Coaching Behaviors in Youth Sports

A Thesis
Presented to the Department of Psychology and the Faculty of the Graduate College University of Nebraska at Omaha

by
Mary Elizabeth Davis
July 1992
THESIS ACCEPTANCE

Acceptance for the faculty of the Graduate College, University of Nebraska at Omaha.

Committee

<table>
<thead>
<tr>
<th>Name</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wayne Hansen</td>
<td>Psychology</td>
</tr>
<tr>
<td>Richard L. Tschiff</td>
<td>Psychology</td>
</tr>
<tr>
<td>Vic Berg</td>
<td>H.P.E.R</td>
</tr>
</tbody>
</table>

Chairman: James M. Thomas

Date: June 27, 1991
Acknowledgements

Completion of this research would not have been possible without the support I received from the Fremont YMCA, The Omaha YMCA's, and the Omaha Public School District. This project was also funded in part by the University Committee on Research. Appreciation is extended to my committee consisting of Drs. Wayne Harrison, Richard Wikoff, and Kris Berg for their helpful suggestions and comments while overseeing this project. I would like to direct thanks to my advisor, Dr. James Thomas, for his thoughtful insights, guidance, and friendship graciously offered to me during this time in my life.

I would also like to recognize Richard Anderson, Betty Inglett, and Michelle Harrison for either helping with data collection or providing moral support. Finally, I wish to thank to my parents who have supported every endeavor I have attempted while striving to instill within me a valuable work ethic and sense of unconditional worth.
<table>
<thead>
<tr>
<th>TABLE OF CONTENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>LIST OF TABLES</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
</tr>
<tr>
<td>ABSTRACT</td>
</tr>
<tr>
<td>Chapter</td>
</tr>
<tr>
<td>I. Introduction</td>
</tr>
<tr>
<td>Prevalent...</td>
</tr>
<tr>
<td>Junior High Level</td>
</tr>
<tr>
<td>Self-Concept</td>
</tr>
<tr>
<td>Self-Efficacy</td>
</tr>
<tr>
<td>Leadership</td>
</tr>
<tr>
<td>Measuring...</td>
</tr>
<tr>
<td>Subordinate...</td>
</tr>
<tr>
<td>Behavioral...</td>
</tr>
<tr>
<td>Leadership...</td>
</tr>
<tr>
<td>Coaching...</td>
</tr>
<tr>
<td>Purpose of the Study</td>
</tr>
<tr>
<td>Hypotheses</td>
</tr>
<tr>
<td>II. Study One</td>
</tr>
</tbody>
</table>
Table of Contents (continued)

Method ............................................................... 20
Subjects ........................................................................................................ 20
Materials ................................................................................................. 20
Procedure ............................................................................................... 21
Results ................................................................................................... 21

III. Study Two ......................................................... 23
Method .................................................................................. 23
Subject ............................................................................................... 23
Materials ............................................................................................... 23
Procedure ............................................................................................... 23
Team Level Analysis ........................................................................... 25
Player Level Analysis ........................................................................ 33

IV. Discussion .............................................................. 38

V. References ............................................................................... 47

VI. Appendix A: Sixty-five Coaching Behaviors Survey ............... 57

VII. Appendix B: Means and Standard Deviations
    for the Sixty-five Coaching Behaviors ........................................... 70

VIII. Appendix C: Inter-item Correlations for the
     Championship and Developmental Subscales ......................... 73
Table of Contents (continued)

IX. Appendix D: Player Survey of Coaching Behaviors ............... 75
## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Descriptive Statistics for Team Level Variables</td>
<td>26</td>
</tr>
<tr>
<td>2 Hierarchical Regression Analyses at Team Level</td>
<td>29</td>
</tr>
<tr>
<td>3 Descriptive Statistics for Individual Level Variables</td>
<td>36</td>
</tr>
<tr>
<td>4 Hierarchical Regression Analyses at Individual Level</td>
<td>37</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Path Analytic-type Diagram at Team Level</td>
<td>32</td>
</tr>
<tr>
<td>2 Categorization of Coaches</td>
<td>34</td>
</tr>
<tr>
<td>3 Path Analytic-type Diagram at Individual Level</td>
<td>39</td>
</tr>
</tbody>
</table>
Abstract

Cooper (1980) identified two models of organizing and supervising youth sport participants. The first is the Championship model, characterized by an emphasis on competition and winning; the Developmental model, with the emphasis being on the development of basic skills, rules, and strategies of the game. Most importantly the Developmental model stresses that all players should be allowed the opportunity to enjoy participating in the sport. The present research was intended to develop a means to reliably categorize a coach as adhering to a Championship or Developmental orientation and subsequently determine what effect the orientation would have on participants’ satisfaction with participating on the team, intentions to continue participating, and win percentage for the team. Twenty-two specific behaviors were identified as being representative of either the Championship or Developmental model by having subject matter experts in the area of youth sports generate ratings on each dimension. Subjects consisted of 326 seventh- and eighth-grade boys participating in organized basketball. Data from 60 teams were utilized for group level analysis. Athletes’ perceptions were obtained by having them rate the frequency with which their coaches displayed Championship or Developmental behaviors. Players’ perceptions of satisfaction, intentions to continue participating, and ability level were also collected via survey. Hierarchical regression analyses
were used at both the team and individual levels to determine what effect a coach's orientation would have on satisfaction with participating on the team and intentions to continue participating. Analyses at the individual level revealed that the Developmental orientation was the only variable to account for a significant amount of variance in the satisfaction variable. Satisfaction with the team and perceived ability level produced significant Beta values in predicting intentions to continue participating. Team level analyses indicated that win percentage and a Developmental orientation were the only significant predictors of satisfaction with the team. Ability level was found to be the only significant predictor of intentions to continue participating at the team level. Analysis of variance indicated that no significant difference existed between the win percentage for those coaches identified as Developmentally or Championship oriented. Taken as a whole these results indicated that youth sport participants would ultimately benefit from having coaches who exemplify a Developmental orientation.
Coaching Behaviors in Youth Sports

There are approximately 25 million young persons between the ages of 6 and 18 participating in some form of organized youth sport program across the United States (Martens, 1986). One area of concern is the high attrition rate that exists for youth sport participants. Gould and Petlichkoff (1988) have estimated the dropout rate from youth sport programs to be approximately 35%. One of the most vulnerable periods for exiting the youth sport experience seems to be at the junior high age level, those children between the ages of 11 and 13 (Gould & Horn, 1984).

In an attempt to understand why some youths decide to terminate their participation in sport programs, Orlick (1973, 1974) conducted in-depth interviews with 92 children who had dropped out of youth sport programs. Among the reasons reported during the interviews were lack of playing time and various detrimental psychological effects resulting from an overemphasis on competition. An extensive study investigating American attitudes towards sports reported that 86% of parents involved in the study indicated concern about the overemphasis placed on winning in children's sport programs and the lack of effort devoted to the children's physical and psychological development (Miller Brewing Company, 1983).

The coach has been identified as the individual in the "athletic triad"
(i.e., the child, parent, and coach) that most directly influences the team and determines whether the youth sport experience will be a positive one for the children involved (Martens, 1978; Smith, Smoll, & Curtis, 1979; Synder & Sprietzer, 1976). Concern for the psychological well being of children who participate in organized youth sports is one reason for the interest and energy devoted to the investigation of coaching behaviors. The need for more research examining the effects of coaching behaviors on youth sport participants in natural settings has been repeatedly recognized (Martens, 1978; Smith & Smoll, 1978; Scanlan & Lewthwaite, 1986; Wandzilak, Ansorge, & Potter, 1988). Specifically, it seems worthwhile to investigate how a coach's orientation toward winning and development is translated into behaviors that potentially might affect the players. The initial stages of such an investigation include the formulation of important potential coaching orientations and identification of the behaviors that are representative of these orientations.

Cooper (1980) has suggested that two coaching orientations exist in the youth sport environment, a Championship orientation and a Developmental orientation. The types of behavior coaches display may depend on the orientation to which they adhere.

The intentions of the present study were to identify behaviors that are representative of the two coaching orientations proposed by Cooper,
and to investigate the potential relationships between coaches’ orientations and the overall performance of the team as well as players’ reports of satisfaction with having participated, satisfaction with the coach, and the intention to terminate or continue involvement in youth sports. The age group of interest in the present field study is at the junior high level.

**Prevalent Psychological Concerns At Junior High Level**

**Self-Concept.** The junior high age level coincides with the onset of adolescence, a time when it has been suggested that the development of one’s self-concept and identity are major concerns (Erikson, 1963). Although the development of one’s self-concept is important throughout all stages of life, it may be the most problematic during adolescence (Rosenberg, 1985). Lowenthal, Thurner, and Chiriboga (1975) conducted interviews with a cross-section of people at various life stages and found that 40% of the people identified adolescence as the worst time in their lives because self-directed negative attitudes and self-criticism were prominent. Erikson (1963) has suggested that a deficient or negative development of the self during adolescence is so pervasive that it carries over into adulthood.

**Personal experiences and evaluations obtained from significant others influence the formation of one’s self-concept** (Rogers, 1959; Wylie, 1974). During this formative stage of adolescence, youths are especially vulnerable
to external influences such as those resulting from interactions with peers and with individuals in leadership positions. Gould (1987) provided guidelines youth sport coaches may choose to follow so as to encourage the development of positive self-concepts within the players. Gould's suggestions include creating a supportive atmosphere; assuring the participants that their acceptance is not contingent on game performance; providing the children with constructive criticism which is directed at the child's actions and not at the child as a person; de-emphasizing the importance of "beating" opponents; and redefining the meaning of success so the experiences children carry away with them are building blocks for the development of positive self-concepts.

**Self-Efficacy.** Children whose motor and skill development is behind that of their peers may not be allowed the same amount of practice or playing time and, thus, may not develop the belief that they can master the behaviors required to successfully and actively participate in a particular sport. The perception that one can perform the behaviors necessary to lead to a desired outcome has been termed self-efficacy (Bandura, 1977). One's perceived self-efficacy can indirectly influence performance by affecting the intensity and persistence of effort (Bandura, Adams, & Beyer, 1977). Increased expenditure of effort has the potential to compensate for lack of ability (Kun, 1977). Efficacy expectations may also dictate activities
in which an individual will choose to participate. For example, if a child has low self-efficacy for mastering the skills required to play in a sport such as basketball, it is more than likely that the child will not continue to participate. Field studies have also shown that perceived self-efficacy of athletes is positively correlated with their performance (Barling & Abel, 1983; Lee, 1982; McAuley & Gill, 1983).

