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LEADERSHIP TRAINING WITH ADOLESCENTS

University of Washington

Ph.D. 1984

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Leadership Training With Adolescents

by

MARY RICHARDSON

A dissertation submitted in partial fulfillment of the requirements for the degree of

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College of Education

Date

October 16, 1984
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Considerable effort has gone into the development of leadership training programs for adults who have already assumed formal leadership roles. It is of interest to consider the application of leadership training which has been tested and used successfully with adults for use with adolescents. One such training program, developed by Fred Fiedler, is based on contingency theory. The theory postulates that leadership is a function of the personality of the individual and of the situation within which it is exercised. This training program, entitled Leader Match, was developed for use with adults in both private and public settings as a management training tool, and was revised for use with adolescents in this study. Hypotheses tested included 1) Leadership effectiveness as measured by group performance will improve significantly for those teams whose leaders receive Leader Match Training; 2) Perception of leadership on the part of group members as measured on a sociometric scale is influenced by providing Leader Match Training; and 3) Leadership behaviors of team leaders are affected by Leader Match Training. An application of the adolescent leadership training program was made with team leaders of high school basketball teams. Team captains were randomly assigned to two groups of 30 subjects each. One group of team leaders received leadership training
while the other received self awareness training. An analysis of the
effect of leadership training was made using group performance meas-
ures, team perception of team leaders and measures of leader behaviors.
A comparison of leadership effectiveness as measured by group perfor-
mance did not reach statistical significance. The perception of
leadership performance based on team members ratings was influenced
significantly. Leadership trained team leaders were seen as more in-
fluential. The frequency of leadership behaviors as reported by
coaches and team leaders themselves increased in the hypothesized
direction. No definitive recommendations were made.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter I: Overview</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>2</td>
</tr>
<tr>
<td>Purpose of the Study</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter II: A Review of Leadership Theories and their Application to Training</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major theories of Leadership</td>
<td>7</td>
</tr>
<tr>
<td>The Contingency Theory of Leadership</td>
<td>11</td>
</tr>
<tr>
<td>Studies of Adolescent Leadership</td>
<td>17</td>
</tr>
<tr>
<td>The Application of Leadership Theories to Training</td>
<td>19</td>
</tr>
<tr>
<td>Adult Leaders</td>
<td>19</td>
</tr>
<tr>
<td>Current Leadership Training Programs</td>
<td>22</td>
</tr>
<tr>
<td>The Application of Leadership Theory to Training Adolescent Leaders</td>
<td>26</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter III: Methodology</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis</td>
<td>30</td>
</tr>
<tr>
<td>Study Population</td>
<td>32</td>
</tr>
<tr>
<td>Research Instruments</td>
<td>33</td>
</tr>
<tr>
<td>Description of Procedures</td>
<td>39</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>41</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter IV: Results</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>44</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter V: Conclusions</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary</td>
<td>54</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BIBLIOGRAPHY</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix A:</td>
<td>Least Preferred Coworker Scale</td>
</tr>
<tr>
<td>Appendix B:</td>
<td>Bibliographical Information Questionnaire</td>
</tr>
<tr>
<td>Appendix C:</td>
<td>Consent Form</td>
</tr>
<tr>
<td>Appendix D:</td>
<td>Self-Esteem Scale</td>
</tr>
<tr>
<td>Appendix E:</td>
<td>Sociometric Scale</td>
</tr>
<tr>
<td>Appendix F:</td>
<td>Leader Behavior Questionnaire for Coaches</td>
</tr>
<tr>
<td>Appendix G:</td>
<td>Leader Behavior Questionnaire for Team Leaders</td>
</tr>
<tr>
<td>Appendix H:</td>
<td>Comprehensive Test for Leader Match</td>
</tr>
<tr>
<td>Appendix I:</td>
<td>Horn and Cattell Test of Fluid and Crystallized Intelligence</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>A Comparison of Group Characteristics</td>
<td>45</td>
</tr>
<tr>
<td>2.</td>
<td>A Comparison of Performance Between Groups Who Received Either Leadership or Self-Awareness Training</td>
<td>45</td>
</tr>
<tr>
<td>3.</td>
<td>Change in Sociometric Scores Comparing Leadership and Self-Awareness Trained Leaders</td>
<td>47</td>
</tr>
<tr>
<td>4.</td>
<td>Weighted Means Comparison of Behavior Ratings by Coaches of Team Leaders Who Received Leadership or Self-Awareness Training</td>
<td>49</td>
</tr>
<tr>
<td>5.</td>
<td>A Comparison of Combined Behavior Ratings by Coaches</td>
<td>50</td>
</tr>
<tr>
<td>6.</td>
<td>A Weighted Means Comparison of Behavior Ratings by Team Leaders Who Received Leadership or Self-Awareness Training</td>
<td>51</td>
</tr>
<tr>
<td>7.</td>
<td>Summary of Correlated Pairs of Coach and Player Responses Rating Frequency of Leader Behaviors</td>
<td>52</td>
</tr>
<tr>
<td>Number</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>1.</td>
<td>Interactive Behavior Patterns of Leaders</td>
<td>10</td>
</tr>
<tr>
<td>2.</td>
<td>Correlations Between Leader's LPC Scores and Group Effectiveness for Each Cell</td>
<td>14</td>
</tr>
<tr>
<td>3.</td>
<td>Leadership Style</td>
<td>22</td>
</tr>
</tbody>
</table>
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LEADERSHIP TRAINING WITH ADOLESCENTS

CHAPTER 1

OVERVIEW

Definitions of leadership vary depending on the focus. Leadership is frequently defined as a process in which one person influences other individuals in their attainment of a common goal (Stogdill, 1974; Lord, 1977; Hannah, 1979). Some definitions refer to positions of leadership (Hannah, 1981; Cribbin, 1972), implying that an individual has the ability to influence behavior by virtue of holding a position which grants some power over others. In some instances, followers may respond to someone in a leadership position because of fear of the consequences if they do not. Leadership in this sense more closely approximates coercion.

However, people may follow a leader willingly because they believe the leader shares their goals or ideals and will help them realize these goals. Power is attributed to the leader by the follower regardless of whether or not the person holds a formal position of leadership. One might define leadership as the ability to attract followership regardless of how the individual came to be a leader.

This chapter presents an overview of leadership training with particular application to adolescents. Drawing upon the contingency theory of leadership, a study of leadership training with adolescents is proposed. The contingency theory of leadership, developed by Fred Fiedler (1967), has been the focus of considerable attention for many years. The theory postulates that leadership is a function of the personality of the individual and the situation within which it is
exercised. It will be the purpose of this research to demonstrate the application of leadership training based up the contingency theory and its application with adolescent leaders.

Statement of the Problem

Research indicates that leaders in one situation are not necessarily leaders in another situation. In a series of studies, Carter and others (1949, 1950) found that leaders in a task requiring intellectual or verbal skills were not necessarily leaders in a situation requiring mechanical skills. The ability to influence others depended upon both the traits or resources which an individual possesses and upon the characteristics of the situation (Hannah, 1979).

More recent research has begun to look at the role of followers in leadership (Hummel, 1975, Green, 1979). The behavior of leaders is substantially related to the activities and/or needs of the group (Stogdill, 1974). Interactional theories of leadership suggest that leadership arises from the special qualities of a particular leader, the needs of the group and the demands of the situation (Hogan, 1978). Congruence in values or objectives between leaders and followers is necessary to make a leader effective (Kets de Vries, 1977).

Fiedler (1967) introduced the contingency model of leadership as a comprehensive model of leadership. Through his work and the work of others, Fiedler began systematically to describe and define the relationship between the motivational structure of the leader and the situation within which the leader was operating. In addition to
describing and developing a means of identifying the motivational structure of a leader, he defined three situational dimensions and developed a way of systematically identifying them. These dimensions include leader-member relationships, task structure and formal power.

Leaders are not always adults. Human beings experiment with their ability to influence others practically from the time they draw their first breath. Over time we all learn to interact with one another in increasingly sophisticated ways as means of accomplishing our own goals. Gradually we find ourselves in positions of leadership. Defined in broad terms, this can be any role in which one finds others looking to them for direction or advice. This can include the child to whom the other children look when deciding the next adventure or the executive who directs a large company. Within this context, the potential for leadership opportunities is great and it becomes increasingly important to consider the role of leadership training within human development.

Although the literatures of social and developmental psychology have investigated many questions of leadership, few of these questions have been directed toward either adolescence or the development of leadership through the life span. Yet it is clear that children and adolescents have, as a developmental phase, the development of leadership skills. The educational curriculum makes frequent reference to evoking leadership qualities from students. However few efforts to do so are either systematic in their application or critical in their evaluation.
Purpose of the Study

Leadership training has gained considerable attention over the last several years. However, the focus of the development of training has been on adults. A major impetus for developing such training has been the interest of private industry to capitalize on the findings of organizational researchers. Personnel is often the single greatest expenditure in a business. Effective management of personnel can directly impact costs of operation through increasing production. Therefore, companies who invest in the training of their management staff can realize direct benefits as a result of increasing profits by decreasing expenses due to employee turnover and declines in productivity.

If we view leadership training as important to the overall development of the human being, we must pay closer attention to the nature of that training within the academic curriculum. Training programs in leadership for adolescents have never reached the sophistication that can be found in leadership training for adults. Perhaps this is because the benefits of training are less visible. We cannot point to increased profits as a justification for improving the ways in which we train adolescents to be better leaders. Instead, we may feel that leadership skills, although important for adolescents, are really more critical for adults.

Recognition of the leadership roles of adolescents may be confined to those young people who assume a formal leadership role such as Student Body President. This perspective overlooks the many
leadership roles in which adolescents actually find themselves. Young people are exercising leadership, for example, when they become informal peer group leaders. Leadership training for adolescents, then, should recognize that most young people act as leaders in one way or another. The acquisition of leadership skills is a part of the developmental process of becoming adults. It is important that educators consider ways in which to work toward more sophisticated and more systematic approaches to leadership training during adolescence. It is time we examined the possibility that the tremendous development efforts which have gone into training programs for adults might well have applicability for adolescents.

The purpose of this research is to modify and then to test a leadership training program with adolescents which has been demonstrated as effective when used with adult leaders. This particular leadership training program is based on a theory which has received much recognition and has been carefully examined over a period of more than twenty years. Further, the training format teaches participants both the theory of leadership as well as helping improve leadership skills.

In the research presented here, group members who have been formally identified as leaders by their coaches will receive leadership training. Measures of group effectiveness and group member perceptions of leadership will be examined to determine whether or not leadership training improves the leadership ability of the group leader such that the overall performance of the group improves or the
perception of the group toward the leader changes. Further, behaviors
defined as leader behaviors will be examined subsequent to leadership
training.

Following this introductory chapter, chapter two reviews the
literature relevant to theories of leadership. An indepth review of
the contingency theory of leadership will be provided. In addition,
literature which discusses leadership and leadership training in rela-
tion to adolescents will be examined.

Chapter Three presents operational definitions of terms employed
in the study, the hypotheses to be tested, the methodology used to
test the hypotheses and the limitations of the study.

Chapter Four will present the results of the data collected, the
statistical procedures used to test the hypotheses, and the results of
those tests.

Chapter Five will summarize the study, draw conclusions from the
results, and discuss areas in need of further research.
Chapter II
A Review of Leadership Theories and a Discussion of Application to Training

Major Theories of Leadership

Studies of leadership have focused primarily on the adult in the workplace. Early studies of leadership concentrated on personality traits that were predictive of leadership behaviors. Notions of leadership were embodied in the concept of the individual. These studies collectively have been referred to as the "Great Man" theory (Hannah, 1979). Trait studies of leadership assume that certain traits are likely to be associated with successful leadership. Over the years, trait studies of leadership produced laundry lists of personality variables which were presumed to be more closely correlated with successful leadership than were others. It seemed each new study simply added to the list. No unique pattern of characteristics emerged which could be identified in all situations.

