AN ANALYSIS OF INTERPERSONAL GROUP STRUCTURES AND PERSONALITY PROFILES OF TEAM MEMBERS REPRESENTING TWO CATEGORIES OF JUNIOR COLLEGE BASKETBALL TEAMS

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CHAPTER I

INTRODUCTION

Man's life is inescapably social; physical educators and coaches are concerned with the relations between the individual and the group, especially with problems that arise in the interactions among individuals: sensitivity to status, interpersonal relations of various kinds, attitudes and opinions, and their change (17, p. 573).

Nearly all aspects of physical education teaching and coaching involve team and group situations. Each of these groups has its own social structure. This social structure is important to the teacher and coach since it influences the effectiveness of group work and the class-room learning of individual pupils. An analysis of the social structure can be made through the use of sociometric methods.

The key idea of sociometry is that behind every formal organization, such as a class, team, or a club, there is an informal, spontaneous organization consisting of interpersonal attractions and repulsions, and that this unstructured organization greatly affects the functioning of the formal organization as well as playing a significant role in the personal successes and failures of the group members (2, p. 258).

Many physical educators and coaches throughout the nation have been seeking new and better ways of improving these interpersonal relationships among team or group members, sometimes referred to as team morale or group climate.

In order for a team to function effectively, individuals have to help ensure the satisfaction and resolution of team needs if their private personal needs are to be met optimally. Furthermore, unless individuals are relating effectively to one another on a team, the achievement problems cannot be dealt with effectively (14, p. 702).

One of the primary objectives of the coach, in working with the team, is to produce a winning team. Successful athletic seasons are most often described in terms of wonloss records of teams; less often are they described in terms of interpersonal group structures and personality patterns which exist during the period of competition.

The present study was an attempt to provide data which would serve as a basis for distinguishing between group patterns of winning and losing basketball teams, in terms of personality profiles and interpersonal group structures. In order for this to be accomplished, an investigation was made of the personality profiles and interpersonal group structures of team members from two categories of junior college basketball teams. These two categories of junior

college basketball teams consisted of (1) teams that won 60 per cent or more of their conference games during the 1966-67 conference season, and (2) teams that won 30 per cent or less of their conference games during the 1966-67 conference season. These percentages were used to distinguish winning teams from losing teams. All team members who played with teams which experienced winning seasons were classified as Group A, and all team members who played with teams which experienced losing seasons were classified as Group B. team members from the winning and losing teams were referred to throughout this study as the two groups or as Group A and Group B. A third group, referred to in this study as Group C, represented team members from the teams which were not classified as winners or losers, but were the teams which won between 30 per cent and 60 per cent of their 1966-67 conference games. Group C was not included in the statistical analysis of the data.

Statement of the Problem

The study concerned an analysis of interpersonal group structures and personality profiles of team members representing two categories of junior college basketball teams.

Purposes of the Study

The following purposes were formulated:

- 1. To determine the actual sociometric status structures of team members representing two categories of junior college basketball teams.
- 2. To determine the perceived sociometric status structures of team members representing two categories of junior college basketball teams.
- 3. To determine the stability of actual and perceived sociometric status structures of team members representing two categories of junior college basketball teams during a season of conference play.
- 4. To determine the mean score differences in actual and perceived sociometric status structures between the two groups of team members representing two categories of junior college basketball teams.
- 5. To determine the differences in mean score personality profiles between the two groups of team members representing two categories of junior college basketball teams.

Each of these purposes was also applied for a subdivision of players from the two groups. The subdivision included those players considered regular players by the coaches of the teams.

The statements of the above purposes were restated operationally:

- 1. To determine the pre-test mean score differences between Group A and Group B, as determined for the following sociometric variables:
 - a. Actual Psychetele Status
 - b. Actual Sociotele Status
 - c. Actual Discrepancy Status
 - d. Actual Total Status
 - e. Perceived Psychetele Status
 - f. Perceived Sociotele Status
 - g. Perceived Discrepancy Status
 - h. Perceived Total Status
- 2. To determine the post-test mean score differences between Group A and Group B, as determined for the eight sociometric variables.
- 3. To determine the mean score changes, from pre-test to post-test, shown by Group A on the eight sociometric variables.
- 4. To determine the mean score changes, from pre-test to post-test, shown by Group B on the eight sociometric variables.

