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High School Basketball Players' Perceptions of their Coaches' Use of Social Power

by

Philip S. J. Kreisel

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH IN

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Date Oct 3, 1988

DEDICATION

To the Rose and the Prince

M. J. & Hal

Abstract

This research examined the leadership role of the high school basketball coach using French and Raven's (1959) theory of social power. French and Raven postulated that leaders influence their followers using five basic forms of power: reward power, coercive power, expert power, legitimate power, and referent power. On the basis of previous research, it was hypothesized in the present study that athletes would perceive expert and legitimate power to be the major sources of power of the coach, followed in turn by referent, reward and coercive power. Additional hypotheses postulated positive relationships between expert and referent power and the reported satisfaction that athletes had with their sport, their coach, and their personal performance. It was hypothesized that reward and legitimate power would be unrelated to sport satisfaction, positively related to coach satisfaction and negatively related to performance satisfaction. Negative relationships were predicted between the reported satisfactions and coercive power.

The subject population for this study consisted of the players from fifteen City of Edmonton high school male basketball teams. Participants from each team were tested as a group at their school. They completed a questionnaire under controlled classroom conditions. One hundred and thirty of the 159 eligible players participated in the study, yielding an 81.8% response rate.

Two sets of scales were used to measure social power. One set arranged single item descriptors of each form of power into a Thurstonian paired comparison inventory. The other set arranged multiple descriptive statements of each form of power in a Likert scale format. In evaluating the first hypothesis, both measures found expert power to be the major source of power emphasized by coaches. The Likert data, however, showed reward power to be second overall, followed in turn by legitimate, referent and coercive power, while the Thurstone data showed legitimate power as being second, followed in turn by referent, reward and coercive power. The Likert measures of expert, reward, and referent power were positively correlated with athletes' reported satisfaction with the sport

and with the coach. In addition, significant positive relationships were found between legitimate power and satisfaction with the coach, and reward power and satisfaction with personal performance.

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This final product would not be possible without the assistance and support of many individuals. I would like to express my deepest appreciation to my supervisor, Dr. Len Wankel, for all of his suggestions and comments given to me throughout the duration of this research. Sincere appreciation is also extended to my committee members, Dr. Trevor Slack, Dr. Murray Smith, Dr. Rick Alderman and Dr. Len Stewin, for their contribution to this dissertation and to my overall studies throughout my doctorate program. I must also acknowledge the comments and ideas put forward by my external advisor, Dr. "Chella" Chelladurai, who is a researcher and teacher that I have long admired, and whose work was instrumental in the development of my current interest in power, leadership and sport.

A special thank you is extended to the principals, coaches and athletes from the Edmonton Public and Edmonton Separate Schools that took part in the study. Without their cooperation and participation, this study would not have been possible. I would also like to acknowledge the assistance of Mr. Dave Raboud, for his willingness to allow members from his waterpolo team to take part in the pilot test portion of this research.

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I. Plan of the Study

A. Introduction

One of the most important leaders in organized sport programs is the coach. In describing coaching behavior, however, most proposed typologies of coaching styles are either based on individual profiles of successful professional coaches (Curry & Jiobu, 1984; Michener, 1976; Tharp & Gallimore, 1976) or are largely heuristic models (Martens, Christina, Harvey, & Sharkey, 1981; Ogilvie & Tutko, 1966; Tutko & Richards, 1971). Another approach for describing coaching behavior has been to make use of established leadership theory. A variety of theories of leadership are available, but none are without problems. On a simplistic level, one might begin to assess leadership on the basis of who leaders are, what leaders do and how leaders act and maintain their status (e.g., Bass, 1960; Cartwright & Zander, 1968a; Cohen, Fink, Gadon, & Willits, 1980; Katz & Kahn, 1978; Lassey & Sashkin, 1983; Wexley & Yukl, 1977; Yukl, 1981). However, when one begins to detail the skills and tasks that are a necessary part of leadership, it becomes evident that "there are almost as many different definitions [and approaches] of leadership as there are persons who have attempted to define the concept" (Stogdill, 1974, p.7).

Although general leadership models have been applied within sport situations, empirical studies on effective leadership styles with respect to coaching/sport situations have generated inconclusive results. In particular, studies that have applied Fiedler's (1967) contingency leadership model to sport have not demonstrated a clear relationship between a coach's leadership style and effective performance by the sport team (Danielson, 1974; Gordon, 1981; Horwood, 1979; Inciong, 1974; Naylor, 1976). The work in recent years by Chelladurai and his associates on a multi-dimensional sport leadership model has been more successful in determining significant relationships between coaching style, athletic performance and sport situations (Chelladurai, 1984a; 1984b; Chelladurai & Carron, 1983; Chelladurai & Saleh, 1978; 1980). Chelladurai's research presents a

valuable overview of coaching leadership. The present study is intended to extend that overview by examining specific leadership behaviors of selected high school coaches.

The limited development of knowledge on coaching leadership behavior might be partially attributed to the tendency of researchers to superficially address many aspects of leadership, rather than examining the concept from a more theoretically grounded perspective. One important parameter within leadership theory is the relationship that exists between a leader and his/her followers. Although the leader is a pivotal factor in any study of the leadership process, "followers also are important ... because without responsive followers there is no leadership" (Adams & Yoder, 1985, p. 37). This is certainly applicable to formally organized sport situations where some form of interaction exists between the coach and his/her athletes. For many athletes, the coach is a combination of teacher, parental figure, role model and friend (Harrison, 1983; Martens et al., 1981; Rog, 1984; Westcott, 1979). As such, the coach often has to decide carefully how he or she will interact with the athletes. When studying this relationship further, it becomes evident that the manner in which a leader interacts, communicates, influences, and controls his/her followers may be viewed as a power relationship.

The act of exerting influence or power over others is perhaps one of the most important defining elements of leadership (cf., Adorno, Frenkel-Brunswik, Levinson, & Sanford 1950; Back, 1961; Bass, 1981; Cartwright, 1959a; 1959b; Cohen et al., 1980; Doob, 1983; French & Raven, 1959; French & Snyder, 1959; Weber, 1971; Yukl 1981). Some enjoy wielding power; others do not. Some use it effectively, while others do not. Although its presence is clearly evident within relationships between leaders and followers, empirical investigation of social power remains an aspect of leadership behavior that is largely neglected by researchers (Cartwright, 1959b; Henderson, 1981; Kipnis, 1976; Tedeschi, Schlenker & Bonoma, 1973). Henderson (1981) surmised that this may, in part, be due to the "little consensus [that has] existed concerning the conceptualization of social power, its place within the knowledge structure of social psychology as well as other

social science disciplines, or its utility in helping solve the social problems of the day" (p. 5).

Empirical research on the use of social power by sport coaches has been quite limited. It has mainly centered on whether or not coaches in various sport settings are authoritarian (Bain, 1972; Gordon, 1981; Horwood, 1979; Naylor, 1976; Sage, 1974a; 1974b). A person is viewed as being authoritarian if he/she is "cold, amoral, and possesses a detached personal unresponsiveness and a covertly aggressive willingness and ability to manipulate others" (Sage, 1974a, p.190). The relevant sport studies, however, determined that male soccer, football and basketball coaches were not "overly authoritarian." Although the intent of these studies was limited to determining the extent of authoritarianism among coaches, one can still question whether coaches use other forms of power when interacting with athletes, particularly if authoritarian behavior was not a major source of influence.

Although there has only been limited empirical research on the use of social power in interpersonal relationships, several structured models on social power have been proposed over the past thirty years (e.g., Bass, 1981; Blau, 1964; Cartwright, 1959a; French and Raven, 1959; Henderson, 1981; Kipnis, 1974; McClelland, 1975; Thibaut & Kelley, 1959; Winter, 1973). One of the most enduring models is the typological analysis proposed by French and Raven (1959). According to this perspective, leaders influence their followers behavior using five basic forms of power: reward power, coercive power, legitimate power, expert power and referent power. While a leader might be inclined to emphasize one or more of these types of power, it is thought that all five would be used at one time or another during a leader's tenure (Busch, 1980; Raven, 1974; Wexley & Yukl, 1977). It is a basic assumption of the current research that this typology might also be useful in explaining how coaches influence and interact with their athletes in various sport settings.

B. Statement of the Problem

The purpose of this study was to examine the leadership role of the formal sports coach in terms of social power theory. Because of the limited reserch on social power in sport, there are several questions that can be addressed. For instance, it is not known whether coaches tend to rely on some forms of power more than others in their coaching. Further, it is not known how the use of different forms of social power by high school coaches effects athletes within a sport setting. This study will address these questions by empirically testing French and Raven's (1959) typology of social power within a particular high school sport setting (basketball). This ultimately will result in an expansion of knowledge on leadership in sport by providing information on the ways that coaches interact with and influence their athletes.

C. Justification for the Study

There are four primary reasons for undertaking this study. The first centers on the greater need for understanding the role of the coach in formal sport environments. Coaches are teachers, socializing agents and counsellors who provide important guidance and feedback to athletes of all ages (Alderman, 1974; Buckelew, 1984; Gallon, 1980; Harrison, 1983; Hart, 1972; Lombardo, 1984; Martens, 1982; Martens et al., 1981; Rog, 1984; Tharp & Gallimore, 1976; Westcott, 1979). Although there is continued emphasis on the importance of coaches, empirical research on the methods used by coaches in communicating with or influencing athletes is very limited (Gordon, 1986; Horne & Carron, 1985).

Current literature pertaining to power and coaching is extremely limited. For instance, power is often depicted as being negative by sport writers, especially when stereotypical images of coaching styles are proposed (e.g., Daly, 1980; Martens et al., 1981; Tutko & Richards, 1971). However, this conclusion is invalid, as it is the user or the use of power which is good or bad, not the form of power itself (Bass, 1981; Burns,

1978; Cuming, 1981; McClelland, 1970). Previous investigations of coaches have simply indicated that coaches are not overly authoritarian (Bain, 1973; Gordon, 1981; Horwood, 1979; Naylor, 1976; Sage, 1974a).

A second reason for undertaking the present study was to contribute to the general knowledge on social power by eliminating some of the methodological weaknesses that have pervaded previous research on the French and Raven social power typology. Although French and Raven's theory is "perhaps the most widely quoted typology of power" (Mintzberg, 1983, p. 25), criticisms have been noted concerning the methods used to gather data on it. For instance, much of the research on social power has been conducted under experimental conditions using hypothetical situations with university students. There is a need to conduct more applied research with actual leaders and subordinates (e.g., Litman-Adizes et al., 1978; Podsakoff & Schriesheim, 1985; Sheley & Shaw, 1979).

Much of the limited field research which has been conducted utilizing French and Raven's typology has suffered from severe methodological problems (Podsakoff & Schriesheim, 1985; Schriesheim, Hinkin, & Podsakoff, 1985). On the basis of a recent review of field studies utilizing this typology, Podsakoff and Schriesheim (1985) concluded that a more adequate examination needs to be conducted and that much more research is needed. In particular, they noted that methodological problems within previous research have given conflicting results in subordinates' reports on the impact of various forms of social power. Many of the studies reviewed by the authors "used single-item operationalizations of each of French and Raven's bases of power" (p. 392) and "asked subordinates to rank order the five power bases according to which was most important (1) through which was least important (5) in securing their compliance or cooperation with requests from their supervisors" (p. 401). Such instruments preclude the establishment of any measures of internal reliability, do not allow for independent assessment of the

importance of the different power bases and restrict the type of statistical analyses that can be performed.

The third reason for undertaking this study was to make a contribution to the general understanding of power in high school coaching settings: In this regard, the study will extend current literature on French and Raven's theory by providing information on its application in another leadership setting. Previous research has applied this theory to business (e.g., Busch, 1980), family (e.g., Smith, 1970), medical (e.g., Fontaine & Beerman, 1977) and educational settings (e.g., Davis, 1979; Jamieson & Thomas, 1974). This will be the first systematic application of the theory in a sport setting. Such an extension is consistent with Podsakoff and Schriesheim's recommendation that more attention be directed to applying the framework to different types of leadership situations.

The fourth reason for undertaking this study was based on the inconsistency in the literature with respect to the effects of a leader's use of reward and coercive behaviors on subordinate performance and satisfaction. Podsakoff and Schriesheim (1985) noted that leadership research within an applied behavior analysis perspective has shown that the use of reward and coercive behaviors can effectively modify subordinates' behavior, yet studies utilizing French and Raven's (1959) typology "generally show supervisory reward behavior to be unrelated, or negatively related, to subordinate outcome variables" (p. 387). It is not known whether these reported differences reflect basic underlying differences or whether they might reflect some of the methodological problems, noted above. Although no previous social power research pertinent to the issue has been conducted in sport settings, previous behavioral coaching research is consistent with the leadership research in indicating that reward and coercive behaviors can effectively be used to modify and improve performance (e.g. Martin & Hrycaiko, 1983; Rushall, 1983; Tharp & Gallimore, 1976). In attempting to address some of the methodological limitations of previous social power research, it is hoped that this study may throw some light on the inconsistency

between the leadership literature and the social power literature with respect to the effectiveness of a leader's use of reward and coercive behaviors.

D. Purposes and Hypotheses of the Study

There were two major purposes in this study. The first purpose was to develop a research instrument designed to measure athletes' perceptions of coaches' use of social power. The second purpose was to investigate the relationship between social power and athlete satisfaction with the sport, with the coach and with personal performance. These relationships were based on the athletes' perceptions of their coaches use of different forms of social power, as well as the athletes' personal beliefs on aspects of satisfaction within the sport setting.

In order to assess the power bases available to the coach, the first purpose of this study was to develop an appropriate research instrument. As noted earlier, measurement of social power has not been conducted in the sport environment. Inventories based on French and Raven's social power typology which have previously been developed include: The Attributed Power Index (API), developed by Holzback (1974) and refined by Lord (1977) and Lord, Phillips and Rush (1980); the Social Power Inventory, developed by Jamieson and Thomas (1974) and modified by Davis (1979); and scales developed by Bachman et al., (1966), Student (1968) and Thamhain and Gemmill (1974). It must be noted, however, that the latter three scales are somewhat problematic in terms of content validity (Podsakoff & Schriesheim, 1985; Schriesheim, Hinkin, & Podsakoff, 1985) and the validity and reliability of the former two scales are unknown. As no satisfactory instrument for assessing social power was available, a new research instrument entitled the Sport Assessment Survey (SAS) was specifically developed for this study to measure social power within a sport environment. A major portion of this study has been to investigate the reliability and validity of the SAS.

The second purpose addressed contained two subproblems. The first subproblem focused on to what extent athletes perceive their coaches to possess the various forms of social power. Previous research has determined that designated leaders will utilize all five forms of power when communicating with their subordinates (e.g., Bachman, Bowers & Marcus, 1968; Burke & Wilcox, 1971; Busch, 1980; Galinsky, Rosen & Thomas, 1973; Ivancevich, 1970; Ivancevich & Donnelly, 1970; Jamieson & Thomas, 1974; Slocum, 1970; Student, 1968; Thamhain &). Although there is no agreement across studies when French and Raven's five forms of power are ranked, many studies employing subordinate reports in business settings have found that subordinates perceived expert and legitimate power to be the most important forms of power when complying to a supervisor's requests, followed by referent, reward and coercive power (Bachman et al., 1968; Burke & Wilcox, 1971; Ivancevich, 1970; Ivancevich & Donnelly, 1970; Student, 1968). With the exception of the Burke and Wilcox study, coercive power was consistently rated as the least important form of power.

On the basis of these previous studies, the following hypothesis was proposed for this study:

Ho(1): Within the high school sport setting, athletes will perceive expert and legitimate power to be the major sources of power of the coach, followed in turn by referent, reward and coercive power.

The second subproblem pertained to the relationship that satisfaction and performance has with the use of power within the sport environment. Whereas performance can be observed or recorded by others on the basis of such things as rankings, win/loss records or outcomes (e.g., Chelladurai, 1984a), satisfaction is not as easily observed and is often based on a person's internal feelings related to his or her expectations (Csikszentmihalyi, 1975; Deci, 1975; 1980).

Although athletic satisfaction in sport has not been correlated with social power variables before, the general importance of other facets of leader behavior to athletic satisfaction has been demonstrated in previous research (e.g., Chelladurai, 1984a; Gordon,

1986; Scholten, 1978; Weiss & Friedrichs, 1986). Much of the previous research on social power in other environments was designed to further the understanding of subordinate satisfaction. Podsakoff and Schriesheim (1985) reviewed several studies conducted in business and educational environments that correlated the five French and Raven power bases with job satisfaction, satisfaction with supervision and subordinate satisfaction with perfomance. Although there are some inconsistencies in the results of these studies, some relatively consistent trends have emerged. In general, referent and expert power were positively related to the three forms of satisfaction, while the use of coercive power did not contribute to overall satisfaction. No consistent relationship was found between the three forms of satisfaction and the use of legitimate and reward power. In some cases, the use of these types of power enhanced satisfaction; in other cases, it was associated with feelings of dissatisfaction.

Based on previous research, the following hypotheses with respect to sport satisfaction were postulated:

Ho(2): There will be a negative relationship between an athlete's perceptions of the coach's reliance on coercive power and the athlete's expressed satisfaction with his participation in sport (Burke & Wilcox, 1971; Jamieson & Thomas, 1974; Podsakoff, Todor, & Skov, 1982; Richmond & McCroskey, 1984; Richmond, McCroskey, Davis, & Koontz, 1980; Slocum, 1970).

Ho(3): There will be a positive relationship between an athlete's perceptions of the coach's reliance on referent power and the athlete's expressed satisfaction with his participation in sport (Burke & Wilcox, 1971; Dunne, Stahl, & Melhart, 1978; Ivancevich, 1970; Richmond et al, 1980; Slocum, 1970).

Ho(4): There will be a positive relationship between an athlete's perceptions of the coach's reliance on expert power and the athlete's expressed satisfaction with his participation in sport (Burke & Wilcox, 1971; Cope, 1972; Ivancevich, 1970; Richmond et al., 1980; Slocum, 1970).

Ho(5): There will be no relationship between an athlete's perceptions of the coach's reliance on reward power and the athlete's expressed satisfaction with his participation in sport (Bachman et al., 1968; Burke & Wilcox, 1971; Cope, 1972; Dunne, et al., 1978; Martin & Hunt, 1980; Slocum, 1970).

Ho(6): There will be no relationship between an athlete's perceptions of the coach's reliance on legitimate power and the athlete's expressed satisfaction with his participation in sport (Bachman, 1968; Bachman et al., 1968; Burke & Wilcox, 1971; Dunne, et al., 1978; Slocum, 1970).

On the basis of previous findings in the literature on the relationship between power bases and leader satisfaction, the following hypotheses were postulated:

Ho(7): There will be a positive relationship between an athlete's perceptions of the coach's reliance on expert power and the athlete's expressed satisfaction with his coach (Bachman, 1968; Bachman et al., 1968; Bachman, Smith, & Slesinger, 1966; Burke & Wilcox, 1971; Busch, 1980; Slocum, 1970).

Ho(8): There will be a positive relationship between an athlete's perceptions of the coach's reliance on referent power and the athlete's expressed satisfaction with his coach (Bachman, 1968; Bachman et al., 1966; Bachman et al., 1968; Burke & Wilcox, 1971; Busch, 1980; Slocum, 1970).

Ho(9): There will be a positive relationship between an athlete's perceptions of the coach's reliance on reward power and the athlete's expressed satisfaction with his coach (Bachman et al., 1968; Busch, 1980).

Ho(10): There will be a positive relationship between an athlete's perceptions of the coach's reliance on legitimate power and the athlete's expressed satisfaction with his coach (Bachman et al., 1968; Busch, 1980).

Ho(11): There will be a negative relationship between an athlete's perceptions of the coach's reliance on coercive power and the athlete's expressed satisfaction with his coach (Bachman, 1968; Bachman et al., 1966; Bachman et al., 1968; Burke & Wilcox, 1971; Busch, 1980).

In the business literature, job satisfaction was based on overall personal feelings, while performance was appraised on the basis of productivity or attainment of set goals (Bachman et al., 1968; Podsakoff, Todor, & Skov, 1982; Student, 1968). In relation to the previous research utilizing the French and Raven power bases (Bachman et al., 1968; Ivancevich & Donnelly, 1970; Sheridan & Vredenburg, 1978; Slocum, 1970; Student, 1968; Thamhain & Gemmill, 1974), the following hypotheses with respect to power and performance were postulated:

Ho(12): The athlete's perceptions of the coach's reliance on expert power will be positively related to the athlete's expressed satisfaction with his personal performance in the sport.

Ho(13): The athlete's perceptions of the coach's reliance on referent power will be positively related to the athlete's expressed satisfaction with his personal performance in the sport.

Ho(14): The athlete's perceptions of the coach's reliance on reward power will be negatively related to the athlete's expressed satisfaction with his personal performance in the sport.

Ho(15): The athlete's perceptions of the coach's reliance on legitimate power will be negatively related to the athlete's expressed satisfaction with his personal performance in the sport.

Ho(16): The athlete's perceptions of the coach's reliance on coercive power will be negatively related to the athlete's expressed satisfaction with his personal performance in the sport.

E. Delimitations

There were two major delimitations imposed in this study. The first delimitation was that the athletes selected for this study were drawn from high schools throughout Edmonton. The high school setting was selected for two reasons. First, the setting provided controlled opportunities for organized sport. Although sport opportunities exist in other organized environments (e.g.; clubs, associations, community leagues), the high school setting is often an attractive venue where many students can hone their athletic skills and can achieve status and gain recognition for participation as representatives of their school. Second, many of the studies conducted on coaching behavior have focused on college/university teams (e.g., Chelladurai & Saleh, 1978; Gordon, 1981; 1986; Horne & Carron, 1985; Horwood, 1979; Scholten, 1978). Although there is no evidence to suggest that college coaches think or perform differently from high school coaches, the calibre of the average college athlete is superior to that of the average high school athlete. It is possible that this may influence the way the coach interacts with the athletes, and the way that athletes perceive the use of different power bases by the coach. However, any comparisons between the college coach and the high school coach with respect to social

power will have to be left to a future study, as no college teams were examined in the present study.

The second delimitation was that the population for the study consisted of male players from "senior boys" basketball teams from public and catholic high schools in the City of Edmonton. There have been no studies conducted that have examined gender differences with respect to perceptions of social power; hence, female basketball players were not used in this study.

F. Limitations

The study was limited by potential volunteer bias on the part of the participants. Appropriate steps were taken to get the best response rate possible; however, some athletes failed to appear on the day of the testing. For that reason, it was unknown why certain people cooperated while others did not.

Despite careful preparation, the study was also limited by the subjects' interpretation of the power bases in the final instrument. As with the use of any questionnaire designed to measure attitudes, the instrument was limited by the accuracy of responses by the athletes.

A third limitation of the study resulted from the scheduling of the testing sessions within the Public and Catholic schools. In order to inconvenience the school administration as little as possible, testing sessions were scheduled during the noon hour on a day determined by each school. This meant that students were on "their own time" and were not pulled from their regular classes. This placed the onus on the students for deciding whether or not they wished to participate in the study.

A fourth potential limitation of the study relates to the time of scheduling the testing sessions. The study was conducted after completion of the basketball season; hence, players were required to reflect back on their season. It is possible that players might have

felt differently about aspects of the sport had they completed the questionnaire during the season, rather than after it was over.

G. Definition of Terms

Basketball Coach - The designated leader appointed by the school to teach athletes the rules, skills, techniques and strategies of basketball and to conduct team practices and to lead the team in games.

Leader Satisfaction - The degree of expressed satisfaction of an athlete with the leadership of his coach. In the present study, measurements that were used included: the individual's reported satisfaction with the way that the coach treated him; the individual's reported satisfaction with the way that the coach handled the team as a whole; the individual's reported satisfaction with the decisions made by the coach; and the athlete's reported assessment of how important the coach's overall influence was to him. Negative feelings associated with the above factors would indicate perceptions of dissatisfaction with the coach.

Performance Satisfaction - An overall description of an individual's reported satisfaction with his performance based on his perception of his level of play in comparison to an overall personal standard. An evaluation of performance in the present study is based on personal assessment of skill improvement, effort put into the sport, and personal expectations for achievement.

Social Power - A behavioral relationship between at least two individuals and/or groups that occurs when person "A" has the ability or capacity to alter person "B's" behavior or actions in a direction deemed appropriate by A, who possesses the power (e.g., Bass, 1981; Burns, 1978; Cartwright, 1959a; Dahl, 1969; de Charms, 1968; French & Raven, 1959; Henderson, 1981; Kotter, 1979; Loomis, 1960; Lukes, 1974; Schopler, 1965; Winter, 1973; Yukl, 1981). French and Raven (1959) have derived five sources of social power. Based on the interaction between the coach and the athlete, these include:

Coercive Power - This form of power is based on the athlete's perceptions that he or she will be punished by the coach if he or she fails to conform to the coach's wishes.

Expert Power - This form of power is based on the athlete's perceptions that the coach possesses special talents or expertise. The athlete evaluates the coach's expertise in relation to his or her own knowledge as well as against other criteria, such as other coaches the athlete has had or is aware of.

Legitimate Power - This form of power is based on the athlete's internalized perceptions that the coach has a legitimate right to influence the athlete and that the athlete has an obligation to comply with the coach's influence. The source of legitimacy may be based on cultural values (such as age, intelligence, experience), the coach's status in the organization (e.g. position or office) or the designation of power by another authority that the athlete has knowledge about.

Referent Power - This form of power has its basis in the identification that the athlete has with the coach. This identification can be based on feelings of personal affection, loyalty and/or admiration of a coach by an athlete.

Reward Power - This form of power is based on the athlete's perceptions that he or she will be rewarded by the coach if he or she conforms to the coach's wishes.

The five forms of social power will be operationalized in the study by having athletes provide reports using both Likert and Thurstone Paired Comparison scales that illustrate how the coach relies on the various forms of social power when interacting with the athletes.

Sport Satisfaction - Positive feelings related to an individual's perceived interpretation of aspects of the sport in relation to an individual's personal frame of reference. This frame of reference is based on such things as personal expectations of the

sport and previous or related experience in the sport (based on Smith, Kendall, & Holin's (1969) definition of job satisfaction in business settings). In the present study, measurements that were used included: the individual's level of expressed liking for the sport; assessment of the adequacy of opportunities for involvement; the individual's expressed feelings of accomplishment; and the individual's assessment of their contribution in the sport. Negative feelings associated with the above factors would indicate perceptions of dissatisfaction with the sport.

II. Review of the Literature

This chapter provides an overview of the meaning and use of social power and its effects on human behavior. It is divided into six major sections. The first section introduces the conceptualization of social power; the second section presents some classical socio-political interpretations of social power. The third section examines social power from a social-psychological perspective and investigates the various motivations that individuals have for acquiring, using and retaining power. The fourth section examines the usage and impact of power in leadership situations. The fifth section presents four specific models of social power, and the sixth section is devoted to a detailed discussion of the social power typology developed by French and Raven (1959).

A. Conceptualizations of Social Power

Power is a perplexing concept. On the one hand, it is an ageless and dominating facet of human existence that individuals intuitively understand. Yet on the other hand, it is a form of behavior besieged with a multitude of definitions and interpretations which may differ dramatically from one theorist to the next. In some people's minds, power has been associated with emotional connotations that imply that it is "bad" or "corrupt." For instance, McClelland (1970) felt that it was socially acceptable to be concerned about doing things well or making friends, but it was reprehensible to be concerned with having influence over others, or in McClelland's terminology to have a need for power. Furthermore, he suggested that there were so many conditions describing power that had "a distinctly negative flavor - dominance, submission, competition, zero sum game (if I win, you lose) [that] it is small wonder that people do not particularly like being told they have a high need for power" (p. 32). However, associating power with negative descriptors is in part making an assumption that power is an object or tangible product, rather than thinking of power as a behavioral process (e.g., Cuming, 1981; Dahl, 1969; Henderson, 1981; Ng,

1980; Olsen, 1970; Schopler & Layton, 1974). Instead, one should judge the actions of power; even then, the judgment is based on an observer's interpretation of how power is used in a given relationship. A positive or negative interpretation "will depend very much upon the observer's point of view, his interests and habits of classifying, and perhaps the consequences to him and others of using any particular concept" (Winter, 1973, p. 7).

As a starting point, many theorists believe that power exists as a relation among human aggregates (e.g., Cartwright, 1959a; French & Raven, 1959; Olsen, 1970; Schopler, 1965; Thibaut & Kelley, 1959) These aggregates can be individuals, groups, and/or governments. Power cannot be categorized as a physical property, entity or possession. Instead, power can be viewed "as a relationship in which two or more persons tap motivational bases in one another and bring varying resources to bear in the process ... Power is ubiquitous; it permeates human relationships. It exists whether or not it is quested for" (Burns, 1978, p. 15). A power relationship is recognized when entity "A" has the ability or capacity to alter entity "B's" behavior or actions in a direction deemed appropriate by entity A, who possesses the power (e.g., Bass, 1981; Burns, 1978; Cartwright, 1959a; Dahl, 1969; de Charms, 1968; French & Raven, 1959; Henderson, 1981; Kotter, 1979; Loomis, 1960; Lukes, 1974; Schopler, 1965; Winter, 1973; Yukl, 1981).

It is when one attempts to further determine the characteristics of social power that definitional problems arise. For instance, terms such as influence, control, persuasion, force, threat, authority, dependence and compliance have been used synonymously with social power (Bierstedt, 1970; Henderson, 1981; Olsen, 1970). This practice has had problematic effects on research in the area. In particular, most of these terms suggest that power is primarily used as a weapon to hurt another human being. Although these terms are valid descriptions of some of the uses of power, relying primarily on these terms can cause one to forget that power can also be used in a less violent or threatening manner. For instance, one could alter another's behavior on the basis of a logical explanation or by

suggesting a reasonable alternative form of action (Bass, 1981; Henderson, 1981; Olsen, 1970; Winter, 1973).

Of all the terms thought to be interchangable with social power, the concept of "social influence" deserves special mention. A variety of attempts have been made to distinguish "power" and "influence" (e.g, Bass, 1981; Burns, 1978; Minton, 1972; Olsen, 1970; Tedeschi & Lindskold, 1976). Henderson (1981), after comparing many definitions of social influence with social power, concluded that it was virtually impossible to distinguish between the terms. In a human interaction, Henderson felt that one could subtly exert power over another or subtly influence another. Either interpretation produces the same outcome. Tedeschi and Lindskold (1976) believed that distinctions between social influence and social power were largely a matter of semantics. Both terms refer to a process of human interaction.

A clear conceptualization of power is often dependent on a particular situation, relationship or setting (Dahl, 1969; Henderson, 1981; Ng, 1980; Winter, 1973). For instance, a power relationship between friends is established informally when one person proposes an evening's entertainment and the other complies. Other situations, however, may demonstrate more formalized power relationships, such as between teachers and students, parents and children, and political leaders and members of their cabinets. Even in such situations, varying power relationships might produce similar outcomes. For example, a teacher who is a firm disciplinarian may be as successful in molding intelligent students as a teacher who achieves a similar goal by being less harsh (Tauber, 1985).

The study of social power has also had an impact on many different (and often seemingly distinct) areas of study. For instance, areas of study such as anthropology (e.g, Schermerhorn, 1965), philosophy (e.g., Kaplan, 1977; Machiavelli, 1977; Russell, 1938), economic, political and organizational theory (e.g., Crozier, 1967; Dahl, 1969; Hickson, Hinings, Lee, & Schneck, 1971; Lukes, 1974; Mechanic, 1983; Weber, 1970) have all presented perspectives of how social power can be used in human interaction. The next

portion of this chapter will discuss some classical socio-economic perspectives of social power that provide the foundations for further analysis from a social-psychological point of view.

B. Political and Organizational Theories of Social Power

The extent to which power can function to the benefit of people is often dependent on whether the society is a democracy or a dictatorship. Ideally, a democracy is "a state in which power is exercised for the common weal, the general welfare [while] despotisms are exploitative states, disproportionately benefitting certain segments of society. The difference relates not only to the ends power is meant to serve but also to the quality of the means employed" (Kaplan, 1977, p. 467). Given a choice, most people prefer a democracy over a dictatorship, given such historical examples of the exploitative use of power during the Roman Empire, or more recently under the Nazi regime in Germany during World War Two (Kaplan, 1977; Martin, 1977). Although the violent use of power is minimized to a much greater extent in a democratic society, power is not necessarily divided equally among the masses. For instance, in a capitalistic democracy, power is often associated with control over resources, particularly wealth. Those with little control over resources, who Karl Marx defined as the proletariat, had considerably less power than the bourgeoisie, defined as those individuals who controlled the means of production (Giddens, 1977).

Another way of observing power in action within modern democr[illegible]n to examine bureaucratic institutions. Bureaucracies are most often associat[illegible] with industrial corporations, but their presence has also been prevalent (interalia) with[illegible] governmental and religious streams in society (Chackerian & Abcarian, 1[illegible]ess of where they are encountered, bureaucracies are forms of organizations noted for having highly specialized positions, tasks and goals that are based on firmly established rules.

