J. J. M. & Fischer, D. G. (1988a). *Leadership style of wrestling coaches*. *Perceptual and Motor Skills*, 67, 706.
- Dwyer, J. J. M. & Fischer, D. G. (1988b). *Psychometric properties of the coach's version of leadership Scale for Sports*. *Perceptual and Motor Skills*, 67, 795 – 798.
- Eden, D. (1990). *Pygmalion in management*. Lexington, MA: D. C. Heath & Co.
- Eden, D., & Shani, A. B. (1982). Pygmalion goes to boot camp: Expectancy, leadership, and trainee performance. *Journal of Applied Psychology*, 67, 194-199.
- Evans, M.G. (1970). Leadership and motivation: A core concept. *Academy of Management Journal*, 13, 91 – 102.
- Feltz, D.L., & Chase, M.A. (1998). *The measurement of self-efficacy and self-confidence in sport*. In J.L. Duda (Ed.). *Advances in sport and exercise psychology measurement*. Morgantown, WV: Fitness Information Technology.
- Feltz, D.L, Chase, M.A., Moritz, S. & Sullivan, P. (1999). Development of the multidimensional coaching efficacy scale. *Journal of Educational Psychology*, 91, 765-776.
- Fernandez, C.F. & Vechio, R. P. (1997). Situational leadership revisited: A test of an across-jobs perspective. *The Leadership Quarterly*, Vol. 8, No. 1, pp. 67 – 84.
- Fiedler, F.E. (1967), *Theory of Leadership Effectiveness*, McGraw Hill, New York.

- Fiengold, A. (1994). *Gender differences in personality: A meta analysis*. Psychology Bulletin, 116 (3), 429 – 56.
- Fisher, C. A., Mancini, V. H., Hirsch, R. L., Proulx, T. J., & Straurowsky, E. J. (1982). Coach-athlete interactions and team climate. *Journal of Sport Psychology*, 4, 388-404.
- Fleishman, E., Harris, E. F. & Burt, H. E. (1955). Leadership and supervision in industry. Bureau of Educational Research. Ohio State University, Columbus.
- Frederick, C. M. & Morrison, C. S. (1999). Collegiate coaches: An examination of motivational style and its relationship to decision making and personality. *Journal of Sport Behaviour*, Vol. 22, No. 2.
- Gaelic Athletic Association, (2007), *Coach education syllabus*, GAA, Dublin.
- Garland, D. J., & Barry, J. R. (1988). The effects of personality and perceived leader behaviour on performance in collegiate football. *The Psychological Record*, 38, 237 – 247.
- Giacobbi, Jr., P. R., Roper, E., Whitney, J., & Butryn, T. (2002). College coaches' views about the development of successful athletes: A descriptive exploratory investigation. *Journal of Sport Behaviour*, Vol. 25, No. 2, 164-180
- Ghiselli, E. E. (1963). *Management Talent*, American Psychologist, vol. 18.
- Gilbert, W. D. & Jackson, C. (2004). *In search of an effective coaching style*. USOC Olympic Coach Magazine, Winter.
- Gilbert, W. D., & Trudel, P. (1999). An evaluation strategy for coach education programmes. *Journal of Sport Behaviour*, Vol. 22, No. 2, 234-250
- Gilbert, W. D., & Trudel, P. (2004). Role of the coach: How model youth team coaches' frame their roles. *The Sport Psychologist*, 18, 21-43

- Gilliland, H., & Mauritsen, H. (1971). Humour in the classroom. *The Reading Journal*, 753-765.
- Gordon, S. (1986). *Behavioural correlates of coaching effectiveness*. Unpublished doctoral dissertation. University of Alberta, Canada
- Gould, D., Damarjian, N., & Medbery, R. (1999). An examination of mental skills training in junior tennis coaches. *The Sport Psychologist*, 13, 127-143.
- Gould, D., Dieffenbach, K., & Moffett, A (2002). Psychological talent and its development in Olympic champions. *Journal of Applied Sport Psychology*, 14, 177-210.
- Gould, D., Gianini, J., Krane, V., & Hodge, K. (1990). Educational needs of elite U.S. National Team, Pan American, and Olympic coaches. *Journal of Teaching in Physical Education*, 9, 332-344.
- Gould, D., Hodge, K., Peterson, K., & Giannini, J. (1989). An exploratory examination of strategies used by elite coaches to enhance self-efficacy in athletes. *Journal of Sport and Exercise Psychology*, 11, 128-140.
- Gould, D., Hodge, K., Peterson, K., & Petlichkoff, (1987). Psychological foundations of coaching similarities and difference among inter-collegiate wrestling. *The Sport Psychologist*.
- Gordon, S. (1988). Decision styles and coaching effectiveness in university soccer. *Canadian Journal of Sport Sciences*, 13, 56-65.
- Grauner, C. R. (1967). Effects of humour on speaker ethos and audience information gain. *Journal of Communication*, 17, 228 – 233.
- Grauner, C. R. (1966). *A further experimental study of satire as persuasion*. Speech Monographs, 33, 184 – 185.