Although most researchers no longer focus exclusively on this area, some work does continue. Growing interest in managerial effectiveness has caused a shift in leadership trait studies from a comparison of differences between leaders and nonleaders to an analysis of traits that are predictive of successful leadership (Yukl, 1981). In addition, researchers have investigated the relationship between locus of control and leadership (Goodstadt and Hjelle, 1973) and sex role (Megargee, 1969; Lord, et al, 1980; Inderlied and Powell, 1979; Brown, 1979).
Later students of leadership began to recognize the difference between the leader and leadership. Leader constitutes a role — a static concept. Leadership is a process — a dynamic concept (Elwell and Malik, 1974). Beginning in the late 1940s a group of studies conducted at Ohio State University began under the direction of John Hemphill (1950). The focus of much of the research was the identification of leadership behavior that is instrumental for the attainment of group or organizational goals. Using nine dimensions of leader behavior defined by Hemphill, Halpin and Winer (1952) devised a questionnaire which they used as a basis for their research. They identified four dimensions of behavior:

1. Consideration: Defines the extent to which behaviors indicative of mutual trust, friendship, respect and warmth characterize the leader’s actions toward his followers.

2. Initiating structure: Encompasses behaviors that clarify leader-follower relations, performance standards, communications channels and operating procedures.

3. Production emphasis: Covers behaviors that motivate or organize group members to achieve their goal.

4. Sensitivity: Subsumes actions on the part of the leader which make him or her a "socially acceptable" person, such as openness to new ideas.

Many researchers have used the Leader Behavior Description Questionnaire developed by Halpin (1966) and have demonstrated that consideration and initiating structure are related to leader effectiveness and group functioning.

At approximately the same time, the "Michigan Studies" were begun
under the direction of Rensis Likert (1961). Likert identified five dimensions of a supervisor's effectiveness: 1) definition of role, 2) orientation toward the work group, 3) closeness of supervision, 4) quality of group relations, and 5) type of supervision received from superiors. Although Likert's studies were studies of traits, he began to cluster these traits into two major behavioral themes. From this work has come the now famous terms "employee centered supervisor" and "production centered supervisor". The "employee centered" supervisor is generally more sensitive to the needs and feelings of people than the "production centered" supervisor who is inclined to perceive people as tools to get a job done.

Likert's theories, then, reflected the same division between concern for the worker and concern for production outlined by other theorists. As his concern shifted from leader traits to leadership behaviors, the notion of leadership style emerged. Leadership styles reflected clusters of traits that resulted in predictable behaviors.

Although the theories generated by the Ohio and Michigan studies were similar in concept, the Ohio studies went one step further. Whereas Likert saw leaders as falling into one of two major behavior patterns, researchers in the Ohio studies saw these patterns as interactive. Terms used in the Ohio studies such as "consideration" and "sensitivity" corresponded with Likert's employee-centered behavior. "Initiating structure" and "production emphasis" were similar to "production centered behavior". Based on this work, a diagram can be developed which places the variable consideration on one axis and
structure on the other.

**INTERACTIVE BEHAVIOR PATTERNS OF LEADERS**

<table>
<thead>
<tr>
<th>CONSIDERATION</th>
<th>STRUCTURE</th>
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<tbody>
<tr>
<td>HIGH</td>
<td>HI HI</td>
</tr>
<tr>
<td>LOW</td>
<td>LOW HI</td>
</tr>
</tbody>
</table>

**FIGURE 1**

The grid in Figure 1 suggests that a leader can be high or low in consideration (employee centered behaviors) and either high or low in structure (production centered behaviors). Studies supported the idea that leaders who were high in consideration were more effective regardless of whether they were high or low in structure. This substantiated the research of Halpin and Binner (1952). The work of Likert (1961) also suggested that employee-centered behaviors were more successful when assessing subsequent production.

Work by Victor Vroom and Floyd C. Mann (1960) moved beyond the simplistic notion of "one good style" and found that while workers who are organized into closely knit units do indeed prefer the employee-centered type of supervision, those who work largely on their own prefer a more directive approach.
After studies which concentrated on trait or style of leadership, the next major breakthrough was the work of Fred Fiedler (1967) who introduced the contingency model of leadership. Fiedler's contingency model was the first major theory to specifically propose contingency relationships in leadership. The theory suggests that group performance is a joint function of the leader's motivational structure and the amount of control and influence available to the leader in the situation. The motivational structure is measured by the Least Preferred Coworker (LPC) scale, and is used to divide people into task-motivated and interpersonally motivated categories. The amount of control or influence is seen as a combination of the leader-member relations, the structure of the task, and the power inherent in the position. More recently Fiedler has extended the model into new areas. First, he has suggested ways in which the model can predict how leadership effectiveness will change as a function of changes in either the leader through means such as experience and training (Bons and Fiedler, 1976), or as a result of changes in situation (Fiedler, 1972).

The Contingency Theory of Leadership

The contingency theory of leadership has stimulated interest and debate over many years. Fiedler writes,

"This theory postulates a contingent relationship between leadership performance and a leadership style score, called the esteem for the Least Preferred Coworker, or LPC. This relationship is moderated by a 'situational favorableness' dimension, which is conceptually defined as the degree to which the leadership situation enables the leader to control and influence his group's behavior." (Fiedler,
Leaders with low LPC scores are those who describe their least preferred coworker in a very negative manner. Leaders with high LPC scores, on the other hand, are those who describe their least preferred coworker in relatively positive terms. High LPC leaders are those who are most motivated by concern for relationships. Low LPC leaders are those whose motivation is more task oriented. The LPC score has been used in numerous investigations including interpersonal relations, educational problems, employee satisfaction, as well as leadership and clearly represents an important predictor of interpersonal behavior (Fiedler, 1972).

The LPC score is obtained by asking individuals to think of everyone with whom they have worked on a common task, and then to describe the one person with whom they have found it most difficult to work. The description of this least preferred coworker is made on a set of eight-point bi-polar scale items modeled after the Semantic Differential:

Friendly: \[ \begin{array}{cccccccc}
8 & 7 & 6 & 5 & 4 & 3 & 2 & 1 \\
\end{array} \] Unfriendly

Cooperative \[ \begin{array}{cccccccc}
1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 \\
\end{array} \] Uncooperative

The three major dimensions of group-task situation identified by Fiedler are: 1) leader-member relations, 2) task structure, and 3) position power. Leader-member relations refers to the personal relationship between the leader and key members of his group and is considered to be the most important of these situational factors. Subse-
quent studies have supported this position (Fishbein, Landy, & Hatch, 1969; Fiedler, 1971.) Leader-member relations can be measured by means of sociometric preference ratings or by a group atmosphere scale which is similar in form and content to LPC, but asks the subject to rate the group as a whole (Fiedler, 1971; Fiedler, 1967).

The task-structure dimension refers to the clarity or ambiguity of the task. One may distinguish between highly structured, unambiguous tasks where the leader and the group members know exactly what needs to be done and the way to complete the task versus unstructured, ambiguous tasks where neither the leader nor the members can readily specify the way in which the task is to be implemented. This dimension, in Fiedler's view, is the second most important determinant affecting team performance. (Fishbein, Landy & Hatch, 1969).

The dimension of position power refers to the degree of formal or informal power inherent in the leadership position. A leader with high position power is one who can utilize rewards and sanctions, and whose authority over the group members is supported by the organization within which the group operates. A leader with low position power is one who is essentially restricted to using persuasion and other indirect means of influence (Fishbein, Landy & Hatch, 1969).

Within the contingency model of leadership, it is possible to classify group situations by means of the three dimensions. If all groups are classified as falling above or below the median on each dimension, an eight-celled classification system is depicted. Each of the eight cells or "octants" can be classified in terms of how much
power and influence a leader might have in such a situation (Fiedler, 1971).

(Figure 2 Here)

Correlations Between Leader's LPC Scores and Group Effectiveness for Each Cell


A leader who is well liked, has a clear-cut task, and has power over the other group members by virtue of position has a very favorable situation (Octant 1). The leader in Octant VIII, conversely, has poor relationships with other group member, a poorly defined task and no formal power over the other members of the group.

Fifteen studies of interacting groups were classified according to their situational favorableness and the correlation between leader LPC and performance was then computed for each set of groups. The correlations between the leader's LPC score and the group's effectiveness measures, when plotted against situational favorableness, gene-
Correlations Between Leader's LPC Scores and Group Effectiveness
Plotted for Each Cell

Median Correlations Between Leader LPC and Group Performance

Leader-member Relations

Task Structure

Position Power

Good

Good

Good

Good

Mod. Poor

Mod. Poor

Mod. Poor

Mod. Poor

Strong

Strong

Strong

Strong

Unstrong

Unstrong

Unstrong

Unstrong

Strong

Weak

Strong

Weak

Strong

Weak
rated a bow-shaped distribution indicating that the low LPC leaders performed more effectively than high LPC leaders in very favorable and very unfavorable situations; high LPC leaders performed more effectively in situations intermediate in favorableness (Fiedler, 1971).

Fiedler's early work interpreted the LPC score as a measure of task versus relationship orientation. Later work suggested that the LPC score is an index of a motivational system which affects behavior on at least two levels depending upon the degree to which the individual feels in control of the situation. Fiedler (1972) states his assumptions as follows:

1. Each individual has a variety of goals which differ in importance; hence his motivation to achieve various goals correspondingly differs in strength.

2. Different types of individuals have different goal structures and therefore different behavior preferences. The goals which are primary for one individual may have secondary, or still more negligible importance for another, and will lead to correspondingly different behaviors.

3. An individual will attempt to achieve as many of his goals as possible. In a situation in which his control and influence is relatively great, in which he feels that he either has, or that he can attain his 'primary' goal, he will devote his efforts as well to the attainment of his less important 'secondary' goals. In a situation in which his control and influence are relatively weak or threatened, the individual will tend to concentrate his efforts on securing his primary goals to the neglect of his secondary goals.

4. At least insofar as their behavior in task situations is concerned, we shall further assume that individuals can be arrayed on a a continuum at the poles of which we can identify two 'types'. One type (high LPC) consists of individuals who are primarily motivated to seek 'relatedness' with others, including superiors, coworkers, and subordinates. Their secondary goals are self-enhancement, prominence, and esteem from others.

At the other end of the continuum are low LPC individuals who are primarily motivated by explicit competition for material and tangible rewards in the work situation, including praise and recognition for
good work by superiors, or the feeling of accomplishment derived from the knowledge that the job was well done. These individuals seek to have good interpersonal relations with their work associates, especially insofar as they see these good interpersonal relations as leading to the accomplishment of the assigned task. Thus, whether or not it can be verbalized, the formula for these individuals in terms of behavior is 'business before pleasure', but pleasure with business if possible.

There has been considerable controversy between advocates and critics of Fielder's model with regard to the status of available validation evidence. A review of 25 validation studies by Fiedler (1971) concluded that evidence generally supported the model. Others who have reviewed some of these validation data have reached more negative conclusions (Ashour, 1973; Graen, Alvarez, Orris & Martella, 1970; McMahon, 1972; Schreishem & Kerr, 1979). Graen et. al. (1970) concluded that the supporting results for the model are weak and inconsistent. Schreisheim and Kerr concluded that the evidence concerning the LPC instrument does not support its continued use.

However, Fiedler's (1971) statistical analysis of the entire set of validation evidence suggested that these effects are significant beyond acceptable levels of chance. Secondly, strong support for the model was found in the one validation study providing the most complete and methodologically adequate test of the model (Chemers & Skrzypek, 1972). This study was an experiment in which leader LPC and situational variables were manipulated. A review by Rice (1976) of group performance studies indicated that 18% of the 455 relationships between LPC and group performance were statistically significant in a sample of randomly selected LPC studies. He suggests that if one considers the minimal statistical power of correlational designs with
the small sample sizes generally found in the research, the finding of nearly four times as many significant correlations as one would expect by chance is encouraging.

Studies of Adolescent Leadership

Although there are no leadership theories that deal exclusively with social influence in the young, the theories designed to explain this process with adults may be applicable. Children and adolescents who are successful at influencing others engage in task and/or maintenance behaviors, and experience positive outcomes as a result of influencing others (Hannah and Midlarsky, 1981).