Bandura's research has identified four main factors that influence efficacy expectations: (a) personal mastery experiences, (b) mastery experiences of others (i.e., vicarious learning or modeling), (c) verbal persuasion, and (d) emotional arousal (e.g., anxiety or stress levels). The position of the coach offers the opportunity to provide stimuli that affect the development and strength of player efficacy expectations. The presence of verbal persuasion and modeling can produce greater sustained effort to master skills (Bandura, 1977). Bandura et al. (1977) report that while verbal encouragement, modeling, and emotional state do influence efficacy expectations, personal mastery produces the greatest and most enduring feelings of self-efficacy. A coach has the opportunity to create situations in which a child is encouraged and allowed to actually perform the skills of the sport. For many children, participating at the junior high level is the final opportunity to develop self-efficacy for mastering the requisite athletic skills to participate because high school and college
athletic environments emphasize the fine tuning and expansion of skill development, not basic skill acquisition.

Leadership

Repeatedly, the sport arena has been used to study both the role of the coach as a leader and the subsequent interactions between the coach and the player (Case, 1987; Curtis, Smith, & Smoll, 1978; Smith, Zane, Smoll, & Coppel, 1983). In effect, the coach of a team occupies a leadership position much like the manager of a work group in an organization (Anderson, Crowell, Doman, & Howard, 1988). Parallel to a work environment being influenced by the leadership style possessed by the supervisor, the athletic environment is a reflection of the coaching philosophy or orientation a coach may possess. A general definition or description of a leader is one who exerts influence on a group and its members, focusing on the attainment of predetermined goals (Wexley & Yukl, 1984). The coach of an athletic team would certainly fit this general definition of a leader (Ball, 1975). Therefore, it seems appropriate to examine the literature from the field of Industrial/Organizational psychology concerned with leadership behavior and, subsequently, the instruments developed to measure such behaviors.

Measuring dimensions of leadership. Throughout the leadership research, attention has been devoted to identifying and measuring
orientations or "styles" that group leaders possess. An integral part of these investigative endeavors focuses on the assessment of potential relationships between salient leader orientations and such factors as group production, satisfaction, team cohesiveness, and turnover (Yukl, 1981). Assuming the leadership role of the coach in the athletic environment is somewhat analogous to that of a manager in the work situation, it is logical to develop types of instruments to assess coaching orientations that are similar to those used with managers. It is also reasonable to investigate the subsequent effects coaching orientations have on the players being supervised.

Early research on leadership focused on the physical characteristics and traits of "good" leaders. In toto, these early investigative efforts failed to corroborate the premise that certain personality characteristics or traits distinguish leaders from non-leaders (Stogdill, 1948). More recently, the trait approach to leadership was revised by focusing on the relationship between patterns of leader traits and leader effectiveness (Stogdill, 1974).

Research on the revised trait theory of leadership produced more conclusive and consistent findings. These in part were due to methodological improvements which focused on the assessment of job irrelevant traits and skills and took into account situational considerations (Yukl, 1981).

Fiedler (1967, 1978) investigated the area of leader effectiveness by
making use of a self-report type of leader trait measure called the
Least-preferred Co-worker Scale (LPC). According to Fiedler, those
individuals receiving a low score on the LPC are primarily concerned with
the achievement of task objectives, while those persons scoring high on the
LPC tend to be relationship oriented and motivated to improve relations
between group members. In predicting leader effectiveness, Fiedler’s
Contingency Model takes into account the interaction or fit between the
favorableness of the situation and the leader’s trait orientation. Although
there has been some controversy about what construct the LPC actually
measures, a thorough review of the past 25 years of research examining
the LPC scale supported Fiedler’s primary claim that individuals scoring
low on the LPC are task-oriented, and those scoring high on the LPC are
relationship-oriented (Rice, 1978).

Leadership studies conducted at Ohio State University identified two
factors, consideration and initiating structure, which emerged as major
leadership behavior dimensions (Fleishman, 1953; Halpin & Winer, 1957).
Stogdill (1963), utilizing the Leader Behavior Description
Questionnaire-Form XII (LBDQ XII), found that 12 scale items tended to
load on two factors identified as person-oriented and system-oriented.
Overall, the LBDQ XII is composed of 12 dimensions; however, in a review
of literature on the LBDQ XII, Cook, Hepworth, Wall, & Warr (1981)
report that the complete form of the LBDQ XII utilizing all 12 of the dimensions is rarely used. Cook et al. indicated that the two subscales of initiating structure and consideration are the dimensions most commonly used.

Research relating to the development of the LBDQ and subsequently to the two integral dimensions of leadership, initiating structure and consideration, has identified behaviors representative of each dimension (Fleishman, 1957; Halpin & Winer, 1957; Hemphill & Coons, 1957). Items associated with the consideration dimension describe behaviors indicative of respect for the integrity of group members, mutual trust, friendship, and recognition of a group member's accomplishments and contributions. Items on the initiating structure dimension largely reflect leader behaviors such as defining and organizing interactions within the group, directing group members, pressuring members to improve performance, and criticizing poor work (Fleishman & Peters, 1962). Fleishman & Harris (1962) reported the existence of a curvilinear relationship reflecting significantly lower turnover and number of grievances for those supervisors having a high score on the consideration dimension; while those supervisors having a high initiating structure score or low consideration score had more grievances and higher turnover. Although initially presented as independent dimensions, correlations between the subscales of consideration and initiating structure
have been reported to range from 0.31 to 0.58 (Sheridan & Vredenburgh, 1979; Szilagyi & Keller, 1976; Valenzi & Dressler, 1978).

The Supervisory Behavior Description Questionnaire (SBDQ) was based on the LBDQ but was revised to improve its usefulness in an industrial setting (Fleishman, 1957). The items on the consideration dimension are virtually the same as those on the LBDQ, but the items on the initiating structure dimension primarily describe behaviors that are autocratic, punitive, and production-oriented (Schriesheim, House, & Kerr, 1976). The subscale intercorrelations for the SBDQ range from -0.02 to 0.47 (Downey, Sheridan, & Slocum, 1976; Wherry, Campbell, & Perloff, 1951). If there is conceptual similarity between the initiating structure and consideration dimensions and the Championship and Developmental orientations, respectively, this research suggests that the Championship and Developmental orientations may not be completely independent of each other.

Leadership studies were also being conducted at Michigan University at approximately the same time as the ones at Ohio State. Michigan’s investigative efforts were concerned with the effectiveness of managerial behaviors. The comparison of more effective managers to less effective managers gave rise to the identification of two leader behavioral profiles very similar to the ones established by the Ohio State studies. One profile
was oriented more toward employees and their needs, while the other was focused on production (McCormick & Ilgen, 1980). It was also revealed that the more effective managers engaged in a supervisory style that was more general and encouraged participation by subordinates in decision making rather than closely supervising employees in an autocratic manner (Yukl, 1981). One conclusion drawn from the Michigan studies was that those leaders who engaged in employee-centered behaviors tended to have subordinates who were more satisfied and more productive than those leaders who were primarily oriented to the tasks of the job and subsequent production (Likert, 1961).

**Subordinate perceptions.** A procedural commonality in the Ohio State and Michigan approaches is that leader orientations toward initiating structure and consideration were measured through subordinate perceptions of the frequency with which supervisors exhibit those behaviors representative of each dimension. Subordinates are in positions that allow frequent interactions with the leader thus providing them with ample opportunity to actually observe the leader’s behaviors. Cascio (1987) emphasizes the importance of using individuals who have firsthand knowledge or experience with the person’s behavior or performance they will be rating. Subordinate ratings of a leader’s behaviors have been identified as potentially valid sources of
information; especially when averaged across raters (Bernardin, 1979; Bernardin & Beatty, 1984; Cascio, 1987). In the area of sports leadership, Wandzilak, Ansorge, and Potter (1988) found that the team players were significantly more accurate at estimating the actual behaviors of their coach than was the coach himself.

Behavioral observation scales. Behavioral observation scales (BOS) are commonly used in instruments developed to assess leader behaviors. The BOS is based on a Likert-type (summative) format (Latham & Wexley, 1977). The initial step in the development of a BOS typically involves collecting a large number of critical incidents or statements relevant to the position in question. Individuals are then observed and rated (typically on a five-point scale) as to the frequency with which they engage in each behavior previously identified as being job relevant (Latham & Wexley, 1977). Factor analytic techniques can be used to determine the appropriate number of behavioral dimensions in those rare instances when a sufficient sample size is available. With smaller samples, item analysis is an acceptable method for determining the dimension within which the item lies (Latham, Fay, & Saari, 1979). Another option suggested by Latham et al. is a qualitative approach to categorize behavioral items when a large enough sample does not exist to rate the items. This method involves having subject matter experts group similar behavioral items together to
form distinct categories or dimensions. Once the dimension to which an item belongs has been identified, a BOS format may be used to assess the frequency with which an individual engages in the behaviors. Latham et al. indicate that a total dimension score for an individual may be obtained by summing the ratings on the behavioral items within that dimension. By utilizing a BOS format, the rater is simply required to report the frequency with which behaviors have actually been observed during the period of assessment. In the present study, a procedure similar to the Latham, Fay, and Saari (1979) approach was used to categorize a variety of coaching behaviors into a priori dimensions suggested by Cooper (1981).

**Leadership Behavior In Sports**

Past literature concerning leadership in sports has often portrayed coaches as authoritarians, driven by the goal of winning to the exclusion of everything else (Eitzen, 1989; Michener, 1976; Underwood, 1984). This orientation toward winning at all costs appears to be somewhat similar to the leadership dimension referred to as initiating structure (particularly as described by the SBDQ). Alternatively, a coaching orientation primarily concerned with the welfare of the athlete and team could indicate the existence of leader characteristics similar to the leadership dimension labeled consideration.

In order to examine coaching behaviors, Smith, Smoll, and Hunt (1978)
developed a 12-category Coaching Behavior Assessment System (CBAS) using social learning theory as its basis. Initially, soccer coaches were observed during practices and games. The coaches' behaviors were recorded using a time-sampling approach. Behavioral categories were established by content analyzing the coaching behaviors consistent with concepts from social learning theory (Smith, Smoll, & Hunt, 1977).

CBAS uses trained raters to systematically observe and record two major classes of youth sport behaviors in field settings. The two classes of coaching behaviors are identified as reactive behaviors and spontaneous behaviors. The reactive and spontaneous behaviors are similar to elicited and emitted behaviors, respectively. Eight specific reactive and four specific spontaneous categories were defined and developed for coding purposes. The CBAS has been used as an aid in the training of youth sport coaches. Smith, Smoll, and Curtis (1979) reported that those children who played for coaches trained using the CBAS were shown to have significant increases in overall self-esteem when compared to the self-esteem scores of the players whose coaches had not been trained. A modified version of the CBAS was used to investigate the relationship between coaching behaviors and players' post-season attitudes, specifically, attitudes toward the sport and the coach (Smith, Zane, Smoll, & Coppel, 1983). Smith et al. found that coaching behaviors, as identified by the the
CBAS, significantly accounted for 53% of the variance in player attitudes toward the sport and 42% of the variance in evaluations of the coach.