- Greenglass, E. R. (1991). Burnout and gender: Theoretical and organisational implications. *Canadian Psychology*, 32, 562-572.
- Harari, O. (2002). *The leadership secrets of Colin Powell*. McGraw-Hill Professional, U.S.
- Haslam, I.R. (1990). Expert assessment of the National Coaching Certification Programme (NCCP) theory component. *Canadian Journal of Sport Sciences*, 15. 201-212.
- Hemery, D. (1996). *The pursuit of sporting excellence: A study of sport's highest achievers*. London: Willow Boos Collins.
- Hersey, P. & Blanchard, K. H. (1977). *Management of Organisational Behaviour* (5th edition). Utilizing Human Resources. Englewood Cliffs, NJ: Prentice Hall.
- House, R.J. (1971), A Path-Goal Theory of Leader Effectiveness, *Administrative Science Quarterly*, 16, 321-338.
- House, R. J., & Dessler, G. (1974). *The Path-Goal Theory of Leadership*, in Hunt, J. G. & Larson, L. L. Contingency Approaches to Leadership, Southern Illinois University Press.
- Houseworth, S.D., Davis, M.L., & Dobbs, R.D. (1990). A survey of coaching education programme features. *Journal of Physical Education, Recreation and Dance*, 61(5), 26-30.
- Horn, T. S. (1984). Expectancy effects in the interscholastic athletic setting: Methodological considerations. *Journal of Sport Psychology*, 6, 60-76.
- Horn, T.S. (1985). Coaches' feedback and changes in children's perceptions of their physical competence. *Journal of Educational Psychology*, 77, 174-186.

- Horn, T. S. (1993). *Leadership effectiveness in the sport domain*. In T. S. Horn (Ed.), *Advances in sport psychology* (pp. 151-200). Champaign, IL: Human Kinetics.
- Horne, T., & Carron, A. V. (1985). Compatibility in coach-athlete relationships. *Journal of Sport Psychology*, 7, 139-149.
- Horn, T.S., & Lox, C. (1993). *The self-fulfilling prophecy theory: When coaches' expectations become reality*. In J.M. Williams (Ed.), *Applied sport psychology: Personal growth to peak performance* (2nd Ed.) (pp. 68-81). Palo Alto, CA: Mayfield.
- Holtz, L. (1998). *Winning every day*. New York: HarperCollins.
- Hoy, W.K. & Woolfolk, A.E. (1990). Socialisation of student teachers. *American Educational Research Journal*, 27, 279-300.
- Hunt, K. R. (1984). *The relationship between occupational stresses and burnout among coaches* (Doctoral dissertation, University of Iowa.). Dissertation Abstracts International, 44, 2406A.
- Ivancevich, J. M., & Matteson, M. T. (1999). *Organisational Behaviour and Management*. McGraw-Hill, Singapore.
- Isaac, S., & Michael, W.B. (1981). *Handbook in research and evaluation*. San Diego, CA: Edits.
- Jackson, P. (1995). *Sacred hoops*. New York: Hyperion.
- Jambor, E. A., & Zhang, J. J. (1997). Investigating leadership, gender, and coaching level using the Revised Leadership for Sport Scale. *Journal of Sport Behaviour*, 20, 313-321.
- Jennings, E. E. (1961). The Anatomy of Leadership. *Management of Personnel Quarterly*.

- Jones, G. (2002). Performance excellence: A personal perspective on the link between sport and business. *Journal of Applied Sport Psychology*, 14: 268-281
- Jones, B. J., Wells, L. J., Peters, R. E., & Johnson, D. J. (1993). *Guide to Effective coaching: Principals and practice*. WCB/McGraw-Hill, USA
- Jowett, S., & Cockerill, I. M. (2002). *Incompatibility in the coach – athlete relationship*. In I. Cockerill (ed.). *Solutions in Sport Psychology* (pp. 16-31). London: Thompson Learning.
- Jowett, S., & Ntoumanis, N. (2003). The Greek coach – athlete relationship questionnaire (GrCART-Q): Scale construction and validation. *International Journal of Sport Psychology*, 34: 101-124
- Kakabadse, A. (1982). *Culture of the social services*. Aldershot, UK: Gower.
- Kakabadse, A., & Kakabadse, N. (1999). *Essence of leadership*. London: International Thomson Business Press.
- Kanaby, R.F. (1990). Ethics-integrity-values: What place do they have in our programmes? *Scholastic Coach*, 72-73.
- Kaplan, R. M., & Pascoe, G. C. (1977). Humorous lectures and humorous examples; Sine effects upon comprehension and retention. *Journal of Educational Psychology*, 69, 61-65.
- Kenow, L. & Williams, J.M. (1999) Coach-athlete compatibility and athlete's perception of coaching behaviours. *Journal of Sport Behaviour*, Vol. 22, No. 2.
- Kirkpatrick, S. E. & Locke, E. A. (1991). *Leadership: Do Traits Matter?* Academy of Management Executive.
- Kluckhohn, C. & Murray, H. A. (1953). *Personality in nature, society & culture*. New York, Knopf.