There are far fewer studies of leadership in adolescents than in adults. Consistent with early studies of leadership which focused on personality traits related to leadership skill, several researchers have addressed themselves to traits seen as important in adolescent school leaders. Three types of leaders were investigated. School wide leaders were the subject of research by Coleman (1961), DeHaan (1962), Friesen 1968 and Gordon (1957). Marks (1957) studied informal clique leaders. Others such as Jones (1958), Karasick (1968), and DeHaan (1962) studied elected leaders. Little consensus was reached concerning the characteristics which are important for influence. Only two resources, friendliness, and a pleasing personality were common to both boy and girl leaders (Jones, 1958; DeHaan, 1962; Friesen, 1968). Ownership or access to a car was an important resource for male leaders (Coleman, 1961; DeHaan, 1962; Eve, 1975;
Snyder, 1975, Gordon, 1957). In addition athletic ability was important for boys (Coleman, 1961; Gordon, 1957; Marks, 1957; Even, 1975; and Snyder, 1975). Receiving good grades and conformance to prevailing behavioral norms was perceived as an important characteristic of girl leaders (Coleman, 1961; Gordon, 1957).

Research on adolescents outside of school situations is almost nonexistent. What has been done focuses on informal cliques and gangs. Sherif and Sherif (1964) found at all socioeconomic levels that the ability to "operate smoothly" without conflict and stress with other gang members was of prime importance. In addition to good interpersonal skills, access to a car was important as well as the ability to get along with the opposite sex (Dunphy, 1963).

Other leadership studies among adolescents have investigated the relationship between the adolescent leader and the situation. Shears (1953) studied two groups of fifteen year olds (n = 15, 16) and two groups of thirteen year olds (n= 32, 31). He found evidence for situational determinants of influence with groups of 15 year olds, but not with 13 year olds. Some situations required that leaders possess both instrumental and expressive competencies. For example Shears found that leadership in learning situations correlated significantly with ability in English and with group relations skills. Hannah (1979) found that in task-maintenance situations, which had a clearcut task and required smooth relationships between group members, instrumental and expressive competence were equally important resources for leaders to posses.
Hardy, Sack & Harpine (1973) investigated the applicability of Fiedler's contingency model of leadership with children and adolescents. In a study of 56 junior high school classroom groups, they found that groups with high LPC leaders were more effective on a structured task when leader-member relations were poor, but not when leader-member relations were good. On an unstructured task, groups with high LPC leaders were more effective when leader-member relations were good. When such relations were poor, groups with low LPC leaders were more effective on only one out of four measures. Using fourth grade groups in which leader-member relations were poor, Hardy (1975) found that on a structured task, groups led by high LPC leaders were more effective than those led by low LPC leaders, regardless of whether or not the leader had high or low power. However, on an unstructured task, groups with high LPC leaders with strong power were more effective than groups with low LPC leaders with strong power. With weak power, however, low LPC leaders were more effective than high LPC leaders on only one of four measures.

The Application of Leadership Theories To Training Adult Leaders

Early studies of leadership focused on traits of leaders. A major criticism of personality research is that personality traits, as traditionally defined, seem to have questionable validity (Mischel, 1973). Traits seem to have little consistency over time or place, suggesting that perhaps our notions of deepseated and permanent personalities may be incorrect.
A second idea is more widely accepted. Even if personality traits are consistent and persistent, they control little of the variation in behavioral measures when compared to situational variables (Mitchell, 1979). Studies of variance controlled by trait and situation almost always indicate the dominance of situation. The conclusion drawn by many researchers, then, is that since so much of the variance is unexplained it is far more promising to study situational factors than personality variables.

By shifting the focus of research in leadership from trait to behavior, attention is drawn away from the role of the leader to the leadership process itself. By clustering traits into two dominant behavioral themes, relationships between leadership process and outcome were more easily derived. One major problem of earlier work, however, was the polarization of leadership styles. Leaders were evaluated in many situations according to style and success was attributed to having selected a superior style.

The contingency model, in contrast, suggests that leadership performance depends upon the interaction between situational favorableness and the leader's motivational pattern or "style" of leadership. In fact, one of the most frequently researched relationships in the LPC literature is the effect of LPC on group performance (Rice, 1978). Hence, both task motivated and relationship motivated leaders as defined within the model should perform well in certain situations but not others and the outcome can be measured in terms of the group's performance of its major assigned task (Fiedler, 1971). A review of
field and laboratory studies extending the model supported the prediction that the situational favorableness dimension moderates the relationship between leadership style and group performance (Fiedler, 1971).

The approach by most training programs is to encourage the leader to recognize a superior style and strive toward using it. An attempt is made to change the leader through such methods as teaching improved interaction with others, increased sensitivity, or the acquisition of new skills.

In contrast, Leader Match is a training program based upon the contingency model that teaches the leader to modify the situation in order to cause it to be more favorable to the leader. Of the two approaches, learning to modify the situation is much less difficult than learning new motivational patterns. Changing the situation is favorable to changing the individual.

Leader Match, unlike many leadership training programs, has been subjected to rigorous analysis. Twelve studies testing the effectiveness of Leader Match were reviewed and each reported statistically significant results supporting Leader Match training (Fiedler and Mahar, 1979). In each of the studies leader effectiveness was measured using performance measures by supervisor, peers or, in some cases, both. Group performance measures have not been used in testing Leader Match effectiveness despite the substantial amount of initial research which supports the relationship between the contingency model and group effectiveness.
Current Leadership Training Programs

Drawing upon the research of pioneers such as Fiedler, Likert and others, organizational development experts have swarmed like bees in a field of clover. Many leadership training formats have been developed and are offered within management training programs throughout private and public industry. Chief among those are the Management Grid designed by Robert Blake and Jane S. Mouton (1982), the Situational Leadership Training developed by Hersey and Blanchard (1977), and Leader Match developed by Fiedler (1977) based on the contingency theory.

Blake and Mouton's Management Grid (1982) builds upon the behavioral themes first described by Rensis Likert. The themes are described and include "Relationship-motivated" and "Task-motivated". Relationship motivation corresponds to Likert's employee-centered behavior and Hemphill's consideration axis. Like Hemphill, Blake and Mouton suggest that leadership style is the result of interacting behaviors.
Blake and Mouton's approach suggests that there is fundamentally one best style of leadership. Using the Management Grid assessment instrument designed by Blake and Mouton, leadership trainers group people according to their scores which indicate some combination of task and relationship behavior. Using the score, leadership style is described along a continuum of authoritarian to collaborative behavior. The implication is that collaborative behavior, or High Relationship – High Task behaviors (9,9) are the best. At the bottom of the scale are Low Relationship – Low Task behaviors (1,1). The purpose of describing the behaviors in this way is to encourage the leader/manager to work toward 9,9 behavior if it has not been achieved.

Blake and Mouton's Management Grid is widely used. It has been tested with many different types of managers wherein the High Relationship – High Task behaviors have been shown to be most highly correlated with measures of productivity and worker satisfaction (Blake and Mouton, 1982). However, it offers more in the way of the description of style than it does in the learning of a new style. It

<table>
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<th>HIGH 9</th>
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<td>1,9</td>
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FIGURE 3
description of style than it does in the learning of a new style. It helps people better understand their own style that they might be encouraged to work toward a "one best" style.

Another very popular training format is the Situational Leadership developed by Hersey and Blanchard (1977). Using the same two dimensional design as Blake and Mouton, behaviors are described in a grid which has relationship-motivation as one axis and task-motivation as its second. However, Hersey and Blanchard introduced situation as a third dimension. Further, unlike Blake and Mouton, the Hersey and Blanchard format suggests that leadership behaviors vary depending on the situation. Hence, they reject the concept of one best style.

This latter training format introduces more of a learning opportunity. Rather than simply describing behaviors and suggesting the one best style to work toward, Hersey and Blanchard's model presumes some ability on the part of the individual to learn which behaviors will be most appropriate in certain situations. For example, a corporate executive does not want to be treated in a 9,9 fashion. They want to be left to their own devices with only a minimal amount of guidance. Therefore, a 1,1 or low relationship, low-task style is the most favorable for that particular situation. Thus the individual taking the training is presented both with a better understanding of his or her own behaviors, and an opportunity to improve the application of those behaviors.

However, Hersey and Blanchard's training format lacks substance in the sense that it merely suggests a range of styles and greater or
less success by the leader depending upon the application made to a particular situation. No effort is made to describe the situational parameters which directly affect the leadership behavior of the individual. Nor do they provide empirical evidence in support of their theory. Unlike Fiedler, they have not published validation studies or offered to justify their assertions. Rather, behaviors are described and examples given of ways in which successful applications may be made.

Participation in the Management Grid and Situational Leadership programs can be interesting and informative. However, actually applying the material is dependent on the sophistication and understanding of the participant. The actual learning process may become quite vague beyond the point of simply describing the leadership behavior of the participant. Participants must be highly motivated to change in order to derive useful tools from the training program. Further, the quality of the training is subject to the quality of the instructor since the format is not highly structured. Both the Management Grid and the Situational Leadership program can be presented in a "quick and dirty" fashion making it possible for less scrupulous trainers to offer it more as a gimmick than a training session.

The most significant problem with the training programs just described is the lack of empirical investigation for the underlying conceptual approach being taken. Fiedler, on the other hand, has developed a training program based upon a theory of leadership for which considerable published research exists including more than 25
validation studies. In addition Fiedler has subjected his training program to rigorous examination through validation studies.

Following the theory, Leader Match training is designed to improve performance by teaching trainees to understand their leadership style; to analyze situational factors and to match up the two. Leader Match, unlike Management Grid and the Situational Leadership training program, is a structured learning program. Using a programmed learning format, participants are taught the contingency theory of leadership as well as how to apply the theory in their own leadership role. Situational variables are clearly defined giving the participant a more precise understanding of what he or she can effectively do to alter outcomes. As such, Leader Match offers a much more substantive learning experience for the participant and allows less variance on the part of different instructors or facilitators in the way it is administered.

The Application of Leadership Theory To Training Adolescent Leaders

The need to assume leadership roles and perform certain types of leader behaviors is a subtle but constant part of social interaction. The complexity of leadership demands and the likelihood of occurrence increases well into the individual's adult life. Leadership demands are a part of all stages of life development. Learning to lead is an important developmental task for the adolescent's transit to adulthood.

Individual patterns of behavior are being formed by children and adolescents as they mature to adulthood. As the adolescent matures,
several important processes take place. Attitudes, values and goals can be and are developed. Self identify evolves and self direction is formulated. Much of this development occurs as part of peer group interactions (Seltzer, 1982). The adolescent is learning to master his or her environment.

Virtually all theorists agree that there is a major change in thinking and learning strategies during the time a child grows and becomes an adult. Both cognitive-developmental and psychoanalytical theorists agree that change is sequential. Psychoanalytic theorists emphasize the instinctive basis of behavior and the role of physical maturation in governing some crucial aspects of a child's interaction. Cognitive-developmentalists, on the other hand, reverse this order of dominance and place greatest emphasis on the development of thinking.

Psychoanalytic and cognitive-developmental theorists alike view adolescence as a time of developing self-awareness and of learning goal setting. Psychoanalytic theorists report that logical and abstract thinking are acquired during this time. The adolescent is capable of abstract thinking and can reason on pure hypothesis (Blotcky and Looney, 1980).

Piaget, noted for his work in cognitive-developmental theory, identified a stage beginning with adolescence (Age 12) which he called formal operations. One of the first steps in this process is for the child to extend his reasoning abilities to objects and situations which he has not seen or experienced first hand. A major facet of the change is the shift from inductive to deductive logic.
Social learning theorists would also agree that adolescence is a time for increasing one's understanding of self and mastery over environment. Their approach, however, would place little emphasis on sequences of development. Rather, they argue that the laws of learning remain the same throughout life and that, although behavior does change, there are no fixed sequences in these changes.

Adolescents, according to social learning theorists, have behavioral tendencies which can be modified by controlling environmental reinforcements (Sears, 1977) or through observation (Bandura, 1977). Bandura further argues that children and adolescents learn new behaviors largely through modeling.

Agreement exists, then, that adolescence is a time of growth, change and shaping in preparation for becoming an adult. Differences occur as to how and why that change occurs. Studies of adolescents as leaders support the notion that they can be successful at influencing others (Hannah and Midlarsky, 1981). Studies of the development of leadership among adolescents are equivocal as has been reported. Little is understood regarding the formation of social influence processes by adolescents. Following the pattern of research with adults, studies focused initially on leadership traits and, to a lesser extent, on the relationship between leader and situation. The study of the application of Fiedler's contingency model with children only partially supported the model (Hardy, Sack and Harpine, 1973) yet there is substantial support for the model as applied to adults.
Many questions remain unanswered as to how and when adolescents become leaders. The effort that exists for developing leadership training programs for young people suggests widespread agreement that leadership is an important consideration for the developing adolescent. Many schools include leadership training as a curriculum component and school-related activities are often viewed as important on-the-job leadership training experiences.