The power structure within bureaucracies is based on a hierarchical system of authority:

> Each member or officer of an organization is to be held accountable to a superior for his own decisions as well as for those of his subordinates. The authority of the superior is based on expert knowledge and is sanctioned and made legitimate by the ultimate source of authority -- the chief official at the top of the hierarchical pyramid. (Korman, 1971, p. 86)

Weber (1970) proposed that authority within bureaucracies existed in three ideal forms: rational-legal, traditional and charismatic authority. Rational-legal authority was based on normative rules established by the organization where individuals were elevated into positions of authority and were given the right to issue commands. The basis of this form of power is that authority is equated to an established office or title. As such, the person's authority over others is limited to the members of the office during an established time frame. Furthermore, it is held that the members of the office group, in so far as they obey a person in authority, do not owe this obedience to this individual outside of the office environment (Weber, 1970).

Traditional authority is based on beliefs established in the sanctity of traditions, or precedents established in past times. "Whereas the hierarchy of rational-legal authority is defined in terms of offices, traditional authority is defined by a system of statuses" (Ng, 1980, p. 53). Both the strength and weakness in interpreting this form of authority lie in the definition of "tradition" by the institution. For instance, one institution might grant a certain authority to a person on the basis of years of experience, while another might base authority on the chronological age of the individual. It should be noted that there may not be any consistent guidelines across institutions for establishing traditions. In other words, what is traditionally valued as a precedent in one organization may not be valued in another (Martin, 1977).

Rather than being firmly established under a written set of guidelines, Weber's third form of bureaucratic authority, charismatic authority, is based on behaviors emulating from an individual's personality:

> [A charismatic individual] is set apart from ordinary men and treated as endowed with supernatural, superhuman, or at least specifically exceptional powers or qualities. . . . It is recognition on the part of those subject to authority which is decisive for the validity of charisma. This is freely given and guaranteed by what is held to be a "sign" or proof, originally always a miracle, and consists in devotion to the corresponding revelation, hero worship, or absolute trust in the leader. . . . If he is for long unsuccessful, above all if his leadership fails to benefit his followers, it is likely that his charismatic authority will disappear. (Weber, 1970, p. 38)

While all three of the above forms of authority may be found in a working bureaucracy, it is the rational-legal authority that is most clearly evident and used most frequently in the day-to-day interactions:

> Charismatic authority is likely during periods of rapid social change, when extraordinary qualities are required to deal with unusually disorienting conditions. Legal-rational authority is characteristic of more stable or predictably evolving societies, in which subordinates develop exchange relations susceptible to rule. (Martin, 1977, p. 82)

Although power in bureaucracies is classically depicted as existing on a vertical hierarchy, it is possible for those at lower levels to exhibit power in their own right. This is theorized by Hickson, Hinings, Lee, Schneck and Pennings' (1971) strategic contingencies theory. The authors proposed that the perceived power of an individual or department in an organization increased when one could account for all possible contingencies. Contingencies were defined by the authors as alternative events or courses of action that could affect one's status or power within an organization. In this regard, the authors suggested that those who could best cope with uncertainty, avoid substitutability, and whose functions were central or pivotal to others would be perceived as having a great deal of power.

Uncertainty was simply defined as having a lack of information about future events, whether it be in human relationships, mechanical operations or factors within the environment. One can predict how people will react or how machines will work to a certain degree; however, one never knows when a breakdown will occur. The authors were quick to note that uncertainty does not give power; it is how one copes with the situation that gives power. Substitutability was related to a person's or unit's particular

skills, knowledge and replacability. The power of a person or unit was felt to increase on the basis of the difficulty one would have in obtaining a suitable substitute. Finally, centrality was defined in terms of how necessary and how essential the activities or functions of the person or unit were to the rest of the organization. The greater the centrality, the greater the power. Establishing power by controlling for contingencies is only good as long as the situation remains relatively stable. "As the goals, outputs, technologies, and markets of organizations change so, for each subunit, the values of the independent variables change, and patterns of power change" (Hickson et al., 1971, p. 227).

Perhaps one of the greatest impacts that bureaucratic organizations have had on modern society is recognizing that the average human being holding a position or office is capable of possessing and using power. Many historical events have suggested that power is a form of energy reserved for elitist or exceptional individuals. What bureaucratic organizations suggest is that it is possible to work up within an established hierarchical structure, and in the process, gain and exert power over others. Chackerian and Abcarian (1984) believe that the concept of bureaucracy:

> Is found wherever such bureaucratic values as hierarchy, impersonality and expertise are supported. This means that a wide variety of social roles can express the bureaucratic values that underlie bureaucratic power. Some of these values are found in work institutions, others are found in nonwork institutions such as the family, school, and political system" (p. 3).

On this basis, one can regularly observe power in action. Using an agreed upon set of rules that are understood by all individuals, power relationships occur in a variety of social situations. "Examples from everyday life include a father's power to punish his own child, a court's power to cite an individual for contempt, a priest's power to grant absolution, and a treasurer's power to collect dues from members of an association" (Schermerhorn, 1965, p. 36). However, power exchanges are not limited to established situations. Rather, it can be seen that any relationship involving at least two people "contains potentialities for the exercise of influence and for the induction of change in one

or both of the participants .... It is evident that power could subsume such traditional content areas as learning, attitude change, leadership, conformity behavior, etc." (Schopler, 1965, p. 178).

There are other forces at work in determining how a power relationship actually works. For instance, most definitions of bureaucracies present a limited perspective on how relationships between designated leaders and followers are perceived by people inside and outside organizations. Often, much of the research conducted on leader-subordinate interactions has assumed that the power relationship is disproportional, where the leader has most of the power while the subordinate has very little (e.g., Korman, 1971; Weber, 1970; Wamsley, 1970) . This is not necessarily the case. Podsakoff (1982) found several studies that demonstrated that:

> The behavior of subordinates is an important determinant of a leader's behavior and that the nature of the influence process between supervisors and subordinates is reciprocal; that is, not only do leader behaviors produce changes in subordinate satisfaction and performance, but subordinate behaviors also cause changes in leadership style" (p. 59).

Subordinates also possess power independent of a leader's actions. This becomes evident when one considers the particular skills, knowledge, as well as effort and personal interest displayed by subordinates in work situations in which higher ranking personnel are often reluctant to participate (Mechanic, 1983). A classic example of the power of the subordinate is provided by Crozier (1967). An examination of work within a French tobacco factory revealed the untapped power that existed in the maintenance department, whose primary task was to maintain and repair the machines. In the event of a mechanical breakdown, the factory went into a standstill. In such cases, it was apparent that production workers, supervisors and administrative officers could potentially be at the mercy of the maintenance men, for it was this latter group that possessed the knowledge and skills necessary to repair the machines and restore production in the factory. While this study showed that subordinates can also have power, it was somewhat exceptional, as

most research on the leader-subordinate relationship in terms of power has usually emphasized the leader, not the subordinate.

Another organizational perspective was developed by Lukes (1974), who believed that power was a multi-faceted phenomenon and as such, should be analyzed multi-dimensionally on the basis of deciding precisely what people wish to know about power. His concept of power, based on an examination of political conflict, was dependent on the increased complexity that a situation offered, which he proposed could be anlayzed over three intertwined dimensions.

A one-dimensional view of power was limited to investigating behavior "in the making of decisions on issues over which there is an observable conflict of (subjective) interests" (p. 15). A two-dimensional view of power emerged when "one exercises power in the manner the one-dimensionalists favor, but also by controlling the agenda mobilizing the bias of the system, determining which issues are 'key' issues, indeed which issues come up for decision, and excluding those which threaten the interests of the powerful" (Lukes, 1986, p. 9). The three-dimensional view of power is even more perplexing, where it is suggested that the unconscious inactivity of people can become a form of power in and of itself. This is where one can question why there is political inactivity in certain areas, why conflict does not arise or why grievances are not forwarded. Lukes (1974) contends that making a decision not to act is still a conscious decision. From a behavioral perspective, it is when one considers the unconscious motives that a third dimensional view of power occurs. Lukes noted a number of ways of exhibiting unconscious actions. "One may be unaware of what is held to be the 'real' motive or meaning of one's action (as in standard Freudian cases). Or, second, one may be unaware of how others interpret one's action. Or, third, one may be unaware of the consequences of one's action" (p. 51). Lukes notion of power reinforces the necessity toward trying to more clearly formulate how power is viewed and used in modern society.

When one examines power relationships beyond the constraints established by organizational boundaries and focuses on the potential impact on the human situation, power can be interpreted to be a social psychological phenomena that can account for much of the interactive behavior that occurs between two or more people. This becomes particularly evident when one begins to consider whether there are different forms of power that can be used within an interpersonal relationship, both inside and outside bureaucratic organizations. It is in the remainder of this chapter where the muli-faceted forms of power will be examined in more detail as it pertains to day-to-day interpersonal encounters among people.

C. Social-Psychological Perspectives of Social Power

There are many social-psychological theories developed that incorporate principles of power in explaining interpersonal relationships among people. The interpretation of power can be studied from a variety of social-psychological perspectives, including cognitive theories, personality studies, Freudian and Neo-Freudian analysis as well as behavioral investigations (Ng, 1980). The research presented in this section will focus on some of the general motivational theories which interpret behavioral patterns between individuals. These include Heider's (1958) theory of interpersonal relations, as well as Thibaut and Kelley's (1959) and Blau's (1964) concepts of social exchange. In addition, overviews of attribution theory and locus of control that pertain to principles of power will be presented. Whenever possible, relevant motivational research conducted within sport situations will be incorporated into the discussion.

Heider's Theory of Interpersonal Relations

One approach to the understanding of how power is used in an interpersonal relationship is to investigate a person's perceptions of the behavior of others. Heider's (1958) concept of "naive analysis of action" attempted to explain the intricacies of

interpersonal behavior by using everyday language and by describing typical encounters. Many theorists believe that Heider's approach was a milestone in the early understanding of how interpersonal relationships functioned and that it provided the foundation for latter developments in attribution research (e.g., Jones & Davis, 1965; Littlejohn, 1978; Ng, 1980; Seibold & Spitberg, 1982; Shaw & Costanzo, 1982).

The basic premise underlying Heider's investigation of interpersonal relationships is that there must be some sort of cause or action behind every type of human interaction. According to Heider, one could attribute events as resulting from either personal or impersonal causes. An impersonal cause was interpreted as being an act of nature or an accident while personal causes were based on human interactions, wishes and sentiments. Personal intentions can have positive and negative consequences. For instance, "one bestows, confers, or gives a benefit such as a gift, praise or help, but one inflicts, causes or commits a harm, such as an insult or injury" (Heider, 1958, p. 262).

Heider relied on two major factors to classify the meaning of power within interpersonal relationships. The first factor that one could use in establishing the use of power was the dispositional concept of "can." Heider translated "can" as being a person's ability, which in turn was a reflection of a person's power. "Ability, both mental and physical, plays a frequent and significant role in determining a person's power. A person with strength and skill can row the boat further than one less favorably equipped. A clever man can do more things than a stupid one" (p. 93).

Once it has been determined that a person is capable of using power, it is necessary to make a judgment on the person's motivation for using power. To do this, Heider believed that it was necessary to identify a person's intentions as well as to measure the exertion or effort behind the interactions. This defined "trying," the second factor that Heider used in defining power. The presence of intention and exertion were both necessary for "trying" to have any impact on behavioral change. Intention related to a person's desire to utilize his or her ability. Concurrently, it was important to consider the

effort that a person was willing to exert in accomplishing a particular action. Heider stressed that a wish does not necessarily produce "trying." For instance, a person may want to influence another person in a particular way, but may not exert any effort toward producing that outcome. Regardless of the reason, a lack of effort results in "trying" as being equated to zero, since this lack of effort would not likely produce any influential change.

Heider noted a number of additional elements which could influence both the "can" and "trying" factors underlying one's use of power within a relationship. With regard to a person's ability, changing mood states such as fatigue or frustration could temporarily alter one's ability to do something. One could also be restrained either socially or legally from using power. For instance, a parent has the power (one "can") to punish a child. However, it may not be socially or legally acceptable to punish the child in the presence of others, since too much physical force could be construed as child abuse (which is against the law and contrary to certain social norms).

One can also examine variables that could influence the amount of exertion (or lack of it) put forward by a person using power. Heider proposed that in addition to the assessment of a person's ability, the use of power within interpersonal relationships was very dependent on a person's value system. The determinants of a value system can be very intricate, and include assessments of desire and pleasure, sentiments (liking, not liking), specific "oughts" and "values," requests and commands, and benefits and harm. As value systems are internal to every individual, assumptions are made as to why a particular action was selected and used from either the actor's or the observer's point of view. This can result in many entirely different interpretations of a set of actions:

> Common-sense psychology leaves no doubt that there are important differences in . . . cases of causal attribution and evaluative judgment. The differences are recognized by such ordinary comments as: he tried to help me but he didn't know how; he did it because he had to; I refused his gift; he didn't mean to hurt me; his kind words are insincere; it is a blessing in disguise, his present is really a bribe. (Heider, 1958, p. 253)

Heider's theories also demonstrate the degree to which a person can attempt to influence or produce effects on the behavior of another. Under the premise of a social power interaction, Heider made reference to the variation between a request and command and the implications for further interpretation of behavior within the relationship. The parameters outlining the differences between the two forms of behavior are based on factors in the external environment combined with a person's value system. A request is generally based on sentiments: "When [p] asks o to do something, he implies that he is dependent on o's good will; o should do it because of a positive attitude toward p" (p. 247). Commands are more forceful, and according to Heider, more accurately demonstrate the power of p to reward or punish o based on the compliance to the command. Heider noted that "there are no sharp boundaries between asking and commanding. If a superior person "asks" o to do something, it can have the meaning of commanding, though it may not be phrased as a command" (p. 247). Such an interpretation would depend on external factors within the environment, such as the recognition of a person's position of office within some formal organizational structure.

The Attribution Process

Heider's (1958) interpretation of interpersonal relationships have provided the foundation for further understanding of the personal perceptions of human behavior. This is particularly evident when one investigates formal attribution theories. In order to understand human behavior, most attribution theories propose that there are certain processes that direct a person's attention, ideas, and feelings toward events in the environment:

> The events which serve as objects of perception might consist of the actions of social others, one's own actions, and/or environmentally produced effects. Attribution theory is typically concerned with the processes and schema invoked by the perceiver in assigning causes to these events. Through such causal analyses the perceiver arrives at inferences about the dispositions of other persons and himself/herself, as well as inferences

about the stability of environmental entities. (Shaw & Costanzo, 1982, p. 232)

When analyzing the use of power within interpersonal relationships, one must not think of power as some form of "object" that people use to control other people. Rather, one should think of power as a force or particular form of behavior that alters another's behavior or actions. As such, virtually any attribution theory that examines causes or alternatives of behavior within social interaction can be applied when analyzing a power relationship. Understanding the given situation is important though, as "many effects on a person's decisions may have nothing to do with the behavior of other actors but may reflect his internal states, natural events, the physical environment, and so forth" (Gamson, 1974, p. 20).

There are several attribution theories that investigate the meanings behind interpersonal interaction. One of the most prominent is Jones and Davis' (1965) correspondence inference theory, which systematically examines the validity of a perceiver's inferences about what an actor was trying to achieve by a particular action, primarily based on what is known about the actor. To make adequate assessments of behavior, the perceiver must first be able to observe an overt action of the person in question. Second, the perceiver should have some basic understanding of the actor's knowledge and ability relative to the action. Jones and Davis proposed that the overall result of the attribution process was to determine whether there is a correspondence or relationship between the inferred reasons behind an action and the underlying characteristics of the actor. The strength of the correspondence was dependent on the strength of the correlation between the characteristics of the actor and the act itself. When analyzing particular actions performed by a person, an observer derives hypotheses or explanations to determine whether the the actions that were observed were intentional on the part of the person, and that these actions were logically based on what the observer knows about the person and about the social situation where the particular actions were observed. For example, if a coach was known to have a bad temper, a perceiver who

observed the coach yelling at an athlete might infer that the action demonstrated the coach's nastiness. The authors also noted, however, that personal characteristics can contribute to the assessment of an action, but will not usually be the only reason or explanation. In the above example, it is quite possible that the coach's anger was also a result of the athlete disobeying the coach's direction.

In deriving a meaning for an action, it was also suggested that the perceiver consider alternative actions that were available but were not taken by the actor. Any given action (or alternative actions) can have multiple consequences. "As perceivers of action, we can only begin to understand the motives prompting an act if we view the effects of the act in the framework of effects that other actions could have achieved" (Jones and Davis, 1965, p. 223). This not only helps define the intentions that underlie behavior, but also enhances the desirability of one action over another. Jones and Davis also noted judgmental differences that could result if personal involvement existed between the actor and the observer. For instance, if an actor was disliked by the observer, these feelings could influence the observer's explanation of assessing the intentions and actions of the actor in a social situation. Although this theory is not devoted solely to power relationships, one can see the potential of using Jones and Davis' theory for such an analysis.

Schopler and Layton's (1974) explanation of interpersonal influence is an application of attribution theory to attempt to identify the ways in which power can be attributed by observers or actors. The framework proposed by the authors places behavioral interaction on a time stream. Given an interaction between two individuals, a behavior change in one of the people was initially determined on the basis of two corresponding events, where the first event is denoted time 1, the second as time 2. A basic assumption in the framework was that exertion of power was not evident if behavior associated with the second event appears to be a logical progression from behavior associated with the first event. As with most other attribution theories, acknowledging a

power relationship between two people where one person's behavior has been altered involves making a judgment as to whether or not the other person was responsible for the subsequent change of behavior:

> According to the proposed framework, Person A will attribute power to himself if his interactions with B lead to a change in B which was not predictable from B's initial state but was predictable from A's interventions. The consequences of A's interactions depend not only upon the characteristics of his responses -- their strength and direction -- but also upon B's characteristics. (Schopler & Layton, 1974, p. 41)

As with the Jones and Davis (1965) theory, making an accurate assessment of the power relationship may require one to obtain additional information about the actors as well as accounting for factors in the environment where the interaction occurred. For instance, a common environmental contingency for assessing the exertion of power is knowing whether the influencer occupies a recognized position that gives him or her the right to change another's behavior. Other situational factors may be influential in determining how power is used.

Depending on the necessity for inducing a behavior change, many theorists have suggested that power can vary in degree and intensity (e.g., Etzioni, 1970; French & Raven, 1959; Kaplowitz, 1978; Kipnis, 1974; Olsen, 1970; Schopler, 1965).. For instance, Kaplowitz (1974) proposed that the differences of interests between two parties of equal stature may constitute a power struggle. If a behavior change in one of the parties occurs, then one can attribute power to the party receiving the most preferred outcome. The way power was exerted would be dependent on how far apart the interests or desires of two people were and how necessary it was for a change of behavior to occur. Kaplowitz felt that threatening strategies would be most effective when interests were opposed. Rewarding actions would be more appropriate if the interests were independent, while logical persuasion would be the best cause of action if interests were similar.

While behavioral patterns of the actors may be the result of exertion of power, it might not be possible to observe or assess precisely how the change occurred (Heider,

1958; Jones & Davis, 1965; Kelley, 1972; Seibald & Spitzberg, 1982). An example of this is knowing whether a person's self-reliance is high or low. Individuals who strongly believe that they have personal control over their own behavior will be more resistant in believing that their behavioral change was the result of the influence of another person (Rotter, 1966; Schopler & Layton, 1974). In order to derive this conclusion, an observer would have to have had previous knowledge of the personalities of the individuals involved in the interaction.

In assessing actions in sport, it appears that attribution research has focused on the achievement-orientation of sport rather than investigating the various interpersonal relationships that exist. The primary reason for this is the assumption that the behavioral actions in sport are geared toward the wining/losing phenomenon or the measurement of success and failure in sport (Brawley & Roberts, 1984; Rejeski & Brawley, 1983; Weiner, 1975). However, it is becoming apparent that limiting attribution research to the win/loss scenario ignores much of the other actions and behaviors that occur in the sports setting. Even if outcome is still considered to be the driving factor in sport, "ascriptions could also be made about outcomes concerning skill development, outcomes concerning the understanding of strategy, or outcomes of the rapport between player and coach, athlete or family" (Brawley & Roberts, 1984, p. 212).

Rejeski and Brawley (1983) have argued that the lack of research on all types of interpersonal relationships in sport is a serious oversight. For instance, the authors suggested that more work needs to be done on the coach-athlete relationship. One aspect of the relationship that needs to be examined is to see how power is used by the coach and how athletes react to the coach's use of power. Some preliminary research has begun on measuring athlete and coach perceptions of the coach's leadership capabilities (Horne & Carron, 1985), but this approach, by the authors' own admission, is still in its infancy.

Locus of Control

In understanding power relationships between individuals, it is often necessary to be aware of what motivates people to either influence or be influenced by others. One theory that was developed to assess this aspect of human behavior was Rotter's (1966) locus of control theory. By definition, locus of control is a personality variable that refers to the amount of personal control that individuals feel they have over what happens to them in a given situation. Rotter (1966) conceptualized that personal control could be viewed on an internal-external continuum. On the one extreme, an individual would be classified as having a belief in internal control if it was perceived that he or she had full control over personal behavior. On the other extreme, if a person consistently attributed outcomes of events as being due to external factors such as luck, chance, or under control of powerful others rather than personal behavior, such a person would be classified as having a belief in external control. For example, if an internally oriented person scored a point in a tennis match, his or her belief in the outcome would be that the scored point was a result of personal skill. On the other hand, an externally oriented individual would be more likely to attribute a point to luck (e.g., a lucky bounce, bad move by the opponent) rather than to personal ability. These two examples demonstrate extreme ends of the continuum. It is probable that the majority of people believe in a combination of internal and external control.

An important consideration for operationalizing locus of control theory is an understanding of the effects of reinforcement on a person's perceived control over personal behavior. Social learning theorists suggest that behavior or actions are followed by some sort of reward or reinforcement. A person's desire (or willingness) to repeat the behavior is dependent on the type of reinforcement received. A positive reinforcement promotes a reoccurrence of behavior, while negative reinforcement would discourage reoccurrence (Shaw and Costanzo, 1982). However, individuals might not have full control over whether or not they wish to pursue a behavior (Lacey, 1979). With respect to

reinforcement, Rotter (1966) suggested that if an individual feels in control of the situation, then the reinforcement received from the behavior will be influential for the person to repeat the behavior in the future. If the individual does not feel personal control over his or her behavior, then the reinforcement received will not influence future performances (either positively or negatively).

In terms of understanding power relationships, the locus of control concept has only been used sparingly. Minton (1972) believed that feelings of power were very much intertwined with a personal belief structure. As such, one could expect that those with a strong internal locus of control would perceive themselves as powerful while externals would perceive themselves as powerless.

One should not conclude from this that those with an external locus of control orientation never achieve positions of power. The orientation may, however, be influential in how that person behaves in power situations. In an experimental environment, Goodstadt and Hjelle (1973) found that the way one chose to influence another was dependent on whether a person had an internal or external orientation. The authors found that persons high in internal control influenced others by gentle persuasion or promises, while those high in external control made extensive use of threats or punishments. It was felt that the modes of behavior chosen were directly related to a person's self-confidence, where those who lacked it personally believed that positive forms of influence would not succeed and thus relied on coercive power.

Social Exchange and Power

Another interpersonal theory that is useful for understanding power relationships is that of social exchange. The basic premise of social exchange theory is that in any social interaction, people will attempt to maximize the rewards obtained from the interaction and minimize costs in order to obtain a profitable or worthwhile outcome. It is important to note that social interaction with another in an exchange relationship is not necessarily

equivalent to a zero-sum game in which the gains of some result in the losses of others. "Quite the contrary, individuals associate with one another because they all profit from their association. But they do not necessarily all profit equally, nor do they share the cost of providing the benefits equally" (Blau, 1964, p. 15). For example, many interactions are mutually satisfying for both parties, such as two friends who enjoy hiking together. It is possible, however, that the difficulty of a hike might result in one person enjoying the activity more that the other.

Homans (1974) felt that there were two important reinforcement contingencies underlying social exchange behavior. The first of these was a personal evaluation of success, where actions that result in a reward for a person would likely be repeated in the future. Homans noted, however, that the value of the reward obtained for the action is also assessed by the individual. While he believes that rewards obtained from an action that are valued by a person will likely result in the individual repeating the action, the continuance of the action would be dependent on the value placed on the reward. For instance, not all rewards are perceived as being of equal value, or a too frequent administration of the same reward may eventually decrease the value of that reward. Under the premise of social exchange theory, it was felt that an interaction that resulted in rewards exceeding costs realized a profit for an individual, and hence was valuable for that person. A second contingency that one must consider when engaging in an interpersonal relationship is that a person is always confronted with a number of potential ways to behave. Homans noted that ideally, an individual needs to assess all possible courses of action and pick the one that would result in the best return.

Some mention needs to be made as to what constitutes rewards and costs for individuals engaged in interpersonal relationships. Blau (1964) suggested that rewards and costs are very individualistic, in so far as a reward for one person might be interpreted as a cost to another. Nevertheless, he believed that positive sentiments such as affection, approval, trust and respect derived from an interpersonal encounter were usually interpreted

as rewards. Costs would usually be based on how much of a person's time, effort and resources were used in the interaction.

Thibaut and Kelley (1959) made a specific use of the theory of social exchange to explain how power affected interpersonal relationships. Initially, the authors' ideas followed the basic framework of social exchange, where people enter into interpersonal relationships in order to obtain some personal goal, which can be (but does not have to be) unique for each person in the relationship. Through the course of interaction, each person weighs the rewards and costs that result from participation in the relationship. Thibaut and Kelley suggested that every individual entering a relationship with another has a personal comparison level (CL), which was "a standard by which the person evaluates the rewards and costs of a given relationship in terms of what he feels he 'deserves'" (p. 21). Outcomes that fell above the person's CL would be satisfying and attractive for the person, while the reverse would be true for outcomes that fell below the set standard. In any relationship, each person has a repertoire of possible behaviors that can be used. However, the behavior of one person would be dependent on how the other person reacted. According to Thibaut and Kelley, this was an initial step in establishing an exchange of power or influence within a relationship.

Thibaut and Kelley believed that in a dyadic relationship, each person was capable of exercising power over the other. A power relationship was established when one person in the dyad becomes capable of controlling the rewards and costs of the other person. As such, the outcome of the interaction is under the control of the person exercising power over the other. The authors went on to suggest that power in a relationship could be defined in two ways. The first form of power was denoted fate control, where person A, by varying his/her behavior, could alter person B's behavior, regardless of what B did. In other words, A has absolute control over B's fate. One can see how this works by analyzing the disproportionate power relationship that existed in German internment camps during the Second World War. Regardless of the way prisoners behaved, they were

completely at the mercy of the Gestapo, who often enforced nonsensical rules which originated from the whims of one or more of the guards (Frankl, 1977).

The second form of power was defined as behavior control. This occurred when A, by varying his behavior, made it desirable for B to also vary his behavior, while maintaining outcomes that were desirable for A. The amount of behavior control "will depend upon the values to B of the various outcomes. A's behavior control is greater the more B stands to gain by adjusting his behavior in accord with A's behavioral choices" (Thibaut and Kelley, 1959, p. 103). Although the person being controlled is unable to alter the outcome under the parameters of behavior control, there is still a perceived belief that he or she has a choice in the actions that will best achieve the outcome.

A slightly different interpretation of power under the parameters of social exchange was put forward by Blau (1964). Within the theory of social exchange, Blau's concept of power was based on a relationship where one person was asked to supply some sort of unique commodity, service or need to another. Under these terms, a power relationship was established when the strong person (defined as the one with the service) was in a position to barter with the weaker person (the one who required the service). On the basis of a defined need, an individual (A) who required the unique services of another (B) would have up to four alternative courses of action. First, A could enter into a reciprocal exchange with B if person A could provide something in return. Second, A could try to obtain the needed service elsewhere. Third, A could coerce B into providing the service, but only if A was capable of such an act (in which case, A would have power over B). The fourth alternative was that A could attempt to do without the service, or determine whether some sort of substitute was available. If these four alternative forms of action were not feasible, and person A decided that the services provided by B were necessary, then A and B would enter a power relationship. "A person who commands services others need, and who is independent of any at their command, attains power over others by making the satisfaction of their need contingent on their compliance" (Blau, 1964, p. 22). The

measurement of the exchange was then dependent on each person's interpretation of the situation.

For example, a girl with whom a boy is in love has power over him, since his eagerness to spend time with her prompts him to make their time together especially pleasant for her by succumbing to her wishes. There are a multitude of ways to interpret this scenario; nevertheless, one can surmise that both parties obtain rewards but incur costs. For the girl, her rewards include the successful exertion of power in that the couple are spending time together doing what she wants to do. The possible costs for the girl are not evident, though it is possible that her emotional attachment toward the boy are not as strong as his are for her. She might, for example, be taking advantage of his feelings toward her in order to do a particular activity. For the boy, his reward is that he gets to spend time with the girl; his cost is that participation in the activity may not be as enjoyable for him. Both the boy and girl need to assess whether the outcome (spending time together doing the chosen activity) was worthwhile. This again is dependent on whether each person's rewards was perceived as being greater than his/her costs.

D. Leadership Behavior and Power

There are countless behaviors associated with leadership. Of all the displayed characteristics though, many theorists have noted that power is one of the prominent behavioral foundations for describing how leaders act and maintain their status (e.g., Bass, 1960; Cartwright & Zander, 1968a; Cohen et al., 1980; Katz & Kahn, 1978; Tedeschi, Schlenker, & Bonoma, 1973; Wexley & Yukl, 1977; Yukl, 1981). Power is almost always associated with a formalized leadership position, regardless of whether or not the individual in the position chooses to use it. "When people say 'X has the authority' to enforce particular behaviors ... [they are referring to] the influence which is both prescribed for the holder of an office in a social system and seen as his or her right to exert by the other members of it" (Cohen et al., 1980, p. 247). The use of power varies considerably

among leaders. Fiedler (1967) stressed that leaders walk a fine line between using too much or too little power when dealing with subordinates. Some enjoy wielding power; others do not. Some use it appropriately, while others do not. Tedeschi, Schlenker and Bonoma (1973) felt that there were many factors that could affect a leader's methods of altering a subordinate's behavior:

> A person's value preferences, his habitual manner of biasing the probabilities of receiving rewards or punishments, and other personal characteristics are important factors that affect how often he tries to influence others. Among his personal characteristics are his self-confidence, statu[illegible]xpertise, and prestige. (p. 97)

Power can var[illegible] its form and its magnitude. For instance, several authors believed that most le[illegible]n a formal setting would have position power. Position power refers to power that one inherits when entering a particular job (Bass, 1960; Etzioni, 1961; Hersey & Blanchard, 1977; Yukl, 1981). Yukl (1981) felt that position power was particularly useful when the leader "needs to influence subordinate compliance with unpopular rules or procedures" (p. 63). In addition, some leaders may also possess personal power; this is often associated with the leader's potential to be charismatic. According to Yukl, "the opportunity to use forms of influence such as persuasion, rational faith and personal identification depends more on the characteristics of the leader than on the attributes of the position" (p. 24). One must realize, however, that the use of personal power by the leader will also be very dependent on the interpersonal relationships that exist between the leader and the followers. Personal power will quickly disappear if the followers feel that they are not being treated properly by the leader (Etzioni, 1961).

Leadership Styles and Power

One method of assessing how power is used by the leader is to examine the various styles that leaders display in their interactions with their subordinates. Initially, Lewin and Lippit (1938) proposed that there were two types of leadership behavior. On the one hand, a leader could adopt an authoritarian style that placed a heavy emphasis on work or tasks,

yet placed a minimal emphasis on personal relationships. Conversely, a leader could also take on a democratic style, which placed more emphasis on personal relationships than on tasks. In a later study, Tannenbaum and Schmidt (1958) elaborated on the various forms of leadership that could exist between the two extremes on the basis of the amount of decision making that was shared between the leader and the subordinates (see Figure 1). It can be seen that a greater degree of trust exists between the leader and subordinates as one moves from an authoritarian mode to a democratic form of leadership. This does not mean that a leader loses power over the subordinates in such a progression. Rather, the leader chooses not to overly dominate the subordinates, and instead gives them more of an opportunity to make their own decisions.

There have been many other models developed that define leadership style. One of the most popular approaches has been contingency theory, which describes the leader-subordinate relationship in terms of designated tasks, human interaction and the particular social and physical environment. According to contingency theory, the requisite attributes for productive leadership are contingent on the external situation; to be effective, a person's style of leadership may have to shift from one situation to another (Fiedler, 1967; Hersey & Blanchard, 1977; House, 1971; Yukl, 1981). Fiedler's (1967) contingency theory of leadership effectiveness was the first and probably the most widely known theory that took the situation into account (Bass, 1981; Yukl, 1981). The basis of the model was that:

> The group's performance will be contingent upon the appropriate matching of leadership style and the degree of favorableness of the group situation for the leader, that is, the degree to which the situation provides the leader with influence over his group members. The model suggests that group performance can, therefore, be improved either by modifying the leader's style or by modifying the group-task situation. (Fiedler, 1967, p. 151)

The method that Fiedler utilized to assess the effectivenss of a leader was a bi-polar attitude scale called the LPC scale, where leaders were asked to rate their "least preferred co-worker" (LPC). Fiedler suggested that leaders who obtained a high LPC score would show more tolerance and less personal bias toward his or her subordinates than a leader

Figure 1 The Continuum of Leadership Behavior

originally appeared in

Tannenbaum, A.S., & Schmidt, W.H. (1958). How to choose a leadership pattern. Harvard Business Review, 36, 96.