- 5. To determine the differences between the mean score changes shown by Group A and those shown by Group B on the eight sociometric variables.
- 6. To determine the differences between the mean score personality profiles of Groups A and B following the conference season.
- 7. To determine if the above changes and differences, referred to in operational purposes one, two, three, four, five, and six, exist for the regular players from Groups A and B.

Hypotheses

Consistent with the above purposes, the study was designed to test the following hypotheses:

- 1. There will be no significance of difference between the mean scores, as determined for each of the following variables, for Groups A and B prior to the beginning of the conference season:
 - a. Actual Psychetele Status
 - b. Actual Sociotele Status
 - c. Actual Discrepancy Status
 - d. Actual Total Status
 - e. Perceived Psychetele Status
 - f. Perceived Sociotele Status

- g. Perceived Discrepancy Status
- h. Perceived Total Status
- 2. There will be no significance of difference between the mean scores, as determined for each of the eight sociometric variables, for Groups A and B following the conference season.
- 3. There will be no significance of difference between the pre-test mean scores and the post-test mean scores of Group A on the eight sociometric variables.
- 4. There will be no significance of difference between the pre-test mean scores and the post-test mean scores of Group B on the eight sociometric variables.
- 5. There will be no significance of difference between the mean score changes shown by Group A and those shown by Group B on the eight sociometric variables.
- 6. There will be no significance of difference between the mean score personality profiles of Groups A and B following the conference season.

Each of the above hypotheses was also established for a subdivision of the team members in Groups A and B. The subdivision included those players considered regular players by the coaches of the teams. These hypotheses are referred to throughout the study as hypotheses one, two, three, four, five, and six for the regular players.

Definition of Terms

In the study the following definitions were used:

- 1. <u>Guilford-Zimmerman</u> <u>Temperament Survey</u> are used as a means of measuring certain attributes of personality. The attributes or traits were defined in the test manual (16).
- 2. <u>Psychetele</u> indicates feelings which are projected within the social atom and are founded on responses toward associating or not associating with others as a purely personal matter and concerns no situation common to all members (15; 22, p. 43; 102).
- 3. Sociotele refers to feelings which are projected within the social atom and are founded upon responses toward remaining with or wishing to depart from such associations in the specific common work or task oriented situation (15; 22, p. 43; 102).
- L. <u>Discrepancy Status</u> is operationally defined for this study as the arithmetical difference between an individual's near-sociometric ratings on the sociotele and the psychetele criteria, regardless of sign.
- 5. Total Status is operationally defined as the arithmetic sum of the individual's near-sociometric ratings on the sociotele and the psychetele criteria.
- 6. Near-sociometric indicates a difference from true sociometric in that a true sociometric criterion is a two-way criterion on which mutual association is possible. One-way

criteria do not request choices for mutual association, but rather choices of representation (15, p. 44). Respondents are not asked to identify themselves; hence a measure is obtained only of choices received. Near-sociometric techniques supplement sociometric and psychometric methods in providing additional sources of information concerning perceptions of individual personalities and role-functions in social groups (20, p. 7).

- 7. Team indicates the total number of members who worked out daily with the squad.
- 8. Winning team refers to a team that won a minimum of 60 per cent of its conference games.
- 9. Losing team refers to a team that won less than 30 per cent of its conference games.
- 10. Regular player indicates a member of a basketball team who was indicated as a regular player by the coach of that team. The coach was asked to list those players who started in most of the conference games and/or who played consistently more than 50 per cent of the time throughout the conference season.

Basic Assumptions

1. It is assumed that the ten personality traits measured by the <u>Guilford-Zimmerman Temperament Survey</u> are important aspects of personality.

- 2. It is assumed that the near-sociometric measurements are measuring the important interpersonal relationships among the team members of each group.
- 3. It is assumed that the responses would be true feelings of the respondents and would be given in good faith.
- 4. It was assumed that the coaches would not make a self-conscious attempt to create specific interpersonal relationships.