Finally, adolescents are at a time when they are becoming more aware of themselves in relation to their environment and are developing ways of better managing that environment. Their energies are focused on learning as they prepare themselves to become successful adults. The application of Leader Match training represents an approach to learning which has been successful with adults in many management situations. Applying Leader Match training to adolescents potentially expands a successful leadership training concept.
CHAPTER III
METHODOLOGY

Leader Match (Fiedler, Chemers & Mahar, 1977) is a self-instructional training program based on the contingency theory of leadership (Fiedler, 1977). The theory states that a group's success depends on two factors: (a) the leader's basic motivation either to relate to members of his group or to achieve task success, and (b) the degree to which the leadership situation is favorable in enabling the leader to exercise power and influence (Fiedler, 1972).

Leader Match has been used with adults in organizational settings and the effectiveness of the approach has been documented (Fiedler and Mahar, 1979). Questions to be investigated here are 1) whether or not group performance measures of adolescents will improve significantly if Leader Match training is given; 2) whether or not team perception of group leader will change as a result of training and 3) whether or not leadership behavior will be influenced by training.

Leader Match has been revised, as a part of this study, for use with adolescents. The revision was designed to make Leader Match more readable for adolescents. Further, Leader Match exercises were rewritten so as to use examples that have meaning for adolescents.

Hypothesis

The formal hypotheses tested in this study are: (1) Leadership effectiveness as measured by group performance will improve more for those teams whose leaders receive Leader Match training than for those
whose leaders receive self awareness training. (2) Perception of leadership on the part of group members as measured on a sociometric scale is influenced more by providing Leader Match training to a team leader than by providing self awareness training.

(3) Leadership behaviors of team leaders as measured by self report and report of team coaches is affected more by Leader Match training than by self awareness training.

A. Dependent Variables

The first hypothesis states that group effectiveness will improve more for those groups whose leaders receive Leader Match for Adolescents (LMA). The dependent variable, leadership effectiveness, will be measured by group performance. Group performance will be a measure of the success of the group in their primary activity. In this case, it is the percentage of games won in league participation by high school basketball teams composed of adolescent males between the ages of 16 and 18. A similar measure was used by Fiedler in an early study of basketball teams during the development of the contingency theory (Fiedler, 1954).

The second hypothesis addresses changes in perception of team members concerning the leadership role of the team leader who receives LMA. Perception of leadership role by team members was obtained at the beginning and end of the league season during the study years by using a sociometric scale described under "Research Instruments".

Hypothesis three states that leadership behaviors by team leaders will be influenced as a result of training using LMA. Meaningful and
measurable categories of leadership behaviors have been chosen from a taxonomy of leader behaviors developed as a result of a four year program of research (Yukl, 1981) and described under "Research Instruments".

B. Independent Variable

The independent variable is training. Leader Match for Adolescents was administered to the experimental group and self awareness training was offered to members of the control group.

Study Population

The study of Leader Match with adolescent groups was undertaken using high school basketball team leaders between the ages of 16 and 18. High school basketball teams represent groups in which performance is directly related to the leadership ability of specific team players. Basketball is a player oriented sport. Because basketball is continuous play, the team must rely upon the leadership of certain team members to achieve a successful performance.

In contrast, a sport such as football comes to a halt at the end of each play and coaches have an opportunity to intercede with suggestions and directions for future plays. Football teams, then, have greater dependence on the leadership of coaches to determine successful plays. Basketball coaches must teach their players the best strategies they can and then rely upon certain team members to provide the right judgment and influence to lead the team to victory.
(Harshman, 1983). The coach must turn the leadership role over to team members.

A total of 60 team leaders were recruited by contacting high school basketball coaches. Participants were randomly assigned to one of two groups. One group was to receive Leader Match for Adolescents (LMA); a second group was offered a self awareness training program (SAW) currently available in school settings which is designed to influence player attitude and motivation. The purpose of the self awareness training was to offer an acceptable activity to team leaders who were not selected for LMA in order to control for any "Hawthorn effect".

Research Instruments

Data collection occurred at four points in time, prior to, during and after training, and after the league season following training.

A. Data Collected Prior to Training

Biographical Information: Biographical information was obtained from all study participants. Data collected included age, height, weight, number of years experience playing basketball, number of years playing on a high school team, whether or not participant had ever received leadership training.

Intellectual Level: It was important to determine whether or not participants in the study had similar intellectual abilities. A test of fluid and crystallized intelligence, developed by J. Horn and R. Cattel (1967), was administered prior to the actual training but on the day of training. The theory of fluid and crystallized intelli-
gence states that intellectual abilities are organized at a general level into two general intelligences. Fluid intelligence calls for a capacity to perceive relations and involve concept formation and attainment, reasoning and abstracting. Crystallized intelligence indicates the extent to which one has appropriated the collective intelligence of his culture for his own use (Horn and Cattell, 1967).

The measures in Horn and Cattell's Test of Fluid and Crystallized Intelligence were obtained from a study of 297 individuals ranging in age from 14 - 61. Of this group, 46 subjects were 14 - 17 and 51 subjects were 18 - 20 years old. Results were consistent with those found in earlier, similar studies and agree with other studies employing similar measures such as the Matrices subtest and the performance subtests of the Wechsler scales. Measures of crystallized intelligence agree with similar measures like the Concept Mastery, Otis and Stanford-Binet (Horn & Cattell, 1967).

This test was chosen because measures were obtained from a sample which included adolescents in the same age range as this study, has demonstrated reliability and validity and was easy to administer. It provided adequate information for comparing intellectual levels of participants. The administration required less than twenty minutes, an important factor when considering the energy level required from participants in a full day of leadership training.

B. Data Collected Before and After Basketball Season

Team Performance: Information on team standing was collected for two years prior to training and for the league season immediately
following.

Sociometric Measure: Since team captains are chosen in different ways for each team, it is important to know whether or not the team leader was, in fact, perceived by members of the team in a leadership role. Further it is important to note change in perception as a result of leadership training. A sociometric test was given to members of every team represented by the team leaders participating in the study. The sociometric test is a technique for eliciting responses from members of a defined social group on the choice, communication, and interaction patterns of individuals in the group (Kerlinger, 1973). The test consisted of asking each member of the team to name the people whom he felt to be a) most influential b) most cooperative c) best player d) best leader and e) best liked within the group.

Team members were asked to identify, in order of priority, the three players whom they felt each of the five categories best described. Responses were compiled for each team. If the team leader/study participant was given first priority in a particular category, he was given a score of 3 for that category. If he was picked second, he received a 2 and if he was picked third he received a 1. Not being chosen at all for a particular category caused a participant to receive a 0. Scores were obtained and calculated before and after the season.

In a review of technical literature on reliability and validity, Gronlund (1959) stated that in general, internal consistency of socio-
metric tests has tended to be high. Studies using a test-retest approach found correlations between choice-status indices ranging from time, .65 to .66. On the question of face validity for a test, Gronlund (1959) reports agreement that a sociometric test does indeed appear to measure social structure.

Self Esteem: A self esteem scale was administered to participants of training on the day of training but prior to training. The measure of self esteem employed was a ten-item Guttman scale standardized by Rosenberg in a study of 5,024 high school juniors and seniors from ten randomly selected public high schools (Rosenberg, 1965). The Guttman or cumulative scale consists of a relatively small set of homogeneous items that are unidimensional.

Items were selected by Rosenberg which openly and directly dealt with self esteem. The method of validation often used with a priori personality scales is the known-group method (Kerlinger, 1973). As a means of validation, Rosenberg demonstrated relationships with data from other groups which reflected similar theoretical meaning. Included was a sociometric study conducted among 272 high school seniors. He found that the lower the individual's self esteem, the less likely that individual is to be described as an active class participant. Similarly those who responded that others were likely to think well of them were also likely to have high self esteem scores.

The Rosenberg scale was chosen because of its development and use with adolescents in the same age range of this study. Further, validation evidence included comparison studies with adolescents. The
test insures a unidimensional continuum by establishing a pattern which must be satisfied before the scale can be accepted. It is easy to administer, taking approximately ten minutes.

C. Data Collected During Training

Leadership Style: The predictor measure used in the contingency model is the Least Preferred CoWorker score (LPC). This score is seen as a measure which reflects the motivational system that evokes relationship-oriented and task-oriented behaviors from high versus low LPC persons in situations which are unfavorable for them as leaders.

Comprehension: A simple paper and pencil test was administered at the end of each major section of Leader Match training in order to determine that participants understood the material being tested.

D. Data Collected after League Season

A survey was conducted after the League Season following the training. Both coaches and team leaders were questioned regarding the use of leader behaviors by team leaders participating in the study. Leader behaviors were selected from a taxonomy of leader behaviors developed by Yukl and associates (1981). They included:

1. Performance Emphasis: The extent to which a leader emphasizes the importance of subordinate performance, tries to improve productivity and efficiency, tries to keep subordinates working up to their capacity and checks on their performance.

2. Consideration: The extent to which a leader is friendly, supportive, and considerate in his or her behavior toward subordinates and tries to be fair and objective.

3. Inspiration: The extent to which a leader stimulates enthusiasm among subordinates for the work of the group and says things to build
subordinate confidence in their ability to perform assignments successfully and attain group objectives.

4. Praise-Recognition: The extent to which a leader provides praise and recognition to subordinates with effective performance, shows appreciation for their special efforts and contributions, and makes sure they get credit for their helpful ideas and suggestions.

5. Decision Participation: The extent to which a leader consults with subordinates and otherwise allows them to influence his or her decisions.

6. Role Clarification: The extent to which a leader informs subordinates about their duties and responsibilities, specifies the rules and policies that must be observed, and lets subordinates know what is expected of them.

7. Goal Setting: The extent to which a leader emphasizes the importance of setting specific performance goals for each important aspect of a subordinate's job, measures progress toward goals, and provides concrete feedback.

8. Planning: The extent to which a leader plans how to efficiently organize and schedule the work in advance, plans how to attain work unit objectives, and makes contingency plans for potential problems.

9. Interaction Facilitation: The extent to which a leader tries to get subordinates to be friendly with each other, cooperate, share information and ideas, and help each other.

10. Conflict Management: The extent to which a leader restrains subordinates from fighting and arguing, encourages them to resolve conflicts in a constructive manner, and helps to settle conflicts and disagreements between subordinates.

A telephone survey was conducted with team leaders while coaches were asked to respond by mail. Coaches had not been informed of the particular training group to which their team participant had been assigned. Leader behaviors were described in terms meaningful to the adolescent team leaders and responses from both coaches and team leaders were recorded using the following scale:
Frequent (At least twice a week) 5
Often (At least once a week) 4
Moderate (At least once every two weeks) 3
Rarely (Only a few times during season) 2
Never (Not at all) 1

Description of Procedures

All high school basketball teams participating in leagues, formed within designated school boundaries in the State of Washington, were considered eligible for participation. Coaches of 60 high school basketball teams from Western and Eastern Washington were contacted and agreed to send their team leader to a training program at one of four sites. Sites were selected in order to minimize travel time for the maximum number of participants. Of those participating, 30 were randomly selected to receive Leader Match for Adolescents and the remaining 30 were assigned self awareness training. Subjects were male adolescents participating in regular team play during league season for 1984, the study year. The age of adolescents ranged from 15-18. Training was conducted over a one day period in each of the selected sites.

Subjects were randomly assigned to one of two groups. The experimental group (Group 1) received Leader Match (LMA) training. The control group (Group 2) received self awareness (SAW) training. De-
scriptive information concerning age, size, experience and cognitive ability were collected from all participants.

A pretest of the effective use of LMA was conducted with adolescents using several methods. Adolescents were asked to: review the material as it was being developed; to offer suggestions as to its readability and believability; and, to report their understanding of the content. Leader Match training was given to a group of adolescents as a pretest prior to the carrying out the actual study. An evaluation of the success of the pretest was conducted by testing for understanding of content and by soliciting feedback as to the manner of presentation and the usefulness of the content.