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The figure has the following seven access points to describe how a leadership style can move from an extreme authoritarian perspective to an extreme democratic position. Going from authoritarian to democratic, these are:

- Leader makes decision and announces it (extreme authoritarian/task oriented)
- Leader "sells" decision
- Leader presents ideas and invites questions
- Leader presents tentative decision subject to change
- Leader presents problem, gets ideas and makes decision
- Leader defines limits; asks group to make decision
- Leader permits subordinates to function within limits defined by superior (extreme democratic/person oriented)

who obtained a low LPC score. Fiedler went on to say that a leader who had a high LPC score would be a relation-oriented type person, while the low LPC score leader would be a task-oriented individual.

While the LPC scores are useful for classifying the leader's feelings toward the followers, Fiedler (1967; 1971) also noted that it was very important to categorize the possible situations that leaders could be faced with. In addition to the leader/follower relationship criteria, Fiedler felt that the nature of the situation was dependent on two other important factors. The first factor centered on establishing the degree to which the leader perceives a position of power and/or influence over the followers (both in a positive and negative fashion). The second factor was noting the structure of the task that the followers were engaged in (i.e., was it highly structured such that the leader could clearly direct the followers or was it more undefined and left open for the followers to interpret). Fiedler felt that the application of the three factors for assessment of leadership behavior demonstrated that different types of groups required different types of leadership. For example, "A leader with one type of leadership style may perform very well in a group in which he enjoys high position power and very good leader-member relations, but he may fail in a group in which his position power is weak and his leader-member relations are poor" (Fiedler, 1967, p. 33).

Fiedler (1967; 1977) conducted extensive research relating leaders' LPC scores to task structure and perception of positional power. He found that the low (or task oriented) LPC leaders tended to perform better in extreme situations "when the quality of leader member relationships, the degree of task structure, and the position power of the leader were either altogether highly favorable or altogether highly unfavorable to the leader" (Bass, 1981, p. 348). High LPC leaders tended to be most effective in the other situations that were more intermediate in terms of favorable control. One explanation for these differences was based on the leader's differences in primary and secondary goals with respect to the degree of stress and anxiety present in the situation. In the extreme

situations, the low LPC leader is effective because emphasis is placed on the accomplishment of the task (the interpersonal relationships, though favorable in one extreme, are nonetheless unimportant to the low LPC leader). The high LPC leader cannot function as well in the extreme situations because the accomplishment of the task is not a primary motive for this leader. The high LPC leader will function better in the intermediate situations because these situations demand that a certain amount of good interpersonal relations be established to ensure an effective, condusive atmosphere. Fiedler (1971) concluded that one should not eliminate either type of leader; rather both "task motivated as well as relation motivated types of leaders can be effective leaders provided they are placed in the right situations" (p. 13).

Although Fiedler's contingency model has been utilized in sport leadership research, those studies that have incorporated it have not produced very successful results. Inciong (1974, as cited by Straub, 1980) hypothesized that high LPC scores of basketball coaches would be positively correlated with performance effectivenss in moderately favorable situations and negatively correlated in very favorable and unfavorable situations. Although the correlations were in the hypothesized direction, none were statistically significant. Inciong concluded that leadership style was unrelated to team success in basketball. In a minor hockey situation as well (participants aged 12-14), Danielson (1974) did not find support for Fiedler's contingency model. Rather, Danielson found that in very "favorable and unfavorable conditions, the more relation oriented the coach, the greater is his effectiveness" (p. 91). This finding was in complete contradiction to Fiedler's hypothesis. Similarly, research by Naylor (1976), Horwood (1979) and Gordon (1981) found no support for Fiedler's hypothesis that high LPC scores would correlate positively with coaching effectiveness (defined on the basis of winning percentages and championships won). It should be noted, however, that all of these studies had very little flexibility with respect to situational parameters (i.e., teams from the same sport and level of competition were compared in each study). In order to be effective, Fiedler's model

requires a variance in the situation. Chelladurai and Carron (1978) concluded that "in the absence of differences in the situational parameters, Fiedler's model cannot be adequately tested" (p. 29).

On the basis of established leadership concepts, Chelladurai (1984a, 1984b) developed a contingency model that pertained specifically to sport (Figure 2). Chelladurai's model examines the varying degrees of leadership behavior with respect to situational antecedents. Under these parameters, the model is used to analyze the performance and satisfaction outcomes of the followers. The model implies that "member performance and satisfaction are a function of the congruence between actual leader behavior and a member's preference for such behavior" (Chelladurai, 1984a, p. 28).

Chelladurai proposed that the sports environment dimension of the model has three antecedents: the situational characteristics of the environment itself (e.g., actual competition, practice, etc.), the characteristics of the leader (coach) and the characteristics of the followers (athletes). In the model, "these situational variables considered in combination are viewed as setting limits or boundaries for the set of behaviors considered appropriate for the leader. Thus, the leader's behavior must broadly conform to prescribed norms which have evolved as a result of the impact of the various situational variables" (Chelladurai & Carron, 1978, p. 65).

The second portion of the model focuses on the behavior of the leader. The required behavior is dependent on the situational characteristics within the sport environment. For example, Chelladurai felt that coaches might have to display different behaviors in game as opposed to practice situations. Preferred behavior is viewed as being a combination of situational characteristics of the environment and the athletes' preferences as to how the coach should behave. Chelladurai noted that the situational characteristics will also be influential for this type of behavior in as much as it will be the situation that also shapes the perceptions of the athletes. The actual behavior, while primarily derived on the basis of the personal characteristics and overall behavior of the leader, also will be

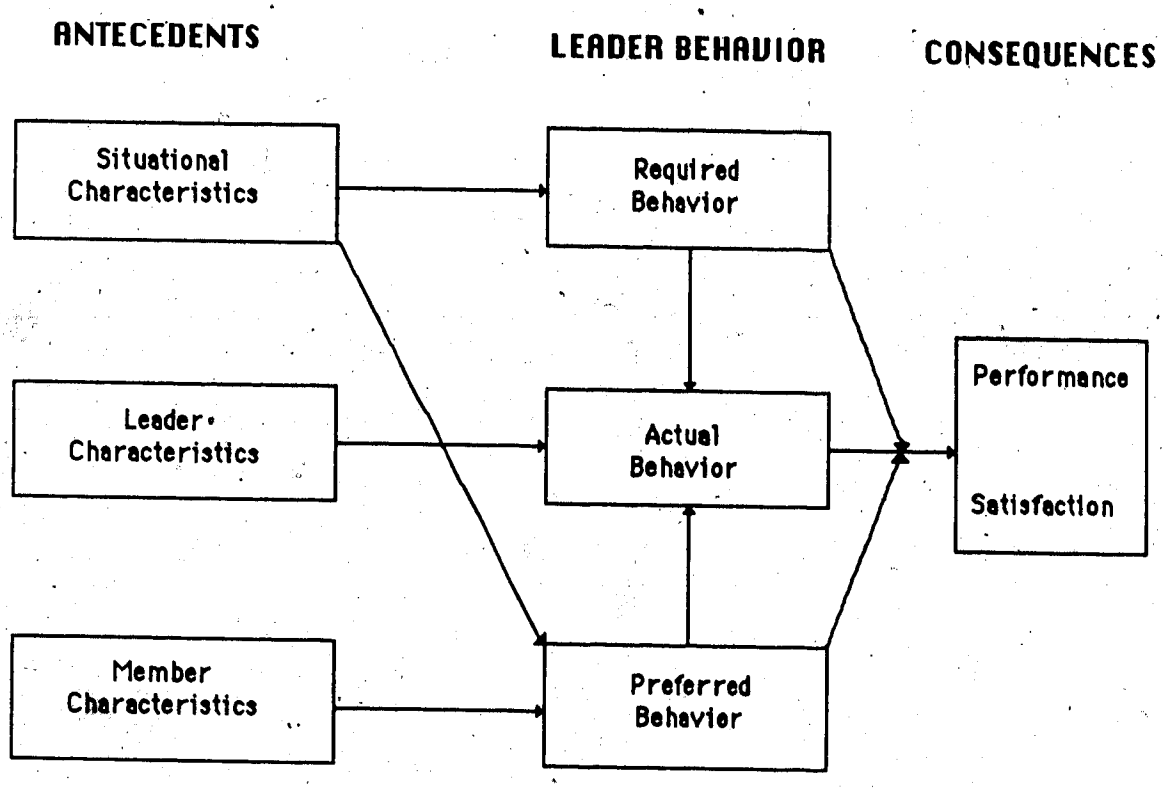

Figure 2 A Multidimensional Model of Leadership

(Chelladurai, 1984b, p.338)

influenced by the behavior dictated by the situation as well as by the behavior that the athletes would prefer the coach to display. The actual behavior, however, is the prime determinant for the third dimension of the model, this being the measured performance and satisfaction outcomes of the athletes themselves. Chelladurai and Carron (1978) noted that if the required, preferred and actual behaviors were all congruent, an ideal outcome would occur. In most situations, however, there will be a discrepancy between what is ideal and what actually occurs.

In accordance with the model, it was also felt that there were many dimensions of leader behavior in sport that needed to be identified to derive an appropriate leadership style (Chelladurai, 1984a; Chelladurai & Saleh, 1978; 1980). Initially, 99 items that described leader behavior within athletic situations were identified. Through factor analysis, five factors were extracted. These were: training and instruction, democratic behavior, autocratic behavior, social support and positive feedback. All of these factors were used for assessing the nature of the coach-athlete relationship.

The first factor, training and instruction behavior, referred to the methods that allow a participant to develop and master skills, techniques and tactics of a sport. The second factor, social support behavior, referred to the general feelings that can exist between a coach and an athlete independent of the athlete's performance. Friendship, mutual trust, respect and warmth are descriptors of this behavior. The remaining factors were behaviors that described the communication channels between a coach and his/her athletes. Positive feedback behavior was associated with the reinforcement a coach provided an athlete following a good performance. Democratic behavior occurred when a coach turned decision making over to the athletes, while autocratic behavior, on the other hand, was displayed when the coach took an authoritarian stance and retained decision making authority.

Using athletes from three sports (basketball, wrestling, track and field) Chelladurai (1984a) operationalized his model by comparing personal perception for ideal leader

behavior with the perceptions of the actual behavior that occurred. With respect to the five dimensions of leader behavior, he found that there was a discrepancy between the behaviors that athletes would like the coach to have, compared to the actual displayed behaviors. For each dimension of behavior, "the greater perceptions relative to the preferences in Training and Instruction, Democratic Behavior, Social Support, and Positive Feedback, and the lower the perceptions relative to the preferences in Autocratic Behavior, the higher the satisfaction with leadership" (p. 36-37). Overall, participants in basketball were most satisfied with their coach's leadership, followed by wrestlers and track and field participants.

There were mixed results when personal satisfaction in sport was compared with leadership behavior. None of the leader behaviors influenced satisfaction with individual performance. However, the leader behaviors of positive feedback enhanced participants' satisfaction with team performance in basketball; training and instruction was particularly important in track and field athletes; and training and instruction, democratic behavior and social support encouraged team performance satisfaction in wrestling. A later study by Weiss and Friedrichs (1986) assessed the relationship between leader behaviors and athletic satisfaction and performance. Using the methodology derived by Chelladurai (1984a), the authors found that collegiate basketball players were more satisfied when coaches engaged in positive feedback, social support and democratic forms of behavior. From these results, one can conclude that there is some evidence to indicate that coaching styles can enhance an athlete's satisfaction in sport.

Authoritarian Behavior

In assessing leadership behavior, it is important to have an understanding of both authoritarian and democratic modes of behavior. When focusing on power relations though, many theorists have paid particular attention to the effect of authoritarian behavior on both leaders and subordinates (e.g., Chelladurai, 1984a; 1984b; Cratty, 1981; Fiedler,

1967; Hersey & Blanchard, 1977; McGregor, 1960). Most of these theorists believe that leaders need to use authoritarian behavior at some point, though it is also felt that a reliance on such behavior in the long run could be detrimental for maintaining successful relationships. According to Cratty (1981):

> An authoritarian coach may be impeded in the sensitivity and flexibility he or she can exhibit when attempting to understand and handle interpersonal problems that arise on the team. Finally, this type of rigidity may prevent the coach from examining and using new and potentially helpful practices indicated by research in the biological or behavioral sciences. (p. 26)

Extreme instances of authoritarianism have been denoted by some as Machiavellian behavior. Such people are categorized as displaying a lack of conventional morality and lack of affect in interpersonal relationships. They generally have a mistrust in human nature, and are not afraid to manipulate others in order to achieve personal ends (Christie & Geis, 1968; Drory & Gluskinos, 1980).

Authoritarianism and Machiavellianism are very similar concepts. Both concepts share similarities concerning interaction in personal relationships, particularly with respect to who should have power over whom, why they should have power and how power would be best used. There are, however, three important distinctions that should be noted. The first difference is that authoritarianism is thought of as a general, all encompassing form of behavior. The authoritarian personality has distinctive opinions on religion, war, ideal society, human nature, cultural relationships and so on, which would be best described as being fascist (Adorno et al., 1950). Machiavellian behavior is less encompassing and primarily limited to descriptions of how people deal with one another. Any inferences about other aspects of society can only be done indirectly (Robinson & Shaver, 1969).

The second difference between the two lies in the form of questionnaire used to measure each behavior. Authoritarian behavior is measured with an F (for Fascism) scale that examines many facets of human behavior, including rigidity, intolerance of ambiguity, racial attitude, aggressiveness, and conformity. While the F scale was originally developed

by Adorno et al. (1950), many variations have been created since then (see Robinson & Shaver, 1969). Machiavellian behavior is measured with "Mach scales" specifically created to examine ways in which one might interact with other people (Christie & Geis, 1968).

The third difference between Authoritarianism and Machiavellianism lies in their ideological orientation. Christie and Geis felt that those high in authoritarianism would tend to evaluate others in moralistic terms such as suggesting what people "ought" to do, while those high in machiavellian behavior would evaluate an interpersonal situation in opportunistic terms, such as determining how one could manipulate or exploit someone. Christie and Geis felt this difference was substantiated when no significant correlation was found between the Adorno et al. F scale and the Mach scales.

Some effort has been made to study authoritarian behavior among coaches in the sport environment. In part, research in this area has been conducted to investigate the validity of the stereotypical picture of the sports coach. Often, the coach is depicted as "one who is tough, relentless and authoritarian, showing as much concern for the feelings and welfare of his charges as a field marshall sending front line troops into battle" (Daly, 1980, p. 3). Although media observation of paid professional coaches does little to eliminate the stereotype (Curry & Jiobu, 1984; Hendry, 1972), some research indicates that not all coaches act in this manner (Bain, 1973; Gordon, 1981; Horwood, 1979; Naylor, 1976; Sage, 1974a; 1974b). For example, studies by Bain (1973) and Sage (1974a) also compared male sport coaches with male teachers, college students, and businessmen in terms of expressed authoritarian behavior. No differences between any of these aggregates were found.

Although these findings demonstrate the fallacy of accepting the stereotypical image of the sports coach, one should not necessarily dismiss authoritarian behavior from coaching. For one thing, the studies by Bain, Gordon, Naylor and Sage all had coaches do a self-report on their own behavior. The problem with self-reports is that individuals who analyze themselves tend to report on how they think they act, rather than on how they

actually behave (Mouly, 1978). This is particularly evident when comparisons are made between the way athletes perceive a coach's behavior as opposed to the way a coach perceives his or her own behavior. In almost all instances, coaches believe that they participate in more positive reinforcing behavior and less negative or punitive behavior, while athletes perceive the precise opposite trends (Curtis, Smith, & Smoll, 1979; Horne & Carron, 1985). It is possible, however, that the differences between athletes and coaches is due to the different emphasis that each group places on reward and coercive behavior. Nevertheless, if self-report measures are positively biased, it is possible that the coaches in the Bain, Gordon, Naylor and Sage studies might be more authoritarian than what was reported.

Consequences of Power in Leader-Subordinate Relationships

The use of power to induce behavior change can have positive and negative effects on the subordinates' actions in any given situation. For example, external rewards and punishments may be used to maintain control over subordinate action. Podsakoff and Todor (1985) pointed out the value of rewarding subordinate performance, but also found that punishment tactics had a positive effect on future behavior. They speculated that "leaders who use contingent punishment convey to the individual being punished as well as to other group members, that their expectations were not met. This may lead to increased goal setting at either the individual or group level, both of which have been shown to influence the productivity of workers" (p. 70). Punishment tactics must be used carefully though, as too much use of coercive power may create resentment and cause retaliation among the subordinates (Cartwright & Zander, 1968b; Sheley & Shaw, 1979; Thamhain & Gemmill, 1974; Yukl, 1981).

The effectiveness of rewards may also be dependent on the work environment or task that an individual is doing. Many jobs, tasks or activities are seen as being intrinsically motivating where the primary motivation is doing the activity itself. For

instance, the expression of skills, doing interesting and challenging work and obtaining a sense of accomplishment from a successful performance can be adequate rewards for many people (Deci, 1975; 1980; Katz & Kahn, 1978; O'Reilly & Caldwell, 1980). Similar intrinsic factors have also been found within sport environments (Gould, Feltz, Weiss, & Petlichkoff, 1982; Robertson, 1981; Wankel & Kreisel, 1985a). If an activity or task is perceived to be intrinsic, the administration of rewards must be done carefully; a body of research conducted in this area has determined that the repeated administration of a reward can undermine the intrinsic value of an activity (e.g., Deci, 1971; Kruglanski, Friedman, & Zeevi, 1971; Lepper, Greene, & Nisbett, 1973).

This does not mean that the use of external rewards should be avoided. External rewards can provide strong incentives or induce feelings of motivation in subordinates if they are used properly. Katz and Kahn (1978) noted that there were three criteria leaders should be aware of when considering the use of rewards. The first criterion is that the reward must be desirable to the individual. "Reward is a general concept, but all people do not find the same things rewarding, and it is the value of the reward to the individual that helps explain individual motivation" (p. 336). The type of reward will be somewhat dependent on the social setting in which rewards are given. For instance, in the business environment, monetary pay (especially bonuses), promotion and advancement can be positive motivators for some people (Hersey & Blanchard, 1977; Katz & Kahn, 1978; O'Reilly & Caldwell, 1980; Podsakoff, 1982). The use of praise can also be an effective form of reward or reinforcement; while praise can be used in the business setting, previous research had determined that verbal and non-verbal encouragement is particularly useful in sports and educational environments (Chelladurai, 1984a; Chelladurai & Saleh, 1978; 1980; Katz & Kahn, 1978; Rowley & Keller, 1962; Rushall, 1983). In order to be fully effective however, it is suggested that praise or approval from a leader be tied to performance if the purpose of the reward is to increase produetivity (Galbaraith & Cummings, 1967; Katz & Kahn, 1978).

The second criterion for the use of reward is that there be a clear linkage between the task or performance and the reward in order for the reward to be meaningful. Katz and Kahn further suggest that rewards associated with a particular behavior be given immediately. The third criterion is that the reward must be adequate in relation to the effort put into the task, if the leader wishes to obtain a similar effort from the worker in the future.

Some attempt has been made to observe interactive behaviors between coaches and athletes within sports settings. For instance, studies by Tharp and Gallimore (1976) and Lacy and Darst (1985) systematically examined the displayed behaviors of winning coaches in practice situations. Tharp and Gallimore did an individual analysis of UCLA coach John Wooden, while Lacy and Darst observed 10 Pheonix Arizona high school football coaches. In both studies, a variety of behaviors were observed, primarily in the areas of instruction, verbal and non-verbal rewarding actions and verbal and non-verbal punishment actions. While instructional behaviors occurred most often in both studies, the percentage of reward behavior was higher than punishment behavior in the study by Lacy and Darst, while Tharp and Gallimore found that Wooden used reward and punishment behaviors almost equally.

Observation of reward and punishment behavior has also been conducted on coaches who do not have exceptional winning records. Again, research has found that reward behavior is far more evident than punishment behavior in sport (Curtis, Smith, & Smoll; 1979; Danielson, 1980; Lombardo, 1984). There has been some debate, however, as to the value of punishment and reward behavior. For instance, Danielson (1980) believed that the anxiety level of an athlete was a factor in determining the effectiveness of the two forms of behavior. Athletes who had low or high anxiety levels were more favorably influenced by reward behavior and less by punishment, while the reverse was true for those athletes experiencing moderate anxiety. Danielson did not elaborate on the meaning of these relationships, though other researchers suggest that rewarding or reinforcement behavior can have a calming influence on people, while punishment can

intensify feelings of fear and anxiety in individuals (Martin & Pear, 1978; Rushall & Siedentop, 1972).

Rewards and punishments must be administered with care. Too much of either form of behavior can have damaging effects. Rewarding behavior is primarily directed toward reinforcing appropriate behavior, but Martin and Pear felt that rewarding behavior could also unknowingly strengthen undesirable behavior. The authors suggested that the vast majority of undesirable activities of behaviorally deficient individuals was due to the social attention that such behavior elicited from significant others. The attention received was viewed as a reward and as such, prompted individuals to repeat that behavior in the future. An overuse of punishment is also problematic. According to Rushall and Siedentop:

> Punishment is effective in suppressing behaviors, but when it is overindulged it weakens exploratory and investigative behaviors. Stimuli which are associated with the punishing contingency also become adverse. An individual will learn to stop responding in the situation in general. Such behaviors characterize timid, hesitant persons. (p. 89)

In sport situations, Martin and Hrycaiko (1983) believe that some negative feedback is necessary, though they suggest that optimal results will be obtained if the ratio of positive to negative feedback highly favors the positive at about a 4:1 ratio. Most of the observation studies on coaches' use of reward and punishment behaviors show this proportion (e.g., Curtis, Smith, & Smoll, 1979; Lacy & Darst, 1985; Smith, Smoll, & Curtis, 1979).

A leader's use of power can also have personal effects on the leaders themselves. In some ways, it can be very beneficial. For example, having power can allow an individual opportunities to initiate activities and have free movement in shaping the behavior of others within an organizational setting (Cartwright & Zander, 1968b). Power can also contribute to a strengthening of a person's self-esteem. This can give the individual confidence in undertaking new activities and dealing with other people (Cohen et al., 1980; Lippit, Polansky, Redl, & Rosen, 1968). Too much power, however, can also be detrimental to the leader's behavior. Often, the phrase "power corrupts" can describe

people whose obsession with exerting power over others takes precedence over any other form of reasonable interactive behavior (Cartwright & Zander, 1968b; Kotter, 1979; Yukl, 1981). Too much dependence on power may also be damaging, particularly if individuals are in situations where the leadership position is only temporary. Cartwright and Zander (1968b) suggested that a person with such a dependence "who has tasted the fruits of power is likely to be reluctant to relinquish [it and] ... may even be prepared to resort to extreme measures to preserve it. The possession of power may become an end in itself rather than a means to an end" (p. 230).

It should be noted that most research conducted on leader-subordinate interactions has assumed that the power relationship is disproportional, where the leader has most of the power while the subordinate has very little. As noted earlier in this chapter, this is not necessarily the case (e.g., Crozier, 1967; Hickson et al., 1971; Mechanic, 1983; Podsakoff, 1982). However, most research has assumed, from a hierarchical perspective, that the leader has most of the recognized power over a subordinate.

E. Formal Conceptual Models of Social Power

The previous three sections in this chapter have demonstrated the ways in which various social-psychological theories of human behavior can be used in the analysis of potential or actual power relationships. There has also been a concerted effort to develop conceptual frameworks and models entirely devoted to the understanding of interpersonal power in society. In this section of the chapter, three prominent models that explain the use of power in interpersonal relationships will be reviewed. These are Cartwright's (1959a) field conception of power, McClelland's (1975) notion of the individual power motive, and Kipnis' (1974) model on the process of power. A fourth theory, French and Raven's (1959) typology of social power, will be given an expanded treatment in the next section of this dissertation, because of its fundamental importance in the analysis of the results of this study.

A Field Conception of Social Power

Before delving into Cartwright's (1959a) conception of social power, a brief overview of the field theory behavioral approach will be presented. This conceptual approach was largely based on the work of Lewin (1951) who was intensely interested and concerned with understanding all aspects of human behavior:

> Lewin became convinced that, in order to understand behavior, it is essential to put it in context; i.e., in the surrounding field. The meaning of behavior depends on the whole of which it is a part. The whole is different from the sum of its parts. In essence, field theory is an attempt to describe the present situation (field) in which a person or persons participate (behave). (Shaw & Costanzo, 1982, p. 112)

According to Lewin, interaction among individuals could be viewed as a balance between the amount of force exerted by a person and the amount of resistance one encountered in return. Lewin believed that there were three forms of force affecting human behavior. The first of these was one's "own" force, which was based on a person's own internal needs; the second was "induced" force, which originated in the will of some other person, while the third was "impersonal" force, which was derived from impersonal aspects in the external environment. According to Cartwright, power was not assessed solely on the basis of the force exerted; instead, it was estimated according to the maximum difference between the force exerted and the resistance encountered. Total domination, for example, would occur when the full force exerted was met with no resistance. In any situation however, a resulting behavior or action may be caused by a particularly strong force, or may result from a combination or sum of all the exerted and resisted forces that the individual encounters (Schopler, 1965).

In order to adequately understand the presence of power in interpersonal relationships, Cartwright believed that one needed to clarify and expand on the conception of force. He derived seven components that together contributed to the successful exertion of power. First, "agents" were the entities (persons or groups) who either produced effects or suffered consequences. Second, the "act of an agent" referred to the initial event or

action done by an agent. The third factor was a defined "locus," which referred to the position or situation that the agent occupied at the time of the act. The fourth component was "direct joining." Cartwright noted that direct joining implied that the power of one person over another might extend in various ways over various environments. The fifth component of a force was a "motive base," this being the need, drive or desire that causes one to exert force. The sixth and seventh components of a force are the "magnitude," which simply referred to the strength of the act and the "time," which was the duration of the act.

Cartwright's field theory has been important in initially characterizing the elements that constitute a psychological exertion of power within an interpersonal relationship. Ng (1980) noted that thinking of power "in terms of induced force, as distinct from induced change, makes it possible to regard power as a continuous variable rather than an all-or-none discrete factor" (p. 190) because of the continuous interplay between exertion and resistance. However, Cartwright's theory has not been directly used in the development of hypotheses about the determinants and consequences of power and as such, has not been empirically tested (Henderson, 1981; Ng, 1980; Schopler, 1965).

The Need for Power

Unlike most of the power related theories previously discussed, McClelland's (1975) analysis of power in individuals has not been dependent on interpersonal relationships. Instead, McClelland's approach to understanding human behavior was based on motivational ideology, in which individuals have a personal need within their psychological makeup, that when exposed to some form of stimuli, prompted them to act in a particular manner. While McClelland acknowledged that the actions of other people could be a sufficient cause for someone to act in a particular manner, he was not prepared to believe that this was the only source or reason for behavior (de Charms, 1982; McClelland, 1970; 1975).

While much of McClelland's work on motivational behavior focused on understanding the need for achievement (e.g., McClelland, 1958a; 1958b; 1961; McClelland, Atkinson, Clark, & Lowell, 1953), he also investigated other motivations, particularly the need for power (nPower) and the need for affiliation (nAffiliation). The nAffiliation motive centered on a person's desire to belong or be liked by others, while nPower was defined as a desire to have some impact on the personal behavior of other people. The impact can be shown in three ways:

> (1) by strong action, such as assaults and aggression, by giving help... by influencing, persuading someone or trying to impress someone; (2) by action that produces emotions in others ... (3) by a concern for reputation ... a person concerned about his reputation is concerned about his impact in the obvious sense. (McClelland, 1975, p. 8)

Originally, these latter two motivations were felt to be behaviors that had their origin in achievement; however, he later felt that nAchievement, nAffiliation and nPower motivations were independent of one another. This became evident when McClelland began studying people in business. He found that in many instances, "a salesman with high nAchievement does not necessarily make a good sales manager. As a manager, his task is not to sell, but to inspire others to sell ... [In other words,] stimulating achievement motivation in others requires a different motive and a different set of skills than wanting achievement satisfaction for oneself" (McClelland, 1970, p. 30). McClelland determined that a willingness to interact and be influential over people was a definitional framework for a high nPower. One does not necessarily have to have a high need for affiliation; in fact, McClelland and Burnham (1976) found that "73% of the better managers had a stronger need for power than a need to be liked ... as compared with only 22% of the poorer managers" (p. 103).

Although the concept of nPower can be very helpful in understanding power relationships in bureaucracies and economic environments, it is not limited to such environments. Rather, McClelland (1975) believed that the power motive existed in all individuals, though some would have a greater need for power than others. In order to

fully illustrate the power motive, McClelland developed a two dimensional classification scheme (Figure 3). One of the dimensions was denoted the source of power, which could either originate inside the self, or outside the self. The other dimension was the object of power, which was either directed to the self in order to feel stronger, or directed to others in order to influence. McClelland felt that each quadrant in the model could be used to explain power in terms of behavior oriented action. In addition, power was interpreted with respect to occupations, Freudian stages of development, pathological tendencies and folk tale themes. For the purposes of illustration, each quadrant will be briefly defined only in terms of behavioral oriented actions.

The first quadrant is defined as "it strengthens me," where someone or something in the environment causes a person to feel stronger internally. The "it," in this case, "is at first a matter of another caretaker who gives emotional and physical support, even milk at the breast, which comes from the outside and makes the infant feel stronger inside"(p. 13). These feelings continue throughout one's life, particularly in interpersonal relationships, where people draw strength, emotional support and encouragement from friends or significant others in order to build or maintain confidence. The action correlate associated with this quadrant is represented by power-oriented reading. According to McClelland (1975), reading this sort of material can give one confidence, though he noted that such reading material did not necessarily have wide appeal. For instance, magazines that focused on sex and aggression were considered power-oriented, though this material only appealed to some men and not to women.

The second quadrant is characterized as "I strengthen myself." Here, a person relies on feelings of self-assertiveness and inner confidence when interacting within the environment. This typer of person is aware of his/her abilities and assesses them relative to a challenge. The more strength the person desires, the more he will

Figure 3 A Classification of Power Orientations

originally appeared on page 11 in

McClelland, D.C. (1975). Power: The inner experience. New York: Irvington.

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The figure was depicted as a two dimensional square divided into four quadrants to describe power relationships. Going clockwise from the top left quadrant, these forms of power relationships are:

- It (the object of power) strengthens me
- I strengthen myself
- I have impact on others
- It (the object of power) moves me to serve

such as a cadillac or house. While it is possible that a person might want to have such possessions as a means of displaying power, one must also "accept the simple fact that sometimes he enjoys being surrounded by his possessions and feeling the power they convey to him, even when others are not around to be impressed" (McClelland, 1975, p. 17).

The third quadrant is defined as "I have impact on others." This is the most traditional interpretation of power, where one's personal actions or behaviors influence the behavior and actions of others. The previous relationship between personal skills and particular challenges is also relevant here, particularly if the challenge is in the form of another person. McClelland's example of the action correlate is competitive sports or arguing, which he felt were classic examples of individual confrontation.

The fourth quadrant is defined as "It moves me to influence others," which describes how outside societal forces such as laws, organizational hierarchies, or religious structures are the rationale for a person's attempts to influence others. For instance "great religious and political leaders from Jesus Christ to Abraham Lincoln and Malcolm X have felt that they were instruments of a higher power which is beyond the self" (McClelland, 1975, p. 20). An example of behavioral action associated with power in this quadrant is being a member of an organization, where the motivation to influence others is based upon serving or benefiting the organization. For instance, selling raffle tickets to others is a demonstration of influence, but the beneficiary of the funds obtained from the sale is the organization, not the self.

McClelland's conception of nPower has been well documented in numerous studies that have investigated how power motivates or defines individual behavior. It has been particularly useful as a means of establishing an individual profile of a person on the basis of how a person perceives power within the self compared to societal influences. It could be used as a means of interpreting interpersonal relationships, the orientation implementation of the theory has been primarily used for explaining individual b[illegible]or

societal trends. For instance, McClelland's theory has been used to differentiate the need for power between the sexes (e.g., Stewart & Chester, 1982; Veroff, 1982). These authors found that both women and men have a need for power, but that each gender expresses power in different ways. Winter (1973) did extensive research where a person's nPower orientation was instrumental in predicting what sports a person would participate in. He found that people with a high need for power participated in strategic "man/team versus man/team" sports such as football, baseball or wrestling. Those with a low need for power took part in sports such as track or golf that, while competitive, were more of a "man against himself or a designated standard."

A Process Model of Power

Power may be depicted as a logical progression of methods by which one person chooses to influence another in order to achieve an objective or accomplish some sort of task. It should be noted that many models that view power as a type of process have been developed on the basis of some sort of established organizational or political structure (e.g., Kelman, 1974; Kipnis, 1974; Lukes, 1974; Mintzberg, 1979; Pfeffer, 1981). In this section, the power process will be examined from the perspective of the influencing agent (Kipnis, 1974).