- Lacy, A. & Darst, P. W. (1985). Systematic observation of behaviours of winning high school head football coaches. *Journal of Teaching in Physical Education*. 4 (4), 256-270.
- Langsdorf, E. V. (1979). *Coaching behaviours recording form*. In P. W. Darst, V. H. Mancini, & D. B. Zakrajsek (eds.), *Systematic observation instrumentation for physical education* (pp. 306-315). West Point, N. Y.: Leisure Press.
- Laughlin, N. & Laughlin, S. (1994). The relationship between the similarities in perceptions of teacher/coach leader behaviour and evaluations of their effectiveness. *International Journal of Sport psychology*, 22: 396 – 410.
- Larkin, F., Duffy, P., & O’Leary, D. (2007). *Tracing the development process and needs of Irish coaches*. N.C.T.C., Limerick, Ireland.
- Lennon, Joseph. (1994), *Fitness For Gaelic Football*, St. Paul Publications, Dublin.
- Lewin, K. & Lippitt, R. (1938). *An Experimental Approach to the Study of Autocracy and Democracy: A Preliminary Note*, Sociometry 1.
- Liukkonen, J., & Salminen, S. (1989). *Three coach-athlete relationship scales in relation to coaching climate*. Paper presented at the VIth International Congress on Sport Psychology, Lahti, Finland.
- Lyle, J.W.B. (1993). Towards a comparative study of the coaching process. *Journal of Comparative Physical Education and Sport*, 15, 14-23.
- Malete, L. & Feltz, D.L. (2000). The effect of a coaching education programme on coaching efficacy, *The Sport Psychologist*, 14, 410-417.
- Malete, L. & Feltz, D.L. (2001). The effect of a coaching education programme on coaching efficacy. *The Sport Psychologist*, 14: 410-417
- Martens, R. (1987), *Coaches Guide To Sport Psychology*. Champaign, IL: Human Kinetics.

- McCann, Sean, (2005), *What is your coaching personality, and how does it impact the job you do*, USOC Coaching and Sport Sciences, U.S.A.
- McKenna, E. (1994). *Business psychology and organisational behaviour*. Hove, UK: Erlbaum.
- Mintzberg, H. (1979). *An emerging strategy of direct research*. *Administrative Science Quarterly*, Vol. 24, No. 4, pp. 582 – 589.
- Mintzberg, H. (1973). *The nature of managerial work*. Harper & Row.
- Mullins, L. J. (1999). *Management and Organisational Behaviour*. Prentice Hall, Eglanad.
- Murray, M. C. & Mann, B. L. (2002). *Leadership Effectiveness*, 7, 92-109. In R. H. Cox, *Sport psychology: Concepts and applications* (5th ed.). Dubuque, IA: WCB Brown & Benchmark.
- Neuliep, J. W. (1991). An examination of the content of high school teachers' humour in the classroom and the development of an inductively derived taxonomy of classroom humour. *Communication Education*, 40, 343-355.
- Noble, B. P. (1994) *On bosses, barriers, and beliefs*. The New York Times (March 6), 25F.
- Nussbaum, J. F., Comadera, M. E., & Holladay, S. J. (1985). *Verbal communication within the college classroom*. Paper presented at the meeting of the International Communication Association, Chicago, IL.
- Ogilvie, B.C. (1994). *Transference phenomena: Issues in coaching and teaching*. Unpublished manuscript.
- Orlick, T. (1986). *Psyching for sport*. Champaign, IL: Human Kinetics.