Results from an in-depth analysis of a group of youth sport participants indicated that a positive correlation existed between the participants' reports of enjoyment and intentions of continuing their involvement in the sport (Scanlan & Lewthwaite, 1986). Findings from an earlier study conducted by Scanlan and Lewthwaite (1984) indicated that an inverse relationship existed between the amount of fun youth sport participants had and their levels of postcompetition stress. Adult influences (e.g., coaching behaviors) perceived to be positive were also found to be positively related to players' reports of enjoyment.

Coaching Behavior Assessment

Cooper (1980) has proposed two models of organization and supervision that affect the goals and objectives of the youth sport experience. The Championship Model is characterized by an emphasis on competition, recruitment and selection of more talented athletes; measurement of success by the won-loss records; exclusive granting of a greater amount of playing time to the more talented athletes; and performance evaluation based upon competence and ability. As an alternative to the Championship Model, Cooper has proposed the Developmental Model. The Developmental Model emphasizes basic skill
and strategy acquisition, learning the rules of the game, cooperation, and allowing all players the opportunity to enjoy participating in the sport. The Developmental Model is strongly influenced by the Bill of Rights for Young Athletes developed by medical, physical education, and recreation experts (Rarick & Seefeldt, 1977). The ten rights as described by Rarick and Seefeldt are as follows:

1. Right of the opportunity to participate in sports regardless of ability level.

2. Right to participate at a level that is commensurate with each child’s developmental level.

3. Right to have qualified adult leadership.

4. Right to participate in safe and healthy environments.

5. Right of each child to share in the leadership and decision-making of their sport participation.

6. Right to play as a child and not as an adult.

7. Right to proper preparation for participation in the sport.

8. Right to an equal opportunity to strive for success.

9. Right to be treated with dignity by all involved.

10. Right to have fun through sport (p. 44).

Cooper’s two models are potentially useful in describing coaches’
orientations based on the actual behaviors exhibited while interacting with the team members. A coaching orientation would be identified by the frequency with which a coach engages in behaviors representative of each model. Three benefits of identifying a coach’s orientation can be identified. First, the potential positive or negative effects of each coaching orientation could be investigated. Second, during the selection process, organizations could determine if a coach’s orientation is consistent with the goals and philosophy concerning youth sport involvement held by the organization. Third, coaches could be informed of their orientations, and subsequent training could be provided to alter or improve game and practice behaviors to increase the likelihood that the outcome of participating in organized youth sports is a positive one.

Purpose of the Study

The present exploratory study was composed of two parts, each addressing a unique goal. The first part of this research identified coaching behaviors representative of the Championship and Developmental Models of coaching, based on the ratings provided by subject matter experts working from Cooper’s theoretical conceptualization. The second half of this study focused on determining if a coach’s orientation could be identified via players’ perceptions of the frequency with which the coach displayed selected Championship and Developmental behaviors. These
behaviors had previously been identified as being representative of either a Championship or Developmental model of coaching.

A related purpose was to assess whether the two orientation scales were on opposite ends of a single continuum or if they were more appropriately represented as two separate continua, as was the case with the Consideration and Initiating Structure leadership orientations in the Ohio State research. Subsequent, exploratory analyses were performed at the team and the player levels to determine if player variables, such as players' perceptions of their ability level, the coaches orientation scores, and won-loss statistics (included only as a team variable), could predict players' intentions of participating next season, satisfaction with having participated, and satisfaction with the coach. Another point of interest was to determine if a relationship existed between the coaches' orientations and the teams' won-loss records, specifically, win percentage.

Overall, the central objective of the present study was to devise a reliable and easily administered instrument that identified coaching orientations based on player perceptions of the frequency with which a coach exhibited certain behaviors while interacting with team members.

Hypotheses

Although the essence of this study was exploratory, certain hypotheses were generated. Based on the results of previous leadership
studies, it was predicted that players at both the individual and team levels of analysis would report higher levels of satisfaction with the coach and with participating when the coach adhered to a Developmental rather than to a Championship orientation.

Weiss and Klint (1986) found that the lack of "having fun" was often cited as a motivation for discontinuing involvement in youth gymnastics. The concept of having fun or enjoyment while participating in an athletic activity and the subsequent positive relationship with intending to continue participating is a robust finding across various sports such as swimming, softball, basketball, wrestling, and hockey (Gould, Feltz, Weiss, 1985; Scanlon & Lewthwaite, 1988; Wankel, 1983; Wankel & Sefton, 1989). Therefore, it was predicted that those players who reported higher levels of satisfaction with the coach and with having participated would also have stronger intentions to continue participating in basketball.

The last hypothesis to be tested was concerned with the team's winning percentage and the coach's orientation. It was predicted that even though the Championship oriented coach emphasizes winning, the Developmental oriented coach's win record would be higher. This prediction is based on the results Likert (1961) found during his investigations of the relationship between leadership orientation and subsequent subordinate behaviors. Likert found that individuals who worked for a manager who scored high
on the Consideration dimension were more productive than those workers who were supervised by a manager scoring high on the Initiating Structure scale.

Study 1

Method

Subjects. Persons who have served or presently serve in an administrative capacity of an organization involved with youth sport programs were selected to serve as subject matter experts (n = 30). Twenty-five of the thirty surveys were returned or found to be usable. Each subject matter expert (SME) had both first hand experience with coaching a youth sport team and had been at some time, actively involved with directing youth sport programs. These individuals were selected because they would be familiar with the contrasting philosophies of the Developmental and Championship models as applied at the junior high age level (11-13).

Materials. A questionnaire consisting of 65 behavioral statements was used (Appendix A). These items were generated for preliminary research by Klawsky & Thomas (1989), as being a relevant sample of behaviors exhibited by coaches during game or practice situations or while interacting with the athletes at other times. The items provided by Klawsky and Thomas were based on the authors' extensive experience both as athletes
and as coaches of youth sport teams and from sources such as National Interscholastic Coach, Athletic Journal, and National Federation News.

SME’s were asked to rate on two, five-point, Likert-type scales, the extent of their agreement that each behavioral statement clearly reflected each of Cooper’s two models (i.e., the Developmental model and the Championship model). Included at the beginning of the survey was a brief description of Cooper’s two models of coaching so as to ensure that each SME was using the same frame of reference to rate the behavioral statements. While assessing each behavioral statement, the SME’s were asked to use as a reference group those youths in the 11-13 year old age group.

Procedure. The athletic directors of several local organizations were contacted to obtain their approval to complete the behavioral questionnaire. Once a verbal commitment was obtained, the questionnaires and a brief explanation of the intent of the study, were given to the athletic directors. The athletic directors were asked to distribute the questionnaires to assistant coordinators of youth sport programs or to any other knowledgeable administrators or coaches. The completed questionnaires were returned to the athletic directors and collected by the researcher.

Results. The analysis in study one was concerned with the ratings given by the individual SME’s to each of the behavioral statements on the
Championship and Developmental dimensions. The ratings for each item were pooled across raters for each of the two dimensions. Two means and standard deviations (one for each subscale) were calculated for each behavioral statement. The resultant means and standard deviations for each statement appear in Appendix B.

In order for a rated behavioral item to be retained for utilization on the final coaching survey, it had to meet four criteria: First, behavioral statements with the highest means (closest to five) on either of the dimensions were initially retained. Second, of those items with the highest means those with the lowest standard deviations (one or below) were retained. Third, the inter-item correlations were inspected within each subscale; the intent being to select those items with relatively high, positive inter-item correlations. Inter-item correlations for the final Championship and Developmental subscales are presented in Appendix C. Finally, consideration was given to the practicality of using a behavioral item with junior high aged raters. The behavioral statements that satisfied these four conditions were then considered the most representative of either the Championship or Developmental Model for use in study two.

Eleven items were retained for use on each scale in the final survey in an attempt to satisfy both reliability and practicality concerns. The survey used in study two, consisting of the items which survived study one,
is located in Appendix D.

Study 2

Method

Subjects. One hundred twenty-three, seventh- and eighth-grade boys' basketball teams were given surveys in order to collect player perceptions of coaching behaviors. The teams were sponsored by various organizations (e.g., schools, YMCA's). The majority of the teams were located in medium- to small-sized communities in the Midwest. Of the 685 surveys distributed, 326 were returned, yielding a return rate of 48%. Because three players per coach was established as the minimum number of respondents necessary to establish a coach's orientation score, 293 of the 326 surveys were considered viable for analyzing data at the team level. Data from 60 teams (293 players) were utilized in the following group level analyses. The responses of all 326 players were used for analyzing the results at the individual player level.

Materials. The athletes' perceptions were obtained by asking each player to rate on a five-point, Likert-type scale, the frequency with which his coach displayed each of the 22 statements retained from Study 1. These statements or modified variations thereof were presented in the form of a survey (see Appendix D). Note that the items from the two scales were randomly mixed together and simply numbered from 1 to 22 to avoid
creating a Developmental or Championship scale appearance. In keeping with standard BOS methodology, the frequency of exhibiting the behaviors was rated on a scale of one to five (Always to Never). Players were also asked to provide opinions pertaining to their satisfaction with the coach, satisfaction with having played on the team, intentions of playing next season, and self-perception of ability level. A minimum of two questions were placed on the survey to assess each of these player variables.

**Procedure.** Written consent was obtained from the participating organizations sponsoring the teams. The coaches of the teams were contacted to briefly inform them about the study. If the information was available, the sponsoring organizations were asked to supply a roster of the players on each team along with their addresses, the coaches' names, and telephone numbers. All surveys were coded to permit identification of player responses by team and coach. The surveys were distributed in one of two ways: The parents of the athletes were sent a packet containing a letter briefly describing the study and the extent of their child's involvement, and a survey for the child to complete. When the players' addresses were not available, the coaches were asked to distribute the packets to the parents of their players. If the parent(s) and child chose to participate in this study, the child completed the survey and returned it in a self-addressed, stamped envelope to the researcher. The athletes were
ensured of confidentiality concerning all responses given on the survey.
The athletes were asked to be as accurate and honest as possible when completing the survey. After the season had ended, won-loss statistics were obtained for each team from the sponsoring organizations, when available. If the organization could not supply the win percentage for the team, this figure was obtained directly from the surveys. If a player failed to indicate on the survey the team's win percentage, and this information was not available from the sponsoring organization, a win percentage figure was furnished from another player's survey on the same team.

**Team Level Analysis.** For analyses at the team level, a coach's orientation score was obtained for the Developmental and Championship dimensions by pooling the players' ratings within the team. A similar pooling strategy was utilized when analyzing the ability, satisfaction, and intentions-to-continue-participating data at the team level. The means and standard deviations for the coaches' orientation scores are listed in Table 1. The overall means and standard deviations were $M = 3.88$, $SD = .50$ and $M = 2.54$, $SD = .43$ for the Developmental and Championship dimensions, respectively. Possible scores ranged from 1 to 5 with 5 representing Always and 1 representing Never.