Kipnis believed that someone could be identified as an influencing agent if that person was perceived as having access to resources that were needed or valued by others. Powerholders are special types of influencing agents who have access to resources that are institutionally grounded and take the form of things such as money, law, political favors and military force. In his explanation of the process of power, Kipnis pays less attention "to individuals whose resources are based upon personal qualities, such as beauty, strength or intelligence. This is because access to institutional resources allows even the most ordinary of persons to extend their influence over others to a far greater degree than is true for the same persons acting alone" (p. 83).

eight components (see Figure 4). Initially, there must be some motivation on the part of the powerholder. In his model, Kipnis felt that there were a number of origins for the motivation, ranging from an internal desire to satisfy an aroused need for influencing others to an external necessity for directing the efforts of others in order to enhance one's own work or position. The second component simply puts the motivation into action by requesting compliance from the target, this being the person that the powerholder wishes to influence. If the target agrees immediately, the power process has essentially ended (apart from evaluating the consequences of the action). However, the power process is not always smooth, as the powerholder will often encounter some form of resistance from the target. It is on this basis that the remaining components in the model are put into action by the powerholder, in order to try and gain compliance from the target.

One way of obtaining compliance from another is to make use of one's personal or institutional resources. Kipnis felt that deciding what resources to draw on would depend on a combination of an assessment of the situation as well as a determination of what resources the powerholder felt comfortable in using. The powerholder must also consider any inhibitory factors that might prevent him or her from utilizing resources properly. Kipnis believed that there were numerous psychological and sociological barriers that could inhibit a successful implementation of a person's resources. For instance, powerholders might secretly be insecure and lack confidence in using personal resources to influence others (Goodstadt & Hjelle, 1973; Kipnis & Lane, 1962). Another factor might be the powerholder's assessment that the costs of the action outweigh the benefits gained by the influence (Thibaut & Kelley, 1959). If the powerholder feels constrained by any of the forces in this component, power is not exerted and the process itself is terminated.

If one decides to exert power, the next step is to decide how it will be done. As noted in the model, the powerholder can consider several courses of action. The precise means that are used will be dependent on the powerholder's personality, style of interaction

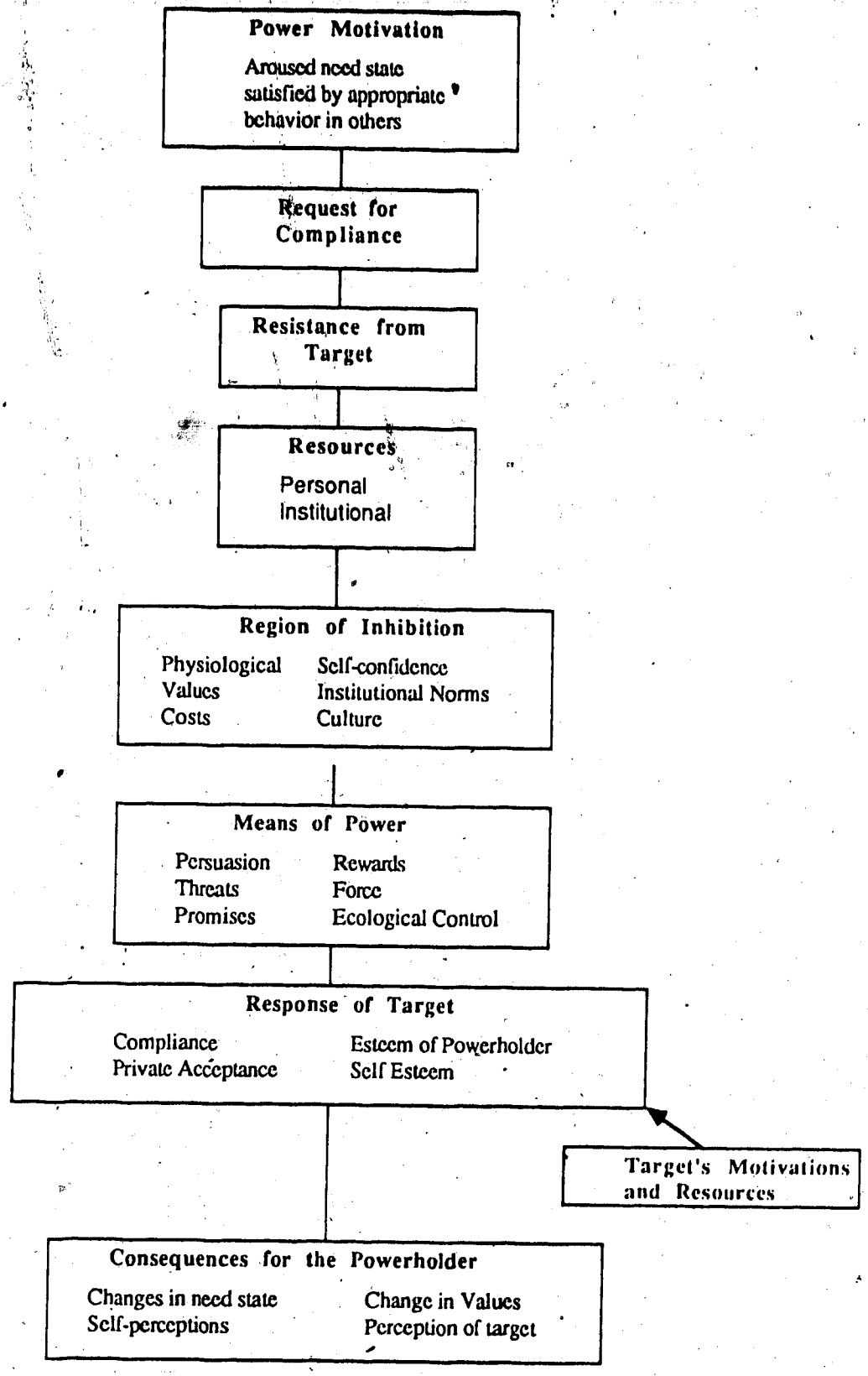

Figure 4 The Power Act from the Powerholder's Perspective (Kipnis, 1974)

and possible assessment of the situation. Once power has been enacted, the next step is to consider the target's response to the powerholder. Kipnis believed that there may be a number of factors contributing to the target's reaction to the powerholder's request. It may stem from the nature of the request and/or the method used in making the request. One must also consider whether the target has particular motivations and resources that influence whether he or she complies or resists. For instance, the request and use of power may be appropriate, with the result that the target responds happily. It is possible though, that the target complies because he or she feels that there is little choice in the matter. In an institutional setting, a refusal to comply could result in a demotion or loss of job and/or status. Though not illustrated in the model, Kipnis noted that continued resistance on the part of the target can force the powerholder to backtrack through the earlier stages of the model, if there is still the need or desire to successfully influence the target. It is up to the powerholder "to diagnose the causes of the target's resistance. A wrong diagnosis may increase rather than decrease resistance" (Kipnis, 1974, p. 95).

The last component in this model is an evaluation of the process for the powerholder. If the process was successful, the powerholder should experience satisfaction. "By contrast, if his influence is resisted and his needs remain unfulfilled, the powerholder should experience frustration and self-doubt" (p. 95). Both successful or unsuccessful attempts at influence can cause changes, such as a shift in internal values, confidence or, in the organizational structure, a change in personal status.

F. French and Raven's Typology of Social Power

One of the most popular and enduring models of social power has been the five item typology developed by French and Raven (1959). The authors developed their theory on the basis of Lewin's (1951) ideas on forces exerted on people in the social environment, where power was defined as the resulting ratio of one person's attempt to exert influence on another compared with the second person's force of resistance from being influenced.

The authors also noted that both the exertion and resistance originated from the act of the influencing agent. French and Raven postulated five basic forms of power that one could use to influence another's behavior: reward power, coercive power, legitimate power, expert power and referent power. When they originally postulated this theory, French and Raven felt that it would be an adequate description of any interpersonal relationship that involved some form of influencing situation. The typology was not limited to describing a leader/follower relationship, though it is in this context where it is often used (e.g., Bachman, Bowers, & Marcus, 1968; Busch, 1980; Ivancevich & Donnelly, 1970; Student, 1968). For simplicity of explanation, each form of power will be described within the context of a leader/subordinate relationship, where the leader is the one perceived as the influencing agent while the subordinate is the target of the influence.

The first two forms, reward power and coercive power, are derived from a subordinate's perceptions that a designated leader has the ability to either reward or punish on the basis of the subordinate's actions or behavior. Reward and punishment behaviors can often be somewhat reciprocal. For instance, reward power is based on an ability to administer positive valences, but it is also a reward to decrease or remove negative valences. Conversely, when one uses punishment behaviors, negative valences are administered and/or positive valences are reduced or eliminated. The exact forms of rewards and punishments deemed appropriate will vary among different leaders and may be dependent on factors such as leadership style, the situation or environment, past performances of the subordinates and the impact that the reward or punishment will have on the subordinates' future behavior.

Legitimate power stems from both internal and external sources, where a subordinate believes that the leader has a legitimate right to influence the subordinate and that the subordinate has an obligation to comply with the leader's influence. Externally, this form of power may often be a reflection of the individual's status within an organization or it may be a result of a designation by another legitimizing agent (Bass,

1960; Yukl, 1981). Moreover, "the more legitimate one is perceived to be, the greater the likelihood of acceptance of one's attempts to influence, and the less resentment at going along" (Cohen et al., 1980, p. 253).

Expert power is derived from the special talents or expertise that a subordinate believes a leader to possess. French and Raven proposed that the subordinate evaluates the leader's expertise in relation to both his or her own knowledge as well as against an absolute standard. Yukl (1981) also suggests that for expert power to be effective, the subordinate should perceive the leader to be a viable source for information and advice. In the short run, "a new leader may be able to 'fake it' for a time by acting confident and pretending to be an expert. However, over time as the leader's knowledge is put to the test, subordinate perceptions will become more accurate" (p. 47).

Referent power has its basis in the identification that the subordinate has with the leader. In other words, the subordinate makes an attitudinal judgment of the leader. Referent power is dependent "on a feeling of personal affection, loyalty, and admiration by a subordinate" (Yukl, 1981, p. 44). A leader with strong personal charismatic qualities would be able to influence the followers using this form of power.

Although French and Raven's power bases can be viewed as distinct facets of influential behavior, they are conceptually related. For instance, Busch (1980) cited previous studies of manager-worker interactions which indicated that certain power bases were linked together. Raven (1974) felt that the situation surrounding the powerholder would be an important factor for deciding on the most appropriate form of power. Nevertheless, "the agent has some choice as to the bases he may utilize, and, if he is wise, he will consider what power resources he has, which ones he will utilize, and in what combination he will utilize them" (p. 180).

Some caution must be taken when using power because the use of one form of power may undermine or eliminate the effectiveness of another. Ideally, a leader would like to strike a balance between the forms of power. In reality though, this may not be

possible, because the use of some forms of power may render other forms of power less effective:

> For example, a leader's use of coercive power is likely to reduce his referent power if subordinates strongly resent the coercion. Likewise, use of reward power may be acceptable to subordinates if the leader has considerable personal power, but may be perceived as excessively manipulative if he does not. (Wexley & Yukl, 1977, p.151).

A few years after the introduction of the social power typology, Raven (1965; 1974) introduced a sixth power base known as informational power into the typology. This form of power was based on information or content of a communication sent from the influencing agent to the target. According to Raven (1974), the impact of the message had a significant impact on the target to the point where a change in behavior of the target was evident. Although Raven tried to emphasize the importance of informational power, with rare exceptions, it is generally ignored in empirical research using the typology. For the most part, no explanation is given for its omission (Podsakoff & Schriesheim, 1985). One could presume that many researchers find it difficult to fully distinguish it from expert power. For instance, Johnson (1976) utilized informational power in her study on women and power, and differentiated it from expert power by proposing that "the influencer does not just say he or she knows best but explains why" (p. 105). Yet, most interpretations of expert power contend that some sort of demonstration through communication is required to confirm one's expertise (e.g., Bachman et al., 1966; Student, 1968; Thamhain & Gemmill, 1974). Informational power is not utilized in this dissertation primarily because most other empirical research has not accepted it as part of the typology.

French and Raven's typology has been empirically tested in many different social settings, including the medical profession, in families, in educational settings and in the business environment. No studies were uncovered that show an implementation of the theory within the sports setting. The remainder of this chapter reviews the empirical research done with the French and Raven typology, specifically showing how the power bases compare with one another in different settings as well as reviewing the impact that the

power bases have had on personal satisfaction, using constructs such as jobs, activities, performance, supervisory authority, and so on.

Power in Family Life

It has long been recognized that parental influence is an important contributor to the shaping of children's behaviors and attitudes toward society (e.g., Peterson, Rollins, & Thomas, 1985; Popenoe, 1977; Rollins & Thomas, 1975). Two studies utilizing French and Raven's (1959) typology have found that some forms of power used by parents are more effective modes of influence than others. Smith (1970) found that high school and college male and female children perceived their fathers as having good expert and referent powers with respect to providing good judgment, support and advice in educational matters as well as for the children's interpersonal relationships with other people. The children also perceived a high degree of legitimate power, in that they believed that the father had a legitimate right to influence them. Children also recognized the parents' ability to reward or punish them, but this was perceived as being less important than the other forms of power that parents could use.

In their study of adolescent conformity to parental influence, Peterson, Rollins, and Thomas (1985) found differences to exist between the father and mother's exertion of power. In shaping personal values, the authors found that the adolescents perceived the mother but not the father to have significant expert and legitimate power. Conversely, they found that the father's ability to reward them was condusive in getting adolescents to conform to proper behavior, although the mother's ability to reward had no effect on behavior. Coercive action by both parents was found to have a positive effect on immediate change in external behavior, but produced a negative effect on children's internalization of societal values. Referent power was not utilized in this study.

The use of power is not limited to the parent-child relationship. It can also be used in explaining spousal relationships. In an exploratory study, Raven, Centers and

Rodrigues (1975) found that husbands and wives try to exert power over one another in a variety of social situations, but some forms of power are more influential than others. Overall, the authors found that referent, expert and legitimate power were perceived as the most prominent sources of spousal power. Both husbands and wives rarely relied on reward power or coercive power. In the instances where reward power was used, it tended to be perceived as a bribe, while the use of coercive power caused marital stress and unpleasantness in the relationship. Some variation in this pattern occurred when one compared social situations or marital values. For instance, when the authors compared the decision to "visit a relative" with "going to the doctor," legitimate power was the dominant behavior influencing the former, while expert power was the predominant basis for the latter decision.

Power in the Educational Setting

Educational settings provide a convenient setting for examining power relationships. All school settings have an established leader/subordinate relationship as represented in the teacher and his/her students. There is a general acceptance that teachers have the ability and right to influence and mold students' behavior. However, this relationship only succeeds when the students perceive that the teacher has both the potential to exert influence as well as the ability to follow through with the influence in learning situations (Kearney, Plax, Richmond, & McCrosky, 1984; 1985; McCrosky & Richmond, 1983; Rouse, 1983; Tauber, 1985).

Application of the French and Raven typology within educational settings has shown some interesting trends. For instance, Jamieson and Thomas (1974) noted variations in the use of power by teachers among three different levels of students. The authors found that high school and undergraduate university students felt that coercive, legitimate and expert power were the primary forms of power utilized by teachers. University graduate students agreed that expert power was utilized, but felt that there was a

high degree of informational power and not very much coercive power used by their teachers. Jamieson and Thomas implied that this shift in perception of power usage may reflect the graduate students' greater interest in the instructor's resourses, as the expertise and information that teacher's have is often beneficial to the student's concentrated graduate study. The authors also believed that the increased responsiveness by the student to the teacher's expert and informational power may have resulted in the teacher perceiving that the use of coercive tactics was not required for this level of student. In a variation of the teacher-student relationship, Davis (1979) found that high school students' perceptions of high school counsellors' expert power and reward power were key components in establishing a positive relationship.

McCroskey and Richmond (1983) found some evidence to suggest that teachers and students have similar perceptions of the use of power in the classroom. The authors found that teachers and students from junior high, senior high, and colleges all perceived that the overwhelming proportion of power use stemmed from a teacher's reward, referent and expert bases. Both groups felt these forms of power were used in a positive and constructive manner, although the teachers' perspectives were more positive than those of the students. In a related study, Richmond and McCroskey (1984) measured the effects of social power on students' learning behaviors. Both teachers and students felt that a high perception of referent power was positively related to learning; the students also felt that perceptions of expert power from the teacher enhanced the students' willingness to learn. Although referent and expert power was found to be important, these forms of power are valued only as long as students perceive the teacher to possess them. Extensive reliance on coercive and legitimate power was perceived as being negatively associated with learning, while reward power was unrelated to learning. With respect to the lack of importance of reward power to learning behavior, Richmond and McCroskey noted the following:

> This lack of relationship raises a significant challenge to those who argue that rewards should be employed to motivate students . . . [yet] the answer does not seem to be a simple "use it" or "don't use it" .... The importance of

> reward power, it would appear, arises when the teacher lacks referent or expert power. At this point, one of the three remaining bases must be chosen. Since use of coercive and legitimate power clearly leads to negative outcomes, reward power becomes the option of choice. While it may not actually increase learning, at least it does not retard it and using reward power for a while may permit the teacher sufficeint time to build referent and/or expert power bases. (p. 136).

Power in Business

Much of the research utilizing French and Raven's typology has been conducted in business settings. As with the educational setting, business environments have established situations where there are leaders and followers; in traditional hierarchical structures, it is usually the leader who is perceived as having power. Much of the research investigating the use of power in business settings has assessed what forms of power were perceived as being used most effectively in obtaining compliance from followers. In addition, many of the studies have examined how different forms of power affect subordinate job satisfaction and performance (e.g., Bachman et al., 1968; Burke & Wilcox, 1971; Busch, 1980; Dunne, Stahl, & Melhart, 1978; Ivancevich, 1970; Ivancevich & Donnelly, 1970; Martin & Hunt, 1980; Slocum, 1970; Student, 1968; Thamhain & Gemmill, 1974).

The five forms of power have been compared with one another in order to determine why subordinates comply with the requests or suggestions of the supervisors (Bachman et al., 1968; Burke & Wilcox, 1971; Ivancevich, 1970; Ivancevich & Donnelly, 1970; Student, 1968). Subordinates were asked to rank statements reflecting each form of power according to personal importance. Although there is not precise agreement across studies in terms of how the five forms of power were ranked, it was generally found that subordinates felt that the expert and legitimate powers of a leader were most important in obtaining compliance with a leader's request. Referent, reward and coercive power were found to be less effective (Bachman et al., 1968; Burke & Wilcox, 1971; Ivancevich, 1970; Ivancevich & Donnelly, 1970; Student, 1968). With the exception of the Burke and Wilcox (1971)

study, coercive power was consistently rated as the form of power which was least effective in obtaining a subordinate's compliance.

Perceptions of social power have also been shown to be related to various measures of satisfaction in the business environment. The most common factors include assessment of job satisfaction, satisfaction with supervision and satisfaction with personal performance.

Although the precise items associated with job satisfaction can vary from one study to the next, job satisfaction was defined as "perceived characteristics of the job in relation to an individual's frames of reference. Alternatives available in given situations, expectations and experience play important roles in providing the relevant frame of reference" (Smith, Kendall, & Hulin, 1969, p. 12). It was generally found that reward power (Bachman et al., 1968; Burke & Wilcox, 1971; Cope, 1972; Dunne, Stahl, & Melhart, 1978; Martin & Hunt, 1980; Slocum, 1970) and legitimate power (Bachman, 1968; Bachman et al., 1968; Dunne, Stahl, & Melhart, 1978; Slocum, 1970) were not related to job satisfaction. The lack of impact of reward power suggests that individuals attribute job satisfaction more to intrinsic values such as the work itself, responsibility, and personal achievement rather than external values such as personal recognition or praise from the leader (Hertzberg, 1966). There was some evidence that the use of coercive power would have negative effects on employee job satisfaction (Burke & Wilcox, 1971; Jamieson & Thomas, 1974; Podsakoff, Todor, & Skov, 1982; Richmond & McCroskey, 1984; Richmond, McCroskey, Davis, & Koontz, 1980; Slocum, 1970). The use of referent power was found to be positively related to job satisfaction (Burke & Wilcox, 1971; Dunne, Stahl, & Melhart, 1978; Ivancevich, 1970; Richmond et al., 1980), as was the perceived use of expert power (Burke & Wilcox, 1971; Cope, 1972; Ivancevich, 1970; Richmond et al., 1980; Slocum, 1970). Previous research has suggested that leaders who are perceived as being competent in their skills and can communicate well with subordinates toward the accomplishment of tasks associated with the job will make the overall job a more satisfying experience

(Bachman, 1968; Dunne et al., 1978; Ivancevich, 1970; Slocum, 1970). Richmond et al. (1980) added that human interaction was a very important part of many jobs, and that in some instances, superiors are often also perceived as colleagues. As such, overall feelings of satisfaction on the job may be in part determined by how much one likes the leader as well as how much respect one grants the leader on the basis of expertise.

It should be noted that the trends noted in the above findings may be a product of the type of job the subordinates were doing. For instance, Ivancevich and Donnelly (1970) believed that differences in the relationship of perceived power to job satisfaction might occur when comparing white collar workers to blue collar workers. There might also be variations across different departments or within different industries.

Some trends within the business literature between the leader's use of power and the subordinate's satisfaction with the leader have emerged. Overall, positive relationships were noted between the leader's use of expert and referent power and subordinate satisfaction with a leader (Bachman, 1968; Bachman et al., 1968; Bachman, Smith, & Slesinger, 1966; Burke & Wilcox, 1971; Busch, 1980; Slocum, 1970). A negative relationship was noted between subordinate satisfaction and a leader's use of coercive power (Bachman, 1968; Bachman et al., 1968; Bachman, Smith, & Slesinger, 1966; Burke & Wilcox, 1971; Busch, 1980). Podsakoff and Schriesheim (1985) noted that the correlation between subordinate satisfaction with the leader and reward and legitimate power was not clear because of the variations in the use of scales among the studies. Studies by Bachman (1968), Bachman et al.(1966), Burke & Wilcox, (1971) and Slocum (1970) used ranked scales and obtained negative results. Subordinates felt that the leader's use of reward and legitimate power reduced the satisfaction that subordinates had with the leader. On the other hand, studies by Bachman et al. (1968) and Busch (1980) used Likert type scales and found that subordinate satisfaction with the leader was enhanced through the subordinates' perceptions of the leader's use of reward and legitimate power.

Perceived satisfaction with personal performance is another form of subordinate satisfaction that is often correlated with social power. Performance is inherently related to satisfaction, though no one is sure which factor influences the other. For instance, Lawler (1973) is not certain whether the two are necessarily by-products of the other. "If satisfaction causes performance, then organizations should try to see that their employees are satisfied; however, if performance causes satisfaction, then high satisfaction is not necessarily a goal but rather a by-product of an effective organization" (p. 64-65). Rather than extensively debate the issue, much of the business literature is content to appraise performance on the basis of productivity or attainment of set goals. (Bachman et al., 1968; Podsakoff, Todor, & Skov, 1982; Student, 1968). Nevertheless, it is possible that an individual can perform adequately according to set standards, but still not be personally satisfied with his or her own personal performance (Chelladurai, 1984b).

In relation to the French and Raven power bases, the business literature has generally found that reward, coercive and legitimate power are negatively related to performance, while expert and referent power are positively related (Bachman et al., 1968; Ivancevich & Donnelly, 1970; Sheridan & Vredenburgh, 1978; Slocum, 1970; Student, 1968; Thamhain & Gemmill, 1974). It was thought that the positive and negative trends associated with the influence of the power variables on performance were in part a reflection of different perceptions of leadership within an organization by the subordinates. Ivancevich and Donnelly (1970) noted that reward power, legitimate power and coercive power in the organizational setting were related specifically to the leader's position in the organization hierarchy, which specifies the amount in which these powers can be exercised. It was felt that the subordinates resented a personal assessment of performance based on the above noted impersonal forms of power. However, the amount and range of a leader's referent power and expert power was independent of the organizational system and were more closely associated with the technical, behavioral and administrative skills of each individual

leader. As such, these were viewed as positive contributors toward an individual's satisfactory performance.

Rationale for the French and Raven Typology

There were three reasons for choosing the French and Raven typology for a power analysis of coaching behavior in sport. The first reason is that the theory has been widely quoted in the literature as a solid, logical description of the ways by which one person can influence another (Bass, 1981; Mintzberg, 1983; Podsakoff & Schriesheim, 1985; Schopler, 1965). The second reason is that it is a theory of power that has been empirically tested in a wide variety of social settings. The third reason, as explained in the opening chapter of this dissertation, is that despite its popularity, there have been some severe methodological problems in testing the typology (Podsakoff & Schriesheim, 1985). It was hoped that in addition to providing a new framework for explaining coaching behavior in sport, this research would make a contribution to the general knowledge on power by overcoming many of the methodological limitations in previous studies.

G. Conclusion

This chapter has shown that social power is a facet of human behavior that can be interpreted under many different circumstances and situations. Although the historical analysis in this chapter has pointed out that power could take on a variety of forms (such as wealth, position of authority, armaments, or gifted intelligence), power was primarily a tool that was used by omniscient figures such as kings or religious leaders as a means of dominating or influencing others (e.g., Kaplan, 1977; Machiavelli, 1977; Russell, 1938; Schermerhorn, 1965).

It is evident that power is not only exclusive to a selected minority. Rather, it is a form of behavior that has been observed and analyzed in a variety of ways. While power relationships are typically thought to be interpersonal, literature from organizational and

political perspectives determined that power exists beyond human relationships. Bureaucratic or political organizations may be compared in terms of power ; similarly, units or sections within a bureaucracy may be perceived as having more power than others within the same organization (Chackerian & Abcarian, 1984; Crozier, 1967; Giddens, 19[illegible]; Hickson et al., 1971; Weber, 1970). The reasons for political conflict and the rationale behind making or not making decisions can also be interpreted on the basis of power (Lukes, 1974).

The exertion of power was also examined within typical interpersonal relationships. Social psychological motivational theories such as Heider's (1958) concep[illegible]terpersonal relations, attribution research (e.g., Jones & Davis, 1965; Schopler & Layton, 1974) and social exchange (Blau, 1964; Thibaut & Kelley, 1959) have all determined that much of a person's interactions with others involved a varying degree of influence, compliance and compromise. Although McClelland (1975) believed that all individuals have some sort of need for power, he also felt that this need would vary widely among individuals on the basis of how power was defined. On the one hand, some individuals might define their need for power on the basis of influencing another's behavior. On the other hand, other people might be content to exert power themselves in order to feel stronger emotionally.

Power was also found to be a characteristic underlying leadership behavior. More specifically, many theories of leadership have included an examination of the power relationships in organized settings that can exist between individuals in the role of leaders interacting with others in the role of followers (e.g., Chelladurai, 1984a; Fiedler, 1967; Hersey & Blanchard, 1977; Tannenbaum & Schmidt, 1958).

There have been a variety of models developed that specifically examine social power within human relationships; one of the most popular and enduring models has been the five item typology developed by French and Raven (1959). The attractiveness of this theory was that power could be characterized in five different ways and that the typology was not limited to a specifically defined leader/follower relationship, but instead could be

used to describe any interpersonal relationship where one person was somehow influencing another.

Although the literature has shown power to be a prevailing aspect of interpersonal relationships and organizational and leadership situations, the study of power in sport situations has been very limited. This may be due, in part, to the sparse theoretical examination of leadership in sport, with the notable exception of Chelladurai's research on sport leadership (Chelladurai, 1984a; Chelladurai, 1984b; Chelladurai & Carron, 1983; Chelladurai & Saleh, 1978; Chelladurai & Saleh, 1980). It was felt that French and Raven's (1959) theory could be transposed into the sports setting relatively easily, as previous literature demonstrated that the theory was useful in explaining power relationships within diverse environments, including business, educational and family settings. As such, it was possible that the typology might also work within the parameters of organized sport. Moreover, previous implementation of the French and Raven typology had produced some trends as to how the sources of power available to leaders were perceived by followers with respect to aspects of satisfaction. Such an investigation might provide additional insights as to the definition and usefulness of power within the sports setting.

III. METHODS AND PROCEDURE

A. The Instrument

In order to determine how athletes felt about the use of power by their coach, a prepared questionnaire, the Sport Assessment Survey (SAS), was developed. This was done for two reasons. First, while French and Raven's (1959) theory of social power has been widely quoted, existing instruments for assessing power have been found to suffer from important methodological problems (Podsakoff & Schriesheim, 1985; Schriesheim, Hinkin, & Podsakoff, 1985). In addition, the sport environment is distinctive from a business or industrial environment. As such, even if there was an appropriate existing general questionnaire, items within it would have to be reworded to properly suit aspects of the sport environment. It therefore seemed more appro[redacted]evelop a new questionnaire to be used for the present study, than to m[redacted] existing questionnaire that was already thought to be somewhat problematic.

In its entirety, the questionnaire contained 87 items spread over six sections (see Appendix A). In the interests of clarity, all of the items in the SAS were clearly stated in plain, everyday language. Two sections centered on examining the power relationships that existed between the coach and the athletes, based on the 5 item typology proposed by French and Raven (1959). The third section measured the athletes' perceived personal satisfaction with the sport of basketball and the fourth section asked athletes for a brief sport profile. The other two sections of the questionnaire contained items which constituted a "lie" scale utilized by Eysenck and Eysenck (1968).

The first section of the questionnaire incorporated French and Raven's five forms of power into a Thurstonian paired comparison inventory. The purpose of the paired comparison method is to provide an unbiased ordering of attitudinal stimuli on an interval scale of measurement (Edwards, 1957; Oppenheim, 1966; Wankel & Kreisel, 1985b). In the present study, the five forms of power were paired against one another, producing ten statements that paired each of the possible sources of power with every other source of

power in turn. The description of each form of power was modelled after the original definitions of French and Raven (1959). An attempt was made to make the paired choices appear equally socially desirable to respondents by wording the compared items as being relied upon by "some coaches" and "other coaches" (Harter, 1979; Kreisel, 1982). To further maintain the concept of equal desirability, all five forms of power were arranged so that each power descriptor occurred first or second an equal number of times in the item pairs on the questionnaire. Through this method, an unbiased order of preferred use of power among sport coaches was derived.

The second set of scales arranged multiple descriptors of the five forms of social power in a Likert Scale format. This was done for two reasons. First, Schriesheim, Hinkin, and Podsakoff (1985) felt that the single-item format used in previous studies was "not broad enough to adequately tap the needed content domains" (p. 4) inherent in each form of power. Secondly, the authors pointed out that the single-item nature of previous measures of the French and Raven typology (used by Bachman et al., 1966, Student, 1968 and Thamhain and Gemmill,1974) are "notoriously unreliable, and do not permit the calculation of internal consistency coefficients. As a result, relationships between the power measures and various dependent variables may be obscured due to undetected (and, with single item measures, undetectable) measurement error" (Schriesheim, Hinkin, & Podsakoff 1985, p.5). On the basis of the previous literature utilizing the French and Raven typology (e.g., Bachman et al., 1968; Burke & Wilcox, 1971; Holzback, 1974; Ivanevich & Donnelly, 1970; Lord, 1977; Schriesheim, Hinkin, & Podsakoff 1985; Slocum, 1970; Student, 1968), 10 descriptors of each form of power were derived, resulting in 50 unique statements. The items were presented in the questionnaire in the following, continuous order: Referent power (items 1, 6, 11, 16, 21, 26, 31, 36, 41, 46), reward power (items 2, 7, 12, 17, 22, 27, 32, 37, 42, 47), expert power (items 3, 8, 13, 18, 23, 28, 33, 38, 43, 48), coercive power (items 4, 9, 14, 19, 24, 29, 34, 39, 44, 49), and legitimate power (items 5, 10, 15, 20, 25, 30, 35, 40, 45, 50). Each statement was

arranged on a five point Likert Scale (strongly agree - strongly disagree) to measure respondent's perceived feeling concerning the extent to which he felt his coach used each form of power.

The reason for the creation of the two new independent measures of social power was based on recommendations made by Podsakoff and Schriesheim (1985) as a result of their review of previous instruments used to assess social power. Podsakoff and Schriesheim noted that most previous attempts to measure social power used a single item ranking approach where the items used were not independent of one another. In other words, "any single base of power can only be given prominence at the expense of the other bases. . . . [Furthermore,] the ranking method used in obtaining the data makes it impossible for all five bases of power to be correlated in the same direction with any single criterion variable" (p. 404). Podsakoff and Schriesheim recommended that a multi-item Likert format would overcome this obstacle of measurement because social power could be described in a variety of ways and that each statement would be assessed independently by the respondents. Despite Podsakoff and Schriesheim's concerns with ipsative ranking procedures, the Thurstone paired comparison method was also used in the present study as a means for directly comparing the bases of power with one another. This procedure had not been used in previous studies on social power and it was felt that the procedure for respondents choosing one item from a pair of items would reduce the bias that was associated with ranking a group of items from highest to lowest.