- Osborne, R. N. & Hunt, J. G. (1975). *An adaptive-reactive theory of leadership: The role of micro variables in leadership research*. In J. G. Hunt & L. L. Larson (eds.). *Leadership Frontiers*. Kent, Ohio: Kent State University press.
- Parcells, B. (1995). *Finding a way to win: The principles of leadership, teamwork, and motivation*. New York: Doubleday.
- Parcells, B. & Coplon, J. (1995). *Finding a way to win: The principles of leadership, teamwork, and motivation*. New York: Doubleday.
- Passer, M. W. & Smith, R. E. (2001). *Psychology: Frontiers and applications*. McGraw – Hill, New York.
- Patton, G. (1987). Sport management research: What progress has been made? *Journal of Sport Management*, 1, 25-31.
- Pitino, R. (1998). *Success is a choice. Ten steps to overachieving in business and life*. New York: Broadway Books.
- Podsakoff, P.M., Mackenzie, S.B., Moorman, R.H. & Fetter, R. (1990). Transformational leader behaviours and their effects on followers' trust in leader, satisfaction, and organisational citizenship behaviours. *Leadership Quarterly*, 1, 107-142.
- Province, R. R. (2000). *The science of laughter*. *Psychology Today*, 33 (6), 58-62.
- Riener, H.A., & Chelladurai, P. (1995), Leadership and satisfaction in athletics, *Journal of Sport and Exercise Psychology*, 17, 276-293
- Riener, H. A. & Toon, K. (2001). Leadership satisfaction in tennis: Examination of congruence, gender and ability. *Research Quarterly for Exercise and Sport*, 72, 243-256.

- Roberts, B. W. & Caspi, A. (2002). The cumulative continuity model of personality: Striking a balance between continuity and change in personality traits across a life course. In K. Saudinger and U. Lindenberger (2003) *Understanding Human Development: Dialogues with lifespan psychology*. Kluwer Academic Publishers.
- Robinson, T. T., Carron, A. V. (1982). Personal and situational factors associated with dropping out versus maintaining participation in competitive sport. *Journal of Sport psychology*, 4, 364 – 378.
- Robbins, S. P. & Coulter, M. (2002). *Management*. (7th ed.), Upper saddle River, Prentice hall International.
- Robbins, H, & Finley, M. (1998). *Why teams don't work*. London: Orion Business.
- Ross, J.G., Dotson, C.O., Gilbert, G.G., & Katz, S.J. (1985). After physical education....Physical activity outside of school physical education programmes? *Journal of Physical Education, Recreation, and Dance*, 56(1), 77-81.
- Russell, C. J. (2001). A longitudinal study of top level executive performance. *Journal of Applied Psychology*, 86, 560-573.
- Ryska, T. A. (2002). Leadership styles and occupational stress among college athletic directors: The moderating effect of programme goals. *The Journal of Psychology*, 136(2), 195-213
- Sabock, R. J. (1985), *The Coach*, Human Kinetics, Champaign.
- Sage, G. H. (1973). *Coach as Management*. Quest XIX: 24.
- Salmela, J. H. (1995). Learning from the development of expert coaches. *Coaching and Sport Science Journal* 2, 3-13.
- Sands, B. (1984). *Coaching women's gymnastics*. Champaign, IL: Human Kinetics.

- Sauter, S. L., & Murphy, L. M. (1995). *Organisational factors for job stress*. Washington, DC: American Psychological Association.
- Schaufeli, W.B., Maslach, C., & Marek, T. (Eds.). (1993). *Professional burnout: Recent developments in theory and research*. Washington, DC: Taylor Francis.
- Schleisman, E.S. (1987). Relationship between the congruence of preferred and actual leader behaviour and subordinate satisfaction with leadership. *Journal of Sport Behaviour*, 10, 157-166.
- Shanahan, M. (1999). *Think like a champion: Building success one victory a time*. New York: HarperCollins.
- Siedentop, D. (1990). *The practice of sport pedagogy*. In M. Lirette, C. Pare, J. Dessureault, & M. Pieron (Eds.). *Physical education and coaching: Present state and outlook for the future*. Sillery, QUE: University du Quebec.
- Silva, J. M. & Stevens, D. E. (2002), *Psychological Foundations of Sport*, Allyn & Bacon, Boston.
- Silva 111, J. M., Weinberg, R. S. (1984), *Psychological Foundations of Sport*. Human Kinetics, Champaign, Illinois.
- Sinclair, D.A., & Vealey, R.S. (1989). Effects of coaches' expectations and feedback on the self-perceptions of athletes. *Journal of Sport Behaviour*, 12, 77-91.
- Singer, R. N., Hausenblas, H. A., & Janelle, C. M. (2001). *Handbook of Sport Psychology*. (2nd ed.), Wiley and Sons, USA.
- Smoll, F.C., Smith, R. E., Barnett, N.P., & Everett, J. J. (1993). Enhancement of children's self-esteem through social support training for youth sport coaches. *Journal of Applied psychology*, 78, 602 – 610.