Leader Match training was administered to Group 1 over a six hour period at each training site, by this author, through the use of lecture and discussion augmented by slides. Each major concept was presented verbally, on slides and then in the form of a probe. These short episodes or "probes" test whether the trainee has understood the concepts. Trainees select the best answer for the probe and then receive immediate feedback. Following each section of the presentation a paper and pencil test was administered in order to assure comprehension of the material.

In the first section of the training, trainees completed the Least Preferred Coworker (LPC) scale, which measures their leadership motivation, and learned how to interpret their scores. Subsequent sections were presented which describes the use of various scales for diagnosing situational control (i.e., leader-member relations, task
structure, and position power). The final section of training dealt with methods for changing or modifying situational factors in a way which will enable trainees to match their personal leadership style with the situation. Subjects in Group 2 were administered a self-awareness training that has been developed for use with high school sports teams. Training was over the same six hour period and in each of the same locations as the experimental group. The trainer was the same in each instance. Training consisted of listening to taped audio materials and receiving augmentation on materials through discussion with the trainer.

Data Analysis

A randomized group design was selected for this study, using an experimental and a control group. There are many advantages. A randomized group design has one of the best built-in theoretical control system of any design; it is flexible, being theoretically capable of extension to any number of groups with any number of variables; if extended to more than one variable, it can test several hypotheses at one time; and it is statistically and probabilistically elegant (Kerlinger, 1973).

A comparison of the two groups for significant differences in the characteristics of the participants was conducted using simple descriptive statistics. Chi Square, a non-parametric statistical test, was chosen for variables that did not depend upon a normal distribution or the metric quality of interval scales but were ordinal in scale and numeric in type. The Chi-square test of statistical sig-
nificance is used to determine whether a systematic relationship exists between two variables. Systematic differences between groups for variables with interval scales were evaluated using t-tests. The t is a statistic which can be computed for a normally distributed variable.

Differences in team performance between the two groups (Hypothesis 1) were examined using t-tests or analysis of variance as appropriate to the particular analysis. Using analysis of variance, differences between more than two groups can be tested for statistical significance, whereas the t-test applies only to two groups.

Team performance was calculated using analysis of co-variance. Analysis of co-variance is a form of analysis of variance that tests the significance of the differences between groups after taking into account initial differences in Y measures (i.e. pretest measures) or differences in some pertinent independent variable (Kerlinger, 1973). In this case, changes in team performance were calculated using two previous years to establish a baseline performance score. A difference score was calculated which represented the change in performance between the baseline score and the study year.

An analysis of change in perception by team members toward team leader (Hypothesis 2) was conducted using an analysis of variance for a repeated measures design. A correlation analysis was obtained as a measure of the relationship between sociometric variables. Bivariate correlation analysis provides a single number summarizing the relationship between two variables. The resulting correlation coefficient
indicates the degree to which variation in one variable is related to variation in another. The strength of association between a pair of variables is thus summarized. A comparison of the effect of training on leader behaviors (Hypothesis 3) was conducted between the two groups using the t-tests as described above. Descriptions of leader behaviors as reported by coaches and team leaders were compared using bivariate correlation analysis.
CHAPTER IV
RESULTS

Sixty coaches were asked to recommend a team leader for participation in training. Of the 30 subjects randomly assigned to Group 1 (LMA) 20 participated. The remaining 10 were no-shows. Of the 30 subjects assigned to Group 2 (SAW) only nine actually participated. Ten additional subjects were contacted after the training to determine the reason for non-attendance. All ten reported reasons such as a recent sports injury, car trouble and other similar reasons. Of those ten, seven agreed to participate in all other aspects of the study. They provided the same information as had been collected from other participants and their teammates responded to sociometric tests. Analysis was then conducted with 20 subjects in Group 1 and 16 subjects assigned to Group 2.

A paper and pencil test was administered to LMA Group following each of three major sections of Leader Match training. Participants answered approximately 85% of the answers correctly. Further, group participation was quite lively and the quality of interaction by participants supported the conclusion that materials were understood.

An analysis of the two groups revealed similar characteristics:
TABLE 1

A COMPARISON OF GROUP CHARACTERISTICS

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</tbody>
</table>

Intelligence as measured by Horn and Cattell (1967) Test of Fluid and Crystallized Intelligence was not different between the two groups. A further breakdown confirmed there were no differences between the nine members of Group 2 who received training and the seven who did not.

A comparison was made of team performance for each group in the years included as part of the study. A t-test was performed in order to compare percentage of games won between groups for each of the years included.

TABLE 2

A COMPARISON OF PERFORMANCE BETWEEN GROUPS WHO RECEIVED EITHER LEADERSHIP OR SELF AWARENESS TRAINING

<table>
<thead>
<tr>
<th>PERCENT OF GAMES WON</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982</td>
</tr>
<tr>
<td>LMA GROUP (n=20)</td>
</tr>
<tr>
<td>.49</td>
</tr>
<tr>
<td>SAW GROUP (n=16)</td>
</tr>
<tr>
<td>.54</td>
</tr>
<tr>
<td>(ns)</td>
</tr>
</tbody>
</table>
It should be noted that LMA teams experienced significantly less success than SAW teams in the year previous to the study year \((p=.03)\).

An improvement score was calculated for each team which reflected change over the three year period. Number of games won for each team in each of the three years was converted to Z-scores and an average of the two years prior to the study year was computed as follows:

\[
\frac{Z\text{Year1} + Z\text{Year2}}{2}
\]

where \(Z\text{Year1}\) is number of games won two years prior to study year and \(Z\text{Year2}\) is number of games won one year prior to study year. The resultant score represents a baseline from which change in number of games won between the study year and the year previous can be calculated.

Over the three year period, the LMA Group showed the greatest overall improvement. However, a comparison between groups using the calculated improvement score did not reach significance. Therefore, Hypothesis 1, which states that teams whose leaders received Leader Match training would improve more was not supported.

Hypothesis 2 states that perception of leadership on the part of team members is influenced more by Leader Match training than self awareness training. Team member perceptions of team leaders were compared using an analysis of variance for a repeated measures design.
TABLE 3

CHANGE IN SOCIOMETRIC SCORES COMPARING LEADERSHIP AND SELF AWARENESS TRAINED LEADERS

<table>
<thead>
<tr>
<th></th>
<th>LMA GROUP (n=20)</th>
<th>SAW GROUP (n=16)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most Cooperative</td>
<td>.10</td>
<td>.06</td>
</tr>
<tr>
<td>Best Liked</td>
<td>-.40</td>
<td>.38</td>
</tr>
<tr>
<td>Best Player</td>
<td>.15</td>
<td>-.13</td>
</tr>
<tr>
<td>Best Leader</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>Most Influential</td>
<td>.25</td>
<td>-.63</td>
</tr>
</tbody>
</table>

*p=.01  **p=.03

LMA Group leaders were rated numerically higher overall in three of the categories, remained the same in one and declined in one. Changes related to most influential and best liked were statistically significant.

Of the five categories, most influential and best leader imply directive behavior on the part of the leader which would presumably have a greater effect on group performance. Most cooperative and best liked imply popularity. And best player is a measure of skill.

The most striking finding is that LMA Group leaders were perceived by their teammates to increase in influence over the course of the season following training whereas SAW Group leaders declined in influence as reported by their teammates (p=.03). The interesting corollary is that LMA team leaders were less likely to be designated
as best liked by their teammates over the course of the season while SAW team leaders were more likely to be selected as best liked (p=.01).

Perception of best leader remained constant in both groups. Best leader and most influential were highly correlated (.72). It is difficult to say why perception of best leader did not change even though team leaders were seen as more influential. Perhaps the idea of "best leader" is less clear to young people than the idea of "most influential".

It is especially interesting to note an increase in influence despite a decline in being best liked. Perhaps an increase in influence and a decline in popularity is an indication of increased social distance on the part of the leader.

Overall, these results lend support to Hypothesis 2 which states that Leader Match training does influence team perception of leader behavior by teammates.

Hypothesis 3 states that leadership behavior will be influenced more by Leader Match training than by self awareness training. Using the taxonomy of leader behaviors (Yukl, 1981), team leader behaviors were ranked according to frequency of occurrence by both coaches and team leaders after the completion of the league season following training. Coaches responses were analyzed using a weighted means comparison of average behavior scores.
### Table 4

**Weighted Means Comparison of Behavior Ratings by Coaches of Team Leaders Who Received Leadership or Self Awareness Training**

<table>
<thead>
<tr>
<th>Behavior</th>
<th>LMA Group (N=20)</th>
<th>SAW Group (N=16)</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encouraging good performance</td>
<td>3.842</td>
<td>3.666</td>
<td>.49</td>
</tr>
<tr>
<td>Showing consideration to teammates</td>
<td>4.050</td>
<td>4.000</td>
<td>.13</td>
</tr>
<tr>
<td>Inspiring others</td>
<td>3.800</td>
<td>3.666</td>
<td>.33</td>
</tr>
<tr>
<td>Recognizing and praising good performance</td>
<td>4.200</td>
<td>3.888</td>
<td>.90</td>
</tr>
<tr>
<td>Encourage teammates to help in making decisions</td>
<td>3.250</td>
<td>3.111</td>
<td>.42</td>
</tr>
<tr>
<td>Inform team members of roles and responsibilities</td>
<td>3.150</td>
<td>2.888</td>
<td>.60</td>
</tr>
<tr>
<td>Set goals</td>
<td>3.850</td>
<td>3.888</td>
<td>-.08</td>
</tr>
<tr>
<td>Assist in planning team activities</td>
<td>3.250</td>
<td>2.777</td>
<td>.91</td>
</tr>
<tr>
<td>Stimulate interaction between teammates</td>
<td>3.500</td>
<td>3.333</td>
<td>.42*</td>
</tr>
<tr>
<td>Prevent arguing and fighting</td>
<td>3.700</td>
<td>3.111</td>
<td>1.37</td>
</tr>
</tbody>
</table>

*Approaching significance (p=.09)

Although statistical significance was not reached in a comparison of individual behaviors in the two groups, LMA leaders were seen by their coaches as engaging in designated leader behaviors more frequently for 80% of the behaviors.
Correlations between the eight leader behaviors which LMA Group coaches reported as more frequent were compared using bivariate correlation analysis. Correlations ranged from .34 to .82 with only one correlation falling below .40. All were significant at the .03 level or greater. Therefore, coach response scores for each of the eight behaviors were added. A weighted means comparison of the combined response scores showed LMA leaders being rated by their coaches as using leader behaviors significantly more often than SAW leaders. (p=.001)

**TABLE 5**

A COMPARISON OF COMBINED BEHAVIOR RATINGS BY COACHES

<table>
<thead>
<tr>
<th>LMA GROUP (n=20)</th>
<th>SAW GROUP (n=16)</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined mean score</td>
<td>28.5</td>
<td>14.88</td>
</tr>
</tbody>
</table>

*p=.001

Team leader evaluation of the frequency of their own behavior was considerably more mixed.
<table>
<thead>
<tr>
<th></th>
<th>LMA GROUP (N=20)</th>
<th>SAW GROUP (N=16)</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encouraging good performance</td>
<td>4.450</td>
<td>4.666</td>
<td>-.78</td>
</tr>
<tr>
<td>Showing consideration to teammates</td>
<td>4.500</td>
<td>4.555</td>
<td>-.24</td>
</tr>
<tr>
<td>Inspiring others</td>
<td>4.650</td>
<td>4.222</td>
<td>1.95</td>
</tr>
<tr>
<td>Recognizing and praising good performance</td>
<td>4.600</td>
<td>4.666</td>
<td>-.26</td>
</tr>
<tr>
<td>Encourage teammates to help in making decisions</td>
<td>3.250</td>
<td>3.555</td>
<td>-.93</td>
</tr>
<tr>
<td>Inform team members of roles and responsibilities</td>
<td>3.300</td>
<td>3.888</td>
<td>-1.33</td>
</tr>
<tr>
<td>Set goals</td>
<td>4.300</td>
<td>4.000</td>
<td>.79</td>
</tr>
<tr>
<td>Assist in planning team activities</td>
<td>3.300</td>
<td>2.777</td>
<td>1.02</td>
</tr>
<tr>
<td>Stimulate interaction between team members</td>
<td>3.700</td>
<td>3.333</td>
<td>1.11</td>
</tr>
<tr>
<td>Prevent arguing and fighting</td>
<td>4.000</td>
<td>3.666</td>
<td>.88</td>
</tr>
</tbody>
</table>

*p = .03

LMA leaders rated themselves higher than SAW leaders for only half of the ten behaviors. The one behavior which was reported as significantly higher in frequency by LMA team leaders was "inspiring others" (p = .03). Thinking back to the analysis of sociometric ratings by team members (Figure 2), LMA team leaders were perceived as
more influential over time than were SAW team leaders. Correlations between sociometric scores for most influential and team leader responses for "inspiring others" showed a correlation of .46 (p = .03). Team leaders, in reporting their own behavior, appeared to recognize their increasing influence and describe it as inspirational.