In order to obtain an assessment of internal consistency for the two coaching dimensions, alpha coefficients were calculated (Cronbach, 1951).
Table 1

Descriptive Statistics and Intercorrelations

Among All Team Level Variables

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. DEVEL</td>
<td>3.88</td>
<td>.50</td>
<td>.893</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. CHAMP</td>
<td>2.54</td>
<td>.43</td>
<td>-.449**</td>
<td>.785</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. SWC</td>
<td>3.87</td>
<td>.74</td>
<td>.755**</td>
<td>-.256*</td>
<td>.920</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. SWP</td>
<td>4.23</td>
<td>.58</td>
<td>.584**</td>
<td>-.082</td>
<td>.854**</td>
<td>.870</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. ABIL</td>
<td>3.63</td>
<td>.39</td>
<td>.127</td>
<td>.080</td>
<td>.105</td>
<td>.135</td>
<td>.594</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. ICP</td>
<td>4.68</td>
<td>.35</td>
<td>.237</td>
<td>.111</td>
<td>.356**</td>
<td>.460</td>
<td>.453**</td>
<td>.905</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. SWT</td>
<td>4.05</td>
<td>.64</td>
<td>.706**</td>
<td>-.186</td>
<td>.971**</td>
<td>.953**</td>
<td>.123</td>
<td>.417**</td>
<td>.934</td>
<td></td>
</tr>
<tr>
<td>8. WIN</td>
<td>.59</td>
<td>.26</td>
<td>.024</td>
<td>.215</td>
<td>.406**</td>
<td>.522**</td>
<td>.049</td>
<td>.331**</td>
<td>.475**</td>
<td>----</td>
</tr>
</tbody>
</table>

VALUES ON DIAGONAL REPRESENT CRONBACH'S ALPHA COEFFICIENTS.

*P < .05  **p < .01  N = 60
The resultant alpha's were .893 for the Developmental scale and .785 for the Championship scale. Inter-item correlations are presented for both dimensions in Appendix C.

Consistent with the methodology proposed by Schmidt and Hunter (1989) for assessing rater agreement when only one stimulus is observed, the mean of the standard deviations of the players' ratings on the two orientation scales within a team were calculated. The mean standard deviations were averaged across teams resulting in the mean of the standard deviations of the players' ratings of their coaches being .48 for the Championship dimension and .59 for the Developmental dimension.

Schmidt and Hunter's contention is that, it is not appropriate to compute interrater reliabilities when only one person is being observed, because the one stimulus provides no true variance. Schmidt and Hunter suggest that standard deviations with smaller magnitudes are reasonable indicators of greater inter-rater agreement when only a single stimulus is being rated.

Descriptive statistics and intercorrelations of all team level variables in the study appear in Table 1. Alpha levels for each of the scales are also reported in Table 1, providing a measure of internal consistency for the items that comprise each scale. Based on the fact that satisfaction with participating (SWP) and satisfaction with coach (SWC) are so highly correlated, \( r = .85 \) (\( p < .01 \)), these items were combined to form a single
scale which identifies overall satisfaction with the team (SWT). The combined scale, SWT, produced an alpha of .934.

In order to examine potential relationships between the coaches' orientations, the team's overall satisfaction with the team (SWT), and intentions to continue participating in basketball (ICP), hierarchical regression analyses were performed. Initially, the variables measuring the team's average ability level, win percentage, and the coach's Developmental and Championship orientation scores served as "independent" variables. The foremost area of interest was concerned with determining the amount of variance that coaching orientation can account for in the "dependent variables", beyond that associated with ability level and win percentage. Therefore, for all of the regression analyses completed, ability level and when applicable win percentage served as covariates by forcing them into the regression equation at steps one and two. The two coaching orientation variables were entered at both steps three and four. Regressing the teams' overall satisfaction (SWT) on average team ability levels, win percentage, and coach's Championship and Developmental orientations produced the results in Table 2. From the information provided, it can be seen that for SWT, average ability level initially contributed an $R^2 = .015$, ns; the win percentage contributed an additional .22, $p < .000$; Championship orientation increased $R^2 .092$, $p < .01$; and the
Table 2
Hierarchical Regression Analyses

Team Level

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Beta</th>
<th>R²</th>
<th>R² Change</th>
<th>F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Satisfaction with Team (SWT)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABIL</td>
<td>.008</td>
<td>.015</td>
<td>.015</td>
<td>.89</td>
</tr>
<tr>
<td>WIN</td>
<td>.450***</td>
<td>.235</td>
<td>.220</td>
<td>16.44***</td>
</tr>
<tr>
<td>CHAMP</td>
<td>.035</td>
<td>.327</td>
<td>.092</td>
<td>7.64**</td>
</tr>
<tr>
<td>DEVEL</td>
<td>.709***</td>
<td>.708</td>
<td>.381</td>
<td>71.94***</td>
</tr>
<tr>
<td>ABIL</td>
<td>.000</td>
<td>.015</td>
<td>.015</td>
<td>.89</td>
</tr>
<tr>
<td>WIN</td>
<td>.450***</td>
<td>.235</td>
<td>.220</td>
<td>16.40***</td>
</tr>
<tr>
<td>DEVEL</td>
<td>.709***</td>
<td>.708</td>
<td>.472</td>
<td>90.45***</td>
</tr>
<tr>
<td>CHAMP</td>
<td>.035</td>
<td>.708</td>
<td>.000</td>
<td>.17</td>
</tr>
<tr>
<td><strong>Intentions to Continue Participating (ICP)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABIL</td>
<td>.398</td>
<td>.206</td>
<td>.206</td>
<td>15.01***</td>
</tr>
<tr>
<td>WIN</td>
<td>.136</td>
<td>.301</td>
<td>.096</td>
<td>7.81**</td>
</tr>
<tr>
<td>CHAMP</td>
<td>.113</td>
<td>.301</td>
<td>.000</td>
<td>.01</td>
</tr>
<tr>
<td>DEVEL</td>
<td>.008</td>
<td>.343</td>
<td>.042</td>
<td>3.50</td>
</tr>
<tr>
<td>SWT</td>
<td>.319</td>
<td>.373</td>
<td>.030</td>
<td>2.56</td>
</tr>
<tr>
<td>ABIL</td>
<td>.398</td>
<td>.206</td>
<td>.206</td>
<td>15.01***</td>
</tr>
<tr>
<td>WIN</td>
<td>.136</td>
<td>.301</td>
<td>.096</td>
<td>7.81**</td>
</tr>
<tr>
<td>DEVEL</td>
<td>.008</td>
<td>.332</td>
<td>.031</td>
<td>2.57</td>
</tr>
<tr>
<td>CHAMP</td>
<td>.113</td>
<td>.343</td>
<td>.011</td>
<td>.34</td>
</tr>
<tr>
<td>SWT</td>
<td>.319</td>
<td>.373</td>
<td>.030</td>
<td>2.56</td>
</tr>
</tbody>
</table>

*p < .05  **p < .01  ***p < .001  N = 60
Note: Beta weights are for the full model.
Developmental orientation's contribution to the overall $R^2$ of .708 was an $R^2$ increase of .381, $p < .000$. When the order of entry for the two coaching orientation variables was reversed, Developmental style contributed an $R^2$ increase of .472, $p < .000$; Championship orientation added nothing ($R^2$ change ns.). The Beta values obtained for win percentage ($B = .45$) and the Developmental orientation ($B = .71$) were both found to be significant at $p < .000$. In interpreting these Beta values it should be recalled that, "Testing the significance of a squared semipartial correlation is identical to testing the regression coefficient (b or $B$) associated with it." (Pedhazur, 1982, p. 123). The squared semipartial correlation is an indication of the increment of variance that an independent variable accounts for in the dependent variable when that independent variable is entered last in the regression equation (Pedhazur).

In order to investigate the influence of a coach's orientation on the team's intentions to continue participating (ICP), a second set of hierarchical regression analyses were performed. ICP was regressed upon the independent team variables of ability, win percentage, the coach's Developmental and Championship orientation ratings, and SWT. Initially, ability level and then win record were forced into the equation. The other three variables were then entered sequentially. SWT was entered last in the equation in order to account for any additional variance that could not
be accounted for by ability, win percentage, and the coaching orientations. The entry orders for the Developmental and Championship orientations, were again alternated. Ability produced an $R^2 = .206$, $p < .000$; win percentage added .096, $p < .007$; Championship orientation added nothing ($R^2$ change $= .000$, ns.); Developmental orientation increased $R^2$ by .042, ns.; and finally, SWT contributed an added .030 (ns.,) to the cumulative $R^2$ of .373. When the Developmental orientation was entered at step three, only .031 (ns.) was added. The entry of Championship orientation at step four resulted in an increase of .011 (ns.). A significant Beta value was found only for ability level ($B = .398$ $p < .001$). Figure 1 provides a path analytic-type diagram, along with the Beta coefficients for the variables involved in the team level analysis. As the diagram illustrates, win percentage and the coach's Developmental orientation tend to significantly relate to SWT. The ability level of the team was found to be the best indicator of the team's ICP.

A median split was performed on each of the two coaching dimensions to determine the categorization of the coaches as being high or low on Championship and Developmental orientations. Those coaches receiving a score above 3.86 on the Developmental orientation were considered to be developmentally oriented coaches, and those receiving a score above 2.50 on the Championship dimension were identified as Championship oriented.
Figure 1. Path Analytic-Type Diagram Team Level

DEVEL

.709**

ABIL

.008

SWT

.008

.398**

WIN

.450**

.319

CHAMP

.035

.134

.113

*p < .01  **p < .001  N = 60
Figure 2 shows the four coaching orientation quadrants and gives the number of coaches' categorized within each quadrant. Note the rather small number of coaches in quadrants 2 and 3; most of the coaches were higher on one dimension that the other. A negative correlation between the Developmental and Championship dimensions was found ($r = -.449 (p < .001)$). The correlation between the Championship and Developmental dimensions increased in magnitude to $r = -.88 (p < .001)$ when only those coaches identified as predominately Championship or Developmental (quadrants 1 and 4) were analyzed.

As a means to investigate a potential difference between win percentages for coaches in the two categories, a (2 X 2) ANOVA was performed on the data. The results of the analysis indicate that there were no significant main effects or interactions between coaching orientation and win percentage. This supports the nonsignificant correlations between win and coaching orientation variables reported in Table 1.