Limitations of the Study

The limitations are stated as follows:

- 1. Although there were other such influencing variables as coaching methods and personalities, length of practice, and ability of the players, this study was limited to the interpersonal group structures and personality profiles of team members representing two categories of junior college basketball teams.
- 2. The interpretation of the results is limited to the extent that 22 out of 162 team members who originally participated in the study were lost during the conference season due to illness and scholastic ineligibility. The loss of team members from a team influences the interpersonal relationships of members on that team.

Background and Significance of the Study

Students are socialized when they learn the ways of the group, become functioning members of it, act according to its standards, accept its rules, and in turn become accepted by the group. During socialization, students acquire social experiences, social habits, and social relationships. Physical educators and coaches are interested in the development of the social phases of personality, attitudes, and values by means of games, sports, and related activities.

Personal and social adjustments are significant factors in relation to the success of any task oriented group. Problems arise each year on athletic teams because of personality conflicts and a lack of social integration among the players on these teams. Several studies (1, 19, 21) show a relationship between personality and success in athletics and also a relationship between sociometric status and athletic ability.

In athletics much emphasis is placed upon height, weight, jumping ability, agility, speed, and accuracy. These things are very important to the functioning of the team, but many teams each year with maximum potential ability do not function

effectively because of inadequate personal and interpersonal relationships among the team members.

Interpersonal relationships among group members are of two forms, those that actually exist and those that are perceived to exist. Tagiuri (24) suggested this important extension of sociometric techniques for the study of group relationships: "The first of these is the nature of the response of each person to the other. The second aspect consists of the perception that each person has of the other person's response toward him"(24, p. 91). If team effectiveness could be found to be related to these two aspects of interpersonal relationships or to specific personality profiles, then various instruments could be utilized early when working with teams or or other similar groups with task oriented objectives in an attempt to improve the personal and social integration of these groups.

It is suggested that the proposed study may serve as follows:

1. As a basis for improving team or group interaction by providing coaches and teachers with more information concerning personality profiles and interpersonal group structures in terms of winning and losing groups.

- 2. As an encouragement for coaches and teachers to use methods of group dynamics to complement their present methods of instruction.
- 3. As an encouragement for those within the physical education profession to place more emphasis on personality and interpersonal relationships when designing the teacher education curricula.

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CHAPTER II

RELATED LITERATURE

The intangible forces which interact on the playing fields, in the gymnasium, and elsewhere provide for pupils a steady flow of motivations and feelings. These feelings gradually shape personalities and mold interpersonal group structures.

Gronlund states,

The assumption that certain types of social structure are better than others for educational purposes needs to be verified by more carefully controlled studies. Likewise, the specific influence of group status and structure on pupils' behavior, emotional problems, attitudes, and responsiveness to learning situations warrants extensive investigation. These are not limitations in the technique itself, but rather limitations in our knowledge of how to use the sociometric test most effectively in solving educational problems and in improving school practices (13, p. 25).

In recent years a number of research studies have been conducted to investigate the relationship of sociometric status, personal-social adjustment, personality, and social perception to athletics, physical education, and related activities. The present study is related to each of the above four topics; therefore, the review of literature will be presented under these four topics, as they relate to athletics, physical education, and related activities.

Sociometric Status

Through the use of the sociometric test, coaches and teachers have another means to become more aware of the importance of interpersonal relationships among their students. A study of the internal structure of the group should provide knowledge concerning the pattern of players' interaction, the emotional climate of the group, and the problems of learning and adjustment of individual students. It should also provide a basis for organizing work groups and for evaluating attempts to improve the social structure of the group (13, p. 12).

Ondrus (26) analyzed the group structure and traced the patterns of interpersonal relationships of the members of a football squad to determine what bearing these had upon group cohesiveness. Conclusions indicated that interaction cannot be static; and shifts upward and downward among players, in social status, are bound to occur; but the total group structure, as was evident in the sociograms, was not significantly different. The majority of the highly chosen seemed to have one thing in common—an abundance of skills for playing the game of football.