There were seven pairs of coach and player responses which were correlated at a significant level of at least .05. No other pairs were significantly correlated. Correlated pairs are illustrated in Table 7:

<table>
<thead>
<tr>
<th>COACH RESPONSE</th>
<th>Inspired Others</th>
<th>Assisted Planning</th>
<th>Showed Consideration</th>
<th>Prevented Arguments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informed roles/responsibility</td>
<td>.41*</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>Assisted Planning</td>
<td>.45**</td>
<td>.46**</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>Stimulated Interaction</td>
<td>.53**</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>Prevented Arguments</td>
<td>.53**</td>
<td>ns</td>
<td>ns</td>
<td>.51**</td>
</tr>
<tr>
<td>Inspired Others</td>
<td>ns</td>
<td>ns</td>
<td>.41*</td>
<td>ns</td>
</tr>
</tbody>
</table>

*p = .01  **p = .005
It is interesting to note the correlations between player evaluation of "inspiration" and coaches responses along four different behavioral dimensions. Team leader and coaches did not view inspiration in the same way.

The four leader behaviors described by coaches which correlate with players concept of "inspirational" fall within two categories. The first two behaviors, 1) informed team members about roles and responsibilities and 2) assisted planning, are directive behaviors that relate to the accomplishment of tasks. The other two, 1) stimulated interaction and 2) prevented arguments, are interactional behaviors designed to improve and maintain team relationships. Coaches appear to be describing "inspirational" behavior in more discriminating terms. A coach response for "inspiration" was correlated with a player response for "consideration".

An argument can be made that team members, team leaders and coaches are reflecting the same concept only describing it in different ways. Team leaders engaged in behaviors they saw as inspirational while team members describe the effect on themselves as team members in terms of influence. Coaches, observing the "inspirational behavior" were more sophisticated in their interpretation and were able to define the same behavior into more discriminating categories.
CHAPTER V

CONCLUSIONS

There is a paucity of evidence regarding the success of theoretical approaches to leadership training for either adults or adolescents. Leadership training programs have been developed and used extensively with adults in management training positions in many organizational settings. Many of these programs are based on studies of leadership style and situation. The training program based on the contingency theory, Leader Match, is one of the few for which validation studies exist.

The application of Leader Match with adolescents allows an opportunity to test a leadership training program, used successfully with adults, and one for which considerable theoretical support exists. It presumes the existence of a motivational structure similar to that found in adult leaders which is predictive of a certain cluster of behaviors or a leadership style. Further, the existence of a particular leadership style suggests the adolescent will be more successful in some situations than in others.

The study of Leader Match training with adolescents examines the effect of training on group performance, individual behavior on the part of the leader and perception of leader behavior on the part of followers. Group performance was measured by number of games won in league play, while individual leader behaviors were measured based on frequency of occurrence as reported by team leaders and coaches inde-
pendently. The perception of leader behaviors by followers was reported by team members.

Team leaders were assigned randomly to one of two groups. One group received Leader Match training while the other received self-awareness training. Teams whose leaders received Leader Match training actually won more league games than those whose leaders received a self-awareness training. Number of games won during league play were reported for two years prior to the study year and the league year after which training took place.

Teams whose leaders received Leader Match training had very poor performance as measured by games won prior to the study year. Those teams did win more games between that year and the study year. Even over the three year period, with the difference in the prior year statistically adjusted, the same teams showed a greater increase in number of games won than did teams whose leaders receive self-awareness training.

However, a comparison of the difference in performance did not reach statistical significance. It is difficult to say whether a similar study with larger group sizes would be more likely to identify a statistically significant difference in performance. Based on the results of this study group performance was not an indicator of the successful application of Leader Match training.

It is important to note, however, that although group performance measures were used consistently in the development of contingency theory, individual performance was the measure of validation for the
success of Leader Match training (Fiedler, 1979). Individual performance measures, per se, were not collected as a part of this study. What was documented, however, was the perception of those who were to be the recipient of leadership efforts – team members. Further, an evaluation of the frequency of leader behaviors was obtained from the team leaders themselves and from highly motivated observers – their coaches.

In that regard, this study provides some intriguing results. The perception of successful leadership is different depending on whether the observer is a leader, a follower or an interested observer. Followers, in this case, were team members and they reported a change in influence on the part of their team leader. Leaders who received Leader Match training increased in influence, according to their team mates, while the influence of other team leaders declined. These more influential team leaders were also more likely to describe their own behavior as inspirational, appearing to recognize their increasing influence over their team members.

Coaches further corroborated this finding by reporting that leadership behaviors occurred more frequently in general for team leaders who received Leader Match. Perceptions from three different perspectives all supported the notion of increased leadership on the part of the trained leader. An argument can be made that these combined perspectives represent, in fact, a rather broad rating of the performance of the team leaders. Therefore this study confirms Fiedler's earlier premise that Leader Match training is effective
based on ratings of individual performance (Fiedler and Mahar, 1979).

A related finding suggests differences, perhaps related to development, in the way social influence or leadership occurs and is described. Earlier studies of leadership identified a number of leader "traits" associated with adolescent leaders. Friendliness and a pleasing personality were common to leaders (Jones, 1958; DeHaan, 1962; Friesen, 1968). Conformance to prevailing norms was characteristic of girl leaders (Coleman, 1961; Gordon, 1957) while ownership or access to a car was important for male leaders (Gordon, 1957; Coleman, 1961; DeHaan, 1962; Eve, 1975; Snyder, 1975). Traits described in these studies all have to do with popularity or likeability of leaders. Results of this study suggest greater discrimination on the part of young people between influence related to accomplishing group goals and popularity. Team leaders who received Leader Match became more influential in the eyes of their team mates, but declined in popularity.

Team leaders are chosen from among their colleagues to assume a leadership position. As a result, their relationship with those same colleagues change, at least as it relates to team activity. Their new position may require increased social distance in order to assume a more directive role regarding the responsibility of team members in carrying out team goals and objectives.

Based on the results of this study, it would seem that Leader Match trained leaders are able to understand the need for change in how they relate to their peers as they assume leadership roles and
better able to accomplish that change in acceptable ways. Further, they are able to learn strategies for influencing others in a way that is recognized and understood by the targets of that influence.

Moreover, team members in general seemed capable of discriminating between popularity and influence related to accomplishing team goals. It is particularly interesting to note that team leaders who gained in popularity declined in influence. Team members expectations of colleagues appear to change when they become leaders. They were able to discriminate between leadership and friendship.

Further discrimination occurred when leadership behaviors were described by adults. Their descriptions became more precise. Whereas team leaders who were more influential described their behavior as inspirational, coaches were more specific in their description. A high correlation existed between self report by team leaders of being inspirational and coaches report of specific leader behaviors that were either directive or interactive in nature. Coaches view of inspirational behavior was correlated with team leaders report of considerate behavior toward team members.

The adolescent recognizes and is able to employ specific leadership behaviors effectively. However, his way of thinking about them is far more global than that of an adult observer. Hence, one difference between adult and adolescent views on leadership is the specificity with which they are able to think about or describe it. However, even though the adolescent is more global in describing leadership, he
appears to understand the processes well enough to actually employ them in a way which increases influence over followers.

**Summary**

Although definitions of leadership vary, a common theme is the ability of the leader to influence others as a result of congruence in goals and values between leader and follower. A leader influences followers in the attainment of mutual objectives. Learning to be a leader is a task to be undertaken prior to entering an adult world.

How does leadership develop? Children learn to influence others almost from the time they are born. As they grow older, their methods of influence become increasingly sophisticated. The child may cry while the adolescent is more likely to learn to negotiate.

Adolescents, particularly, are entering a time of increasing self awareness. Further, they have achieved a developmental level which allows for hypothetical reasoning. Therefore, they are able to view situations in an abstract way and learn skills which can be applied in actual practice.

Most importantly, adolescents are motivated to learn new ways to manage an increasingly complex environment. As children they are dependent on parents or other adult caretakers. As adolescents they must learn to reduce dependence on adult caretakers and look toward assuming independence in an adult world. Their role with adults in their world changes, and expectations become different. They are expected to make decisions and try their wings in relation to aca-
demic, work, recreational and other components of their social system. As they develop, adolescents are more likely to be looked to for leadership behaviors in their interactions with adults, peers and younger children. And they become very aware of the times they successfully influence others and when they do not.

If the acquisition of social influence skills is part of a developmental process, when does it start and how are skills attained? Considerable effort has gone into developing leadership training for adolescents in school and other settings, evidence of a shared belief that adolescents are able to differentiate the components of successful influence and learn to use it systematically in leadership roles.

We know from studies of adult leadership a motivational structure exists which determines certain leadership behaviors or styles. In addition, Fiedler, who established the contingency theory, and others who study it have been able to measure the relationship between leadership style and situation.

If a motivational structure exists which determines adult leadership style, does it also exist for adolescents? Little research exists that examines the motivational structure of the adolescent as it affects leadership style or the relationship between adolescent leadership and situation. What has been done is mixed in its interpretation with the exception of the studies based on the contingency theory (Hardy, Sack & Harpine, 1973; Hardy, 1975) which generally supported the model.
In summary, there is convincing evidence that influence and, thus, leadership skills and strategies can be taught. The young people receiving Leader Match training in this study were exposed to a very structured training which defined their own style of leadership, taught them to analyze their leadership situation and suggested specific strategies for altering situations to fit their style.

Once trained, Leader Match trained leaders increased their influence over team members and increased their frequency of use of leader behaviors as reported by coaches. Further, these young leaders appeared to recognize their success and described their behavior in relation to their team mates as inspirational.

The use of group performance as a measure of successful leadership training was not supported despite its use in measuring the relationship between leadership style and situation in studies of the contingency theory. Further study of group performance as a measure of successful training using larger groups is warranted.

The results of this study supports continued use of Leader Match training. It is important to remember, however, in the application of this or any other adolescent leadership training program the rather broadly defined notion of leadership on the part of adolescents. That isn't to say that adolescents cannot learn leadership skills and strategies. Rather, they may be non-specific in understanding and describing what they learn. As they become adults and continue to grow and develop as leaders, their ability to define leadership in more specific terms will increase.
More research is needed which examines the motivational structure of adolescent leaders in the same way adults have been studied. Structure of adolescent leadership may or may not change as a part of development. Yet there is certainly reason to believe that increasing one's social influence is a part of the developmental process. The way in which that development occurs affects an individual's ability to lead in any situation regardless of how fleeting it might be.

An interesting further study of Leader Match training would employ a longitudinal design. It would be most helpful to observe developmental changes in understanding leadership on the part of participants as well as measuring their success as leaders over time.

An important final note is a report of the anecdotal response to Leader Match training on the part of adolescent participants. In short, they loved it. Both participants and coaches told the author. Parents of participants remarked, through coaches, how much they appreciated the opportunity for their son to participate.

Participants who received self awareness training and their coaches were appreciative of the training they received but the direction of their comments was quite different. Young men who participated in Leader Match training were outspoken in their enthusiasm for being able to describe the leadership behaviors of others, particularly coaches and other teachers. They were interested in learning about their own leadership style primarily because knowing something about themselves gave them a way to think about how to handle different situations.
Participants in self awareness training, on the other hand, were likely to comment that their training reinforced what they already knew – they were inherently good leaders. The difference in response to training was in focus. Leader Match participants were describing a new way of looking at the world and a better understanding of how to manage it while self awareness participants were simply reporting greater self confidence.
Bibliography


Halpin, A.W., & Winer, B.J. (1952). The leadership behavior of the airplane commander. Columbus: Ohio State University Research Foundation.