The third set of scales used in the present study measured the overall satisfaction athletes had in their sport, their overall satisfaction with the coach and their satisfaction with their performance. Twelve items (four for each measurement of satisfaction) were presented in this portion of the questionnaire. Again, these items were of a five point Likert Scale format. There have been a considerable number of instruments developed that

measure job satisfaction and performance.[1] Two of the major considerations for the use of a particular scale were its length and format of measurement; many of the scales considered were either too long, or were in a format that made it difficult to adequately correlate the scores with the Likert power scale. In order to keep the length of the entire questionnaire reasonably short, it was decided to make use of shorter scales that gave general descriptions of satisfaction rather than lengthier scales that had more specific descriptions of job, leadership and performance satisfaction.

The overall satisfaction in sport items were based upon an intrinsic job satisfaction index developed by Morse (1953). The items making up this scale were carefully derived by Morse on the basis of employee interviews and represented overall feelings of satisfaction from an employee's perception of the job as a whole. The items measuring satisfaction with the coach were general descriptors of interaction that existed between the leader and the follower, derived from the Minnesota satisfaction questionnaire previously developed by Weiss, Dawis, England and Lofquist (1967). Finally, the items measuring satisfaction with personal performance in sport were adapted from Gordon (1986). In all instances, the wording of the items was modified to reflect the current sport tested in the present study.

The fourth section of the questionnaire was a short sport and personal profile section, which asked athletes their current grade, year of birth, years of experience in the sport and participation in other organized sports, both inside and outside the school environment.

The other two sections of the questionnaire were presented to the subjects as "personal profile" sections, whereby individuals were asked to respond in a yes/no manner to questions on everyday events. In reality, the 9 items contained in these two sections

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[1] Several job satisfaction scales have been collected in edited works. Collections that were consulted in the development of the present questionnaire included Miller (1977) and Robinson, Athansiou, and Head (1969).

constituted a "lie" scale (L) which was derived from the Eysenck Personality Inventory - Form A (Eysenck & Eysenck, 1968). This scale was a measurement of social desirability, or the degree to which an individual was "faking good" on the questionnaire, and has been found to be reliable and valid in its measurement. Reliability and validity checks of this scale were reported by Gibson (1962). He found that the items in the scale displayed good face validity, as subjects generally answered the items "in accord wtih improbable moral perfection" (p. 19). A split-half reliabilty of the lie scale using Guttman's formula was found to be r=.66.

To prevent subjects from suspecting the true nature of these questions, the lie scale was split into two sections that appeared near the beginning and end of the questionnaire. From the 9 items, a score "of 4 or 5 would be considered to constitute the cutting point where inventory answers ceased to be acceptable" (Eysenck & Eysenck, 1968, p. 20). Since Eysenck and Eysenck did not elaborate further on this, it was decided to use scores of 5 or greater as the indicator of significant "faking" within the sample in the present study. Using that criterion, 15 individuals attained a score of 5 or greater, and as a result, were eliminated from further analysis. The deletion of these respondents was based on the assumption underlying the "faking good" concept that someone who attempted to make himself look good on this scale may have given false responses on the other scales. According to Norman (1967), established lie detection scales provide tight control over the problem of faking, and will "identify about 91% of the fakers at a cost of misclassifying only about 9% of the nonfakers" (p. 389).

Pre-Testing and Reliability Checks of the Instrument

Prior to the main implementation of the instrument, a pre-test was conducted in order to check on the understanding of the items as well as to identify any potential problems involved in the administration of the questionnaire. Nine members from a local high school waterpolo team agreed to complete the questionnaire following an after school

practice. All sections of the questionnaire were answered by the athletes with the exception of the Eysenck and Eysenck (1968) Lie Scale, which was not added until after the pilot testing. The athletes on this team were all between the ages of 16 and 18, the same age of participants required for the actual sample. No problems were encountered, either in the administration of the questionnaire or in the athletes understanding of the items. The questionnaire took the athletes between 10 and 15 minutes to complete.

"The reliability of [a] scale is an index of the extent to which repeated measurements yield similar results" (Green, 1967, p. 729). In order to establish reliability, items contained within each set of Likert subscales (for measuring power and forms of satisfaction) were correlated with one another in order to establish the "coefficient of equivalence, or the parallel-form reliability. It measures the extent to which the scale is specific to the particular items used" (Green, 1967, p. 730). For the Likert Scale data, split-half reliability measures were obtained. The overall Spearman-Brown reliability coefficient for the Likert power scale was $r = 0.89$. For the sport satisfaction, leader satisfaction and performance satisfaction Likert scales, the derived Spearman-Brown reliability coefficients were $r = 0.86$, $r = 0.85$ and $r = 0.76$, respectively. Reliability measures in this range are considered acceptable for this kind of social psychological research, and all of the derived coefficients were statistically significant ($p < .001$) (e.g., Cronbach, 1984; Ferguson, 1976; Lemke & Wiersma, 1976).

For checking the reliability of the Thurstonian Paired Comparison Inventory, a test-retest procedure was employed with the span of time between the sessions being a period of one week. On the first occasion, the athletes were asked to complete this section along with all other parts of the questionnaire. On the re-test, the athletes were only asked to complete the paired comparison portion of the questionnaire and in the same manner in which they completed it previously. The reliability coefficient obtained for the paired comparison items was 0.90, which was statistically significant ($p < .001$) (Ferguson,

1976). A split-half reliability test was not appropriate for this scale because the items could not be logically split into two distinct groups.

Validity of the Instrument

In the construction of any psychological instrument, it is important to establish some form of validity, whereby "a test measures what it is supposed to measure" (Lemke & Wiersma, 1976, p. 111). The validity associated with the Eysenck and Eysenck Lie Scale was previously discussed.

One of the most important forms of validity that one can establish within an instrument is construct validity (e.g., Cronbach & Meehl, 1967; Loevinger, 1967). "The lines of evidence which together establish the construct validity of a test refer to its content, its internal structure, and relation to outside variables" (Loevinger, 1967, p. 119). Two of the three sets of satisfaction scales that were developed prior to the present study reported validity checks. The overall satisfaction with sport scale was originally developed by Morse (1953) as an intrinsic job satisfaction scale. Construct validity was established as a result of obtaining significant intercorrelations of the items that were included in the scale. The average intercorrelation of the items reported by Morse was $r = .50$. In the present study, it was found that all four items were significantly intercorrelated (intercorrelations ranged from $r = .44$ to $r = .72$, $p < .001$), with the average intercorrelation of these items being $r = .57$ ($p < .001$).

Concurrent validity had been previously established for the satisfaction with the coach (leader) scale (Weiss et al., 1967). The authors found that this scale correlated significantly with other scales within the Minnesota satisfaction questionnaire that purported to measure satisfaction within a work environment. Construct validity was also established in the present study by obtaining significant intercorrelations of the items that were included in the scale. In the present study, it was found that all four items were

significantly intercorrelated (intercorrelations ranged from r = .56 to r = .71, p < .001), with the average intercorrelation of these items being r = .63 (p < .001).

No previous validity tests were noted by Gordon (1986) in his development of the satisfaction with performance scale. In the present study, however, construct validity of the scale was established as a result of investigating the intercorrelations of the four items that comprise the scale. It was found that all four items were significantly intercorrelated (intercorrelations ranged from r = .37 to r = .51, p < .001), with the average intercorrelation of the items being r = .45 (p < .001). The remaining portion of this section will focus on the two sets of scales that were developed to assess the athletes' perceptions of their basketball coaches utilization of the five forms of power. Several forms of validity were considered in the development of the Thurstoninan and Likert power base scales.

In the present study, the content of the Thurstone and Likert power scales was determined through investigation of the wording and multiple descriptors of the French and Raven power bases used in other previously developed instruments. According to Horrocks (1964), "the content must be relevant to the purpose of the instrument; the items selected must be representative, sufficiently complete [and] uncontaminated with other content" (p. 57). Cronbach and Meehl also suggested that the use of a retest reliability score is also relevant to construct validity. In the present study, the obtained score of 0.90 demonstrated acceptable stability in the athletes' responses to the Thurstone paired comparison items.

All of the scales demonstrated a degree of face validity, that identifies "whether a test agreed with a subject's ideas of what the content of the test ought to be" (Horrocks, 1964, p. 61). Prior to the actual administration of the questionnaire, the items and format of the instrument were examined and found acceptable by six other people, all of whom had expertise in the area of questionnaire design as well as appropriate background knowledge in coaching behavior.

The purpose of the Thurstonian paired comparison method was to produce an unbiased ordering of the power base items; to do this, statements must be presented such that all items have an equal chance of being selected (Messick, 1967; Thurstone, 1967). In the present study, this was done in two ways. First, each form of social power was stated as being important to "some coaches" or "other coaches." According to Harter (1979), the use of a reference group (characterized by the terms "some" and "other") effectively legitimizes either choice. Second, in the presentation of the statements, each form of social power appeared twice on the left hand side of the page (associated with "some coaches") and twice on the right hand side of the page (associated with "other coaches").

Other advantages of the paired comparison method have also been noted. Fisher (1980) suggested that the Thurstonian method simplifies the ranking process. Thus, instead of ordering a large composite list, individuals are only presented with two items at any one time and required to select the more favorable of the pair. Finally, Miller (1977) concluded that "the ordering by paired comparisons is a relatively rapid process for securing a precise and relative positioning along a continuum. Comparative ordering generally increases reliability and validity over arbitrary rating methods" (p.94).

The Likert method demonstrates face validity through its simplicity (Edwards & Kenney, 1967; Jahoda, Deutsch, & Cook, 1951). For a given item, the Likert scale is useful in that "persons do differ quantitatively in their attitudes, some being more toward one extreme, some more toward the other" (Likert, 1967, p. 91). In other words, attitudes toward a given item will vary to the extent that it becomes useful to measure people's reactions on an established continuum, because the method of scoring varies according to the intensity expressed by individuals responding to a given statement (Miller, 1977). Miller also noted that this type of scale "is highly reliable when it comes to a rough ordering of people with regard to a particular attitude or attitude complex" (p. 89).

In measuring the internal structure of the instrument, factor analysis was used to determine whether the items contained in the entire social power subscale were related to

one another. According to Cronbach and Meehl (1967), if one uses a series of items to describe some form of trait or behavior, then it would appear that the selected items should be intercorrelated to some degree. On the basis of the magnitude of factor loadings, this resulted in certain items within the Likert scale being grouped together in terms of the particular forms of power. This technique also pinpointed items that were not adequate or unique descriptors of the particular forms of power, either because their factor loadings were low, or because items had high factor loadings on more than one form of power. Items from the Likert scale that were not unique or adequate descriptors of social power were eliminated from further analysis.

The validity of an instrument may be negatively affected by the language and presentation of the items that are to be measured (Jahoda, Deutsch, & Cook, 1951). Since the present study was measuring teenage athletes' attitudes toward a coach's use of power in sport, all wording in the questionnaire was geared toward this age group's level of understanding. The pre-test was useful in checking the clarity and understanding of the items in the questionnaire. In addition, the readability of the questionnaire was checked with a computer spelling and grammatical program ("Thunder! The Writer's Assistant"), which suggested that the instrument was appropriate for the age group used in the study.

B. Subjects

The subject population for this study were all male basketball players from the "senior boys" division of the high school basketball league in the City of Edmonton. In order to provide more equal participation among schools on the basis of ability and challenge, the schools are divided into two leagues: the Premier Conference and the City Conference. Each league maintains its own regular season, playoffs and championships. There is no interaction between the two conferences, with the exception of exhibition games and tournaments which exist outside of the fixed schedule. There were a total of 15 senior boys teams registered for league play during the 1986-87 season. Nine of these

were registered in the Premier Conference, with the remaining six registered in the City Conference. As this was a relatively small number of teams, it was felt that all teams could be contacted and tested. Moreover, the use of all teams would ensure equal representation from all areas of the city.

Basketball was selected for two reasons. First, it is a popular sport in high school. Second, because of its relatively small roster (10-12 players on a team), it was a sport that gave the athletes and coach ample opportunity to communicate and get to know one another over the course of the season. A total of 159 players were eligible to take part in the study. Of these, 130 completed the questionnaire, representing a response rate of 81.8%. After eliminating the 15 respondents who scored high on the Eysenck and Eysenck Lie Scale, the final sample used in the data analysis was 115 basketball players.

As seen in Table 1, the majority of participants were in grades 11 and 12. In Table 2, it can be seen that the participants had a considerable amount of experience in the sport, as the average number of seasons spent playing in organized basketball was 4.6 seasons. Over 50% of the respondents indicated that they played organized basketball for at least four seasons.

It appeared that the lack of participation by the 29 non-respondents was largely due to the scheduled testing sessions for administration of the questionnaire. It was previously decided to administer the questionnaire during each school's lunch hour in order to minimize any disruption of the students' regular class time. This meant, however, that there was a possible volunteer bias on the part of the participants, as lunch hour is "free time" for students. Lunch hour is also a time where multiple activities occur (such as clubs, intramural sports, etc.). On the day of the testing at each school, an announcement was made over the P.A. system at the commencement of the lunch hour reminding basketball players about the questionnaire session. Nevertheless, it was likely that some potential participants "forgot" about the testing session (or did not hear the reminder announcement) and left the school during this time or were involved in other recreation or

Table 1

School Grade of Basketball Respondents

Grade	N	% of Sample
10	9	7.8
11		28.7
12		63.5
Total	115	100.0

Table 2

Seasons of Basketball Experience of Respondents (Including Current Season)

Seasons	N	% of Sample
1	6	5.2
2	10	8.7
3	19	16.5
4	23	20.0
5	24	20.9
6	15	13.0
7	10	8.7
8	2	1.7
9 or more	6	5.2
Total	115	100.0

school commitments within the school that they felt were more important to them. There were also instances in some schools where potential participants were absent from school on the day of the testing session or were no longer attending school. Only 4 of the 15 schools had all team members present for the completion of the questionnaire; the non-participants were randomly dispersed among the remaining 11 schools.

C. Collection of the Data

In order to obtain permission to administer the questionnaire to high school basketball players, a series of steps was undertaken. First, the questionnaire was reviewed and approved by the chairman of the Ethics Committee of the Faculty of Physical Education and Recreation. Next, the questionnaire was submitted to The University of Alberta's Field Services Office, where it was again reviewed and then sent to the Research sections of the Edmonton Public and Edmonton Catholic School Boards. The study was granted approval from the school boards noted above in early April, 1987.

After receiving permission from the research sections of the various school boards, the principals from the 15 high schools were contacted by telephone. After a brief explanation of the study, a personal meeting was arranged. This was done in order to fully explain the nature and demands of the study, as well as to show the questionnaire to the principals. In addition, this meeting was used to schedule a suitable time for the collection of the data. All 15 principals agreed to have their schools take part in the study. It was decided that the principal and/or the coach would inform the athletes of the study and arrange for the athletes to be present at the prearranged testing time. With the exception of one school (where students were in a "free period" in the early afternoon), the data collection took place at the beginning of the school lunch period. It was felt that this time period was the least disruptive to the students' school schedules. This was also a time where a classroom could easily be obtained for administration of the questionnaire.

Because of the similarity in scheduled lunch breaks between schools, the testing was usually limited to one school per day.

The data collection occurred during April and May, 1987. At this point in time, the high school basketball season was finished, which meant that the players from all teams were reflecting back on their season. This was somewhat advantageous since players were assessing their overall season and would not be unduly affected by individual events which occurred at specific points in the season. The major disadvantage in testing teams at the conclusion of a season was that the passage of time might have clouded events that occurred during the season.

Each team was tested as a group at their school. At the beginning of each testing session, all players were informed that their team was one of those chosen to have its players express their views on how they felt the coach communicated and led the athletes during the past season. They were also told that their contribution in the study would result in further knowledge about how coaches interacted with their athletes. To put the players at ease, they were then informed that there were no right or wrong answers in the questionnaire, that their names were not required and that all information obtained was strictly confidential.

In all schools, the questionnaire was administered to the athletes by the same researcher under controlled classroom conditions. All sections of the questionnaire were then briefly explained to the participants before they were asked to complete it. This ensured that the questionnaire was completed properly, yet also gave participants the opportunity to complete the entire questionnaire at their own speed. All individuals were asked to complete the questionnaire on their own without influence from their peers and were reminded that it was their personal input that the researcher was interested in, rather than a group opinion. After instructions were given, the questionnaire took approximately 15 minutes for the athletes to complete. Upon completion of the questionnaire, the athletes were thanked for their cooperation and allowed to leave.

D. Analyses of the Data

Testing The First Hypothesis

Two sets of scales from the questionnaire were utilized in testing the first hypothesis. First, through the use of the Division of Educational Research Services (DERS) program SCAL01, the paired comparison scales were used to order the five forms of social power on the basis of standardized scores. This program produced proportion matrices, z value matrices and scale values (standardized scores) for each form of power. The scale values were then ranked in descending order of importance. Coefficients of agreement for each of the rankings were also calculated using Kendall's U statistic and chi-square. This was done to determine if there was significant agreement among the respondents in the rankings of the Thurstonian items (Edwards, 1957).

The second method of testing this hypothesis was to use the mean scores from the fifty item Likert scale portion of the questionnaire. As noted earlier, Schriesheim, Hinkin, & Podsakoff (1985) have described the shortcomings of previous research in relying on single item descriptors of French and Raven's social power typology. The Likert scales overcome this by having ten descriptors for each form of social power. Through the use of the SPSSx statistical package, a series of factor analysis tests using a principal components extraction with varimax rotation were performed on the data in order to eliminate those items that did not adequately represent the various forms of social power. Two statistical tests, Bartlett's test of sphericity and the Kaiser-Meyer-Olkin measure of sampling adequacy, were used to confirm the appropriateness of the data for a factor analysis procedure. Listwise deletion[2] of missing data was used with this analysis. Overall mean scores were then computed for those Likert items that were best associated with each form of social power, then ranked in descending order of importance. In order to determine

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[2] In listwise deletion, only respondents who answered all 50 items were included in the analysis.

whether the means for the different forms of social power were significantly different, an analysis of variance with a repeated measures procedure, along with Scheffe post hoc tests was conducted on the data, using the UANOVA procedure from SPSSx.

Since two different scales were used in the testing of this hypothesis, a series of statistical tests were used to determine whether there were any significant relationships. A Pearson product moment correlation procedure was initially conducted to examine the relationships between the power items in the Thurstone and Likert scales[3] . A Kendall rank order correlation analysis and a Wilcoxon matched-paired test were also performed to compare the ranks of each of the five power items from the Thurstone scale with their counterparts from the Likert scale (e.g., Thurstonian reward power was compared with Likert reward power, etc.). Both the Kendall and Wilcoxon procedures were done in order to determine whether the ranking of the five sources of power were similar for the two procedures.

Testing Hypotheses Two Through Sixteen

Through the use of SPSSx, correlation analyses were conducted between the five power bases (using the mean averages derived from the appropriate items from the 50 item Likert power scale) and the following Likert scales: The items pertinent to sport satisfaction were used in testing Hypotheses 2 through 6; those items associated with leadership satisfaction were used to test Hypotheses 7 through 11; and finally, those items representing satisfaction with performance were used to test Hypotheses 12 through 16. Pairwise deletion[4] of missing data was used with this program. Overall

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[3]In doing this procedure, the Thurstonian data was transformed into an equal appearing interval scale with values ranging from 0 to 4. A score of zero for a particular form of power meant that the item was never selected by a respondent; a score of four meant that the item was always selected whenever the respondent had an opportunity to do so.

[4] In pairwise deletion, a case is omitted from the statistical calculations if the value for one of the pair of variables being analyzed contains a designated missing value.

mean scores were computed for each set of satisfaction scales to derive single scores that best represented satisfaction with sport, satisfaction with coaching leadership and satisfaction with personal performance.

IV. Results and Discussion

This chapter contains the results and the interpretation of the findings pertaining to the 16 hypotheses established in this study. This is presented in four sections. The first section outlines the results and implications in terms of the forms of social power perceived, by the athletes, to be most relied upon by their coaches. The second section examines the forms of social power affecting the individuals' perceptions of personal satisfaction with the sport of basketball. The third section presents the relationships between the forms of social power and the athletes' perceived satisfaction with their coach's leadership. The fourth section deals with the effects that social power had on an individual's perceived satisfaction with his personal performance in high school basketball.

A. The Reliance on Perceived Social Power by Coaches

Thurstonian Scale Analysis

Table 3 presents the data depicting the relative importance of the five Thurstonian power items in the testing of the first hypothesis:

> Ho(1): Within the high school sports setting, athletes will perceive expert and legitimate power to be the major sources of power of the coach, followed in turn by referent, reward and coercive power.

The scaling of the items was accomplished through the use of z scores that were adjusted by the removal of all negative scale values[5]. Kendall's U statistic was used to measure the coefficient of agreement, which indicates whether there was agreement among the respondents concerning the rank order of the items. A positive U value indicates a degree

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[5] According to Edwards (1957), in a Thurstone paired comparison inventory, negative scale values are judged to be less favorable to respondents while positive scale values are seen to be more favorable to respondents. In order to eliminate this psychological bias, a constant is added to all the standard scores to make them all positive. This constant does not change the distance between any of the scale values. The most logical constant to be added is the scale value of the scale item with the largest negative value. As a result, this score becomes zero, while all of the other scale values become positive.

Table 3

Z Score Values and Rank Orders of Athletes' Perceptions of their Coaches' Reliance on Five Forms of Social Power

FORM OF POWER	SCALE VALUE	RANK
Expert Power	2.95	1
Legitimate Power	1.80	2
Referent Power	1.68	3
Reward Power	0.76	4
Coercive Power	0.00	5
Kendall's U	+0.29	
Chi-square	347.86*	

n = 115
*Significant at $p < .001$
Constant added = 1.44

of agreement among the judges (Edwards, 1957). The significance of Kendall's U was then derived based upon the chi-square distribution. It was found that there was a significant agreement among the basketball participants as to the rank order of the five social power items ($\chi^2 = 347.86$, $p < .001$).

The results in Table 3 support the first hypothesis. Expert power was perceived by the respondents as being the most relied upon, with the adjusted z score being 2.95. The second ranked form of power was legitimate power ($z = 1.80$), which was closely followed by the third ranked referent power ($z = 1.68$). Reward power was ranked fourth on the basis of its z score ($z = 0.76$) and did not appear to be overly relied upon, while coercive power was perceived as being the least relied upon form of power ($z = 0.00$).

The summary of data obtained from the basketball participants has provided some fairly consistent trends. Expert power was perceived as being the primary form of power which the coaches relied upon when interacting with the basketball players. This is not surprising, as one of the most fundamental roles of the coach is to teach or pass on the necessary skills, techniques and strategies of the sport to the athletes (Chelladurai, 1984a; Martens et al., 1981; Tharp & Gallimore, 1976). In an observation analysis of college basketball coach John Wooden, Tharp and Gallimore (1976) noted that behaviors associated with the coach's expertise accounted for 67.4% of all forms of behavior. Similarly, Lacy and Darst (1985) found that winning high school football coaches emphasized their expertise of the sport more often than any other form of behavior (62.8% of the time over the course of the season).

The results of the present study wherein legitimate power was ranked second in importance and referent power was ranked third is consistent with previous research. The importance of legitimate power suggests that athletes recognize that the coach has a right to influence and guide them in the pursuit of the sport because "he is the coach." The legitimacy of the coach's position "as the coach" has only been sporadically examined in previous sport studies and has often been linked with coercive/authoritarian actions. For

instance, Chelladurai and Saleh (1980) state that a coach's desire to "not explain his action" and "to speak in a manner not to be questioned" were defining elements of a coach's autocratic behavior. Similarly, Sage (1974a) noted that there is an underlying understanding that "when an athlete commits himself to a sports team, he commits himself to the will of the coach of that team on all matters which the coach thinks are important " (p. 187). Sage also indicated that the legitimate position of the coach granted the coach the right to correct athletic behavior in any manner that he felt was appropriate. Often, this resulted in the coach utilizing variations of coercive behaviors.

A recognition of the importance of the legitimate power of a leader as perceived by subordinates was also noted by studies conducted within business environments. Nevertheless, previous research from the business literature suggested that a leader will be more effective if he uses expert and referent power to strengthen the relationship between himself and those in his/her charge, rather than continuing to rely primarily on legitimate power. Although subordinates acknowledged the presence of legitimate power of a leader, they tended to be more satisfied with leaders who demonstrated how they earned their status and how their skills could aid subordinates in pursuing their jobs (Bachman et al., 1966; Bachman et al., 1968; Slocum, 1970; Student, 1968). The z scores derived in the present study that emphasize the greater importance of expert power, and the similar magnitude of the z scores associated with legitimate and referent power also seem to support this conclusion.

Referent power is a way of defining the interpersonal relationship that exists between a leader and his or her followers . It is not necessarily a form of power that leaders consciously attempt to use when influencing their followers, although Student (1968) believed that efforts by the leader to be friendly would be positively acknowledged by the followers. The impact of this form of power is very dependent on the degree that genuine feelings of trust, admiration and respect for the leader are expressed by the followers (Burke & Wilcox, 1971). In sport environments, referent power depends upon a

coach being friendly, trusting, supportive and compassionate in his or her interactions with the athletes (Harrison, 1983; Horne & Carron, 1985; Martens et al., 1981; Westcott, 1979).

The athletes perceived that the reliance on reward power by coaches was not extensive when directly compared with expert, legitimate and referent power. This trend was also found in the business setting (Bachman, et al., 1968; Burke & Wilcox, 1971; Busch, 1980; Galinsky, Rosen & Thomas, 1973; Ivancevich, 1970; Jamieson & Thomas, 1974; Slocum, 1970).

In the sports setting, there is some debate concerning the importance of rewarding athletes for good or appropriate behavior associated with participation in the sport. Although there has been only a limited number of studies conducted in the sport setting that compares different forms of coaching behavior (Chelladurai, 1984a; Lacy & Darst, 1985; Tharp & Gallimore, 1976), all of these studies found that a coach relied on his expertise to a much greater extent than he did on reward behavior. Nevertheless, there are those who believe that a variety of verbal and non-verbal rewarding actions on the part of the coach can be important motivators to athletes (Martin and Hrycaiko, 1983; Rushall, 1983).

There are two possible reasons explaining why reward power was not perceived by the athletes as being a form of power relied upon extensively by the coaches. One possible reason is that it may not be socially desirable to rely extensively on rewarding behavior as a form of influence unless it is associated with a particular action. In the questionnaire, the item was generally worded as "a reliance on the promise of rewards" and was not placed within a particular context (e.g. such as "rewards following a good performance"). In the business setting, Bachman et al. (1966) noted that rewards may provide motivational incentives, but that it was also possible that in certain situations, "rewards may also be perceived as bribes, payoffs, favoritism and the like. The phrase used [by Bachman et al. (1966) was] 'He can give special help and benefits to those who cooperate with him' may have implied the latter type of reward" (p. 135). In the present study, the athletes may have

similarly interpreted the wording of the "promise of rewards" statement as being a bribe rather than an acceptable type of incentive.

Related to this, another possible explanation for the low ranking of this power variable is that the rewarding of behavior is usually done by coaches following a particular event or action done by the athlete (Chelladurai, 1984a; Martin and Hrycaiko, 1983). In order to be effective, the reward must have value to the athlete . Research has suggested that rewarding someone a long time after a particularly good behavior occurred reduces the significance of the reward as a form of motivation (Martin and Hrycaiko, 1983; Katz & Kahn, 1978).

Coercive power was ranked as the form of power least relied upon by the coaches. As in other studies, these findings do not support the stereotypical image of the coach being a strict disciplinarian (Bain, 1973; Gordon, 1981; Horwood, 1979; Naylor, 1976; Sage, 1974a; 1974b). Although previous research has indicated that coaches can use punishment or coercive behavior when interacting with their athletes, this form of behavior does not appear to be used extensively by coaches. For instance, Tharp and Gallimore (1976) found that in comparison to other forms of behavior, only 14.6% of Wooden's behavior could be interpreted as coercive. Other studies reported even smaller percentages. Lacy and Darst (1985) found that coercive actions of high school football coaches accounted for only 5.6% of their total behavior over the course of an entire season. In a comparison between positive rewarding behaviors and negative coercive behavior among youth sport coaches, Lombardo (1984) found that the latter form of behavior was observed only sporadically. Curtis, Smith, and Smoll (1979) also found that punitive behavior accounted for only 3% of the coaching behavior observed in Little League baseball. Despite this low occurrence, the authors added that "players seemed especially sensitive to punitiveness in their perceptions of a coach" (p. 398).

Likert Scale Analysis

As noted in Chapter 3, Schriesheim, Hinkin, & Podsakoff (1985) indicated that there are drawbacks to relying primarily on single item descriptors of the five forms of social power. In order to see whether the first hypothesis was supported using multiple descriptors of social power, the 50 items contained in the Likert scale section of the questionnaire were also used to test the first hypothesis. The first step in the analysis was to determine which of the items best described each form of social power. In order to do this, factor analysis was performed on the 50 items using a principal components extraction with a varimax rotation to obtain a specified five factor solution. This procedure was done in order to eliminate any of the Likert items that did not adequately measure the forms of social power originally derived by French and Raven. The communalities of the Likert items, along with the size of the factor loadings in the rotated factor matrix were examined and those items that did not load high (less than .35) in the initial solution were eliminated (Norusis, 1985). In addition, items that had high factor loadings (.35 or greater) on more than one factor were eliminated from further analysis. These procedures resulted in the deletion of 21 of the original items.

A factor analysis procedure (again specifying a five factor solution) was then conducted on the remaining 29 Likert scale items. In confirming the appropriateness of the factor analysis model, two statistical tests suggested by Norusis were performed on the correlation matrix used in the final solution. The first statistic, Bartlett's test of sphericity, was used to determine whether the correlation matrix was an identity matrix. According to Norusis, "if the hypothesis that the population correlation matrix is an identity cannot be rejected because the observed significance level is large, you should reconsider the use of the factor model" (p. 128). The value obtained for the Bartlett test in the the present study was 1516.74 with a significance of $p < .001$. Since the value of the test was large and the significance was small, the correlation matrix could not be considered an identity matrix, and as such was suitable for factor analysis.

The second test performed on the correlation matrix was the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy:

> [This statistic compared] the magnitudes of the observed correlation coefficients to the magnitude of the partial correlation coefficients . . . . Small values for the KMO measure indicate that a factor analysis of the variables may not be a good idea, since correlations between pairs of variables cannot be explained by the other variables. Kaiser (1974) characterizes measures in the 0.90's as marvelous, in the 0.80's as meritorious, in the 0.70's as middling, in the 0.60's as mediocre, in the 0.50's as miserable and below 0.50 as unacceptable. (Norusis, 1985, p. 129)

In the present study, the KMO value was 0.775 which was considered to be adequate for proceeding with the factor analysis.

On the basis of a principal components extraction with a varimax rotation, the specified five factor solution accounted for 56.7% of the variance. The factor structure and item loadings are displayed in Table 4[6]. For this solution, a minimum loading of .35 was also used for inclusion of an item on a particular factor. Using this criterion, none of the items loaded on more than one factor. The items[7] associated with each factor will be discussed in terms of the original definitions of each form of social power postulated by French and Raven (1959) and other related literature.

Referent power was the first factor derived by the factor solution. Six items were associated with this factor. Three of these are statements on the athletes' admiration, respect and liking of their coach. The remaining three items reflect the athletes' desire to share their coach's ideals and philosophy of the sport and to model their behavior after the coach. French and Raven originally postulated that there would be a linear correlation between the amount of referent power a leader had and the extent by which a subordinate

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[6] A complete display of all the loadings for each of the five factors can be found in Table 18 in Appendix B.

[7] Descriptive statistics and further explanations for these items can be found in Appendix C.

Table 4

Factor Analytic Solution of the 29 Likert Power Items

Factors	1	2	3	4	5	Total
1 Referent Power						
Admire coach	.85					
Respect coach as a person	.85					
Like coach	.84					
Share coach's sport ideals	.83					
Share coach's sport philosophy	.82					
Model behavior after coach	.63					
2 Coercive Power						
Athletes punished when mistakes made when playing/performing		.76				
Athletes punished when they don't pay attention		.72				
Harsh disciplinarian tactics used		.71				
Athletes punished when they don't follow directions		.68				
Coach rules with force		.66				
Coach is strict		.63				
Athletes punished by receiving undesirable assignments		.47				
Athletes prohibited from playing when coach feels it warranted		.36				
3 Reward Power						
Good athletic performance rewarded			.82			
Athletic achievement acknowledged			.72			
Credit given where credit due			.68			
Positive verbal feedback given			.62			
Athletes rewarded by getting chances to participate in sport			.58			
Rewards offered to athletes who play the sport			.52			
Athletes rewarded by getting change of status after good performances			.44			

Table 4 (Con't)

Factors	1	2	3	4	5	Total
4 Expert Power						
Coach physically skilled in sport				.85		
Coach proficiently performs physical skills of sport				.82		
Coach has experience in sport as an athlete				.76		
Coach demonstrates skills associated with sport				.74		
5 Legitimate Power						
Coaching decisions not explained to athletes					.72	
Coach is a school representative					.71	
Coach is authorized by school					.60	
Coach is justified in telling athletes what to do					.42	
Eigenvalue	6.65	3.50	2.46	2.09	1.74	
% Variance	22.90	12.10	8.50	7.20	6.00	56.70

was attracted to the leader; they did not, however, offer any precise suggestions as to how "attractiveness" could be measured, although they did note that referent power had its basis in the identification that a subordinate had with the leader. Thus, several items associated with identification were theorized for the present study. It was felt that identification in sport could, in part, be conceptualized if athletes were aware of the coach's sport ideals and philosophy and incorporated these into their own definitions of sport. Ideals and personal philosophy are central to many people's personal value system, and are often a motivational explanation of an individual's desire to influence or direct another's behavior (Heider, 1958). Modelling is another behavior that is based on identification or admiration of an individual (Shaw & Costanzo, 1982). Other measurements of attractiveness of a person, including admiration, respect, and liking, were derived from previous instruments of social power developed by Holzback (1974) and Schriesheim, Hinkin, and Podsakoff (1985). Similar descriptors were also used by Chelladurai (1984a; 1984b) for the "social support" factor of his conception of sport leadership.