- Smoll, F.C., Smith, R. E., & Curtis, B., & Hunt, E. (1978). Towards a mediational model of coach-player relationships. *Research Quarterly for Exercise and Sport*, 49, 528-541.
- Smith, R. E., & Smoll, F. L. (1996). *Way to go coach: A scientifically-proven approach to coaching effectiveness*. Portola Valley, CA: Warde.
- Smith, R. E., & Smoll, F. L. (1997). Coach-mediated team building in youth sports. *Journal of Applied Sport Psychology*, 9, 114-132.
- Smith, R. E., Smoll, F. L., & Hunt, E. B (1977). A system for behavioural assessments of athletic coaches. *Research Quarterly*, 48, 401-407.
- Smith, R. E., Zane, N. W. s., Smoll, F. L., Coppell, D. B. (1983). Behavioural assessment in youth sports: Coaching behaviours and children's attitudes. *Medicine and science in Sport and Exercise*, 15, 208 -214.
- Solomon, G.B., DiMarco, A.M., Ohlson, C.J. & Reece, S.D. (1998). Expectations and coaching experience: Is more better? *Journal of Sport Behaviour*, Vol. 21, No. 4, 444-455
- Solomon, G. B., Striegel, D. A., Eliot, J. F., Heon, S. N., Maas, J. L., & Wayda, V. K. (1996). The self-fulfilling prophecy in college basketball: Implications for effective coaching. *Journal of Applied Sport Psychology*, 8, 44-59.
- Soucrie, D. (1994). Effective managerial leadership in sport organisations. *Journal of Sport Management*, 8(1), 1-13.
- Sport Canada (1994). *La pratique des sports au Canada*. Ottawa, ON: Heritage Canada.
- Spizer, Q., & Evans, R. (1997). *Heads, you win: How the best companies think*. New York: Simon & Schuster.

- Sullivan, P.J. & Kent, A. (2003). Coaching efficacy as a predictor of leadership style in intercollegiate athletics, *Journal of Applied Sport Psychology*, 15: 1-11.
- Summers, R. J. (1983). *A study of leadership in a sport setting*. Unpublished masters thesis. University of Waterloo, Canada.
- Starr, J. (2003), *The Coaching Manual*, Pearson Education Ltd, Harlow, England.
- Stogdill, R.M. (1948). Personal factors associated with leadership: Survey of literature. *Journal of Psychology*, 25, 35-71.
- Stogdill, R. M. (1974). *Handbook of Leadership*, Free Press.
- Stogdill, R. M. & Coons, A.E. (1951). *Leadership behaviour, its description and measurement*. Columbus, OH: The Ohio State University.
- Straub, W.F. (Ed.) (1978). *Sport Psychology: An analysis of athlete behaviour*. Ithaca, NY: Movement.
- Strean, W. B., Senecal, K., Howlett, S., & Burgess, J. (1997). Xs and Os and what the coach knows: Improving team strategy through critical thinking. *Sport Psychologist*, 11, 243 – 256.
- Telama, R. (1982). *Sports in and out of school*. In R.M. Malina (Ed), Youth athletes: Biological, psychological, and educational perspectives. Champaign, IL: Human Kinetics.
- Terry, P. C. (1984). The coaching preference of elite athletes competing at Universiade '83. *Canadian Journal of Applied Sport Sciences*, 9, 201-208.
- Terry, P. C. & Howe, B. L. (1984). Coaching preferences of athletes. *Canadian Journal of Applied Sport Sciences*, 9, 188-193.
- Terry, R. L. & Woods, M. E. (1975). Effects of humour on the test performance of elementary school children. *Psychology in the Schools*, 12, 182-185.

- Tharp, R. G., & Gallimore, R. (1976). What a coach can teach a teacher. *Psychology Today*, 9 (8), 74-78.
- Thorpe, J. & Medford, P. (1986). *An inventory for measuring player-coach interaction*. *Perceptual & Motor Skills*, 63, 267 – 270.
- Tichy, N. M., & Devanna, M. A. (1986). *The transformational leader*. New York: Wiley.
- Tinning, R. (1982). *Improving coaches' instructional effectiveness*. *Sports Coach*, 4(5), 37-41.
- Trudel, P., Cote, J., & Bernard, D. (1996). Systematic observation of youth ice hockey coaches during games. *Journal of Sport Behaviour*.
- Vos Strache, C. (1979). Players' perceptions of leadership qualities for coaches. *Research Quarterly*, 50, 679-686.
- Vroom, V. H., & Jago, A. G. (1988). *The New Leadership: Managing Participation in Organisations*, Prentice-Hall.
- Vroom, V. H., & Yetton, P. W. (1973). *Leadership and Decision-Making*, University of Pittsburgh Press.
- Waterman, R. H. (1994). *What America does right: Learning from companies that put people first*. New York: Norton.
- Watt, D. C. (1998), *Sports Management and Administration*, E. & FN Spon, London and New York.
- Weaver, R. L., & Cotrell, H. W. (1988). Motivating students: Stimulating and sustaining student effort. *The College Student Journal*, 22, 22 – 32.
- Weese, W. J. (1994). A leadership discussion with Dr. Bernard Bass. *Journal of Sport Management*, 8(3), 176-189.