APPENDIX A
LEAST PREFERRED CO-WORKER SCALE

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Score</th>
<th>Description</th>
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<tbody>
<tr>
<td>Pleasant:</td>
<td>8 7 6 5 4 3 2 1</td>
<td>Unpleasant</td>
</tr>
<tr>
<td>Friendly:</td>
<td>8 7 6 5 4 3 2 1</td>
<td>Unfriendly</td>
</tr>
<tr>
<td>Rejecting:</td>
<td>1 2 3 4 5 6 7 8</td>
<td>Accepting</td>
</tr>
<tr>
<td>Tense:</td>
<td>1 2 3 4 5 6 7 8</td>
<td>Relaxed</td>
</tr>
<tr>
<td>Distant:</td>
<td>1 2 3 4 5 6 7 8</td>
<td>Close</td>
</tr>
<tr>
<td>Cold:</td>
<td>1 2 3 4 5 6 7 8</td>
<td>Warm</td>
</tr>
<tr>
<td>Supportive:</td>
<td>8 7 6 5 4 3 2 1</td>
<td>Hostile</td>
</tr>
<tr>
<td>Boring:</td>
<td>1 2 3 4 5 6 7 8</td>
<td>Interesting</td>
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<td>8 7 6 5 4 3 2 1</td>
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<tr>
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<td>Sincere</td>
</tr>
<tr>
<td>Kind:</td>
<td>8 7 6 5 4 3 2 1</td>
<td>Unkind</td>
</tr>
</tbody>
</table>

Sum of all Scores
APPENDIX B

BIOGRAPHICAL INFORMATION QUESTIONNAIRE

Code #

Participant Data

Age     Height     Weight

Years Experience Playing Basketball

Test Data

Self Esteem Scale Score    Pre     Post

Instructional Level

Leader Match Training Scale Scores:

Least Preferred Coworker Scale
Leader Member Relationship Scale
Position Power Scale Score
Task Structure Scale Score
Adj for experience
Leadership Effectiveness Score

Individual Performance Scores

Number of Assists     Beg/Season     End/Season
Diving on loose balls
Taking charges
Forced turnovers
Offensive rebounds

Team Performance Score

Percentage of Games won  1982     1983     1984
APPENDIX C

UNIVERSITY OF WASHINGTON
CONSENT FORM

Leader Match Training for Adolescents

Investigator: Mary Richardson, M.H.A.
Administrator, Clinical Training Unit
C.D.M.R.C., University of Washington
545-1350

Purpose and Benefits

This study is being conducted in order to test a leadership training program which has been used successfully by adults, many of whom manage other people in their work. The training program is the result of many years of research. It has been revised for use with adolescents. Participation in the training program will give you an opportunity to learn more about yourself as a leader and teach you skills for being a more effective leader.

Procedures

Participants will be asked to provide information such as age, height, number of years playing basketball. Further you will be asked to take two brief tests (approximately ten minutes each). One test asks you to rate how you feel about yourself. Examples of items you would be asked to respond to include, "I feel I have a number of good qualities", or "I feel I do not have much to be proud of". There are ten questions. The second test is to ensure that you will not have any problem reading and understanding the training material. The leadership training will take about six hours. It involves reading, including interesting stories, and you will have an opportunity to decide what you might do if you were the person in the story. You will also get a chance to decide which leadership strategies are successful for you now as Captain of your basketball team and also learn some new strategies.

Risks, Stress, or Discomfort

You will be asked to respond to question on the test which asks you how you feel about yourself. This may make you uncomfortable. The tests you fill out will only be seen by the investigator, and will not be discussed with anyone. You may also think about ideas during the training which you may not wish to share with other members of the group. At no time will you be asked to discuss ideas if you do not wish to.

Continued....
University of Washington
Consent Form
Leadership Training for Adolescents
(Continued)

Other Information
You are free not to participate and may withdraw from this study at any time without penalty or loss of benefits to which you are otherwise entitled. The data obtained for this study will be kept in the investigators office and entered on a confidential data sheet. Only the investigator will have access to this data. It will be retained for two years. The results of this study will be reported only as part of a description of a group. No individual will be identified. The results will be included in a dissertation and possible publication or presentation. The results of this study will be placed in the thesis section of the University of Washington Library.

Signature of Investigator/Date

***

Subject's Statement
The study described above as been explained to me, and I voluntarily consent to participate in this study. I have had an opportunity to ask questions and understand that future questions I have about the research or about subjects' rights will be answered by the investigator listed above.

Signature of Subject Date

Signature of Parent or Guardian Date
APPENDIX D

(SELF ESTEEM SCALE – ROSENBERG, 1965)

DIRECTIONS: Listed below are a series of statements which could be used to describe how you feel about yourself. Please indicate your agreement with each statement by circling the appropriate number.

1. I feel that I am a person of worth, at least on an equal plane with others. 1 2 3 4 5 6
2. I feel that I have a number of good qualities. 1 2 3 4 5 6
3. All in all, I am inclined to feel that I am a failure. 1 2 3 4 5 6
4. I am able to do things as well as most other people. 1 2 3 4 5 6
5. I feel that I do not have much to be proud of. 1 2 3 4 5 6
6. I take a positive attitude toward myself. 1 2 3 4 5 6
7. On the whole, I am satisfied with myself. 1 2 3 4 5 6
8. I wish I could have more respect for myself. 1 2 3 4 5 6
9. I certainly feel useless at times. 1 2 3 4 5 6
10. At times I think I am no good at all. 1 2 3 4 5 6
APPENDIX E

SOCIOMETRIC SCALE

SCHOOL

This is a brief scale designed to give information for use in a study of the benefits of leadership training. You do not have to identify yourself. Please fill out the questionnaire according to the instructions below. Be sure to put the name of your school in the space above. Your answers will not be shared with anyone. Thank you.

DIRECTIONS: List in order of your choice three players on your team who fit the descriptions below. Use first and last names of players.

Most cooperative


Best Liked


Best Player


Best Leader


Most Influential


APPENDIX F

LEADER BEHAVIOR QUESTIONNAIRE FOR COACHES

SCHOOL______________________________

Thank you for answering the following questions regarding the participation of your team leader in the leadership training program.

1. Was the team leader whom you selected to attend the leadership training your first choice?

   YES______    NO_____

If the answer to QUESTION 1 was NO, please answer A and B.

If the answer to QUESTION 1 was YES, please skip to question 2.

   A. Was the boy whom you would have selected first to attend leadership training
      _____Unavailable
      _____Chose not to attend

   B. In retrospect, do you think the boy who ultimately attended became the leader in the eyes of the other team members?
      _____Yes    _____No

Please skip now to Question 3 if you answered A and B.

2. Did your opinion of his leadership abilities change during the season?

   _____Yes    _____No

If the answer to QUESTION 2 was YES, please answer A.

   A. Did you change your opinion opinion because:

      _____Poor Performance
      _____A more capable leader emerged during the season
      _____Other (Please state reason)_____________________

_____________________________________________
3. Was the boy who attended the leadership training the captain or co-captain for this past season?

_____Yes     _____No

Please recall the 1983/84 basketball season. How did the boy who was trained interact with team members.
For each behavior described, indicate on the following scale how often the behavior occurred.

Frequent  Often  Moderate  Rarely  Never
...
...
...
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Frequent: at least twice a week

Often: at least once a week

Moderate: at least once every two weeks

Rarely: only a few times during the season

Never: not at all

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<thead>
<tr>
<th></th>
<th>FREQUENT</th>
<th>OFTEN</th>
<th>MODERATE</th>
<th>RARELY</th>
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<td>Emphasized importance of</td>
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<td>good performance during</td>
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<td>and considerate toward</td>
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<td>other team members.</td>
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<td>their best.</td>
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<td>Encouraged team members</td>
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<td>Informed team members</td>
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<td>of their role and</td>
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<td>responsibility to the team</td>
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<td>Set goals for himself</td>
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<td>and for the team</td>
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</table>
Assisted in planning team activities
Stimulated interaction among team members
Helped keep team members from arguing and fighting
APPENDIX G
LEADER BEHAVIOR QUESTIONNAIRE FOR TEAM LEADERS

NAME__________________________________________

SCHOOL________________________________________

1. Do you feel you were the appropriate choice for attending a workshop designed for the team leader
   ____Yes    ____No

IF NO ASK QUESTION 2

IF YES SKIP TO QUESTION 3

2. Who would have been a better choice:
   (ASK FOR NAME)_____________________________________

3. Were you the team captain for this past season?
   ____Yes    ____No

IF NO ASK QUESTION 4

IF YES SKIP TO QUESTION 5

4. Did you expect to be team captain?
   ____Yes    ____No

5. Who do you think was the most influential team member?
   (ASK FOR NAME)_____________________________________

6. Think back to the leadership training and name the three most important things you learned to do as a result of the training:
   1)_____________________________________________________________________
   2)_____________________________________________________________________
   3)_____________________________________________________________________

7. Would you feel it would be helpful to participate in the same type of training again?
   ____Yes    ____No
I am going to describe some leader behaviors. If the leadership training you received helped you use these behaviors, please let me know by describing how often you used them. Describe that as follows:

<table>
<thead>
<tr>
<th>Frequent</th>
<th>Often</th>
<th>Moderate</th>
<th>Rarely</th>
<th>Never</th>
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... ... ... ... ...

Frequent means at least twice a week

Often means at least once a week

Moderate means at least once every two weeks

Rarely means only a few times during the season

Never means not at all

<table>
<thead>
<tr>
<th>Did you emphasize the importance of good performance during team play</th>
<th>FREQUENT</th>
<th>OFTEN</th>
<th>MODERATE</th>
<th>RARELY</th>
<th>NEVER</th>
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<tr>
<th>Were you considerate of other team member's efforts</th>
<th>FREQUENT</th>
<th>OFTEN</th>
<th>MODERATE</th>
<th>RARELY</th>
<th>NEVER</th>
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<tr>
<th>Did you try to inspire others to do their best</th>
<th>FREQUENT</th>
<th>OFTEN</th>
<th>MODERATE</th>
<th>RARELY</th>
<th>NEVER</th>
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<tr>
<th>Did you recognize and praise good performance</th>
<th>FREQUENT</th>
<th>OFTEN</th>
<th>MODERATE</th>
<th>RARELY</th>
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<th>Did you encourage team members to help in making decisions</th>
<th>FREQUENT</th>
<th>OFTEN</th>
<th>MODERATE</th>
<th>RARELY</th>
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<th>Did you inform team members of their role and responsibility to the team</th>
<th>FREQUENT</th>
<th>OFTEN</th>
<th>MODERATE</th>
<th>RARELY</th>
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<th>Did you set goals for yourself and the team</th>
<th>FREQUENT</th>
<th>OFTEN</th>
<th>MODERATE</th>
<th>RARELY</th>
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<tr>
<th>Did you assist in planning team activities</th>
<th>FREQUENT</th>
<th>OFTEN</th>
<th>MODERATE</th>
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Did you stimulate interaction among team members

Did you help team members keep from arguing and fighting

Do you have anything else you wish to add?
APPENDIX H

PART 1 SELF-TEST

Indicate whether the statements below are true or false.

____ 1. The leadership styles measured by the LPC scale are behaviors which do not vary in different situations.

____ 2. Low LPC, task-motivated leaders are generally less well-liked by their followers than are other types of leaders.

____ 3. High LPC, relationship-motivated leaders are primarily motivated to gain esteem from other people.

____ 4. Low LPC leaders are most comfortable in situations where the task is clearly defined and orderly.

____ 5. High LPC leaders generally try to avoid conflict by carefully managing interpersonal relations.

____ 6. In low control situations, low LPC leaders are more critical and give more orders than high LPC leaders.

____ 7. Under predictable and relaxed conditions, low LPC leaders are likely to act nervous, edgy, and distracted.

____ 8. Low LPC leaders tend to be more productive in very high control situations or in very low control situations.

Go to the next page for answers to this Self-Test.

PART II SELF-TEST

1. The second most important factor in determining situational control is ________________________.

2. A situation in which the leader had good relations with his subordinates and an unstructured task with low position power would be one of high/moderate/low _________________ situational control.

3. The scale used to measure your relations with your group is called ________________________.
4. A situation in which the leader has poor leader-member relations, low position power, and an unstructured task would be one of high/moderate/low ________________ situational control.