**Player Level Analysis.** Analyzing the data at the individual level involved using each player's ratings of the coach's Championship and Developmental orientations, self-perceived ability level, satisfaction with the team, and intentions to continue participating in basketball. Due to the fact that win percentage can only be considered a team level variable, it was not included in the analysis at the player level. The means, standard
Figure 2. Categorization of Developmental and Championship Oriented Coaches
deviations, and intercorrelations for all individual variables appear in Table 3. Due to the high, significant correlation $r = .758$, $p < .001$, between satisfaction with the coach and with participating, these two variables were again combined to represent satisfaction with the team (SWT).

As was done at the team level, two sets of hierarchical regression analyses were performed using the individual player data; and again ability served as covariate in all regression analyses. SWT served as the first "dependent" variable and was regressed on the ability level, Championship orientation, and Developmental orientation variables. Results of the regression analysis are presented in Table 4. Initially forcing ability level into the equation produced an $R^2 = .002$, ns.; the Championship orientation added .016, ns., the Developmental orientation contributed an additional .450, $p < .000$, to produce the overall $R^2$ of .468. When the Developmental and Championship orientation order of entry was reversed, an $R^2$ increase of .463 ($p < .000$) was obtained with the addition of the Developmental orientation, and an $R^2$ increase of .004, ns., resulted when the Championship orientation was added. The only significant Beta value was produced by the coach's Developmental orientation ($B = .698$, $p < .000$).

The second set of hierarchical regressions consisted of regressing ICP on ability level, Championship orientation, Developmental orientation, and
Table 3

Descriptive Statistics and Intercorrelations

Among All Individual Level Variables

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. DEVEL</td>
<td>3.89</td>
<td>.75</td>
<td>.860</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. CHAMP</td>
<td>2.58</td>
<td>.64</td>
<td>-.262**</td>
<td>.694</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. SWC</td>
<td>3.85</td>
<td>1.14</td>
<td>.692**</td>
<td>-.185**</td>
<td>.851</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. SWP</td>
<td>4.21</td>
<td>.86</td>
<td>.571**</td>
<td>-.018</td>
<td>.758**</td>
<td>.808</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. ABIL</td>
<td>3.60</td>
<td>.70</td>
<td>.051</td>
<td>.100</td>
<td>.031</td>
<td>.056</td>
<td>.692</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. ICP</td>
<td>4.67</td>
<td>.64</td>
<td>.211**</td>
<td>-.081</td>
<td>.239</td>
<td>.352**</td>
<td>.382**</td>
<td>.887</td>
<td></td>
</tr>
<tr>
<td>7. SWT</td>
<td>4.03</td>
<td>.94</td>
<td>.682**</td>
<td>-.121*</td>
<td>.955**</td>
<td>.918**</td>
<td>.044</td>
<td>.306**</td>
<td>.885</td>
</tr>
</tbody>
</table>

VALUES ON DIAGONAL REPRESENT CRONBACH'S ALPHA COEFFICIENTS.
*P < .05  **p < .01  N = 326
Table 4
Hierarchical Regression Analyses

Individual Level

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Beta</th>
<th>$R^2$</th>
<th>$R^2$ Change</th>
<th>F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Satisfaction with Team (SWT)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABIL</td>
<td>.003</td>
<td>.002</td>
<td>.002</td>
<td>.63</td>
</tr>
<tr>
<td>CHAMP</td>
<td>.062</td>
<td>.018</td>
<td>.016</td>
<td>5.22*</td>
</tr>
<tr>
<td>DEVEL</td>
<td>.698***</td>
<td>.468</td>
<td>.450</td>
<td>272.73***</td>
</tr>
<tr>
<td>ABIL</td>
<td>.003</td>
<td>.002</td>
<td>.002</td>
<td>.63</td>
</tr>
<tr>
<td>DEVEL</td>
<td>.698***</td>
<td>.464</td>
<td>.463</td>
<td>279.26***</td>
</tr>
<tr>
<td>CHAMP</td>
<td>.062</td>
<td>.486</td>
<td>.004</td>
<td>2.12</td>
</tr>
</tbody>
</table>

| **Intentions to Continue Participating (ICP)** |       |        |              |          |
| ABIL              | .360*** | .146 | .146         | 55.23*** |
| CHAMP             | .085  | .148   | .002         | .71      |
| DEVEL             | .018  | .192   | .044         | 17.70*** |
| SWT               | .288*** | .236 | .044         | 18.56*** |
| ABIL              | .360*** | .146 | .146         | 55.23*** |
| DEVEL             | .018  | .182   | .037         | 14.47*** |
| CHAMP             | .085  | .192   | .010         | 3.85     |
| SWT               | .288*** | .236 | .044         | 18.56*** |

*p < .05  **p < .01  ***p < .001  N = 326
Note: Beta weights are for the full model.
SWT. These results can also be seen in Table 4; they indicate that ability level, entered first, produced an $R^2 = .146, p < .000$; the Championship orientation had only added $.002$, ns.; the Developmental orientation contributed an additional $.044, p < .000$; and finally, SWT added another $.044, p < .000$ to produce a final $R^2 = .236$. Forcing the Developmental orientation in on step two increased $R^2$ by $.037 (p < .000)$, and then the Championship orientation on step three provided an additional $.01$, ns.

Inspection of the Beta values when all variables were present in the equation indicated that only ability level and SWT reached significance ($p < .001$). A path analytic-type diagram, appearing in Figure 3, was constructed to depict the relationship between the variables at the individual player level. Note the prominent role played by the Developmental orientation in determining SWT, but not ICP directly.

**DISCUSSION**

The motivation for conducting this study was not to establish that one type of coaching orientation is "right" and the other is "wrong", but that perhaps one orientation may be more appropriate for the junior high level depending on the intentions of the organization sponsoring the youth sport program. Based on this premise, it therefore becomes relevant to investigate how differing coaching philosophies relate to the well-being of the players. The coaching orientations of interest were two described by
Figure 3. Path Analytic-Type Diagram Individual Level

* p < .01  ** p < .001  N = 326
Cooper (1980) which are designated as Championship and Developmental orientations. Study one established a reasonably reliable and valid measurement instrument to assess a coach's orientation. The assessment was based on the behaviors of the coach while interacting with the players.

Discussion of the results of this study, as a whole, is primarily focused on two areas: First, examining the nature of the relationship found between the two coaching dimensions and secondly, investigating potential relationships that exist between a coach's orientation, player satisfaction, and future intentions to continue participating in the sport, at both the individual and group levels.

The existence of significant negative correlations found between the Championship and Developmental coaching orientations at both the player and team levels was not unexpected. The fact that two of the Developmental and Championship behavioral items are semantically direct opposites of one another provides one explanation. For example, a Developmental item referred to allowing "...all players the opportunity to play equal amounts of time", while a Championship item addressed the issue of only allowing the "...best players to play a majority of the time." Considering the ipsative nature of these two items on the coaching dimensions, the moderate magnitudes of the correlations ($r = -.45$, at the team level and $r = -.26$ at the player level), and the fact that each coaching
orientation can account for only 20% and 7% of the variance in the other
dimension at the team and player levels, respectively, it is reasonable to
make the assumption that the two coaching dimensions are moderately
independent of one another. Establishing independence between the two
dimensions becomes salient when addressing the issue of whether or not
the orientations fall at opposite ends of a single continuum. The results of
this study indicate that the two orientations can be thought of as existing as
two relatively independent dimensions. In a review article, Smith and
Smoll (1989) report similar findings. They found, at both perceptual and
behavioral levels, that coaching behaviors identified as punitive and
supportive were seen as being independent dimensions, rather than existing
at opposing ends of the same continuum.

Based on the results provided by players at the group and individual
levels, a strong, positive relationship was found between the coach's
Developmental orientation and the players' satisfaction with the team. The
best indicators of satisfaction with the team were the win percentage and
the perception that the coach adhered to a Developmental style of
coaching, thus providing support for the first proposed hypothesis. These
results are consistent with results reported concerning employee satisfaction
and the leader's orientation on the Consideration dimension (Fleishman &
Harris, 1962; Greene, 1975; Nealy & Blood, 1968; Yukl, 1971). One of the
few consistent relationships found in leadership research is the existence of a positive relationship between high Consideration or person-oriented behaviors and reports of greater satisfaction by the subordinates. A previous study has indicated that leader consideration was found to be related to satisfaction in smaller work groups, while leader initiation of structure was related to satisfaction in members of larger groups (Schriesheim & Murphy, 1976).

A subsequent area of interest was that of the relationship between a coach's orientation and the player's reports of intentions to continue participating. At both levels, the most convincing relationship found between intentions to continue participating and the other independent variables was with ability level. Ability has been identified by Bandura (1986) as directly affecting self-efficacy. It is not surprising then, that a player who possesses the necessary ability, motivation, and self-efficacy for successfully playing basketball will be more likely to report intentions to continue participating in the sport.

Investigating the relationship between ICP and SWT, the results analyzed at the team and player levels were not stable. At the player level, SWT was determined to be a significant predictor of ICP, while at the team level, the predictive utility of SWT only approached significance ($p < .11$). Therefore, the second hypothesis, predicting a positive relationship between
a player's or team's satisfaction and intentions to continue participating, was upheld only at the individual level. Organizational studies have indicated that a consistent relationship exists between employee dissatisfaction and withdrawal from the organization, typically in the forms of absenteeism and turnover (Argyle, Gardner, & Croti, 1958; Brayfield & Crockett, 1955; Vroom, 1964). On the other hand, existence of a significant relationship between SWT and ICP at the individual level, but not at the group level could be attributed to a combination of the difference in sample size (60 vs. 326) and the nonorthogonal nature of the independent variables.

Turning to the issue of the viability of the third hypothesis, it was thought that the Developmentally oriented coaches would have higher win percentages for the season. Analysis of the data revealed that no relationship existed between the orientation of the coach and the season win record for the team. The fact that the data did not lend support for this hypothesis is not completely disheartening. At the team level the **Championship orientation** is not necessary to produce a winning record. Taken as a whole, the implications of these findings are quite encouraging for those organizations and individuals who are concerned about the physical and psychological welfare of the children who do participate in organized youth sports. The results of this study indicate that children will
only benefit from being exposed to coaches who include some developmental behaviors in their dealings with the children they supervise. Additionally, this orientation toward developmental coaching behaviors is not at the expense of sacrificing a winning season, as some skeptics might suggest.

In summary, this study succeeded in developing a method of assessing a coach's orientation with respect to two styles, referred to as Championship and Developmental. It was found that 44 of the 60 coaches could successfully be categorized as exhibiting primarily a Championship or Developmental orientation. Data at the individual level of analysis indicated that the more Developmentally oriented the player perceived the coach to be, a higher level of satisfaction with the team was reported. Analyses at the team level provided evidence which indicated that both the higher win percentage and a more Developmentally oriented coach predicted reports of greater satisfaction with the team. Satisfaction with the team along with ability level were found to be positively related to overall intentions to continue participating, particularly at the group level.