- Weinberg, R. S., & Gould, D. (2003), *Foundations of Sport and Exercise Psychology*, (3rd ed.). Human Kinetics, Champaign, IL, Illinois.
- Weinberg, R. S., & Gould, D. (1999), *Foundations of Sport and Exercise Psychology*, (2nd ed.). Human Kinetics, Champaign, IL, Illinois.
- Weinberg, R. & Jackson, A. (1990). Building self-efficacy in tennis players: A coach's perspective. *Journal of Applied Sport Psychology*, 2, 164-174.
- Weinberg, R.S., Grove, R., & Jackson, A. (1992). Strategies for building self-efficacy in tennis players: A comparative analysis of American and Australian coaches. *Sport Psychologist*, 6, 3-13.
- Weinberg, R., & McDermott, M. (2002). A comparative analysis of sport and Business organisations: Factors perceived critical for organisational success. *Journal of Applied Sport Psychology*, 14: 282-298.
- Weese, W.J. (1994). A leadership discussion with Dr. Bernard Bass. *Journal of Sport Management*.
- Weese, W.J. (1996). Do leadership and organisational culture really matter? *Journal Of Sport management*, 10 (2), 197 -206.
- Weiss, M. R., & Friedrichs, W. D. (1986). The influence of leader behaviours, coach attributes and institutional variables on performance and satisfaction of collegiate basketball teams. *Journal of Sport Psychology*, 8, 332-346.
- Weiss, M., & Gould, D. (1986). *Sport for children and youths*. Champaign, IL: Human Kinetics.
- Wilcox, S., & Trudel, P. (1998). *Constructing the coaching principles and beliefs of a youth ice hockey coach*. Avante.

- Williams, Jean, M. (1998), *Applied Sport Psychology: Personal growth to peak performance*, 23, 345-363. Mayfield Publishing Company, California, U.S.A. Mountain View, CA: Mayfield.
- Woodman, L. (1993). Coaching: A science, an art, an emerging profession. *Sport Science Review*, 2(2), 1-13.
- Yukelson, D. (1997). Principles of effective team building interventions in sport: A direct services approach at Penn State University. *Journal of Applied Sport Psychology*, 9, 73-96.
- Yukl, G. A. (1971). Toward a behaviour theory of leadership. *Organisational Behaviour and Human Performance*, 6: 414 – 440.
- Yukl, G. A. (1989). Managerial leadership: a review of theory and research. *Journal Of Management*.
- Yukl, G. A. & Van Fleet, D. D. (1992). *Theory and research on leadership in organisations*. In M. D. Dunnette & L. M. Hough (eds.). *Handbook of Industrial & Organisational Psychology*, (1992). 2nd edition, PaloAlto, CA: Consulting Psychologists Press, 147 – 197.
- Zhang, J., Jensen, B.E., & Mann, B.L. (1997). Modification and revision of the leadership scale for sport. *Journal of Sport Behaviour*, 20, 105-122.
- Zimmerman, J. (1997). *The culture of success*. New York: McGraw-Hill.

Appendix 1



5. Level of Coach Education attained:

a) **GAA Education Courses:** (Please tick)

None GAA Foundation GAA Level 1 GAA Level 2 GAA Tutor

b) **Sport Specific 3rd Level College Qualifications:**

Type of Course (e.g. Cert., Diploma, Degree etc)	Name of Course (e.g. P.E., Sport Science, etc)

c) **Other Sports Coach Education and Qualifications:**

Name of Sport	Qualification

6. If you have undertaken any of the GAA Courses listed in Question 5 above, please answer the following?

a) **How did you rate the course(s) undertaken?** (Please Tick)

	POOR	FAIR	GOOD	V-GOOD	EXCELLENT
GAA Foundation					
GAA Level 1					
GAA Level 2					
GAA Tutor					

b) **Have the course(s) been of benefit to you with regard to coaching?** (Please Tick)

YES NO

Explain briefly:

c) **What improvements would you make to the courses?**

Describe briefly:

7. If and when required, where do you source information with regard to coaching and training issues or methods? (Please Tick)