The second extracted factor was made up of 8 items that defined coercive power. Coercive power is often the basis for the traditional perceptions that people have about power - this being the ability to punish those who do not comply with requests or procedures (Bierstedt. 1970; Henderson, 1981; Olsen, 1970). Coercive power is often a description of authoritarian behavior; a person who is authoritarian is often characterized as being " a tough disciplinarian," "relentless," or "strict" (e.g., Chelladurai, 1984a; Daly, 1980; Sage, 1974a) This is a form of power that is almost always perceived as being negative, even though some studies have shown that punishment can have a positive effect on future behavior (e.g., Martin & Hrycaiko, 1983; Podsakoff & Todor, 1985; Tharp & Gallimore, 1976). The items making up this factor pertained to particular actions that might warrant punishment, as well as forms of behavior that the coach could exhabit in his interaction with the athletes.

Reward power was the third factor derived; seven items were found to be associated with this factor. Four of the items described instances where the coach provides feedback to the athletes with respect to their performance. The other three items focused on specific rewards that the coaches might administer to their athletes. French and Raven did not originally elaborate on the actual form rewards could take, although they implied that in organized settings, rewards would often be tangible (such as pay incentives for exceptional work). French and Raven also noted that the removal of a punishment could also be considered a reward. The conceptualization of reward in the present study was quite broad in light of the amount of literature on how rewards could be administered to people. In sport situations, rewards could be given in the form of positive feedback that was both verbal and non-verbal (e.g., Chelladurai, 1984a; Chelladurai & Saleh, 1978; 1980; Lacy & Darst, 1985; Martin & Hrycaiko, 1983; Tharp & Gallimore, 1976). Although several examples of verbal feedback were part of the factor solution, the athletes in the present study did not perceive "non-verbal feedback" as being a strong unique indicator of reward power. This item was part of the original Likert scale found in the questionnaire, and while it initially loaded somewhat high on the reward factor, it also loaded high on referent power. In order to minimize confusion over the item, it was eliminated from the final factor solution.

Expert power was the fourth factor extracted in the analysis. Four items made up the expert power factor - all of them describe the coach's physical expertise in the sport. When French and Raven originally conceived this form of power, they specifically defined it in terms of the perceived knowledge that a subordinate feels a leader had with respect to a particular area, or job. However, this is not a form of power that is necessarily restricted to one who is in a designated position of authority. Previous research in organizational behavior has shown that particular sections or subordinates within an organization which had particular talents could wield tremendous power under certain circumstances where production within the organization was threatened (Crozier, 1967; Hickson et al., 1971;

Mechanic, 1983). In sport situations, coaches are often required to display physical talent in a sport, as well as have good instructional and technical knowledge of a particular sport (Chelladurai, 1984a; Chelladurai & Saleh, 1978; 1980; Lacy & Darst, 1985; Tharp & Gallimore, 1976). On this basis, several statements that focused on the technical knowledge and on the physical qualifications of the coach were derived for the present study; however, none of the items centering on the coach's knowledge of the sport loaded high enough or cleanly on this particular factor.

The fifth factor in the analysis was legitimate power. Four items were associated with this factor. Two of these items defined the coach's position relative to the school. The other two items described the position of authority that the coach had over the athletes. French and Raven originally noted that there were several ways of characterizing legitimate power. Legitimate power could be based on cultural values, such as the right to power because of superior age or intelligence. It could be defined as the right to power based on a designated position, or because a person or organization that is in a position of authority granted the power of position to a particular individual. Regardless of the way legitimate power is granted, it was noted that "the notion of legitimacy involves some sort of code or standard, accepted by the individual [the one who does not have "the power"], by virtue of which the external agent can assert his power" (French & Raven, 1959, p. 159). This essentially places one in a position of authority and can in fact be further defined in terms of the "rights" of the individual to influence other people. For instance, a person in a legitimate position of power might have the right to use other forms of power (notably reward or coercive power) when interacting with those with less authority. Many theories of leadership have noted that leaders in a position of authority have the "right" to make decisions on behalf of others without consulting anyone else (e.g., Chelladurai, 1984a; Hersey & Blanchard, 1977; Lewin & Lippit, 1938; Tannenbaum & Schmidt, 1958).

In order to confirm that the items associated with each social power factor were associated with one another, an internal consistency check of the items was conducted

using Cronbach's (1951) alpha reliability technique. Previous research in sport psychology has generally accepted an alpha score of approximately $\alpha = .60$ as indicating adequate internal consistency of a scale (Highlen & Bennett, 1983; Weiss, Bredemeier & Shewchuk, 1985; Weiss and Friedrichs, 1986). In the current study, four of the five power scales were found to exceed this level of reliability. The respective alpha coefficients were: referent power ($\alpha = .92$), expert power ($\alpha = .84$), coercive power ($\alpha = .79$) and reward power ($\alpha = .77$). The alpha score for legitimate power ($\alpha = .57$) was considerably lower than the alpha coefficients obtained for the other four forms of power, though the score still approached the .60 criterion level. Although the legitimate power results will still be used for further analysis, the lower alpha score suggests that some caution must be exercised in interpreting and accepting them.

In order to test the first hypothesis using the Likert data, an overall mean score was computed for each form of power using the items associated with the five factor solution[8]. The results of this procedure are presented in Table 5, where a high mean score indicated a higher perception by the athletes of a coach's reliance on a particular form of social power than a low mean score. A repeated measures analysis of variance procedure, together with a Scheffe post hoc test was also performed to assess whether there were significant differences among the power subscale values. In this analysis, the overall influence of the various forms of social power was found to be significant, $F(4,448) = 48.57$, $p < .001$. As indicated in Table 6, the Scheffe post hoc tests confirmed that coercive power scored significantly lower than the other four forms of power. As well, expert power was significantly higher than legitimate and referent power while reward power was significantly higher than referent power.

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[8] For instance, the single mean score for referent power was calculated by adding the scores for each of the six items associated with this form of power, then averaging this total. A similar procedure was done for the other four forms of power, using the items derived from the factor analysis solution.

Table 5

Mean Scores, Standard Deviations and Rank Orders of Five Forms of Social Power Available to Coaches (Based on the Likert Power Items)

FORM OF POWER	MEAN SCORE	ST. DEV.	RANK
Expert Power	3.98	0.84	1
Reward Power	3.75	0.59	2
Legitimate Power	3.61	0.64	3
Referent Power	3.46	0.97	4
Coercive Power	2.93	0.67	5

n = 115

Table 6

Summary of Analysis of Variance and Scheffe Post Hoc Tests on Five Forms of Social Power Available to Coaches (Based on the Likert Power Subscales)

Source of Variation	SS	df	MS	F
Power	93.20	4	23.30	48.57**
Athletes	106.42	114	0.93	1.95**

**p < .001

Scheffe Post Hoc Results

Form of Power	Expert	Reward	Legitimate	Referent	Coercive
Expert	--				
Reward	0.22	--			
Legitimate	0.37*	0.14	--		
Referent	0.51*	0.29*	0.14	--	
Coercive	1.20*	0.97*	0.83*	0.69*	--

*p < .05, based on Scheffe's post hoc test (required difference = 0.29 minimum)

It can be seen that the first hypothesis is not fully supported using the Likert data. Although expert power is still viewed by the athletes as being the form of power most relied upon by the coach (M=3.98), reward power takes on a greater prominence, ranking second overall (M=3.75). This is followed closely by legitimate power (M=3.61) and referent power (M=3.46). The mean associated with coercive power was considerably lower than the other four forms of social power (M=2.98), and was ranked fifth overall. Statistically, expert power was found to be significantly higher than all of the other forms of power, with the exception of reward power. This meant that from the athletes' perspective, the coach's expert power and reward power were perceived to be particularly pertinent means for influencing behavior, in comparison to the other forms of power that the coaches could potentially rely on.

A comparison between the Thurstone scale and the Likert scale results for the five forms of social power is presented in Table 7. It is important to note that there is no absolute zero point established between the Likert and Thurstone scales. As such, it is not meaningful to directly compare a single score from the Likert scale to another score from the Thurstone scale. At best, one can compare the scale interval patterns that exist within each set of scales. One can see that with the exception of reward power, the order of the remaining four forms of power are precisely the same. If reward power was removed from the order of both scales, one can see that expert power had the largest scale value, followed by legitimate power, referent power and coercive power. Similar patterns also exist when the interval spreads between certain forms of power are examined. For instance, there is a small difference in magnitude between legitimate power and referent power that is evident in both the Likert scale and the Thurstone scale data.

Some common relationships were established between the two sets of scales using a Pearson product moment correlation procedure. As seen in Table 8, strong relationships were seen between the two scales for referent power and coercive power subscales. Smaller, though still positive relationships were also seen for expert and reward power. A

Table 7

Comparative Analysis between the Thurstone Data and the Likert Data for the Five Forms of Social Power Available to Coaches

FORM OF POWER	THURSTONE SCORES[1]	LIKERT SCORES[2]
Expert Power	2.95	1.05
Legitimate Power	1.80	0.68
Referent Power	1.68	0.53
Reward Power	0.76	0.82
Coercive Power	0.00	0.00

[1]This data is also presented separately in Table 3.

[2]For the Likert data, the constant added to each score was -2.93. It is important to note that there is no absolute zero point established between the Likert and Thurstone scales.

Table 8

Likert Bases of Social Power Correlated with Thurstonian Bases of Social Power

Power Bases	Pearsn r
Referent	0.41***
Coercive	0.39***
Legitimate	- 0.24**
Expert	0.22**
Reward	0.17*

Note: Values presented are Pearson product-moment correlations.

*p < 0.05, one-tailed.
**p < 0.01, one-tailed.
***p < 0.001, one-tailed.

negative relationship between the Thurstone and Likert scales was found for legitimate power. Two non-parametric tests were also performed to compare the relative rankings of the five forms of power for the two scales. In making comparisons between the Thurstone and Likert subscales, these tests produced results that were similar to those achieved through the pearson correlation procedure. The first non-parametric test produced Kendall tau-b correlation coefficients for each form of power. The results are found in Table 9. Significant positive relationships were found between the Thurstone and Likert scales for referent, coercive and expert power. A significant positive relationship between the two scales was also seen for reward power, although the magnitude of the Kendall correlation coefficient was considerably smaller. Although positive, this suggests that the two scales may not be measuring the same attribute with respect to reward power. A negative, inverse relationship was found between the Thurstone and Likert scales for legitimate power. Contrary to expectations, the two measures of legitimate power were negatively rather than positively related. This suggests that there is a relationship between the two scales, but that the meaning associated with the Thurstonian statement was perhaps interpreted differently by the respondents than the Likert items that represented legitimate power.

According to French and Raven (1959), legitimate power was, in their opinion, the most complex form of social power to define. One of the reasons for its complexity was the perceived feelings of "oughtness" that is usually associated with legitimacy; many people will accept that a leader has a legitimate right to influence others, though they may or may not be happy with this form of power. In other words, depending on one's views toward the person who has legitimate power, such power can potentially be positively or negatively perceived by others. The way legitimacy is perceived may also be influential. For instance, French and Raven noted that cultural characteristics such as age and intelligence constituted one parameter for establishing legitimate power. In the sport setting, a coach's degree of expertise, while defined as a separate form of social power,

may nevertheless be a way of positively defining a coach's legitimate right to influence an athlete, particularly if the athletes perceive that the coach is an expert in the sport. This may have been the way the athletes interpreted the Likert statement of the "coach being justified in telling athletes what to do." Power by authorization from a higher source was also noted by French and Raven as other basis for legitimate power. This is perceived to be positive if the followers perceive that the higher authority appointed the leader in a logical and understandable manner, and if the followers have respect for the higher authority. In the present study, the athletes perceived the school itself to be a higher authority; if they believe that the school has their best interests at heart when appointing a coach, chances are that they will view the decision as a favorable one.

It is when one tries to define a range for legitimacy that one might question the appropriateness of legitimate power. In particular, while one might have "the right" to act in a particular manner because of one's position, this still does not mean that such behaviors are appropriate, or will be viewed in a positive manner by others. In other words, having a "right" to control others does not necessarily mean that people will be happy when one exerts his or her rights. In the present study, legitimate power was described in the Thurstonian scale as the coach as being "in a position of authority." The term "authority" may have been negatively perceived by the athletes and associated more with coercive measures that were available to a coach, and were within his "rights" to use. Although they have this knowledge and could accept that the coach has "authority" over them, nevertheless they may not be happy with this perspective of the coach. The descriptive statements of legitimate power in the Likert scale tended to be more positively worded, and were either associated with a coach's expertise or with a logical higher and respected authority (the school) rather than with coercive images.

The relationships of scores using the Thurstone and Likert scales for the five forms of power were also investigated through a series of Wilcoxon matched-pairs signed ranks tests. This procedure takes into account the magnitude of the differences between rankings

of the scales in the Thurstone and Likert distributions (Williams, 1979) and tests a null hypothesis that there will be no difference in the overall rankings between the Thurstone power items and Likert power items. It can be seen from Table 10 that there was no significant difference found between the Thurstone and Likert scales for coercive power, referent power and expert power, while significant differences in the magnitude of the ranks were noted for legitimate power and reward power.

Table 9

Kendall Rank Order Correlation of the Thurstonian Social Power Items with the Likert Social Power Items

Power Bases	Kendall's Tau-b
Referent	0.37**
Coercive	0.28**
Expert	0.22**
Legitimate	- 0.21**
Reward	0.14*

*p < 0.05
**p < 0.01

Table 10

Wilcoxon Z Scores and Rank Comparisons of Thurstonian and Likert Power Items

Power Base	Mean Rank	Cases[1,2]		Z Score
Coercive	35.87	31	- Ranks	- 0.27
	32.82	36	+Ranks	
		48	Ties	
Expert	33.51	35	- Ranks	- 0.41
	37.49	35	+Ranks	
		45	Ties	
Referent	39.47	46	- Ranks	- 0.73
	43.01	35	+Ranks	
		34	Ties	
Legitimate	35.87	43	- Ranks	- 2.03*
	54.31	47	+Ranks	
		25	Ties	
Reward	49.94	18	- Ranks	- 4.93**
	46.29	75	+Ranks	
		22	Ties	

*$p < 0.05$
**$p < 0.001$

[1] The negative (-) ranks refer to instances where the ranking of the Likert power item was lower than the ranking of the Thurstone power item.

[2] The positive (+) ranks refer to instances where the ranking of the Likert power item was higher than the ranking of the Thurstone power item.

A discrepancy was also found with respect to how the ranking of reward power varied between the two scales. While the Kendall test showed that there is only a weak relationship between the two scales, it can be seen in Table 10 that the Wilcoxon test results showed that there were considerably more instances where the subjects ranked reward power from the Likert scale higher than they did in the Thurstone scale.

There are two possible explanations for the greater importance attached to reward power in the Likert data than in the Thurstone data. First, the Likert data gave more descriptive information as to how a coach could reward athletes than the Thurstonian data, which only had a single descriptor. The multiple statements may have made the athletes more cognizant of the coach's ability to reward their behavior and as such, may have increased the value placed on this form of power.

The second explanation is that the wording of the reward power statement from the Thurstone scale may have been perceived in a more negative fashion than the reward power statements contained in the Likert scale. Previous research has found that the administration of rewards can have both positive and negative effects, depending on the circumstances in which rewards are administered. For instance, studies measuring the impact of rewards on intrinsic motivation have found that rewards perceived as forms of control can undermine the intrinsic value of an activity (e.g., Deci, 1971; Kruglanski, Friedman, & Zeevi, 1971; Lepper, Greene, & Nisbett, 1973). However, the use of rewards can have positive effects as well, particularly as a means of providing information as to how an individual is progressing in a particular activity. [illegible], positive rewards have been found to be important incentives for maintaining motivation for engaging in a particular activity or task within a variety of environments (1975; Katz & Kahn, 1978; Rowley & Keller, 1962; Rushall, 1983). Previous [illegible] has also indicated that the use of rewards by coaches can produce positive motivations in athletic behavior (Chelladurai, 1984a; Chelladurai & Saleh, 1978; 1980; Curtis, Smith, & Smoll, 1979; Lacy & Darst, 1985; Lombardo, 1984; Martin & Hrycaiko, 1983).

As noted in the previous section, the wording of the Thurstonian reward power statement was that "some coaches rely on the promise of rewards" which might have been interpreted by some athletes as false promises or bribery, rather than as a genuine, positive form of motivation. The items in the Likert scale, however, described situations where the coach provided some form of positive feedback to the athletes following athletic performances. As such, it is possible that the variation in the rankings of reward power between the two scales may have been the result of the Thurstone reward power statement being negatively interpreted while the reward items from the Likert scale were positively interpreted.

It appears that the acceptance or rejection of the first hypothesis is dependent on what scales are used. The purpose of the first hypothesis was to derive an unbiased order of what forms of social power were felt to be relied upon by the basketball coaches. In terms of methodology, the Likert approach provides multiple descriptors for each form of social power. The assessment of each statement of social power was independent of the other statements. The Thurstonian approach was limited to one descriptive statement for each form of social power. However, the Thurstonian technique compared all of the social power statements against one another and forced respondents to choose one form of social power over another.

A further distinction that should be noted between the Thurstone and Likert scales is their defined method of measurement. The Thurstone paired comparison method produces scale values that can be considered to be on an interval level scale. Edwards (1957) noted that each item, when compared against every other item, has an equal chance of being selected (or not being selected). The scale values produced by this technique are representative figures of the degree by which a particular item was favored over the other items.

Likert scales, on the other hand, produce equal appearing intervals. While such scales are generally viewed as interval level scales, they in fact are really ordinal scales

(Oppenheim, 1966). While Likert items have people place themselves on an attitudinal continuum (ranging from "strongly agree" to "strongly disagree"), there is no clear agreement that the difference between a score of 5 for "strongly agree" and a score of 4 for "agree" is equal to the difference between a score of 2 for "disagree" and a score of 1 for "strongly disagree" (Oppenheim, 1966; Williams, 1979). Oppenheim also suggested that the neutral point noted on Likert scales "is not necessarily the midpoint between two extreme scale scores; moreover, scores in the middle region could be due to lukewarm response, lack of knowledge, or lack of attitude in the respondent" (p. 141).

When comparing the Thurstone and Likert techniques with respect to scaling potential alone, the Thurstonian approach is superior because the measurement has an established equidistant value that consistently distinguishes the magnitude of the differences between each form of power. On the other hand, it is open to question whether the results produced by the Thurstonian procedure would be altered significantly if the reward power statement was worded differently. As such, it is felt that this hypothesis cannot be fully accepted until this discrepancy is examined in further research.

B. Determination of Overall Suitability of the Satisfaction Subscales

The purpose of this section is to confirm the suitability of the Likert items used to measure respondent satisfaction with the sport overall, with the coach, and with the athlete's perceptions of satisfaction with personal performance. As noted in Chapter 3, the items in each of these three subscales were derived from scales previously developed by Morse (1953), Weiss et al., (1967) and Gordon (1986). A number of procedures were conducted to determine whether the items contained in the subscales were appropriate and unique measurements of athletic satisfaction.

In order to confirm that the items associated with each form of satisfaction were associated with one another, an internal consistency check of the items was conducted

using Cronbach's (1951) alpha reliability technique. As noted earlier, previous research in sport psychology has generally accepted an alpha score of approximately $\alpha = .60$ to be an acceptable score for measuring internal consistency of a scale. In the current study, all three satisfaction subscales were found to exceed this level of reliability. The respective alpha coefficients were: satisfaction with sport ($\alpha = .84$), satisfaction with the coach ($\alpha = .87$), and satisfaction with personal performance ($\alpha = .76$).

Four items were used to assess the athletes' expressed satisfaction in the sport of basketball for the 1986-87 season. As seen in Table 11, the athletes generally enjoyed participating in the sport during the past season ($M = 4.18$). The athletes believed that they made an important contribution to the team over the course of the season ($M = 3.84$). They also felt that they were given a chance to do things throughout the season ($M = 3.67$) and were able to obtain feelings of accomplishment ($M = 3.63$). All four of these items were indicators of intrinsic elements within sport; previous research has also identified these as factors that contribute toward an individual's positive feelings of sport (e.g., Gould et al., 1982; Robertson, 1981; Wankel & Kreisel, 1985a). An overall mean score representing the athletes' satisfaction with the sport was calculated for use in further analysis ($M = 4.00$).

Satisfaction with the coach was measured using four items. As can be seen in Table 12, the means of these items indicate that the athletes were generally satisfied with their coach. The respondents generally believed that the coach was fair in his overall treatment of team members ($M = 3.44$) and they felt that they themselves were treated well by the coach ($M = 3.70$). The athletes also believed that the coach successfully exerted influence over them ($M = 3.84$), and were generally satisfied with the coaching decisions made that affected the team as a whole ($M = 3.68$). On the basis of these results, an overall mean score of $M = 4.01$ was calculated as a representative measure of satisfaction with the coach, for use in further analysis.

Four items were used to assess satisfaction with personal performance. The means, standard deviations and percentages of agreement expressed by the athletes toward

these items can be seen in Table 13. The athletes seemed to be satisfied with the effort that they put into the sport during the past season (M= 4.18) and with specific skill improvement (M= 3.97). There was also a positive feeling expressed by the athletes

Table 11

Means, Standard Deviations and Percentages of Agreement for Likert Sport Satisfaction Items

Items	Mean	St. Dev.	Percentage of Agreement: Very Much	Some-what	Neutral	Not Really	Def. Not
Liked playing basketball this season	4.18	0.99	48.7	30.4	12.2	7.8	0.9
Felt that contribution to team was important	3.84	1.12	33.0	38.3	11.3	14.8	2.6
Got a chance to do things	3.67	1.18	26.1	43.5	4.3	23.5	2.6
Got feelings of accomplish-ment from participation	3.63	1.25	30.4	28.6	22.3	10.7	8.0
Overall mean score	4.00	0.76					

Table 12

Means, Standard Deviations and Percentages of Agreement for Likert Satisfaction with Coach Items

Items	Mean	St. Dev.	Percentage of Agreement: Very Much	Somewhat	Neutral	Not Really	Def. Not
Felt that coach had influence over athlete	3.84	1.17	38.3	27.8	16.5	14.8	2.6
Satisfied with coach's treatment with athlete	3.70	1.26	33.0	32.2	13.9	13.9	7.0
Satisfied with coach's team decisions	3.68	1.19	29.6	32.2	20.9	11.3	6.1
Satisfied with coach's treatment of team members	3.44	1.31	27.0	28.7	13.9	22.6	7.8
Overall mean score	4.01	0.65					

Table 13

Means, Standard Deviations and Percentages of Agreement for Satisfaction with Personal Performance Items

Items	Mean	St. Dev.	Percentage of Agreement: Very Much	Somewhat	Neutral	Not Really	Def. Not
Satisfied with effort put into the sport	4.18	0.80	36.5	40.4	8.7	3.5	0.9
Satisfied with specific skill improvement	3.97	1.01	33.9	42.6	10.4	12.2	0.9
Satisfied with overall performance	3.54	1.18	20.2	42.1	16.7	13.2	7.9
Satisfied with performance in relation to personal expectations	2.87	1.19	12.3	17.5	25.4	34.2	10.5
Overall mean score	3.73	0.73					

concerning their overall performance (M= 3.54); in genral, there were not many who felt that their actual performance was lower than what they anticipated for the season (M= 2.87). For further analysis, an overall mean score, based on these four performance items was calculated to be M=3.73.

It was important to determine how all of the satisfaction items related to one another. It was felt that all of the items would be related to some degree, as they were all measuring aspects of satisfaction. It was felt, however, that those items associated with "satisfaction with sport" would correlate higher with the overall mean score for satisfaction with sport than for the other measures of satisfaction. Simiar expectations were anticipated with respect to the items associated with "satisfaction with the coach" and "satisfaction with personal performance." This was confirmed by performing a series of item-to-subtotal correlations between the means of the individual items and the three satisfaction subscale mean scores. As seen in Table 14, the only exceptions were with the "liked playing basketball this season" item, which was strongly related to the satisfaction with the coach composite score as well as with the satisfaction with sport composite score, and the "satisfied with overall performance" item, which had the same score for the satisfaction with sport and the satisfaction with personal performance composite factors. On the basis of these correlations, there was enough confidence to use the items originally associated with each set of subscales and calculate overall mean scores for use in further analysis.[9]

C. The Relationship of Perceived Social Power with Expressed Satisfaction in Sport

This section presents the results and interpretation of the correlations between the athletes' perceived satisfaction with their sport and the five forms of social power. It was hypothesized that there would be a positive correlation between sport satisfaction and a

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9 The details of each set of subscales will be provided in the remaining sections of this chapter.

Table 14

Correlations between Individual Satisfaction Items and Satisfaction Subscale Totals for Each Set of Sport Satisfaction Subscales

	Subscale Totals		
Individual Items	Satisfaction with Sport	Satisfaction with Coach	Satisfaction with Personal Performance
Satisfaction with Sport			
Liked playing basketball this season	.60	.57	.44
Felt that contribution to team was important	.60	.57	.44
Got a chance to do things	.61	.45	.50
Got feelings of accomplishment from participation	.69	.37	.50
Satisfaction with Coach			
Felt that coach had influence over athlete	.39	.67	.19
Satisfied with coach's treatment with athlete	.64	.72	.32
Satisfied with coach's team decisions	.35	.74	.19
Satisfied with coach's treatment of team members	.53	.75	.28
Satisfaction with Personal Performance			
Satisfied with effort put into the sport	.57	.28	.57
Satisfied with specific skill improvement	.47	.26	.62
Satisfied with overall performance	.39	.15	.50
Satisfied with performance in relation to personal expectations	.41	.18	.56

coach's reliance on referent and expert power, a negative correlation between sport satisfaction and a coach's reliance on coercive power, and no correlation between sport satisfaction and a coach's reliance on legitimate and reward power.

In order to determine the relationship between sport satisfaction and the bases of social power, athletes' scores on the sport satisfaction subscales were correlated with their scores on each form of social power as assessed by the Likert power scales. The Likert data was favored over the Thurstone data because the multiple descriptors used in the former measure for deriving of the social power factors was felt to be more reflective of the way each form of social power could be interpreted, especially in light of the problems associated with the Thurstone reward power item. Secondly, because the various modes of satisfaction were measured using a Likert scale format, it was felt that the correlations obtained would be more meaningful because all of the data was operationalized in a similar manner (Babbie, 1979). The derived correlation coefficients are presented in Table 15. The results from this table supported three of the five hypotheses; the hypotheses not supported were those with respect to coercive power and reward power.

There was virtually no correlation between sports satisfaction and coercive power. This suggests that coercive power was either not used extensively or was not overly threatening to the athletes to negatively affect their satisfaction with the sport of basketball. This may be an indication that coaches do not have to use coercive tactics as a means of influencing athletes, or choose not to use them. For instance, Lombardo (1984) found through observation that coercive or negative forms of behavior used by youth and high school sport coaches occurred very infrequently. This may be wise, as previous research on youth coaches who regularly used coercive tactics resulted in athletes not enjoying their participation in sport as much as athletes who were not subjected to coercive tactics (Curtis, Smith, & Smoll, 1979).

Table 15

Bases of Social Power Correlated with Satisfaction with Sport

Power Bases	Satisfaction With Sport
Reward	0.44**
Referent	0.32**
Expert	0.25*
Legitimate	0,13
Coercive	- 0.02

Note: Values presented are Pearson product-moment correlations.

*p < 0.01, one-tailed.
**p < 0.001, one-tailed.

It was also hypothesized that there would be no relationship between an athlete's satisfaction with sport and the athlete's perceptions of a coach's reliance on reward power. The results instead indicated that a significantly positive relationship existed between the two scores, which suggested that the athletes felt that their coach's ability to reward is an important contributing factor toward them being satisfied with their sport[10]. This finding may emphasize how the sport environment differs from other social environments, particularly when it pertains to different interpretations of reward power. For instance, one of the predominant features of the sport environment is the ongoing desire and display of excellence by athletes, which can occur when learning new skills of the sport and displaying those skills in practice and game situations. Rewards are a means of acknowledging these achievements and are often necessary in order to keep athletes motivated (Martens et al., 1981; Martin & Hrycaiko, 1983). One such reward that is unique to sport is winning. Although winning is often downplayed in minor sport competition, for many athletes, losing does not have many positive qualties. For most, "losing is punishing and, because competition is zero sum, one party must end up being punished. . . . Zero-sum competition demands - indeed is defined by - wins and losses, and in most societies, the winners get the lion's share of the rewards: fame, money, praise, and ego gratification. With perhaps a few exceptions, it is much better to win than to lose" (Curry & Jiobu, 1984, p. 45).

Rewards do not have to necessarily be based on winning. For instance, achievement can often be measured by how much an athlete personally improves over a season. Coaches who help athletes set realistic personal goals can create situations where the athletes inevitably experience more success and feel more competent (Martens et al., 1981). This also gives the coach information as to when rewards are appropriate,

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[10] It should be noted that the Likert reward power measure gave extensive information on the way a coach could reward his athletes. A different correlation might have resulted if sport satisfaction was compared to the Thurstone measure of reward, which implied control or bribery on the part of the coach.

particularly if the coach has a number of athletes who are in different levels of skill development and sport knowledge. Complementing an athlete for successfully dribbling a ball up the court will be perceived as more rewarding by one who is just learning the sport as opposed to one who has mastered this skill in previous years.

There are a number of interpretations that one can put forward concerning the importance of rewards on overall satisfaction in sport. For example, some previous research conducted in the business setting noted a link between the rewarding behaviors exhibited by a leader and subordinate satisfaction with the job. In his study of personal relationships between managers and agents in an American insurance company, Ivancevich (1970) found a positive correlation between a manager's use of reward power and the subordinates' expressed satisfaction with their job. The manager's willingness to reward the subordinates through positive feedback was interpreted as a positive incentive which in turn gave the subordinates additional motivation to do their job well and enjoy what they were doing. Similar feelings can easily be derived within sport settings; for instance, praise from the coach after a good play can do wonders for an athlete's confidence and desire to continue to perform well (Martin & Hrycaiko, 1983, Rushall, 1983).

Previous research has also noted that rewards that are contingent on performance give information about competence which would lead to intrinsic interest, satisfaction and enjoyment (Deci, 1975; 1980; Katz & Kahn, 1978). Katz and Kahn (1978) also suggested that it was particularly pertinent that feedback was given immediately and at appropriate times, usually following a good performance by the subordinate. Martin and Hrycaiko (1983) and Rushall (1983) have noted that the effectiveness of feedback by a coach in sport may be dependent on a number of factors. For instance, when a new or unfamiliar behavior is performed by an athlete, immediate positive feedback by the coach can indicate an approval of the adequacy of that behavior to the athlete. However, one can reduce the rewarding of familiar behaviors in favor of the athlete doing self-evaluations. Coaches might also consider rewarding good behavior under different circumstances, such as during

a league competition rather than during a team practice (Rushall, 1983). Nevertheless, it appears that athletes in the present study valued the rewards received from the coach, as the rewards probably make the athletes feel good about themselves, and as such, may help them in deriving positive feelings about their accomplishment. Positive feelings of this type may also contribute toward them feeling satisfied about their participation in the sport (Wankel & Kreisel, 1985a).

One can approach the importance of rewards and satisfaction from a more general perspective. For instance, the concept of social exchange suggests that people are constantly seeking some sort of reward resulting from interactions with others and that the interaction must be satisfying for the individual to repeat it in the future (Blau, 1964; Thibaut & Kelley, 1959). Moreover, common sense suggests that there are very few individuals who do not find rewards given in the pursuit of a job to be satisfying, especially when these rewards are given by someone who is in a position of authority.

It is also possible that the positive relationship derived between reward power and sport satisfaction was due to the methodological differences between the scales used in the present study and the scales used in previous research that found no relationship between reward and job satisfaction. Five of the studies that found no relationship between reward and job satisfaction used a single item to operationalize each of French and Raven's forms of social power (Bachman et al., 1968; Burke & Wilcox, 1971; Cope, 1972; Dunne, et al., 1978; Slocum, 1970). Schriesheim, Hinkin, and Podsakoff (1985) noted that there are methodological drawbacks to the single item ranking procedure, especially when forms of power are compared with other measures of subordinate/leader behavior. Under the ranking procedure:

> One power base can be given a high value only at the expense of the others (which must consequently be ranked lower). As a result, empirical relationships among the power bases are forced to be negative. These negative intercorrelations are strongly at odds with theory, which would suggest that some of the power bases (e.g., reward, coercive, and expert) should be positively rather than negatively correlated in work organizations. (p. 4).