A potential problem with the present study is the fact that restriction of range was probable, especially in relation to potential Championship oriented coaches who may have considered the survey to be a threat and, subsequently, did not distribute the surveys to the players. A case in point
is that four of the ten public school basketball coaches declined to participate by refusing to distribute the surveys to their players.

Although attempts were made to minimize errors by utilizing acceptable procedures borrowed from industrial research, this study, undoubtedly, suffers from the inherent threats one encounters when using a subjective measure to assess behavior. The need for observational measures of assessing behavior in naturalistic settings has been a reoccurring theme for studies of leadership (Hunt, Sekaran, & Schriesheim, 1982; Luthans, 1979). It is therefore suggested that in order to extend this research, these two coaching dimensions and their respective items should be so as to make them more conducive for use in an observational format for assessing coaching behaviors. Coaches would be observed by independent raters as to the frequency with which they engaged in behaviors specific to each of the coaching orientations. The strategy would hopefully provide more objective data than that provided by a player; a player who may incorporate particular biases into the ratings of the coach.

A longitudinal study to further explore the influence of a coach's orientation on the player's actual decision to continue participating on future organized youth sport teams would be warranted. Because intentions are known to influence future behavior but are not equivalent to it, collecting verifiable data regarding whether or not the player did actually
continue participating would be worthwhile and advisable.

Finally, another area deserving investigation would be the relationship between the youth sport injuries and coaching orientation. Concern over the increase in the number of reports of preadolescent and adolescent sports injuries would certainly justify such research (Stanitski, 1989).

While just as the dimensions of Consideration and Initiating Structure or the task and person-oriented dimensions were not found to be fully comprehensive descriptions of leadership, neither are the Championship and Developmental orientations meant to fully encompass all facets of the complex act of coaching. The fact remains that if one aspect of coaching can be identified as being positively related to player satisfaction and indirectly related to a player's intentions to continue participating in a sport, it seems within reason for an organization that adheres to a developmental philosophy to either encourage a coach to implement developmental aspects into the coaching strategy or to create an environment via rules and regulations that promotes a Developmental coaching orientation. This study indicated that the strongest predictor of intention to continue participating was the self-perceived ability of the player; but when it is all said and done, it is the coach, influenced by his or her orientation, who decides when and how often a player will actually participate.
References


Cooper, W. E. (1980). Youth sports. Paper presented at a colloquium at the University of Nebraska at Omaha, Omaha, NE.


attitudes, and managerial "success". Personnel Psychology, 15, 127-143.


Unpublished manuscript.


Human Kinetics Publishers, Inc.


*Psychometrika, 16,* 67-74.


*Organizational Behavior and Human Performance, 6,* 414-460.

Appendix A
In 1980, Walter E. Cooper presented a Developmental model for organizing and supervising youth sports. Based on several lines of research and the Bill of Rights for Young Athletes, the Developmental model emphasizes the following goals:

- learning the basic skills required in the sport
- learning the basic rules of the sport
- learning the various strategies involved in the sport
- enjoying participation in the sport (all players play in each game)
- learning the importance and value of cooperation between team members
- appreciating the beauty and skill involved in competent performance by one's team members or the opponents

This Developmental model can be contrasted with the Championship model which emphasizes the following goals:

- screening and selection of team members
- evaluation of performance in terms of competence, intensity, etc.
- evaluation of outcomes in terms of winning or losing games/meets/events
- high team standing relative to other teams
- winning end of season play-offs or tournaments
- optimal use of skills and abilities of team members to accomplish team goals

This questionnaire is intended to identify things coaches do which reflect their orientations toward these contrasting models. Read each of the following coaching behaviors and indicate the extent of your agreement that the behavioral statement clearly reflects each of the coaching models.

1 STRONGLY DISAGREE
2 DISAGREE
3 NO OPINION
4 AGREE
5 STRONGLY AGREE

Circle the appropriate numbers on each scale, located beneath each statement, to indicate your opinions. Consider each of the 65 behaviors separately and ask yourself: "If I observed a coach doing this, would it indicate the extent of his/her belief in an orientation toward the Developmental model or the Championship model?" Use as a reference a coach involved with youths between the ages of 11-13.
Example: Insisting that a player repeat a drill until the skill is mastered.

Clearly reflects the Developmental model

1 2 3 4 5

Clearly reflects the Championship model

1 2 3 4 5

Be sure to circle one number on BOTH rating scales for each behavior.

1 STRONGLY DISAGREE
2 DISAGREE
3 NO OPINION
4 AGREE
5 STRONGLY AGREE

1. Singles out weakest member of opposing team and exploits that member's weakness.

Clearly reflects the Developmental model

1 2 3 4 5

Clearly reflects the Championship model

1 2 3 4 5

2. Allows athletes to design or suggest their own workout or practice sessions.

Clearly reflects the Developmental model

1 2 3 4 5

Clearly reflects the Championship model

1 2 3 4 5

3. Blames losses on lack of effort by an individual team member.

Clearly reflects the Developmental model

1 2 3 4 5

Clearly reflects the Championship model

1 2 3 4 5

4. Emphasizes competition between team members for starting positions.

Clearly reflects the Developmental model

1 2 3 4 5

Clearly reflects the Championship model

1 2 3 4 5

5. Emphasizes performances as a way of "proving yourself" to the fans, etc.

Clearly reflects the Developmental model

1 2 3 4 5

Clearly reflects the Championship model

1 2 3 4 5
1 STRONGLY DISAGREE
2 DISAGREE
3 NO OPINION
4 AGREE
5 STRONGLY AGREE

6. Blames losses on lack of ability by his team.

Clearly reflects the Developmental model
1 2 3 4 5

Clearly reflects the Championship model
1 2 3 4 5

7. Plays all players an equal amount of time in each game throughout the season.

Clearly reflects the Developmental model
1 2 3 4 5

Clearly reflects the Championship model
1 2 3 4 5

8. Substitutes to ensure that all players play regardless of the score.

Clearly reflects the Developmental model
1 2 3 4 5

Clearly reflects the Championship model
1 2 3 4 5

9. Discourages direct criticism or disparagement of opponents and/or officials.

Clearly reflects the Developmental model
1 2 3 4 5

Clearly reflects the Championship model
1 2 3 4 5

10. Encourages players to violate minor rules if they can get away with it.

Clearly reflects the Developmental model
1 2 3 4 5

Clearly reflects the Championship model
1 2 3 4 5

11. Remains calm, cool, and loose "under fire" (e.g., in close or important games).

Clearly reflects the Developmental model
1 2 3 4 5

Clearly reflects the Championship model
1 2 3 4 5
12. Praises team members for trying hard regardless of the quality of their performance or the outcome of the competition.

Clearly reflects the Developmental model
1 2 3 4 5

Clearly reflects the Championship model
1 2 3 4 5

13. Organizes conditioning events and practices that extend beyond the normal season dates.

Clearly reflects the Developmental model
1 2 3 4 5

Clearly reflects the Championship model
1 2 3 4 5

14. Takes an active interest in the athlete's life that extends beyond practice and games.

Clearly reflects the Developmental model
1 2 3 4 5

Clearly reflects the Championship model
1 2 3 4 5

15. Discontinues the use of strategies designed to keep the opponent from scoring when leading by a comfortable margin (e.g., full court presses, blitzes, etc.).

Clearly reflects the Developmental model
1 2 3 4 5

Clearly reflects the Championship model
1 2 3 4 5

16. Allows all players to "start" an equal number of times during the season.

Clearly reflects the Developmental model
1 2 3 4 5

Clearly reflects the Championship model
1 2 3 4 5

17. Shows "control" when an official makes a mistake.

Clearly reflects the Developmental model
1 2 3 4 5

Clearly reflects the Championship model
1 2 3 4 5
18. Explains reasons for decisions, requested activities, rules, discipline, etc.

Clearly reflects the Developmental model
1 2 3 4 5

Clearly reflects the Championship model
1 2 3 4 5

19. Stresses friendly relations between team members.

Clearly reflects the Developmental model
1 2 3 4 5

Clearly reflects the Championship model
1 2 3 4 5

20. Makes decisions that have the safety and welfare of team members as top priority.

Clearly reflects the Developmental model
1 2 3 4 5

Clearly reflects the Championship model
1 2 3 4 5

21. Selects the best players to play the majority of the time in each game.

Clearly reflects the Developmental model
1 2 3 4 5

Clearly reflects the Championship model
1 2 3 4 5

22. Offers guidance to team members in a positive, constructive manner.

Clearly reflects the Developmental model
1 2 3 4 5

Clearly reflects the Championship model
1 2 3 4 5

23. Blames losses on lack of team motivation, not an individual team member's motivation.

Clearly reflects the Developmental model
1 2 3 4 5

Clearly reflects the Championship model
1 2 3 4 5
24. Stresses systematic teaching of rules of the sport during practices and games.

Clearly reflects the Developmental model
1 2 3 4 5

Clearly reflects the Championship model
1 2 3 4 5

25. Expects players to exert themselves to the extremes of physiological limitations even though painful.

Clearly reflects the Developmental model
1 2 3 4 5

Clearly reflects the Championship model
1 2 3 4 5


Clearly reflects the Developmental model
1 2 3 4 5

Clearly reflects the Championship model
1 2 3 4 5

27. Yells sarcastic remarks to his/her players during games.

Clearly reflects the Developmental model
1 2 3 4 5

Clearly reflects the Championship model
1 2 3 4 5

28. Displays anger when a player makes a mistake.

Clearly reflects the Developmental model
1 2 3 4 5

Clearly reflects the Championship model
1 2 3 4 5

29. Selects the best players to "start" each game and rarely changes this group.

Clearly reflects the Developmental model
1 2 3 4 5

Clearly reflects the Championship model
1 2 3 4 5

30. Stresses general physical fitness as a lifelong value to be sought and maintained.

Clearly reflects the Developmental model
1 2 3 4 5

Clearly reflects the Championship model
1 2 3 4 5
31. Insists on adherence to rules affecting the players outside of practice and games.

Clearly reflects the Developmental model 1 2 3 4 5
Clearly reflects the Championship model 1 2 3 4 5

32. Discourages the use of techniques that are known to be associated with risk of injury but are also known to be effective.

Clearly reflects the Developmental model 1 2 3 4 5
Clearly reflects the Championship model 1 2 3 4 5

33. Discourages athletes from involvement in other sports and encourages specialization in one sport.

Clearly reflects the Developmental model 1 2 3 4 5
Clearly reflects the Championship model 1 2 3 4 5

34. Encourages players to be aggressive to the point of risking injury to themselves.

Clearly reflects the Developmental model 1 2 3 4 5
Clearly reflects the Championship model 1 2 3 4 5

35. Uses game strategies that have the self concept and ego of opponents as top priority.

Clearly reflects the Developmental model 1 2 3 4 5
Clearly reflects the Championship model 1 2 3 4 5

36. Helps to set short, intermediate, and long range goals for each athlete in areas beyond game performance (training, techniques, attitudes, knowledge, etc.).