Managerial Biographies	<input type="checkbox"/>	Internet	<input type="checkbox"/>	Other Sports Coaching Manuals	<input type="checkbox"/>	
GAA Coaching Manuals	<input type="checkbox"/>	Coaching Colleagues	<input type="checkbox"/>	Do not source information	<input type="checkbox"/>	
OTHER:		<input type="checkbox"/>	If OTHER, state source:			

8. Indicate six reasons for being involved in coaching and training county teams at adult level. (Rank 1, 2, 3, etc. in order of importance)

Winning	<input type="checkbox"/>	Being in a Position of Influence	<input type="checkbox"/>	Social Aspects	<input type="checkbox"/>	
Enjoyment	<input type="checkbox"/>	Personal Development	<input type="checkbox"/>	Health & Fitness	<input type="checkbox"/>	
Player Development	<input type="checkbox"/>	Publicity	<input type="checkbox"/>	Financial Expenses	<input type="checkbox"/>	
Competitive Environment	<input type="checkbox"/>	If OTHER, state:				

9. How do you judge your success? (Indicate six reasons and rank 1, 2, 3, etc. in order of importance)

Player Development	<input type="checkbox"/>	Player Fulfilment	<input type="checkbox"/>
Team Development	<input type="checkbox"/>	Relationship with Players	<input type="checkbox"/>
Winning Performances	<input type="checkbox"/>	Achieving Coaching Goals	<input type="checkbox"/>
Achieving Player Goals	<input type="checkbox"/>	Personal Satisfaction	<input type="checkbox"/>
Attaining Team Goals	<input type="checkbox"/>	Coaching Reputation	<input type="checkbox"/>
Team Discipline	<input type="checkbox"/>	Publicity	<input type="checkbox"/>
Team Effort	<input type="checkbox"/>	Other	<input type="checkbox"/>

If OTHER, state:

10. Rank in order of importance the following elements of the Coaching Role. (Rank 1, 2, 3, etc. in order of importance)

Team Building	<input type="text"/>	Mental Preparation	<input type="text"/>
Technical Instruction	<input type="text"/>	Tactical Instruction	<input type="text"/>
Managerial Tasks	<input type="text"/>	Physical Fitness	<input type="text"/>
Man Management	<input type="text"/>	Other:	<input type="text"/>

If OTHER, state:

11. Indicate the roles you feel are the responsibility of the Head Coach. (Rank 1, 2, 3, etc. in order of importance)

Training	<input type="text"/>	Motivation	<input type="text"/>	Organiser	<input type="text"/>
Coaching	<input type="text"/>	Discipline	<input type="text"/>	Problem Solver	<input type="text"/>
Administrator	<input type="text"/>	Friend	<input type="text"/>	Other	<input type="text"/>

If OTHER, state:

12. Indicate the characteristics of Head Coaches you have worked with or played under that you liked and disliked.

Likes

Dislikes

13. Do you possess any of the characteristics listed in Question 12 above?

Likes

Dislikes

14. If relevant, indicate other sports played, levels and duration.

NAME OF SPORT	LEVEL	NO. OF YEARS

15. Do you coach any other sport apart from Hurling? (Please Tick)

YES NO

If 'Yes', please state name of sport, level, and years of experience.

NAME OF SPORT	LEVEL	NO. OF YEARS

16. What Coach in any sport do you most admire and consider as your role model?

Name of Coach: _____

Briefly describe reasons:

Thank you for taking the time to complete this questionnaire.

Appendix 2

RLSS QUESTIONNAIRE

Directions:

Each of the following statements describes a specific behaviour that a coach may exhibit. For each statement there are five alternative responses: **Always** (i.e. 100% of the time), **Often** (75% of the time), **Occasionally** (50% of the time), **Seldom** (25% of the time), and **Never** (0% of the time).

You are required to indicate your characteristic behaviour by ticking the appropriate one. There is no right or wrong answer. Your spontaneous and honest response is important for the success of the study.

Please answer every question.

	As a Senior Hurling Coach at Inter-County Level.....	Always 100%	Often 75%	Occasionally 50%	Seldom 25%	Never 0%
1	I put the suggestions made by team members into operation					
2	I ask for the opinion of the players on strategies for specific competition					
3	I encourage the players to make suggestions for ways to conduct training					
4	I let the players try their own way even if they make mistakes					
5	I see the merits of players' ideas when different from the coach's					
6	I let the players set their own goals					
7	I get approval from the players on important matters before going ahead					
8	I let the players decide on tactics to be used in a competition					
9	I give the players freedom to determine the details of conducting a drill					
10	I get input from the players at team meetings					
11	I ask for the opinion of players on important coaching matters					
12	I let the players share in decision-making and policy formation					
13	I show "OK" or "Thumbs Up" gesture to players when they perform well					
14	I pat a player after a good performance					
15	I congratulate a player after a good performance					
16	I tell a player when the player does a particularly good job					
17	I express appreciation when a player performs well					
18	I encourage a player when the player makes mistakes in performance					
19	I praise the players' good performance after losing a competition					
20	I compliment the player for good performance in front of others					