5. The amount of authority you have in a given situation can be measured by the ________________ scale.

6. The three dimensions used to determine situational control in order of their importance are as follows (check the correct choice):
   
   (a) 1. Task Structure  
       2. Position Power  
       3. Leader-Member Relations

   (b) 1. Leader-Member Relations  
       2. Position Power  
       3. Task Structure

   (c) 1. Leader-Member Relations  
       2. Task Structure  
       3. Position Power

7. A situation in which the leader has good leader-member relations, high position power, and a structured task would be one of high/moderate/low ________________ situational control.
INSTRUCTIONS: Answer the questions on the following pages to the best of your ability. Try to give an answer to every question. If you believe there is no good answer to a question, put a circle around N/A, meaning "No Answer." Give an answer or an N/A response to every question. Please do not leave any questions blank.

If you do not understand a question, make your best guess as to its meaning and then provide either an answer or an N/A response based on this meaning.

PART I

INSTRUCTIONS: Find the word in each line which has most nearly the same meaning as the first word and put a circle around this word.

EXAMPLE:
First Word: LARGE

"LARGE" has most nearly the same meaning as "Large" and therefore a circle has been drawn around the word, "Large." Answer the following questions in the same way. In each question put a circle around only one of the choices to the right. Remember, encircle N/A if you do not have an answer.

FIRST WORD: CHOOSE THE WORD WHICH HAS MOST NEARLY THE SAME MEANING:

INDOLENT: YELLOW LAZY OCEAN PIGMY QUIET N/A
LUMINOUS: BRIGHT EXPERT FRESH SLIMY TIMID N/A
PLACID: GREEN CRASH FAST SPRY CALM N/A
GUILE: TRICKERY SENSE FEELING BLAKE HUMOR N/A
SIMIAN: BIZARRE APELIKE FRIENDLY SONOROUS NEAT N/A
DIFFIDENT: OBSCURE SHY REVERIE CERTAIN NIMBUS N/A
FATUOUS: INANE HEAVY TORPOR POWERFUL MONISM N/A
BADINAGE: GENE TEPEP NOTICE RAILLERY WOUND N/A

EXAMPLE:
LIGHT is to DARK as HAPPY is to:

GLAD SAD GAY EAGER DIM N/A

Notice that DAVY is an opposite of LIGHT and SAD is an opposite of HAPPY. For this reason SAD can be accepted as the best answer. It is related to HAPPY in the same way as DARK is related to LIGHT.

EXAMPLE:
AUNT is to WOMAN as UNCLE is to:

FATHER GIRL BOY SON MAN N/A

This time, however, the pairs of words are not opposites. But again, MAN can be accepted as the best answer because it is related to UNCLE in the same way as WOMAN is to AUNT.

INSTRUCTIONS: Do all the following questions in the same way. In each question put a circle around only one of the choices to indicate your answer. Remember, encircle N/A if you do not have an answer.

1. SPACE is to POINT as TIME is to:
   CLOAK STANDARD ETERNAL PORTION MOMENT N/A
2. WIN is to JOY as LOSE is to:
   SADNESS SUCCESS FAIL DREAM FUN N/A
3. BETTER is to WORST as SLOWER is to:
   FAST RAPID BEST QUICKEST LEAST N/A
4. SURPRISE is to STRANGE as FEAR is to:
   ANXIOUS WEAK QUICK TERRIBLE BRAVE N/A
5. SIZE is to LENGTH as DISHONEST is to:
   PRISON SIN STEALING BAD WRONG N/A
6. SOON is to NEVER as NEAR is to:
7. ENGLISH is to AUSTRALIAN as PORTUGUESE is to:
   INDIA          COSTA RICA          BRAZIL          CUBA          SPAIN          N/A
8. HOMICIDE is to LAW as EDEMA is to:
   PEDAGOGY        THEOLOGY        ACTING        DRAFTING        MEDICINE        N/A
9. CAT is to FELINE as HORSE is to:
   CARNIVORE        EQUINE        QUADRUPED        CANINE        VULPINE        N/A
10. THREE is to TRIANGLE as FIVE is to:
    HEXAGON        TRAPEZOID        SENISIM        CIRCLE        PENTAGON        N/A
11. ARMADILLO is to ANIMAL as CHARD is to:
    VEGETABLE        WAINK        SNAKE        FILM        LILARD        N/A
12. CONSTELLATION is to STAR as ARCHIPELAGO is to:
    ISLAND        PENINSULA        CONTINENT        COUNTRY        NATIVE        N/A
13. LENORE is to POE as ALICE is to:
    HOUSMAN        WHITMAN        CARROLL        LYDON        FRIST        N/A
14. GUSTATORY is to TASTE as Olfactory is to:
    SHELL        TOUCH        FEEL        HEAR        BALANCE        N/A
15. VIRGIL is to AENEID as MATTHEW is to:
    PSALMS        MARK        GOSPEL        JESUS        GOD        N/A
16. ERYTHROCYTE is to PHAGOCYTE as PROV. is to:
    ENEMY        CIVILIAN        SOLDIER        COUPLE        QUEER        N/A
PART II

INSTRUCTIONS: In these questions write the letter that comes next in the series of letters.

EXAMPLE #1:

A B C D E F G

The next letter in this series is "H."

EXAMPLE #2:

A A A A A A A A A A A A A A A A

This time the next letter is "E." You can see that "A" occurs once, "B" twice, "C" three times, and "D" four times. Therefore, "E" should occur five times. Since there are only four "E's" listed, the next, or fifth letter, should be an "E."

EXAMPLE #3:

G F E D C B A Z

The alphabet is written backwards. When the series comes to "A" it goes to the end of the alphabet to the letter "Z" and continues on backwards, therefore "T" is next.

EXAMPLE #4:

R S R T R U V R

The letters in the series "S T U V" are separated by an "R." The last letter to appear is one of the separating "R's," so the next letter should be "W."

EXAMPLE #5:

Z Q S S A B D C

There seems to be no order in this set of letters. Thus there may be no satisfactory answer for this question. The correct response for this item is N/A for No Answer.

INSTRUCTIONS: Please attempt the problems in the order they appear. Do not leave a problem without recording a solution or an N/A response.

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<th>J K L M N O P Q</th>
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| C C Z C C Y C C X X C C |               |       N/A       |               |               |               |               |               |               |

| P Q Q R R R S S S S |               |               |               |               |               |               |               |       N/A       |

| T R A T T B T R C T R |               |               |               |               |               |               |               |               |

| B C C D D E E F G |               |               |               |               |               |               |               |       N/A       |

| D P Q Q P Q R S R S T U |               |               |               |               |               |               |               |               |

| L O M P N |               |               |               |               |               |               |               |               |

| A D G B E H C F |               |               |               |               |               |               |               |               |

| A X A Y B X B Y C X C Y |               |               |               |               |               |               |               |               |

| A M B C M D E F M G H I J |               |               |               |               |               |               |               |               |

| A B C R S T D E F Q R S G H I |               |               |               |               |               |               |               |               |

| R C R S C S T C T U C |               |               |               |               |               |               |               |       N/A       |

| Z A X Z Z X Z Y X Z X Z Z |               |               |               |               |               |               |               |               |

| C E B D A C Z B |               |               |               |               |               |               |               |               |

| X F H Z J L B N P |               |               |               |               |               |               |               |               |

|               |               |               |               |               |               |               |               |               |
CURRICULUM VITAE

Mary Richardson
1202 N.W. Norcross Way
Seattle, Washington 98177

Personal Data

Born: February 2, 1944
Marital Status: Single
Place of Birth: Bend, Oregon

Education

1976  B.A., Education (Social Studies) Central State University, Edmond, Oklahoma
1978  M.H.A. Health Administration and Planning University of Washington, Seattle, Washington
1983  Ph.D. in Educational Psychology, University of Washington (Expected June, 1984)

Present Position

Administrator, Clinical Training Unit, Child Development and Mental Retardation Center, University of Washington, Seattle, Washington.
Instructor, Department of Health Services, School of Public Health, University of Washington, Seattle, Washington

Professional Experience

1978 Teaching Assistant, Department of Health Services, University of Washington (Summer) Administrative Intern, Highline West Seattle, Community Mental Health Center, Seattle, Washington
1974-1976 Director, Volunteer Services, Tri-City Youth and Family Center, Choctaw, Oklahoma

Teaching Experience

1978 - Present Mental Health Administration, Graduate Course in Department of Health Services, University of Washington.
Mary Richardson  
Curriculum Vitae  

Teaching Experience (continued)  

1978 - Present  
Advising students specializing in Mental Health Administration  
1976  
Curriculum development and teaching in alternative high school for emotionally troubled adolescents  

Workshops and Panels  

1978  
1978  
1979  
"Impact of DDA Standards for University Affiliated Programs," Administrators Workshop, UAP Meeting, Miami, Florida  
1979 - 1980  
National Panel on Manpower Development in Mental Health Administration, University of Wisconsin Center for Health Sciences  
1980  
Motivational Management: Coping with Burnout. Workshop presented to health and human service organizations statewide.  

Professional Presentations  

Richardson, Mary and West, Margaret A. "Assessing Human Resources within Mental Retardation Systems, International Association of Scientific Studies in Mental Deficiency, August, 1982, Toronto, Canada.  
Richardson, Mary and West, Margaret A., "Motivational Management - Coping with Burnout" Presented at National Meeting of Orthopsychiatry, March, 1981, New York City.  
Richardson, Mary and Keenan, Charles V. "Integrating Mental Health and Mental Retardation Services" Association of Mental Health Administration, San Francisco, 1981.
Mary Richardson 
Curriculum Vitae

Richardson, Mary, and Keenan, Charles V. "Mental Health Services in HMOs" Presentation to the National Association of Mental Health Administrators, Washington, D.C., October, 1980.

Richardson, Mary, "Mental Health Services as Part of the Health Care System": Presentation to the Washington State Public Health Association, Seattle, October, 1980.

Richardson, Mary and West, Margaret A., "Integrating Service Systems through training - How to Better Serve the Multihandicapped Child" Presented to American Association on Mental Deficiency, San Francisco, May, 1980.

West, Margaret A. and Richardson, Mary, "Development of Mental Health Services for Mentally Retarded Clinics in Community Mental Health Services" Presented to American Association on Mental Deficiency, San Francisco, May, 1980.

Richardson, Mary, "Burnout in Mental Health Professions" Presented to American Association of Mental Health Administrators, San Francisco, May, 1980.

Research

Principal Investigator, Determining the Feasibility of Prepaid Care for Handicapped Children, Washington Association for Retarded Citizens.

Co-Principal Investigator, The Development of a DD Manpower Assessment Tool and Methodology, Developmental Disabilities Administration.

Masters Project, Planning Mental Health Services for the Chronically Mentally Ill.

Professional Membership and Affiliations

Comite Cientifico de AVEPANE, Caracas, Venezuela
American College of Hospital Administrators
American Public Health Association
Association of Mental Health Administrators

Community Activities

Developmental Disabilities Planning Council (Governor's Appointment)
Board of Directors - Fairfax Hospital, Kirkland, Wa.
Orion Multiservice Center, Seattle, Wa.
Mary Richardson
Curriculum Vitae

Honors and Awards

1982 University of Washington nominee for Kennedy Foundation
Public Policy Leadership Program for Professionals in
Mental Retardation
1977 American College of Hospital Administrators
1977 Business and Professional Women's Association
1976 Soroptimist Club

Publications

Richardson, Mary and Keeran, Charles V. "Providing Mental Health
Services in a Health Maintenance Organization" Journal of
Mental Health Administration, Spring, 1983.

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Handbook of Mental Health Administration: The Middle
Management Perspective, Michael J. Austin and William

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Coping with Burnout" Hospital and Community Psychiatry,
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Policy, Hospitals, May, 1981.

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Carlton, E, Nelson, A, Richardson, M. Sells, C, and West M. Human
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Richardson, Mary "Mental Health Services, Growth and Development
of a System." Introduction to Health Services, Stephen J.
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York, Jan, 1980.

Richardson, Mary, "The Role of Programs in health Administration
in Training Administrator for Mental health and Mental
Retardation Services," Program Notes, AUPHA, May/June,
1980.

Richardson, Mary, "Human Resource Planning in Mental Health
Delivery Systems" Resource Module prepared for School of
Social Work - Ph.D. Program in Mental Health Administration.
Keeran, Charles V. and Richardson, Mary, "Removing the Barriers to
Mental Health Services," in Continuum, Hospitals, March,
1980.