Clearly reflects the Developmental model 1 2 3 4 5
Clearly reflects the Championship model 1 2 3 4 5
1 STRONGLY DISAGREE
2 DISAGREE
3 NO OPINION
4 AGREE
5 STRONGLY AGREE

37. Blames losses on lack of ability by the officials.
   Clearly reflects the Developmental model
   1 2 3 4 5
   Clearly reflects the Championship model
   1 2 3 4 5

38. Praises team members primarily for trying hard as opposed to winning.
   Clearly reflects the Developmental model
   1 2 3 4 5
   Clearly reflects the Championship model
   1 2 3 4 5

39. Strongly emphasizes the strengths and weaknesses of team members and wisely deploys the players for purposes of winning.
   Clearly reflects the Developmental model
   1 2 3 4 5
   Clearly reflects the Championship model
   1 2 3 4 5

40. Expresses the primary team goal in terms of a won/lost record.
   Clearly reflects the Developmental model
   1 2 3 4 5
   Clearly reflects the Championship model
   1 2 3 4 5

41. Places the health and welfare of participants above the outcome of the game.
   Clearly reflects the Developmental model
   1 2 3 4 5
   Clearly reflects the Championship model
   1 2 3 4 5

42. Allows players to complete their playing time regardless of the competence of their performance.
   Clearly reflects the Developmental model
   1 2 3 4 5
   Clearly reflects the Championship model
   1 2 3 4 5

43. Yells sarcastic remarks to officials during games.
   Clearly reflects the Developmental model
   1 2 3 4 5
   Clearly reflects the Championship model
   1 2 3 4 5
44. Criticizes players publicly.

Clearly reflects the Developmental model
1 2 3 4 5
Clearly reflects the Championship model
1 2 3 4 5

45. Strongly stresses the relationship between winning and the self respect, status, or image of the team, coach, or players.

Clearly reflects the Developmental model
1 2 3 4 5
Clearly reflects the Championship model
1 2 3 4 5

46. Remains flexible and open to communication from the team or players.

Clearly reflects the Developmental model
1 2 3 4 5
Clearly reflects the Championship model
1 2 3 4 5

47. Spends more time teaching athletes as opposed to motivating and arousing them.

Clearly reflects the Developmental model
1 2 3 4 5
Clearly reflects the Championship model
1 2 3 4 5

48. Insists on displays of sportsmanship by players and fans.

Clearly reflects the Developmental model
1 2 3 4 5
Clearly reflects the Championship model
1 2 3 4 5

49. Takes the position that winning justifies any means (win at all costs).

Clearly reflects the Developmental model
1 2 3 4 5
Clearly reflects the Championship model
1 2 3 4 5
50. Reacts with anger when a player makes a mistake.

Clearly reflects the Developmental model

1 2 3 4 5

Clearly reflects the Championship model

1 2 3 4 5

51. Stresses the use of play-offs and championship trophies.

Clearly reflects the Developmental model

1 2 3 4 5

Clearly reflects the Championship model

1 2 3 4 5

52. Makes decisions that have the safety and welfare of opponents as top priority.

Clearly reflects the Developmental model

1 2 3 4 5

Clearly reflects the Championship model

1 2 3 4 5

53. Frequently displays anger when an official makes a mistake.

Clearly reflects the Developmental model

1 2 3 4 5

Clearly reflects the Championship model

1 2 3 4 5

54. Knowingly plays an injured or ill player when the game is close or important.

Clearly reflects the Developmental model

1 2 3 4 5

Clearly reflects the Championship model

1 2 3 4 5

55. Finds non-performance ways for all team members to feel they are contributing to the success of the team.

Clearly reflects the Developmental model

1 2 3 4 5

Clearly reflects the Championship model

1 2 3 4 5

56. Spends a majority of the practice time interacting with, watching, and instructing the best players.

Clearly reflects the Developmental model

1 2 3 4 5

Clearly reflects the Championship model

1 2 3 4 5
<table>
<thead>
<tr>
<th></th>
<th>STRONGLY DISAGREE</th>
<th>DISAGREE</th>
<th>NO OPINION</th>
<th>AGREE</th>
<th>STRONGLY AGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>57. Ties rewards for the team or team members primarily to winning.</td>
<td>Clearly reflects the Developmental model</td>
<td>Clearly reflects the Championship model</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>58. Makes decisions that have the self concept of team members as top priority.</td>
<td>Clearly reflects the Developmental model</td>
<td>Clearly reflects the Championship model</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>59. Builds fun into training routines and practices.</td>
<td>Clearly reflects the Developmental model</td>
<td>Clearly reflects the Championship model</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60. Overtly expresses blame for losses.</td>
<td>Clearly reflects the Developmental model</td>
<td>Clearly reflects the Championship model</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>61. Confines remarks made to players to instructions (strategy, technique, assignments).</td>
<td>Clearly reflects the Developmental model</td>
<td>Clearly reflects the Championship model</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>62. Punishes players for inattention during practice (withholding playing time, assigning laps, pushups, or wind sprints).</td>
<td>Clearly reflects the Developmental model</td>
<td>Clearly reflects the Championship model</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
63. Seeks players participation in coaching decisions concerning strategies, use of personnel, length and frequency of practice, practice activities, etc.

Clearly reflects the
Developmental model
1 2 3 4 5

Clearly reflects the
Championship model
1 2 3 4 5

64. Uses positive reinforcement to change team or player behavior (rather than punishment).

Clearly reflects the
Developmental model
1 2 3 4 5

Clearly reflects the
Championship model
1 2 3 4 5

65. Within safety constraints, rotates players through various positions or events to provide varied experiences for the players in actual competition.