	As a Senior Hurling Coach at Inter-County Level.....	Always 100%	Often 75%	Occasionally 50%	Seldom 25%	Never 0%
21	I recognise individual contributions to the success of each competition					
22	I clap hands when a player does well					
23	I give credit when it is due					
24	I reward a player as long as the player tries hard					
25	I make complex things easier to understand and learn					
26	I pay special attention to correcting players' mistakes					
27	I explain to each player the techniques and tactics of the sport					
28	I use a variety of drills for training					
29	I stress the mastery of skills					
30	I use objective measurements for evaluation					
31	I conduct proper progression in teaching fundamentals					
32	I supervise players drills closely					
33	I clarify training priorities and work on them					
34	I use my knowledge of the different elements of the sport (i.e. Technical, Tactical, Physical Fitness, Mental Preparation) as required for the various situations					
35	I coach to the level of the players					
36	I set goals that are compatible with the players' ability					
37	I clarify goals and the paths to reach goals for the players					
38	I adapt coaching styles to suit the situation					
39	I use alternative methods when the efforts of the players are not working well in practice or in competition					
40	I alter plans due to unforeseen events					
41	I put the appropriate players in the line-up					
42	I put the players into different positions depending on the needs of the situation					
43	I assign tasks according to each individual's ability and needs					
44	I increase complexity and demands if the players find the demands are too easy					

[RLSS 00]

	As a Senior Hurling Coach at Inter-County Level.....	Always 100%	Often 75%	Occasionally 50%	Seldom 25%	Never 0%
45	I encourage close and informal relationships with the players					
46	I remain sensitive to the needs of the players					
47	I stay interested in the personal well-being of the players					
48	I look out for the personal welfare of the players					
49	I encourage the players to confide in the coach					
50	I perform personal favours for the players					
51	I help the players with their personal problems					
52	I visit with the parents/guardians of the players					
53	I disregard players' fears and dissatisfactions					
54	I refuse to compromise on a point					
55	I plan for the team relatively independent of the players					
56	I prescribe the methods to be followed					
57	I dislike suggestions and opinions from the players					
58	I fail to explain my actions					
59	I present ideas forcefully					
60	I keep aloof from the players					

Appendix 3

LETTER OF INTRODUCTION

Postal
Address

xx/xx/2007

Dear

I am presently undertaking a Masters Degree (MA) through the Department of Health, Sport and Exercise in Waterford Institute of Technology. My research thesis is based on a study of the Leadership and Coaching Behaviours of inter-county senior hurling managers and coaches.

Part of the study involves researching information from past and present inter-county coaches. In order to do this I am employing the use of structured and validated questionnaires.

To this end I am enclosing these questionnaires for your attention. I would be very grateful if you could take the time to complete them and return them in the enclosed stamped addressed envelope, along with the letter of informed consent.

Should you have any queries with regard to the study or require any further information related to it, please do not hesitate to contact me.

Thanking you in advance and looking forward to hearing from you.

Yours sincerely

Paddy McCormack

Appendix 4

LETTER OF INFORMED CONSENT

The information contained within the attached questionnaire will be used only for this present study and will not be used for any other research project. Please be assured that if you agree to partake in this study that your responses will be completely confidential and known only to the researcher and supervisor involved in the study. Your name and other details will remain anonymous at all times throughout the research process. Furthermore, under the Freedom of Information Act, you will have the right of access to your own personal data upon request. If you are interested in taking part, before completing the questionnaire I would ask you to sign below that you give your consent to take part in this study. Please be aware that even when you do consent to take part, you have the right to withdraw from the study at any time without prejudice.

I would like to thank you for your attention and I would be very grateful if you decide to participate in my research study.

Signed _____

Date _____

Contact Details _____

Appendix 5

MODIFICATIONS TO RLSS

Wording on a number of the items of the Revised Leadership Scale for Sports (RLSS) were modified in this study as follows:

- The word 'athletes' was removed from all statements where it appeared and replaced by the word 'players'.
- In item number 8 'tactics' was introduced instead of 'plays'.
- In item 15 'play' was replaced by 'performance'.
- 'Training' was used in item number 28 instead of 'practice'.
- In item number 29 the word 'greater' was taken out of the sentence.
- Item number 34 which read as 'I possess good knowledge of the sport' was altered to read 'I use my knowledge of the different elements of the sport (i.e. Technical, Tactical, Physical Fitness, Mental Preparation) as required for the various situations'.