Schriesheim, Hinkin, and Podsakoff (1985) also noted that single item descriptors used to measure each power base may not be descriptive enough to adequately define all of the aspects originally postulated by French and Raven, and if that is the case, may underestimate relationships between forms of power and other measures of subordinate/leader behavior. The present study used multiple items arranged in a Likert scale format to operationalize the forms of power.

The positive correlations between the sport satisfaction score and expert and referent power were trends that were also noted in previous research. A leader's use of these forms of power was particularly pertinent to a subordinate's positive feelings of satisfaction in the job in situations where a significant portion of the job required the subordinates to interact closely with the leader. Previous research from the business literature has suggested that leaders who are perceived as being competent in their skills and who can communicate effectively with subordinates to enhance accomplishment of tasks associated with the job will make the overall job a more satisfying experience (Bachman, 1968; Dunne et al., 1978; Ivancevich, 1970; Richmond et al., 1980; Slocum, 1970). Similarly, in sport, the way a coach interacts with the athletes can be an important contributing factor in the athletes' perceiving positive feelings of satisfaction and enjoyment of the sport (Horne & Carron, 1985; Lanning, 1979; Martens et al., 1981). In the present study; the relatively strong association of the use of referent and reward power with athlete satisfaction is consistent with the view that the use of these types of power by a coach might play a pivotal role in the athlete's enjoyment and satisfaction of the sport. Most of the sport and coahc satisfaction scales used in this study imply that the coach's degree of expertise is influential in guiding the athletes effectively and teaching them proper skills of the sport. The coach's degree of expertise may also help in a proper assessment of the practice and playing time that an athlete receives. A coach who communicates well with athletes will be able to make them understand the logic behind his decisions (Tharp & Gallimore, 1976). The behavior of the coach, in turn, will be a factor in the athlete's

personal assessment of whether his contribution to the team was important as well as his assessment of whether he accomplished something as a result of his participation.

Legitimate power was not related to sport satisfaction, paralleling results uncovered in previous research in the business literature (Bachman, 1968; Burke & Wilcox, 1971; Dunne et al., 1978; Slocum, 1970). Although it has been determined that athletes acknowledge the coach as a person who has authority over them, this aspect of the coach - athlete relationship is not influential (either positively or negatively) on the degree to which an athlete is satisfied with the sport. This suggests that the coach, by virtue of his position, has legitimate power which is not questioned whether the athletes find the sport satisfactory or not.

D. The Relationship of Perceived Social Power with Expressed Satisfaction with the Coach

This section presents the results and interpretation of the correlations between the five forms of social power and the athletes' perceived satisfaction with their coaches during the 1986-87 season. An overall mean score ($\bar{X}$ = 4.01) was computed on the basis of the four Likert items used to assess satisfaction with the coach and then correlated with the five forms of social power from the Likert data to test the following relationships. It was hypothesized that there would be a negative relationship between an athlete's satisfaction with the coach and a coach's reliance on coercive power and positive relationships between an athlete's satisfaction with the coach and a coach's reliance on the other four forms of social power. The results are presented in Table 16. With the exception of the projected negative relationship between coercive power and satisfaction with the coach, all of these hypotheses were supported. There was no relationship between coercive power and satisfaction with the coach. As noted earlier, this is probably because the athletes believed that their coaches did not employ coercive tactics in coach-athlete interactions or did not

perceive that the coercive power used by coaches was threatening enough to detract from their overall satisfaction wtih the coach.

Table 16

Bases of Social Power Correlated with Satisfaction with Leadership

Power Bases	Satisfaction With Leadership
Referent	0.69**
Reward	0.52**
Expert	0.44**
Legitimate	0.23*
Coercive	- 0.02

Note: Values presented are Pearson product-moment correlations.

*p < 0.01, one-tailed.
**p < 0.001, one-tailed.

There are several implications with respect to the positive relationships found between the other forms of social power and satisfaction with the coach. In assessing leader satisfaction, previous research within business settings has also found that the various forms of social power are somewhat related to one another. In particular, several studies have found that an effective use of referent power puts subordinates more at ease in the work environment and provides a foundation for the leader to build on the relationship by employing expertise and, to a lesser extent, for them to also rely on legitimate power (Bachman et al., 1966; Bachman et al., 1968; Burke & Wilcox, 1971; Busch, 1980; Richmond et al., 1980; Slocum, 1970; Student, 1968).

The positive relationship that exists between expert power and perceived satisfaction with the coach suggests that the athletes value the coach's expertise in the sport. As indicated in previous research, a leader's expertise in the job is one of the most important defining elements of effective leadership (Kearney et al., 1985; Slocum, 1970). As noted in the previous section, athletes may consider the coach to be a pivotal figure in their overall satisfaction with the sport. The coach, through his expertise, provides much of the training, guidance and instruction necessary for athletes to effectively participate in the sport (Chelladurai, 1984a; Chelladurai & Saleh, 1978; 1980; Lacy & Darst, 1985; Tharp & Gallimore, 1976). In the present study, the expertise of a coach is a criteria of that has been recognized and valued by the athletes. As such, athletes may not be as satisfied with coaches who do not have appropriate expertise in their sport.

The effective use of reward power has been found to be very dependent on the environment that establishes the relationship that exists between the leader and the subordinate (Podsakoff, 1982). In the business environment, some previous research has implied that the reward power of a superior is tied in with the position that the supervisor occupies in the hierarchy of an organization. This means that those in higher positions can offer more lucrative tangible rewards than those in lower positions (Kipnis, 1974; Mechanic, 1983; Rausch, 1978). Although this would appear to be positive and satisfying,

many subordinates may be dissatisfied in circumstances where rewards granted to them came from superiors who do not know them as individuals, and instead relied only on guidelines established by the organization. If this is the case, then the administration of rewards by a leader either had no impact on their satisfaction with the leader or was negatively correlated with leadership satisfaction by the subordinates. For instance, Slocum (1970) found that the reward power of supervisors was ineffective for those who depended entirely on their position in the hierarchy. Instead, Slocum suggested that subordinates would be more satisfied with the rewards from leaders who took the time to interact with the subordinates on an interpersonal level. Bachman et al. (1966) surmised that rewards granted from an impersonal, administrative perspective might be perceived as a bribe, and would not enhance one's satisfaction with a superior.

The findings from the present study, however, indicated a very strong positive relationship between reward power and overall satisfaction with the coach. There are several explanations for this relationship. First, on the basis of the previous discussion, the coach is not an impersonal, faceless individual. Instead, he is constantly interacting with the athletes and noting situations where a reward is going to be effective. Furthermore, most coaches are limited in the type of rewards that can be granted to the athletes. Most coaches do not give rewards solely on the basis of pre-established guidelines[11]. The high school coach cannot, for example, offer monetary incentives to athletes, nor can he grant them time off from school as a reward for a good performance. However, the coach will offer rewards in the form of praise or non-verbal actions that will make the athlete feel good about the sport and about the coach.

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[11] Coaches can give ratings to athletes that may be put toward athletic rewards. For example, coaches at Strathcona Composite High School rated athletes on a 5 point numerical system. Through this system, athletes could accumulate points that would award them the "school letter" and provided an opportunity to purchase a school athletic jacket.

It should be noted that the athletes particularly valued reward behavior from the coach when it was given under appropriate circumstances, such as following a good performance by the athlete. Research by Katz and Kahn (1978) and Podsakoff, Todor and Skov (1982) has also suggested that there is a strong correlation between a leader's reward behavior and the subordinate's satisfaction with the leader when rewards were administered in a logical fashion shortly after the subordinate performed well in his job. According to this research, the rewards were valued by the subordinates as acknowledgement of a job well done and subsequently provided additional motivation for the worker to continue to perform well in the job. A similar pattern can be seen in the sport environment where an appropriate reward given to the athlete provides encouragement and an added incentive for the athlete to continue to perform well (Curtis, Smith & Smoll, 1979; Martin & Hrycaiko, 1983; Lacy & Darst, 1985; Rushall, 1980). Such a reward can provide confirmation that the athlete's own perceptions concerning performance are legitimate, particularly from a person who the athlete admires and/or perceives is an expert. Moreover, because the rewards are given as appropriate reinforcers following a good play or performance, it is possible that the coach is viewed as a competent individual who rewards for a particular purpose, rather than one who rewards for the sake of rewarding. Feelings of competency would be positively related to an athlete's feelings of satisfaction with the coach.

The legitimate power of the coaches was seen as being significantly related to the athletes' overall satisfaction with their coaches, although the correlation was not as high as the previously noted correlations with referent power, reward power and expert power. Similar trends in the business environment were reported by Busch (1980) and Bachman et al. (1968). Previous research has suggested that a subordinate's perceptions of a leader's legitimate power may be very dependent on the subordinates understanding of the organization that grants the leader power. For instance, Slocum (1970) and Ivancevich (1970) felt that leaders who overly emphasized their status relative to the organization were insecure about their expertise or referent power. This resulted in the subordinates having

reduced feelings of satisfaction with the leader (Bachman et al., 1966; Burke & Wilcox, 1971; Slocum, 1970). Richmond et al. (1980) added that the established line of communication between a leader and the subordinate may also be a factor in determining how important legitimate power is and how these feelings can in turn influence a subordinate's overall feelings of satisfaction with the leader. According to the authors, situations where the organizational hierarchy clearly places the leaders in a superior position from the subordinates will enhance the importance of legitimate power. In the present study, most of the athletes were aware that the coach was authorized by the school and was also a teacher at the school (in most cases). These may have been contributing factors toward their overall assessment of the satisfaction with the coach, but nonetheless were measures that were not as important as perceptions of the coach's expertise and the rapport that existed between the coach and the athlete.

E. The Relationship of Perceived Social Power with Expressed Satisfaction with Personal Performance

This section presents the results and interpretation of the correlations between the five forms of social power and the athletes' perceived satisfaction with their personal performance. As was the case with the other satisfaction measures, an overall mean score ($\underline{M}$ = 3.75) was computed using four Likert items which assessed personal performance. This was then correlated with the mean scores derived from the Likert data representing each form of social power.

It was hypothesized that the coach's reliance on reward power, coercive power and legitimate power would be negatively correlated with the athlete's expressed satisfaction with personal performance. It was also hypothesized that positive relationships would exist between this variable and referent and expert power. However, none of these hypotheses were supported by the data. As seen in Table 17, virtually no relationships

existed between the coaches' reliance on any form of social power and the athletes' assessments of personal performance. The only statistically significant correlation found

Table 17

Bases of Social Power Correlated with Satisfaction with Personal Performance in Sport

Power Bases	Satisfaction With Personal Performance
Reward	0.18*
Legitimate	0.14
Referent	0.09
Coercive	0.07
Expert	0.05

Note: Values presented are Pearson product-moment correlations.

*$p < 0.05$, one-tailed.

was with reward power, and this was a positive relationship rather than the predicted negative relationship.

The lack of relationship between assessment of personal performance and the power of a coach may be important. One interpretation of this is that the personal performance of athletes is independent of other forms of influence. Instead of solely relying on the opinions and directions of another person, the athletes may be mature and independent enough to rationally evaluate their ability and make personal decisions as to their strengths in the sport as well as realistically decide on the areas where they can improve.

Another possible explanation for the lack of support for these hypotheses may be due to the methodological weaknesses with the performance scales. It was noted earlier that this scale had the lowest average inter-item correlation score of the three satisfaction scales. Thus, it is possible that the items used to assess performance in the present study may not have been the most appropriate measures. Another possible explanation for the lack of relationship is that the items measuring social power were more team oriented in contrast to the individually specific performance measures.

It is also possible that the proposed directions of the hypotheses stated for performance were not appropriate for a sports environment. It was previously noted that the hypotheses derived for this study were based on findings from business settings, where the bulk of previous research on power had been done. It was perhaps invalid to assume that a work environment was equivalent to a sports environment, particularly with respect to an assessment of subordinate performance. In the business setting, subordinate performance is often measured by an organization on the basis of pre-established guidelines, rather than on the basis of self-reports by the subordinates themselves (Bachman et al., 1966; Bachman et al., 1968; Ivancevich & Donnelly, 1970; Student, 1968).

In the sport environment, external standards established by an organization may be used as a means of assessing performance; however, an athlete's self-reports are very important. While external standards may be one basis used in the personal evaluation, in many instances these may not be relevant means for the assessment of performance for some athletes because the standards are unrealistic or unobtainable. Instead, personal assessment of one's performance may be based on internal values that may vary dramatically from one athlete to the next. For instance, one might discover that the performances of two athletes may, from an observer's perspective, appear to be similar. These same performances may be interpreted differently by each athlete, depending on the internal standards that each athlete uses to evaluate the performance (Chelladurai, 1984a; 1984b). Furthermore, if internal values pertaining to an athlete's expressed satisfaction with performance are firmly established, then it is possible that a coach's reliance on various forms of social power may not be influential in altering these internal standards.

It can be seen from Table 17 that a small, though statistically significant relationship was found between the coach's reliance on reward power and the athletes' satisfaction with performance. Although one should interpret this relationship with some caution because of the low correlation coefficient, this finding may be a result of the athlete perceiving the reward as an appropriate reaction to a good performance. Most of the Likert power items placed the use of rewards within a context that was connected to one's individual performance. It has been previously established in the literature that people will continue to engage in activities that are valued by them and provides them with some sort of reinforcement (Blau, 1964; Homans, 1974; Thibaut & Kelley, 1959). In the present study, the rewards given by coaches were forms of positive feedback or opportunities for further participation. In terms of assessing personal performance though, being granted an opportunity to participate could be interpreted as an intrinsic reward in and of itself (Wankel & Kreisel, 1985a), while positive feedback with respect to participation can give athletes the confidence to continue participating and performing. It is through the "playing time"

that athletes can test their abilities against others and against their own personal standards. Even other motives, such as being on the team, winning attention from others and experiencing the excitement of the game are going to be dependent on getting an opportunity to participate in the sport.

Rushall (1983) points out that the coach's use of a variety of key words, variation in voice modulation, physical contact and other non-verbal forms of reinforcement can all contribute toward creating a positive, motivating atmosphere for the athletes. Positive feedback can give the athlete a positive incentive to maintain or better his performance in the sport, but only when such rewards were given under appropriate circumstances, such as immediately following a performance (Bachman et al., 1968; Curtis, Smith, & Smoll, 1979; Horne & Carron, 1985; Katz & Kahn, 1978; Martin & Hrycaiko, 1983; Podsakoff, 1982; Podsakoff, Todor, & Skov, 1982). In an educational setting, studies by Rowley and Keller (1962) and Kearney et al. (1984) both noted that rewards given students following good performances had positive effects on a student's future performance.

V. Summary, Conclusions and Recommendations

A. Summary of the Study

The purpose of this study was to determine how athletes perceived a coach to utilize social power when interacting with athletes in a sport environment, and to see whether the use of social power by the coach affected the satisfaction that an athlete had with the sport, with the coach and with the athlete's personal performance. The theory of social power used in the study was originally developed by French and Raven (1959), who proposed that leaders influence their followers using five basic forms of power: reward power, coercive power, legitimate power, expert power and referent power. This was the first systematic application of the theory in a sports setting, although the French and Raven typology had been previously used to investigate the relationship between leaders and subordinates in a variety of other settings, such as business, educational and family settings (e.g., Bachman et al., 1968; Burke & Wilcox, 1971; Jamieson & Thomas, 1971; Raven et al., 1975; Richmond & McCroskey, 1984; Slocum, 1970; Smith, 1970).

A comprehensive review of the literature was conducted to determine how the use of power had been interpreted within interpersonal relationships and to see how French and Raven's social power typology had been used in other social settings. Although there are some variations between studies, the literature has suggested that leaders are perceived by their followers as favoring expert and legitimate power when interacting with their followers, and rely to a lesser extent on referent, reward and coercive power (e.g., Bachman et al., 1968; Burke & Wilcox, 1971; Ivancevich, 1970; Ivancevich & Donnelly, 1970; Student, 1968). Previous research also suggested that the followers' perceptions of a leader's use of referent and expert power favorably contributed to a follower's satisfaction with the work environment, with the leader and with personal performance. A leader's use of coercive power tended to erode subordinate satisfaction (e.g., Bachman et al., 1968; Burke & Wilcox, 1971; Ivancevich, 1970; Slocum, 1970). The effects of

legitimate power and reward power on subordinate satisfaction were not as clear cut. Based on past research, the general consensus was that these forms of power either did not influence a subordinate's feelings of satisfaction toward aspects of the job, or had negative effects (e.g., Bachman, 1968; Bachman et al., 1966; Burke & Wilcox, 1971; Slocum, 1970). However, Ivancevich (1970) found that the use of reward power by a leader resulted in the subordinates increasing their motivation, and as a result was favorably related to job satisfaction.

On the basis of the review of the literature, sixteen hypotheses were derived to examine the way a coach's reliance on social power was perceived by the athletes. A new questionnaire was developed specifically for this study to determine how social power was used within a sports environment. Although questionnaires incorporating the French and Raven typology had been previously developed, the reliability and validity of past instruments was somewhat problematic (Podsakoff & Schriesheim, 1985; Schriesheim, Hinkin, & Podsakoff, 1985). There was also the need to have an instrument that described the use of social power within the sports environment; most of the previous instruments described situations within business environments.

Social power was assessed by respondents in two ways. In one section of the questionnaire, the five forms of power were presented in a Thurstonian paired comparison format. This technique paired single-item descriptors of the five forms of power against one another, producing ten unique paired statements. For each pair of items, respondents were required to choose one form of power that they believed was relied upon by their coach. This method produced an unbiased order of perceived use of power by sport coaches. The second portion of the questionnaire arranged multiple descriptors of the five forms of social power in a five point Likert scale format in order to measure the respondents' perceptions of their coaches' use of social power in the sports setting.

The remaining portion of the questionnaire measured the respondent's perceived feelings of satisfaction with the sport overall, with the coach and with personal

performance. Four statements were associated with each form of satisfaction and were arranged in a five point Likert scale format. The questionnaire also contained a lie scale and some open-ended questions about sport involvement.

After pilot testing the instrument and assessing its reliability and validity, the questionnaire was administered to the sport population under controlled classroom conditions. All Edmonton high school basketball teams in the "senior boys division" registered during the 1986-87 season took part in the study. A total of 130 basketball players of the 159 eligible players completed the questionnaire, representing a response rate of 81.8%.

The first hypothesis of the study proposed that athletes would perceive that the coach relied primarily on expert and legitimate power when interacting with the athletes and rely to a lesser extent on referent, reward and coercive power. The Thurstonian paired comparison data fully supported this hypothesis while the Likert scale approach gave partial support. For the latter set of scales, expert power was significantly higher than legitimate, referent and coercive power, but not reward power, which was found to be a close second overall. Reward power was also found to be significantly higher than referent and coercive power, but not from legitimate power, which was a close third after reward power. Legitimate power and referent power were significantly rated higher than coercive power by the athletes.

Although the Thurstone technique scaled social power using an interval level of measurement, it was limited because it only had one descriptive statement for each form of social power. The Likert scale, on the other hand, had multiple descriptive statements for each form of power, which could potentially have resulted in the respondents obtaining a better understanding of the meaning for each form of power. Podsakoff and Schriesheim (1985) believed that the multi-descriptive format was a necessity for adequately defining French and Raven's typology of power, because the original definitions for each form of power were multi-faceted. The results of the study also found a major discrepency

between the Thurstone and Likert scales regarding the way reward power was interpreted. In a comparison among the five forms of power in terms of magnitude, the value of the Thurstonian reward power item was fourth overall, while within the Likert scale, the value for reward power was second overall.

In the Thurstone scale, it was thought that the reward power statement might have been negatively perceived by the respondents because of the way it was worded in contrast to the Likert reward power statements, which were worded more favorably. As such, it was possible that the results produced by the Thurstone procedure might have been different if the reward power statement had been worded differently. Based on these results, and the descriptive limitations of the Thurstone procedure, it was felt that the Likert technique was a more viable means for assessing social power in this particular study.

In the present study, the use of multi-item descriptors for each form of social power gave the respondents more flexibility in judging each form of social power. Moreover, since each item was assessed individually, a favorable weighing of one form of power did not necessarily reduce the weighing of another form of social power. In other words, each form of social power was assessed independently, and as such gave a more intricate picture of a coach's use of social power.

It was also possible that the reason that the derived ordering of the five forms of social power differed from previous research because of differences in methodology between the present study and previous research. Many of the previous studies that assessed the importance of one form of social power over another used single-item operationalizations of each form of social power and asked respondents to numerically rank order each item from most important to least important (Bachman et al., 1968; Burke & Wilcox, 1971; Ivancevich, 1970; Ivancevich & Donnelly, 1970; Student, 1968). According to Podsakoff and Schriesheim (1985), this latter form of measurement is very limited and unreliable, especially when one compares this type of measurement with the multi-descriptive Likert scale format.

The remaining hypotheses formulated for this study examined the relationship between the reliance on social power and various measures of satisfaction in sport using the items from the Likert power scale. The hypotheses concerning expert, referent and legitimate power were supported by the data obtained for the study. It was found that a coach's reliance on expert and referent power was positively correlated with the athletes' perceived feelings of satisfaction with overall aspects of the sport. These results indicated that athletes believed that their sports experience was enhanced by a coach who had expertise in the sport and who could communicate with the athletes in a friendly, encouraging manner. Furthermore, a coach's reliance on legitimate power did not influence the athlete's feelings of satisfaction toward the sport.

The projected hypotheses detailing the relationship between sport satisfaction and a coach's reliance on coercive and reward power were not supported by the data. It was predicted that coercive power would be negatively correlated with feelings of sport satisfaction and that the use of reward power would not be influential. However, the results indicated a very strong positive relationship between reward power and athlete's feelings of sport satisfaction, while no significant relationship was found between sport satisfaction and coercive power. In the case of coercive power, it was felt that this particular form of power was either not used extensively by coaches or was not overly threatening to the athletes to detract from achieving feelings of satisfaction from the sport. With respect to reward power, it was felt that the results attained in the present study were due to the different methodology used in the present study (the multi-itemed Likert format) compared to the single item operationalizations used in previous research. It was also possible that the positive relationship between reward power and satisfaction with sport was due to the specific wording of some of the items, especially those reward items that were directly related to how one performed in the sport. For many athletes, receiving some sort of reward from the coach could make them feel good about themselves, which in turn could provide them with feelings of satisfaction in participating in the sport.

Hypotheses were also formulated to see whether there were significant relationships between the coach's reliance on social power and the athletes' perceived satisfaction with their coach. It was postulated that coercive power would be negatively associated with satisfaction with the coach; however, the results indicated that no significant relationship existed. As noted earlier, this is probably because the athletes believed that their coaches did not employ coercive tactics in coach-athlete interactions or did not perceive that the coercive power used by coaches was threatening enough to detract from their overall satisfaction with the coach. It was also hypothesized that the coach's reliance on the other four forms of social power would be positively associated with perceived satisfaction with the coach. All four of these hypotheses were supported by the data. This suggests that there are a variety of ways that a coach can positively influence athletes and contribute to the athletes' overall satisfaction with the coach. The coach's expertise in a sport is important, particulary with respect to his abilities to adequately teach aspects of the sport. Referent power can also be influential in communicating with the athletes. Reward power was also associated with coach satisfaction, especially when it was administered from an interpersonal encounter, rather than from an established set of guidelines; coaches who are able to use techniques that encourage positive participation in the sport would generate feelings of satisfaction in athletes.

The remaining five hypotheses tested the correlations between the athletes' perceived feelings of satisfaction with personal performance and the five forms of social power available to the coach. It was predicted that the coach's reliance on coercive, reward and legitimate power would undermine an athlete's satisfaction with performance and that a coach's reliance on expert and referent power would enhance these feelings concerning performance. However, the data did not support any of these predictions. Instead, it was found that no significant relationship existed between performance satisfaction and expert, referent, legitimate and coercive power. A weak, yet positive relationship was found

between a coach's reliance on reward power and the athlete's perceived satisfaction with performance.

The lack of support for these hypotheses may have been due to the methodological weaknesses with the performance scales. Of the three sets of satisfaction scales, the performance scales had the lowest average inter-item correlation score. This pattern may also be a result of the way performance was defined in previous studies that tested the relationship between social power and satisfaction (within the business environment) compared to the way performance is perceived in the sports environment. In the work environment, performance is often assessed on the basis of pre-determined guidelines such as measures of productivity, where the results of one's work performance benefit the business. In the sport environment, pre-determined standards may be used, but often, personal performance is assessed on the basis of internal standards that the athlete believes are viable. Moreover, the efforts put into performance benefit the athlete as well as the team. In other words, it was perhaps invalid to assume that a work environment was equivalent to an athletic environment with respect to perceptions of performance.

B. Conclusions

The following conclusions are made based on the results of the study:

1. On the basis of the athletes' perceptions, it was apparent that the coaches relied on a variety of forms of social power when interacting with the athletes. When all five forms of social power available to the coach were compared, the Thurstonian and Likert data indicated that athletes consider expertise to be the predominant form of power employed by coaches.

2. Legitimate power was perceived by the athletes as being a relatively important form of power that coaches tended to rely on. It was ranked second on the Thurstone scales, while it ranked third on the Likert data. The importance of legitimate power

suggests that athletes recognize that the coach has a right to influence and guide them in the pursuit of the sport because "he is the coach." In a comparison with the scale values of the other forms of power, legitimate power was relatively similar in magnitude with referent power (on the basis of the Thurstonian data); using the Likert data, the mean score derived for legitimate power was of the same order as reward power and referent power.

3. The data obtained from the study indicated that the referent power of the coach was also important; this defines the rapport and trust that exists between the athlete and the coach, although it is primarily the coach's actions that set the parameters for rapport. Both the Thurstone and Likert scale scores for referent power were close in magnitude to the scores obtained for legitimate power.

4. A coach's use of reward power can be very important, both in establishing a good relationship with the athletes and as a means of providing positive motivation for the athlete to achieve and enjoy his participation in the sport. However, there was a discrepancy in the way reward power was interpreted using the Thurstone scale compared with the Likert scale. The Likert data, through its use of multiple statements, gave specific examples of how a coach could positively reward athletic performance. Compared to the other forms of power, it ranked second overall, though the mean average scores were close to the mean average scores derived for legitimate power and referent power.

The Thurstone data were based on single descriptive statements for each form of power. The reward power statement may have been negatively interpreted by the respondents because of its wording. In the questionnaire, athletes responded to a reward power statement that suggested that some coaches relied "on the promise of rewards." It is possible that this wording might have been interpreted

by some athletes as false promises or bribery, rather than as a genuine, positive form of motivation. In a comparison with the other forms of social power, the Thurstonian reward power statement ranked fourth overall; only coercive power ranked lower.

5. It appears that coercive power was not used extensively by the coaches in this study, at least not as perceived by the players. It was definitely viewed as the form of power least relied upon in contrast to the other forms of power available to coaches.

6. The hypotheses tested in this study were derived from previous research conducted in business settings, primarily because this is where the bulk of research on social power has been done. The observed results indicated some similarities with and some differences from previous studies. There are two explanations for the variation in results between this study and previous research.

The first explanation is that the environmental settings (sport versus business) are different. Distinctive differences between the current results and previous results from business were evident with respect to the athletes' perceptions of the extent that coaches relied on reward and coercive power. In the business environment, it was suggested that the use of reward power would not be effective in motivating a subordinate because the form of rewards (and sanctions) were primarily defined by the organizational hierarchy that distinguishes leaders from subordinates (Bachman, 1968; Ivancevich, 1970; Slocum, 1970; Student, 1968). In the sport setting however, the use of reward and coercive power is primarily up to the coach, rather than on the basis of pre-established rules and regulations put forward by the school. Most coaches reward or punish athletes on the basis of their judgments concerning appropriate and inappropriate behavior of the athletes.

Furthermore, although organizational hierarchies in business settings may predetermine (or strongly suggest) how leaders are to interact with the subordinates, a coach's relationship with the athletes is primarily based on the parameters agreed upon by the coach and the athletes, rather than on parameters suggested by the school itself.

Second, it is also possible that differences between the results of this study and previous research on social power were due to the methodological differences between the scales used in the present study and the scales used in previous research. Previous studies utilizing the French and Raven typology have used single-item operationalizations of each of French and Raven's forms of social power that were ranked by the respondents. This approach is very limited in that one cannot assess the importance of the different power bases independently. Such a procedure might artificially reduce one measure of social power through forced scaling relative to other sources of social power. Moreover, the use of single item descriptors may not adequately capture the essence of the factors originally postulated by French and Raven, and as such, may underestimate relationships between forms of power and other measures of subordinate/leader behavior. The present study used multiple item operationalizations of each form of power arranged in a Likert scale format. Given the limitations of the alternative forms of measurement used in previous research, it is quite possible that different results may be obtained for the relationship of power with other measures of satisfaction.

It is impossible to definitely make a decision at this time as to which of the two explanations is more valid. Further research is required which utilizes appropriate methodology when examining the use of power in sport and other social settings.

7. An athlete's feelings of satisfaction with the sport and with the coach were positively influenced by a coach's effective use of expert, referent and reward power. The basketball players perceived the coach to be an important part of their sport experience. Thus, a coach who has expertise in his sport, understands methods of using positive rewards and establishes effective rapport will make the sport experience more rewarding and enjoyable for the athletes.

8. The only form of social power relied upon by the coach that enhanced an athlete's feelings of satisfaction with personal performance in the present study was reward power. Although this finding must be interpreted cautiously because the results are based on only one level of one sport, one might conclude that an individual's satisfaction with personal performance is primarily based on the athlete's internal values rather than the behavior of the coach. The use of reward power, however, may serve as external reinforcement for the athlete that helps assess his performance with the personal goals that the athlete has set for himself. It is also possible that reward power correlated significantly with the personal performance items because both sets of scales were oriented toward individual achievement. The Likert power items gave many examples of how reward behaviors of the coach could benefit the individual athlete; this may have been compatible to the individual based perfomance satisfaction measures.

C. Recommendations for Sport Administrators and Coaches

The findings from this study are consistent with the view that the satisfaction with one's sport involvement is associated with the perceived use of certain types of social power by the coach. While bearing in mind that the current results were just based upon the male high school basketball environment, the following recommendations are offered to sport organizers and coaches:

1. This study re-affirms the importance of technical expertise in coaching. In the high school setting, athletes have that coaches will be able to properly teach them techniques and skills of the sport. Coaches should be willing and able to demonstrate that expertise to their athletes.

2. The referent power of a coach is also very important. There are several ways by which athletes can identify with the coach, While it is beneficial for the coach to be liked, admired and respected, it is recommended that coaches share their sport philosopy and sport ideals with their athletes. This might aid in establishing a common frame of reference within which the coach and the athlete can relate to each other.

3. Although legitimate power is also important, it is recommended that once it is established, coaches should de-emphasize it in favor of other forms of power. It is important that the athletes understand that the coach has a right to be "the coach," and that he is entitled to certain privileges because of his status as the coach. Most, if not all of the athletes, understand who makes cuts and decides on playing time. However, legitimate power was not an influential form of power with respect to an athlete attaining satisfaction from the sport or from his performance in the sport, and was only moderately correlated with the satisfaction that athletes had with the coach himself.

4. It is recommended that a coach use reward power when interacting with the athletes where the reward provides an incentive or a confirmatory measure that encourages the athlete to continue to perform well. Rewards given for no apparent reason may

be perceived by athletes as bribes, payoffs or favoritism that may undermine future performance and satisfaction in the sport, rather than enhance it.

D. Suggestions for Methodological Improvements

One of the primary purposes of this research was to develop an appropriate instrument for measuring social power. Based on the findings from the present study, and in an effort to improve the reliability and validity of the instrument, the following recommendations are proposed:

1. Two sets of scales measuring social power were used in the present study. The first set of scales utilized a Thurstonian paired comparison approach, where each of the five forms of social power were compared against one another in a series of paired statements. The advantage to this technique is that through this paired comparison, an unbiased order of the items can be derived because each item is compared with every other item. Furthermore, the z scores that are produced by the comparison can be considered to be on an interval level scale of measurement. There are several major drawbacks to this technique, however. The primary drawback of Thurstone scales is that each form of power is limited to one descriptive statement. This assumes that the statement selected adequately describes the behavior and will be interpreted in the same manner by all respondents (Podsakoff and Schriesheim, 1985).

   The second set of scales were multiple descriptors of each of the five forms of power arranged in a Likert type format. The advantage of this technique was that a variety of descriptions for each form of social power could be generated which overcame the limitations of relying solely on single item descriptors. Hence, the multi-item Likert scale had greater flexibility than the single item Thurstone scale.

Unlike the Thurstone procedure though, Likert scales are really at the ordinal level of measurement, although the data is commonly analyzed as interval level data.