Clearly reflects the
Developmental model
1 2 3 4 5

Clearly reflects the
Championship model
1 2 3 4 5
Appendix B
Developmental Ratings for the 65 Behavioral Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>1.84</td>
<td>.898</td>
<td>D41</td>
<td>4.64</td>
<td>.860</td>
</tr>
<tr>
<td>D2</td>
<td>3.84</td>
<td>1.066</td>
<td>D42</td>
<td>4.48</td>
<td>.653</td>
</tr>
<tr>
<td>D3</td>
<td>1.52</td>
<td>.963</td>
<td>D43</td>
<td>1.76</td>
<td>.831</td>
</tr>
<tr>
<td>D4</td>
<td>1.64</td>
<td>.638</td>
<td>D44</td>
<td>1.32</td>
<td>.690</td>
</tr>
<tr>
<td>D5</td>
<td>1.88</td>
<td>1.013</td>
<td>D45</td>
<td>2.20</td>
<td>1.155</td>
</tr>
<tr>
<td>D6</td>
<td>1.88</td>
<td>.927</td>
<td>D46</td>
<td>4.32</td>
<td>.557</td>
</tr>
<tr>
<td>D7</td>
<td>4.76</td>
<td>.436</td>
<td>D47</td>
<td>4.40</td>
<td>.707</td>
</tr>
<tr>
<td>D8</td>
<td>4.84</td>
<td>.374</td>
<td>D48</td>
<td>4.64</td>
<td>.569</td>
</tr>
<tr>
<td>D9</td>
<td>4.68</td>
<td>.476</td>
<td>D49</td>
<td>1.08</td>
<td>.277</td>
</tr>
<tr>
<td>D10</td>
<td>1.24</td>
<td>.831</td>
<td>D50</td>
<td>1.56</td>
<td>.768</td>
</tr>
<tr>
<td>D11</td>
<td>4.04</td>
<td>.935</td>
<td>D51</td>
<td>1.68</td>
<td>.690</td>
</tr>
<tr>
<td>D12</td>
<td>4.76</td>
<td>.436</td>
<td>D52</td>
<td>4.20</td>
<td>.866</td>
</tr>
<tr>
<td>D13</td>
<td>2.20</td>
<td>.957</td>
<td>D53</td>
<td>1.76</td>
<td>.926</td>
</tr>
<tr>
<td>D14</td>
<td>4.20</td>
<td>1.000</td>
<td>D54</td>
<td>1.32</td>
<td>.852</td>
</tr>
<tr>
<td>D15</td>
<td>4.56</td>
<td>.583</td>
<td>D55</td>
<td>4.72</td>
<td>.458</td>
</tr>
<tr>
<td>D16</td>
<td>4.60</td>
<td>.764</td>
<td>D56</td>
<td>1.72</td>
<td>.843</td>
</tr>
<tr>
<td>D17</td>
<td>4.12</td>
<td>1.013</td>
<td>D57</td>
<td>1.60</td>
<td>.645</td>
</tr>
<tr>
<td>D18</td>
<td>4.44</td>
<td>.583</td>
<td>D58</td>
<td>4.28</td>
<td>.936</td>
</tr>
<tr>
<td>D19</td>
<td>4.68</td>
<td>.476</td>
<td>D59</td>
<td>4.56</td>
<td>.507</td>
</tr>
<tr>
<td>D20</td>
<td>4.68</td>
<td>.557</td>
<td>D60</td>
<td>1.80</td>
<td>.957</td>
</tr>
<tr>
<td>D21</td>
<td>1.96</td>
<td>1.060</td>
<td>D61</td>
<td>3.80</td>
<td>1.000</td>
</tr>
<tr>
<td>D22</td>
<td>4.68</td>
<td>.476</td>
<td>D62</td>
<td>2.28</td>
<td>1.173</td>
</tr>
<tr>
<td>D23</td>
<td>3.32</td>
<td>1.345</td>
<td>D63</td>
<td>3.84</td>
<td>.800</td>
</tr>
<tr>
<td>D24</td>
<td>4.68</td>
<td>.476</td>
<td>D64</td>
<td>4.56</td>
<td>.583</td>
</tr>
<tr>
<td>D25</td>
<td>1.84</td>
<td>.800</td>
<td>D65</td>
<td>4.52</td>
<td>.770</td>
</tr>
<tr>
<td>D26</td>
<td>1.80</td>
<td>.913</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D27</td>
<td>1.32</td>
<td>.557</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D28</td>
<td>1.80</td>
<td>.866</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D29</td>
<td>1.56</td>
<td>.768</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D30</td>
<td>4.72</td>
<td>.458</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D31</td>
<td>3.40</td>
<td>1.258</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D32</td>
<td>4.32</td>
<td>1.145</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D33</td>
<td>1.60</td>
<td>.816</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D34</td>
<td>1.32</td>
<td>.557</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D35</td>
<td>1.96</td>
<td>1.172</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D36</td>
<td>4.44</td>
<td>.821</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D37</td>
<td>1.60</td>
<td>.866</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D38</td>
<td>4.80</td>
<td>.408</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D39</td>
<td>2.40</td>
<td>1.041</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D40</td>
<td>1.44</td>
<td>.507</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Championship Ratings for the 65 Behavioral Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>4.68</td>
<td>.557</td>
<td>C41</td>
<td>2.80</td>
<td>1.190</td>
</tr>
<tr>
<td>C2</td>
<td>1.84</td>
<td>.800</td>
<td>C42</td>
<td>1.88</td>
<td>.726</td>
</tr>
<tr>
<td>C3</td>
<td>3.24</td>
<td>1.165</td>
<td>C43</td>
<td>3.04</td>
<td>1.369</td>
</tr>
<tr>
<td>C4</td>
<td>4.52</td>
<td>.872</td>
<td>C44</td>
<td>2.92</td>
<td>1.470</td>
</tr>
<tr>
<td>C5</td>
<td>3.92</td>
<td>1.038</td>
<td>C45</td>
<td>3.56</td>
<td>1.003</td>
</tr>
<tr>
<td>C6</td>
<td>3.84</td>
<td>1.344</td>
<td>C46</td>
<td>3.00</td>
<td>1.190</td>
</tr>
<tr>
<td>C7</td>
<td>1.32</td>
<td>.476</td>
<td>C47</td>
<td>3.20</td>
<td>.866</td>
</tr>
<tr>
<td>C8</td>
<td>1.72</td>
<td>1.208</td>
<td>C48</td>
<td>3.40</td>
<td>.957</td>
</tr>
<tr>
<td>C9</td>
<td>3.04</td>
<td>1.457</td>
<td>C49</td>
<td>3.52</td>
<td>1.503</td>
</tr>
<tr>
<td>C10</td>
<td>3.16</td>
<td>1.434</td>
<td>C50</td>
<td>3.32</td>
<td>1.180</td>
</tr>
<tr>
<td>C11</td>
<td>2.88</td>
<td>1.092</td>
<td>C51</td>
<td>4.60</td>
<td>.764</td>
</tr>
<tr>
<td>C12</td>
<td>2.60</td>
<td>1.190</td>
<td>C52</td>
<td>2.76</td>
<td>1.128</td>
</tr>
<tr>
<td>C13</td>
<td>4.16</td>
<td>1.106</td>
<td>C53</td>
<td>3.24</td>
<td>1.268</td>
</tr>
<tr>
<td>C14</td>
<td>3.36</td>
<td>.907</td>
<td>C54</td>
<td>3.32</td>
<td>1.314</td>
</tr>
<tr>
<td>C15</td>
<td>2.60</td>
<td>1.190</td>
<td>C55</td>
<td>2.96</td>
<td>1.274</td>
</tr>
<tr>
<td>C16</td>
<td>1.76</td>
<td>.970</td>
<td>C56</td>
<td>4.08</td>
<td>.997</td>
</tr>
<tr>
<td>C17</td>
<td>2.88</td>
<td>.971</td>
<td>C57</td>
<td>4.36</td>
<td>.995</td>
</tr>
<tr>
<td>C18</td>
<td>3.56</td>
<td>1.044</td>
<td>C58</td>
<td>3.04</td>
<td>1.207</td>
</tr>
<tr>
<td>C19</td>
<td>3.72</td>
<td>.936</td>
<td>C59</td>
<td>3.28</td>
<td>1.275</td>
</tr>
<tr>
<td>C20</td>
<td>3.56</td>
<td>1.044</td>
<td>C60</td>
<td>3.16</td>
<td>1.143</td>
</tr>
<tr>
<td>C21</td>
<td>4.60</td>
<td>.866</td>
<td>C61</td>
<td>3.12</td>
<td>.971</td>
</tr>
<tr>
<td>C22</td>
<td>3.20</td>
<td>1.155</td>
<td>C62</td>
<td>4.04</td>
<td>.841</td>
</tr>
<tr>
<td>C23</td>
<td>3.12</td>
<td>1.201</td>
<td>C63</td>
<td>2.40</td>
<td>.913</td>
</tr>
<tr>
<td>C24</td>
<td>3.32</td>
<td>1.108</td>
<td>C64</td>
<td>2.92</td>
<td>1.222</td>
</tr>
<tr>
<td>C25</td>
<td>4.04</td>
<td>.790</td>
<td>C65</td>
<td>2.12</td>
<td>.971</td>
</tr>
<tr>
<td>C26</td>
<td>3.08</td>
<td>1.320</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C27</td>
<td>3.28</td>
<td>1.429</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C28</td>
<td>3.40</td>
<td>1.225</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C29</td>
<td>4.40</td>
<td>.764</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C30</td>
<td>3.72</td>
<td>.936</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C31</td>
<td>3.72</td>
<td>1.021</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C32</td>
<td>3.16</td>
<td>1.281</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C33</td>
<td>3.64</td>
<td>1.287</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C34</td>
<td>3.08</td>
<td>1.441</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C35</td>
<td>2.72</td>
<td>1.275</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C36</td>
<td>3.72</td>
<td>.843</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C37</td>
<td>2.96</td>
<td>1.306</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C38</td>
<td>2.56</td>
<td>1.294</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C39</td>
<td>4.12</td>
<td>.881</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C40</td>
<td>4.40</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix C
### Inter-Item Correlations for the Championship Dimension

<table>
<thead>
<tr>
<th></th>
<th>C1</th>
<th>C4</th>
<th>C5</th>
<th>C21</th>
<th>C29</th>
<th>C39</th>
<th>C40</th>
<th>C51</th>
<th>C56</th>
<th>C57</th>
<th>C62</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>C4</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>C5</td>
<td>.3145</td>
<td>.5085</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>C21</td>
<td>.0691</td>
<td>.1766</td>
<td>.3338</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>C29</td>
<td>.3135</td>
<td>.6133</td>
<td>.4627</td>
<td>.0630</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>C39</td>
<td>.5910</td>
<td>.4577</td>
<td>.4210</td>
<td>.3385</td>
<td>.5447</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>C40</td>
<td>.4640</td>
<td>.4684</td>
<td>.7148</td>
<td>.0962</td>
<td>.6001</td>
<td>.6052</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>C51</td>
<td>.3723</td>
<td>.7009</td>
<td>.5889</td>
<td>.2520</td>
<td>.5714</td>
<td>.6314</td>
<td>.7638</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>C56</td>
<td>-.0270</td>
<td>.1899</td>
<td>.3288</td>
<td>.0386</td>
<td>.3394</td>
<td>.2258</td>
<td>.3010</td>
<td>.3722</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>C57</td>
<td>.1414</td>
<td>.4477</td>
<td>.3116</td>
<td>.0774</td>
<td>.4057</td>
<td>.6139</td>
<td>.4355</td>
<td>.5264</td>
<td>.5580</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>C62</td>
<td>.0285</td>
<td>.3116</td>
<td>.4337</td>
<td>.0801</td>
<td>.4932</td>
<td>.3307</td>
<td>.4758</td>
<td>.3504</td>
<td>.5928</td>
<td>.6795</td>
<td>----</td>
</tr>
</tbody>
</table>

### Inter-Item Correlations for the Developmental Dimension

<table>
<thead>
<tr>
<th></th>
<th>D7</th>
<th>D8</th>
<th>D9</th>
<th>D12</th>
<th>D16</th>
<th>D22</th>
<th>D24</th>
<th>D30</th>
<th>D38</th>
<th>D48</th>
<th>D55</th>
</tr>
</thead>
<tbody>
<tr>
<td>D7</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>D8</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>D9</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>D12</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>D16</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>D30</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>D38</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>D48</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>D55</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
</tbody>
</table>
Appendix D
The following sentences have to do with the amount of time your basketball coach spent doing the following things.

Please be honest with your answers, there are no right or wrong answers. Answer all the questions even if you are not sure.

Put an X in the space under the word that describes the amount of time your coach spent doing each thing. Make sure you only put one X for each sentence.

<table>
<thead>
<tr>
<th>Start each sentence with</th>
<th>ALWAYS</th>
<th>OFTEN</th>
<th>SOME TIMES</th>
<th>SELDOM</th>
<th>NEVER</th>
</tr>
</thead>
<tbody>
<tr>
<td>This year my basketball coach......</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Played everyone on the team an equal amount of time in each game.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Pointed out the worst player on the other team and ran plays against that player.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Substituted so that everyone on the team got to play no matter what the score was.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Allowed the best players to play most of the time in each game.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Rewarded the team or team members primarily for winning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Allowed all the players to start games an equal number of times.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Stressed that good performance was a way to prove yourself to the fans and other team members.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. In order to win, played people only in positions where they were the best.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Spent time teaching us the rules of basketball during practices and games.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Motivated us to win by talking about play-off or championship trophies.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Praised team members for trying hard even if they did not play as well as the best players or if the team lost.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

GO ON TO THE NEXT PAGE
<table>
<thead>
<tr>
<th></th>
<th>ALWAYS</th>
<th>OFTEN</th>
<th>SOME TIMES</th>
<th>SELDOM</th>
<th>NEVER</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>Talked about team goals in terms of a won/loss record.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Picked the best players to &quot;start&quot; each game.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Did not want our team members to put down the other team or the officials.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Had players on our team compete for starting positions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Insisted on displays of good sportsmanship by players and fans.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Stressed that physical fitness is something important to work at our entire lives.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Praised team members for trying hard, not just for winning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Spent most of the practice time coaching the best players.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Made sure everyone on the team felt like they were important to the success of the team, even if they were not the best players.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Punished players for not paying attention during practice, like taking away playing time, making us run sprints, or do pushups.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Offered help to team members in a positive way so they didn't feel stupid.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**THIS SEASON, MY TEAM'S WON/LOSS RECORD WAS**

GO ON TO THE NEXT PAGE
The next set of sentences will ask you how much you agree or disagree with them. Place an X under the word that shows your agreement or disagreement for each sentence.

Please mark only one X for each sentence.

<table>
<thead>
<tr>
<th>STRONGLY AGREE</th>
<th>AGREE</th>
<th>NOT SURE</th>
<th>DISAGREE</th>
<th>STRONGLY DISAGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I liked having this coach for our basketball team.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Compared to other coaches I've had, this one is the best.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I had fun this season playing on the basketball team.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I am glad I was on the basketball team.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Compared to other basketball teams I've been on, this one was the best.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. I think I am good enough at basketball to make the team when I go to High School.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. I would like to go out for the basketball team next year.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. I will try out for the basketball team next year.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. After this year, I probably won't play on another basketball team.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The next two sentences have to do with your ability at basketball. Circle the letter choices for the next two questions that you think are true.

10. Compared to the other players on my basketball team, I think I am.....
   a) much   b) better   c) about the   d) almost as   e) not as
   better   same   good   good

11. Compared to other basketball players my age, I think I am.....
   a) much   b) better   c) about the   d) almost as   e) not as
   better   same   good   good

GO BACK AND MAKE SURE YOU HAVE ANSWERED EVERY QUESTION