Given the advantages and disadvantages of each technique, it is recommended that the Likert scales be the primary means for assessing the importance of the five forms of social power, as well as utilized for correlation with other behavioral items in the sport environment, including measures of satisfaction.

2. It is desirable to have more than one measure of the various forms of social power (Schriesheim, Hinkin, & Podsakoff, 1985). The Thurstonian paired comparison method has the potential to supplement Likert scale meaures of social power. In the present study, four of the five Thurstonian power statements appear to have been worded adequately. However, it is recommended that the wording of the "reward power" statement be altered to better depict the use of this form of power within the sport environment. It appears that the wording of the Thurstone reward power statement in the present study made the use of rewards seem more like a bribe. It is recommended that this item be reworded to indicate an emphasis on giving reward as a means of incentive or acknowledgment by the coach.

3. Podsakoff and Schriesheim (1985) state that the Likert approach would be useful for research using the French and Raven typology because it would allow for a multi-item format; however, the authors did not specify how many items would adequately describe each form of power. The present study began with ten items for each form of power. A factor analysis procedure was then done to determine which items best described each form of social power. While there was some variation in the final number of Likert items that were associated with each form of power in the present study, it appears that each form of social power could be adequately characterized by five unique items. Thus, it is recommended that the

Likert power items contained in the original instrument be reduced from 50 items to 25 items.

4. As noted above, the factor analytic procedure was successful in deriving a smaller number of items for measuring each form of social power. Internal consistency checks of the items associated with each form of power were done to confirm the appropriateness of the items. It was noted, however, that the alpha coefficient for legitimate power was considerably lower than those for the other four forms of social power. Therefore, it is recommended that new Likert items be derived to better measure the legitimate power of a coach.

5. The items contained in the "satisfaction with performance" scales did not support any of the hypotheses associated with it. It is possible that the findings from the present study demonstrate that, with the exception of reward power, there is no relationship between a coach's use of power and the athlete's satisfaction with personal sport performance. It is also possible that this lack of relationship occurred because of the different degree of specificity in the power and performance measures. The perfomance measures did assessments based on the individual. With the exception of the reward power items, the other forms of power were based on how the use of power affected the team, not just the individual. This may have resulted in incompatible differences between the two forms of measurements. In addition, the items connected with the performance scale were only used one time prior to the present study, and at that time were not subjected to any validity or reliability checks. In the present study, some construct validity was established, although the intercorrelations within this scale were lower than the intercorrelation measures of the other two satisfaction scales. As such, it is recommended that the items contained in this scale be revised in a further search for

a relationship between a coach's use of power and an athlete's satisfaction with personal performance.

E. Suggestions for Future Research

Although there has been some previous investigation concerning the use of social power, the majority of research has been carried out within business settings. The present study represents the first instance in which the use of social power has been examined within a sports setting. The results of this study were promising, and on this basis, can provide a foundation for further research on the exercise and the effects of social power in sport. The following recommendations for future research are proposed:

1. The population used in this study was limited to male high school basketball participants. In contrast to the broad spectrum of sport, this was a relatively small sample and as such, precludes any broad generalizations regarding the use of social power by coaches in sport settings. Further testing should be done using a variety of sports that have a designated coach to see whether the type of sport has a bearing on the forms of social power relied upon by the coach. Comparisons could also be made between age levels within particular sports as well as between ability levels within sport (i.e., secondary school varsity sport compared with university varsity sport and/or professional sport).

2. Research on the use of social power in sport should be extended to a comparison between male and female sport participants. It is possible that there may be gender differences with respect to whether certain forms of social power are more effective for motivating or contributing toward satisfaction in sport for females as opposed to males.

3. Although there has been some de-emphasis on the importance of winning in recent years (particularly for young participants - e.g., Curtis et al., 1979; Gould, Feltz, Weiss, & Petlichkoff, 1982; Robertson, 1981; Wankel & Kreisel, 1985a), the win-loss records of teams and coaches are still attributed considerable importance (Lacy & Darst, 1985; Lombardo, 1984). Future research could be conducted to determine whether coaches with winning records emphasize different forms of social power than coaches with losing records.

4. Like much of the research previously conducted on social power, the present study solicited assessments of the coach's use of social power from the athletes rather than from the coaches themselves. Although self-report measurement on personal behavior has some problems, future research should obtain information from the coach as well as the athletes. This could illustrate the similarities and differences between athletes and coaches with respect to the perceived use of power within the sports environment.

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Appendix A: The Questionnaire

SPORT ASSESSMENT SURVEY

There are 6 parts to this sport assessment survey. Two sections center on examining the important role the coach plays in guiding and leading athletes. The third section pertains to your personal satisfaction in the sport. The other three sections ask some general questions about sport participation and everyday events.

We are interested in **YOUR FEELINGS** concerning the sport that you are involved in. As you go through this questionnaire:

REMEMBER

THERE ARE NO RIGHT OR WRONG ANSWERS

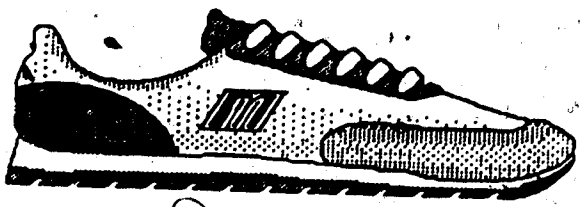
Since we are interested in your personal feelings about your sport, it is important that you **DO NOT TALK TO ANY OF YOUR TEAMMATES** while answering the questions.

If you have any questions about the questionnaire, please ask the researcher. He will be happy to answer any questions that you might have.

Your cooperation in this study will assist us in learning more about sport leadership. If we can learn more about how athletes and coaches communicate with one another, we may gain greater insight into how sport might be made a more positive experience for everyone.

All information obtained from this questionnaire is strictly confidential. No names of any of the participants, nor the names of individual schools or teams will appear in the results or write-up.

THANK YOU FOR YOUR COOPERATION



SECTION A - INTERPERSONAL INFLUENCE INVENTORY

INSTRUCTIONS

On the following page you will find 10 statements detailing how coaches might behave when dealing with athletes. You will see that each statement consists of a pair of items. You are asked to select the item from each statement that best describes your coach. For example, look at the sample statements below:

SAMPLE STATEMENTS

	Most Like My Coach			Most Like My Coach
a.	☑ Some coaches are involved in sport because they like to teach new skills.	BUT	Other coaches are involved because they like to win.	☐
b.	☐ Some coaches are involved in sport because they like the excitement of the game.	[redacted]	Other coaches are involved because they like to win.	☑

For each statement only one of the two items is chosen.

For statement "a", the item on the left ("teach new skills") was picked over the item on the right ("winning"). For statement "b", the item on the right ("winning") was picked over the item on the left ("excitement of the game").

You will notice that the item ("like to win") appeared in both sample statements. You will find that the items in the following section will appear more than once. However, each statement is a unique pairing - in other words, no two pairs of statements are precisely the same.

For each of the following statements, PICK ONLY ONE OF THE TWO ITEMS. Please do not pick both items. Even if both items seem appropriate, please only pick the one item that most characterizes your coach. Similarly, please do not ignore any of the questions. Even if both items do not seem very applicable, please pick the one item that best describes your coach.

THERE ARE NO RIGHT OR WRONG ANSWERS.

Your spontaneous and honest responses are important for the success of the study.

PLEASE TURN TO PAGE 2

	Most Like My Coach		Most Like My Coach
1.	When influencing and guiding athletes, some coaches rely on the promise of rewards.	BUT	When influencing and guiding athletes, other coaches rely on their expertise (knowledge and/or skill) in the sport.
2.	When influencing and guiding athletes, some coaches rely on their expertise (knowledge and/or skill) in the sport.	BUT	When influencing and guiding athletes, other coaches rely on the athletes' admiration and respect for them.
3.	When influencing and guiding athletes, some coaches rely on the view that they are in a position of authority.	BUT	When influencing and guiding athletes, other coaches rely on the threat of punishment.
4.	When influencing and guiding athletes, some coaches rely on the athletes' admiration and respect for them.	BUT	When influencing and guiding athletes, other coaches rely on the promise of rewards.
5.	When influencing and guiding athletes, some coaches rely on the threat of punishment.	BUT	When influencing and guiding athletes, other coaches rely on their expertise (knowledge and/or skill) in the sport.
6.	When influencing and guiding athletes, some coaches rely on the promise of rewards.	BUT	When influencing and guiding athletes, other coaches rely on view that they are in a position of authority.
7.	When influencing and guiding athletes, some coaches rely on the athletes' admiration and respect for them.	BUT	When influencing and guiding athletes, other coaches rely on the threat of punishment.
8.	When influencing and guiding athletes, some coaches rely on their expertise (knowledge and/or skill) in the sport.	BUT	When influencing and guiding athletes, other coaches rely on view that they are in a position of authority.
9.	When influencing and guiding athletes, some coaches rely on the threat of punishment.	BUT	When influencing and guiding athletes, other coaches rely on the promise of rewards.
10.	When influencing and guiding athletes some coaches rely on the view that they are in a position of authority.	BUT	When influencing and guiding athletes, other coaches rely on the athletes' admiration and respect for them.

SECTION B. PERSONAL PROFILE (A)

INSTRUCTIONS: Please circle either yes or no for each statement, and do this for all of the statements. **THERE ARE NO RIGHT OR WRONG ANSWERS.**

1. If you say you will do something, do you always keep your promise, no matter how inconvenient it might be to do so? Yes No
2. Once in a while, do you lose your temper and get angry? Yes No
3. Do you occasionally have thoughts and ideas that you would not like other people to know about? Yes No
4. Are all your habits good and desirable ones? Yes No
5. Do you sometimes gossip? Yes No

SECTION C. COACHING ATTITUDES TOWARD INFLUENCING ATHLETES

INSTRUCTIONS

Each of the statements on the following pages describes a specific behavior that a coach might exhibit when interacting with his/her athletes. For each statement, there are five choices:

(a) Strongly Agree
(b) Agree
(c) Undecided
(d) Disagree
(e) Strongly Disagree

Please circle only one letter per statement, and do this for all of the statements.

THERE ARE NO RIGHT OR WRONG ANSWERS.

Your spontaneous and honest responses are important for the success of the study.

FOR EXAMPLE:

Our coach invites the athletes over to his home. a b c d (e)

If you decided to circle "e", then you strongly disagreed with this statement.

For each of the following statements listed on the following pages, please indicate your degree of agreement or disagreement by circling the appropriate letter.

PLEASE TURN TO PAGE 4

In assessing our basketball coach, I believe that:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. The athletes on this team have admiration for the coach.	a	b	c	d	e
2. Our coach gives credit where credit is due.	a	b	c	d	e
3. Our coach is physically skilled in this sport.	a	b	c	d	e
4. Our coach rules with force.	a	b	c	d	e
5. Athletes have an obligation to accept the coach's orders.	a	b	c	d	e
6. The athletes on this team accept and share the coach's ideals of the sport.	a	b	c	d	e
7. Our coach acknowledges athletic achievement.	a	b	c	d	e
8. Our coach has had experience in this sport as an athlete.	a	b	c	d	e
9. Our coach uses punishment when athletes do not follow his/her direction.	a	b	c	d	e
10. In the pursuit of the sport, the athletes must obey the coach.	a	b	c	d	e
11. The athletes on this team have respect for the coach as a person.	a	b	c	d	e
12. Our coach changes an athlete's status within the sport after good performances (e.g. make the athlete a starter, make the athlete a team captain).	a	b	c	d	e
13. Our coach is qualified in this sport.	a	b	c	d	e
14. Our coach criticizes poor athletic performance.	a	b	c	d	e
15. Our coach is justified in telling athletes what they should be doing.	a	b	c	d	e
16. Our coach is friendly toward athletes.	a	b	c	d	e
17. Our coach rewards good athletic performance.	a	b	c	d	e
18. Our coach proficiently performs the physical skills in this sport.	a	b	c	d	e

In assessing our basketball coach, I believe that:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
19. Our coach uses punishment when athletes make mistakes in playing or performing.	a	b	c	d	e
20. Our coach has the authority to get athletes to change their behavior.	a	b	c	d	e
21. The athletes on this team model their behavior after the coach.	a	b	c	d	e
22. Our coach gives positive verbal feedback to athletes.	a	b	c	d	e
23. Our coach is knowledgeable in this sport.	a	b	c	d	e
24. Our coach uses harsh disciplinarian tactics on the athletes.	a	b	c	d	e
25. Our coach is entitled to direct the athletes' actions.	a	b	c	d	e
26. The athletes on this team like the coach.	a	b	c	d	e
27. Our coach offers rewards to athletes who participate in the sport.	a	b	c	d	e
28. Our coach has previous coaching experience in this sport.	a	b	c	d	e
29. Our coach is strict.	a	b	c	d	e
30. Our coach doesn't have to explain his/her coaching decisions to the athletes.	a	b	c	d	e
31. The athletes on this team accept and share the coach's philosophy of the sport.	a	b	c	d	e
32. Our coach downplays mistakes made by athletes in the pursuit of the sport.	a	b	c	d	e
33. Our coach is aware of new techniques in the sport as they come along.	a	b	c	d	e
34. Our coach punishes athletes who do not pay attention to the coach.	a	b	c	d	e
35. Our coach has a right to guide athletes because he/she is a school representative.	a	b	c	d	e

In assessing our basketball coach, I believe that:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
36. Our coach's actions help inspire the performances of the athletes on this team.	a	b	c	d	e
37. Our coach gives positive non-verbal feedback to athletes (e.g. smiles, pat on the back).	a	b	c	d	e
38. Our coach shows the athletes new ways to do things in the sport.	a	b	c	d	e
39. Our coach removes athletes from the team that he/she feels are uncooperative.	a	b	c	d	e
40. Our coach has the authority to make decisions on behalf of the athletes.	a	b	c	d	e
41. Our coach is a nice person.	a	b	c	d	e
42. Our coach encourages athletes.	a	b	c	d	e
43. Our coach provides good advice to the athletes on this team.	a	b	c	d	e
44. Our coach punishes athletes by giving them undesirable assignments.	a	b	c	d	e
45. Our coach expects athletes to carry out his/her wishes.	a	b	c	d	e
46. Our coach is someone that the athletes can trust.	a	b	c	d	e
47. Our coach rewards athletes by giving them opportunities for sport participation.	a	b	c	d	e
48. Our coach demonstrates the necessary skills associated with the sport.	a	b	c	d	e
49. Our coach prohibits athletes from participating in the sport whenever he/she feels such action is warranted.	a	b	c	d	e
50. The athletes are aware that the coach is authorized by the school.	a	b	c	d	e
51. I dislike my coach.	a	b	c	d	e

PLEASE TURN TO PAGE 7

Section C. Personal Opinion Inventory

Please circle your most appropriate response for each of the following statements. Please circle only one letter per statement. Please respond to all of these statements.

	Strongly Liked	Liked	Neutral	DisLiked	Strongly DisLiked
1. How well did you like playing basketball on this team this season?	a	b	c	d	e

	Very Much So	Somewhat	Neutral	Not Really	Definitely Not
2. Did you get a chance to do the things you felt you did best this season?	a	b	c	d	e
3. Did you get any feeling of accomplishment from your participation in basketball this season?	a	b	c	d	e

	Very Important	Somewhat	Neutral	Not Really	Definitely Not
4. How did you feel about your participation? Did you feel your contribution was important this season?	a	b	c	d	e

	Very Satisfied	Somewhat	Neutral	Not Really	Definitely Not
5. How satisfied were you with the way the coach handled team members this season?	a	b	c	d	e
6. How satisfied were you with the way the coach handled you this season?	a	b	c	d	e
7. How satisfied were you with the coach's decisions with respect to the team this season?	a	b	c	d	e

	Very Important	Somewhat	Neutral	Not Really	Definitely Not
8. How important was the coach's influence over you this season?	a	b	c	d	e

	Very Satisfied	Somewhat	Neutral	Not Really	Definitely Not
9. How satisfied were you with your overall performance this season?	a	b	c	d	e
10. How satisfied were you with specific skill improvement this season?	a	b	c	d	e
11. How satisfied were you with the effort you put into the sport this season?	a	b	c	d	e

	Much Lower	Below	As Expected	Above	Much Higher
12. What is your assessment of your performance in relation to what you had expected to achieve this season?	a	b	c	d	e

SECTION E. PERSONAL PROFILE (B)

INSTRUCTIONS: Please circle either yes or no for each statement, and do this for all of the statements. **THERE ARE NO RIGHT OR WRONG ANSWERS.**

1. Would you always declare everything at the customs, even if you knew that you could never be found out?	Yes	No
2. Have you ever been late for an appointment or school?	Yes	No
3. Of all the people you know, are there some who you definitely do not like?	Yes	No
4. Do you sometimes talk about things you know nothing about?	Yes	No

SECTION F. SPORT PROFILE

Instructions:

Please answer each of the following statements.

1. Year of Birth _____

2. Please indicate your current Grade: Ó Grade 10 Ó Grade 11 Ó Grade 12

3. Seasons of experience as an athlete in this sport (including current season) _____

4. Do you participate in any other school sponsored sports (do not include intramurals):

   Ó No Ó Yes

   If yes, please list these sports: _____

   _____

5. Do you participate in organized sport outside the school (e.g., Track & Field Club, Soccer, etc.):

   Ó No Ó Yes

   If yes, please list these sports: _____

   _____

Thank you for your cooperation. Please return this booklet to the researcher.

Appendix B: All Values Associated with the 29 Item Factor Analytic Solution

Table 18

Factor Analytic Solution of the 29 Likert Power Items (All Factor Scores Shown)

Factors	1	2	3	4	5	Total
1 Referent Power						
Admire coach	.85	-.04	.18	.15	.14	
Respect coach as a person	.85	-.10	.07	.21	.08	
Like coach	.84	-.13	.16	.13	.14	
Share coach's sport ideals	.83	-.04	.13	.11	.03	
Share coach's sport philosophy	.82	.00	.19	.07	.20	
Model behavior after coach	.63	.13	.13	.04	.06	
2 Coercive Power						
Athletes punished when mistakes made when playing/performing	-.13	.76	.00	-.05	-.04	
Athletes punished when they don't pay attention	-.13	.72	.01	.12	-.06	
Harsh disciplinarian tactics used	.13	.71	-.03	-.21	-.24	
Athletes punished when they don't follow directions	-.16	.68	.07	.08	.05	
Coach rules with force	.19	.66	-.12	.01	.20	
Coach is strict	.31	.63	.03	-.16	.15	
Athletes punished by receiving undesirable assignments	-.14	.47	-.27	-.02	-.29	
Athletes prohibited from playing when coach feels it warranted	-.12	.36	-.18	.20	.26	
3 Reward Power						
Good athletic performance rewarded	.07	-.03	.82	.12	.05	
Athletic achievement acknowledged	.19	.00	.72	.19	-.02	
Credit given where credit due	.33	.14	.68	.12	-.10	
Positive verbal feedback given	.33	-.17	.62	.01	.01	
Athletes rewarded by getting chances to participate in sport	.21	-.22	.58	.10	.29	
Rewards offered to athletes who play the sport	-.12	-.08	.52	-.01	.08	
Athletes rewarded by getting change of status after good performances	.17	.25	.44	.14	-.10	

Table 18 (Con't)

Factors	1	2	3	4	5	Total
4 Expert Power						
Coach physically skilled in sport	.23	.03	.10	.85	.05	
Coach proficiently performs physical skills of sport	.03	.11	.18	.82	.08	
Coach has experience in sport as an athlete	.15	-.09	.04	.76	-.07	
Coach demonstrates skills associated with sport	.19	-.08	.24	.74	.13	
5 Legitimate Power						
Coaching decisions not explained to athletes	.12	.11	.01	.02	.72	
Coach is a school representative	.05	.05	.03	-.12	.71	
Coach is authorized by school	.20	-.07	-.04	.17	.60	
Coach is justified in telling athletes what to do	.13	-.12	.30	.12	.42	
Eigenvalue	6.65	3.50	2.46	2.09	1.74	
% Variance	22.90	12.10	8.50	7.20	6.00	56.7

Appendix C: Mean and Percentage Descriptions of the Items Used in the Factor Analytic Solution

A breakdown of the means, standard deviations and percentages of agreement of each of the 29 items used in the factor analytic solution can be found in Table 19. The means for each of the items ranged from a low of 2.16 to a high of 4.21 (on a 5 point scale). A full breakdown of the percentage of respondents indicating each of the five possible responses for each of the items is also presented in this table. In addition to the use of mean scores as well as the summed total of the percentages of respondents indicating either agreement or strong agreement with the Likert items, the rationale of the Likert items used in the final solution will be discussed in terms of the original definitions of each form of social power postulated by French and Raven (1959) and other related literature.

The first factor, referent power, contains six items. Three of these are statements on the athletes' admiration, respect and liking of their coach. The remaining three items reflect the athletes' desire to share their coach's ideals and philosophy of the sport and to model their behavior after the coach. In Table 19, it can be seen that a good proportion of the athletes felt that their coaches had referent power. With the exception of the "modelling behavior" item, all of the other variables associated with referent power had high mean scores (above 3.00) and percentages of agreement over 50%. In contrast, only 20.8% of the respondents ($\underline{M}$ = 2.68) agreed that they modelled their behavior after the coach. The athletes felt it was quite important to respect, like and admire the coach. Moreover, they had positive feelings toward sharing sport philosophy and sport ideals with the coach. If done carefully, it is possible that coaches who share their philosopy and ideals with the athletes might use this in establishing a conducive learning atmosphere between the coach and the athleres.

Overall, there were mixed feelings among the respondents in the present study with respect to the extent that their coach relied on coercive power. Four of these items pertain to particular actions that might warrant punishment. The data in Table 19 indicates that just over one third of the respondents agreed that the coach would punish athletes who did not pay attention (37.4% agreement; $\underline{M}$= 3.11) or who did not follow the coach's directions

Table 19

Means, Standard Deviations and Percentages of Agreement of Likert Power Items used in the Factor Analytic Solution.

Items	Mean	St. Dev.	Percentage of Agreement S.A.	A.	N.	D.	S.D.
1. Referent Power							
Admire coach	3.64	1.27	32.2	29.6	13.9	18.3	6.1
Respect coach as a person	3.84	1.17	34.8	33.9	17.4	7.8	6.1
Like coach	3.73	1.15	32.2	28.7	22.6	13.0	3.5
Share coach's sport ideals	3.54	1.16	19.1	45.2	12.2	17.4	6.1
Share coach's sport philosophy	3.40	1.11	14.8	40.9	18.3	21.7	4.3
Model behavior after coach	2.68	1.03	4.3	16.5	33.9	33.0	12.2
2. Coercive Power							
Punished when mistakes made	2.73	1.07	5.2	18.3	33.9	29.6	13.0
Punished when not paying attention	3.11	1.08	10.4	27.0	32.2	24.3	6.1
Harsh disciplinarian tactics used	2.18	1.02	0.9	13.2	16.7	41.2	28.1
Punished when directions not followed	2.94	1.17	8.7	27.0	26.1	26.1	12.2
Rules with force	2.73	1.05	5.2	16.5	37.4	27.8	13.0
Coach is strict	3.05	1.17	10.4	28.7	27.0	23.5	10.4
Punished by receiving undesirable assign.	2.16	1.00	1.7	10.4	16.5	44.3	27.0
Participation prohibited when coach feels it warranted	3.41	0.85	7.0	42.5	35.7	13.9	0.9
3. Reward Power							
Rewards good athletic performance	3.81	0.80	17.5	51.8	24.6	6.1	0.0
Acknowledges athletic achievement	3.97	0.87	27.2	50.0	15.8	6.1	0.9
Credit given when due	4.06	0.90	34.8	45.2	11.3	8.7	0.0
Positive verbal feedback given	3.94	0.79	22.6	53.9	18.3	5.2	0.0

Table 19 (Con't)

Items	Mean	St. Dev.	Percentage of Agreement S.A.	A.	N.	D.	S.D.
3. Reward Power							
Rewarded by opportunity for sport participation	3.84	0.88	21.9	48.2	23.7	4.4	1.8
Rewards given to those participating in sport	3.09	1.04	6.1	31.3	36.5	17.4	8.7
Status changed after good performances	3.61	1.13	21.7	41.7	17.4	13.9	5.2
4. Expert Power							
Coach physically skilled	3.86	1.15	36.5	31.3	18.3	9.6	4.3
Coach proficiently performs skills	3.79	0.99	23.0	47.8	15.9	11.5	1.8
Coach has experience as an athlete	4.21	1.05	52.2	28.7	9.6	7.0	2.6
Coach demonstrates skills of the sport	4.07	0.91	34.8	47.0	8.7	9.6	0.0
5. Legitimate Power							
Coach doesn't have to explain coaching decisions to athletes	3.00	1.15	8.0	31.9	22.1	28.3	9.7
Coach is a school representative	3.31	1.06	9.6	41 7	25.2	17.4	6.1
Coach authorized by school	3.95	0.90	25.2	53.9	13.9	4.3	2.6
Coach justified in telling athletes what to do	4.19	0.73	34.2	54.4	7.9	3.5	0.0

(35.7% agreement; M= 2.94). Agreement was lower, however, with respect to a coach punishing athletes who made mistakes when playing/performing (23.5% agreement; M= 2.73) or a coach punishing athletes by giving them undesirable assignments (12.1% agreement; M= 2.16).

The other four items are descriptors of general coercive behavior that the coach could exhibit in his interaction with the athletes. Even here, the athletes felt that the coach was not overly punitive with the athletes. For instance, very few athletes believed that the coach used harsh disciplinarian tactics (14.1% agreement; M= 2.18) or "ruled with force" (21.7% agreement; M= 2.73); however, a larger percentage of respondents felt that their coach was strict (39.1% agreement; M= 3.05) or that he prohibited athletes from participating in the sport when he felt such action was warranted (49.6% agreement; M= 3.41).

In the present study, four of the seven items derived for the reward factor describe instances where the coach provides feedback to the athletes with respect to their performance. In Table 19, it can be seen that 76.5% of the respondents (M= 3.94) felt that the coach gave positive verbal feedback to them as they participated in the sport. Similar percentages of agreement were noted for a coach giving credit to the athletes where credit is due (80% agreement; M= 3.94) acknowledging athletic achievement (77.2% agreement; M= 3.97), and rewarding good athletic performance (69.3% agreement; M= 3.81).

Two of the remaining three items detailed specific types of reward that coaches might administer to their athletes. The agreement with these forms of rewarding behaviors were generally positive, though somewhat lower than the athletes' agreement with the more general forms of rewarding behavior. For instance, a coach granting a reward in the form of an opportunity for sport participation was acknowledged by 70.1% of the respondents (M= 3.84), while a reward in the form of a change of athletic status after a good performance was agreed upon by 63.4% of the respondents (M= 3.61). The last Likert item associated with reward power was a general statement suggesting that rewards be

given to those who participate in the sport. This was the lowest rated of all the Likert reward items - only 37.4% of the respondents (M= 3.09) believed that their coach acted in this manner.

Four items made up the expert power factor - all of them describe the coach's physical expertise in the sport. Table 19 shows that the means and percentages of agreement associated with these items were all very high. In terms of percentage, 67.8% of the athletes (M= 3.86) believed that their coach was physically skilled in the sport; 80.8% (M= 3.79) noted that the coach proficiently performed the skills of the sport; 80.9% (M= 4.21) indicated that the coach had experience as an athlete in the sport; and 81.8% of the respondents (M= 4.07) indicated that their coach demonstrated the necessary skills associated with the sport.

Four items were associated with this factor. Two of these items defined the coach's position relative to the school. Although 79.1% (M= 3.95) were aware that the coach was authorized by the school, only 51.3% of the respondents (M= 3.31) saw the coach as a school representative. The other two items described the position of authority that the coach had over the athletes. The agreement expressed by the respondents was somewhat mixed. There was an overwhelming agreement (88.6%; M= 4.19) that the coach was justified in telling athletes what they should be doing. This may be somewhat related to the athletes' overall belief in the expertise that their coaches have in the sport. However, only 39.9% of the athletes (M= 3.00) agreed that their coach did not have to explain coaching decisions to them. This may be an example of athletes trying to distinguish between the legitimate "right" that the coach has to take an autocratic position from other, more democratic courses of action available to the coach. For instance, some studies have noted the positive experiences gained from allowing followers to share in the decision-making (Chelladurai, 1984a; 1984b; Tannenbaum & Schmidt, 1958; Weiss & Friedrichs, 1986). Gordon (1985), however, found that Canadian university soccer coaches did not like relinquishing the power of decision-making, and felt that they should retain this authority

because they had more experience with the demands of teams, players and competition situations. Gordon added that the legitimacy of coaches to make the decisions is almost a given, and that it might "even be unreasonable to assume that athletes would expect and/or prefer anything else from their soccer coach because traditionally the 'boss' usually commands and directs both team and individual affairs" (p. 92).

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March 4, 1988

Dr. David Kipnis
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Dear Dr. Kipnis:

I am a graduate student in Physcial Edcuation and Sport Studies at the University of Alberta. At the present time, I am currently completing my doctoral dissertation on the use of power in a sport environment. The reason that I am writing to you is that I would like your permission to reproduce one of your models of leadership in my thesis, this being the "The power act from the powerholder's perspective" which appeared in your article "The Powerholder," from J.T. Tedeschi's edited book Perspectives on Social Power (1974). A copy of the model is enclosed with this letter.

Our Faculty of Graduate Studies has a requirement that students using previously copyrighted material in their thesis must include, with their thesis, a letter of permission from the person holding the copyright. This letter must accompany the thesis when final copies are presented to the Faculty of Graduate Studies and Research. My deadline for submission of this thesis is April 15, 1988 for our university's spring convocation.

I would appreciate it if you would give me written permission to reproduce this model.

Yours sincerely,

Phil Kreisel

Phil Kreisel, M.A.

March 21, 1988

Dear Mr. Kreisel,

You have my permission to reproduce my model of leadership reproduced in the Powerholder

David Kipnis

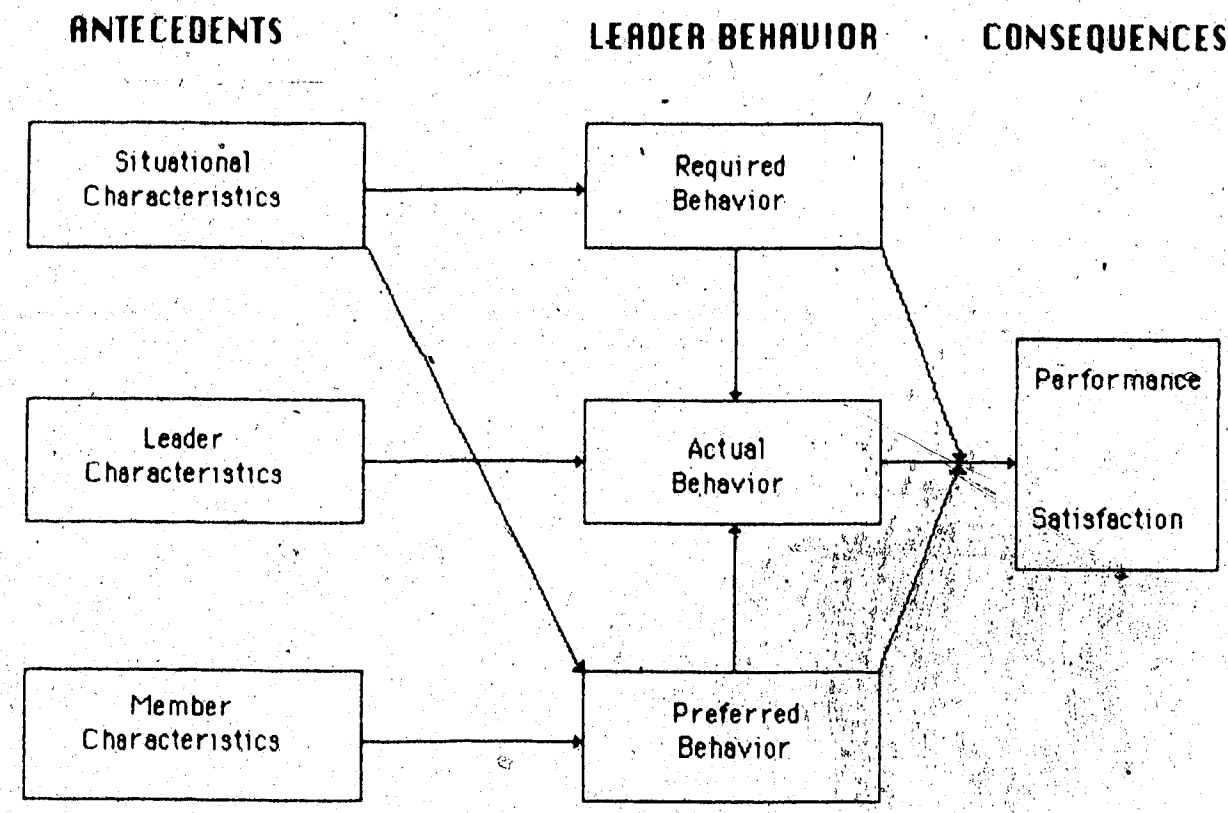

Figure 2 A Multidimensional Model of Leadership

(Chelladurai, 1984b, p.338)

PERMISSION GRANTED.

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