Todd (31) stated that squads chosen on the basis of sociometric information were likely to produce happy, cooperative work and play. Bower (4) pointed out that popularity was unrelated to intelligence, height, home ratings, or school

achievement but was significantly related to strength and to physical ability.

McCraw and Tolbert (23) studied the relationship between sociometric status and general athletic ability among junior high school boys and the extent to which this relationship compared with that between sociometric status and mental maturity. There apparently was no appreciable relationship between sociometric status and mental maturity, but the relationship between sociometric status and mental maturity, but the relationship between sociometric status and athletic ability seemed to be moderately high in almost all of the groups studied.

A similar study was conducted by Biddulph (1) among high school students, but his sociometric test included choices for specific activities. He asked 461 students in high school physical education classes to choose companions for work, play, and social situations. He also determined the athletic ability of each student by testing his strength and speed in various physical education activities. A comparison of the fifty students with highest athletic ability and the fifty students with lowest athletic ability indicated significantly higher sociometric status scores for the group with greater athletic ability.

Yarnall (33) found motor fitness correlated with a sociometric measure of popularity. He also found that subjects with high fitness scores were significantly more popular, and subjects with high popularity were significantly more fit.

While most of the findings showed a relationship between athletic ability, motor fitness, and sociometric status, Lord (22) studied the relationship of sociometric status and athletic ability in eighth and twelfth grade girls and found little or no relationship between the two in the results from the two grades.

Personal-Social Adjustment

Studies reveal that socially well adjusted persons tend to be more successful in athletics, physical fitness, and physical education activities than are persons who are less well adjusted socially (7, p. 293).

Trapp (32) revealed in his study the evidence of social integration possible in a college football squad. The process of social integration in the team, as a whole, was positive and continuous throughout the season. There was an increase of social acceptance of the freshmen by the seniors. There was a positive and continuous process of social integration between the members of the freshman class. The only subgroups showing an increase in social distance between them were the fraternity members and the independents within the squad. As the season progressed, a decrease in social distance between the linemen was apparent. The backfield men were drawn closer to the linemen in personal distance as the process of social integration proceeded.

In Sperling's study (28) social adjustment scales were administered to non-athletes, intramural athletes, and varsity athletes. Statistically reliable differences were found between the patterns of traits of the two athletic groups and those of the non-athletic group. It was found that a more socially desirable degree of personality development accompanied a greater degree of experience in physical education activities.

Burks (5) studied gains in social adjustment. Freshmen students in coeducational physical education classes were compared with those in segregated classes in a private college. No statistically significant differences were found between the classes on social adjustment gains.

Personality

Various phases of personality study have been investigated in the general area of physical education and athletics.

La Place (21) studied personality traits in relation to success in professional baseball. Results indicated that major league players were better able than minor league players to apply their strong drive toward a definite objective, to adjust to occupations requiring social contact or the ability to get along with others, and to exercise initiative.

In Lakie's study (20) scores on personality scales differentiated (a) among sports groups within the state university, but not within the state colleges, and (b) between athletes attending the private university and those attending each of the other three schools. When the 230 athletes were grouped by sports, irrespective of the school attended, no significant differences were observed.

Nelson (25) found little difference among five different groups in personality. High school juniors and seniors were administered a personal preference schedule. They were then categorized into the following groups: football, drama, music, dual participant, and non-participant. Analysis of variance showed very little difference among groups in personality.

Johnson (17) studied changes in personality traits between high school football and non-football players during a season of football. Junior and senior players showed no significant changes when compared with non-players. Sophomore players showed a significant change on only two of the ten personality traits.

Six different physical activity groups were studied by Flanagan (11). These were voluntary classes and not required. He found that fencers were more ascendent than basketball players, volleyball players, and boxers; badminton more extroverted than volleyball players; volleyball players more emotionally unstable than basketball players. He concluded that personality was a factor in determining which activity a person would select.

Merriman (24) studied personality traits and their relationship to motor ability. The results of this study, which included 808 high school boys, indicated that motor ability was related to personality traits. Gottesman's study (12) was similar to this in that he found a correlation between personality factors and physical measures.

Researchers in personality have consistently emphasized the importance of considering an individual's complete profile instead of assessing components separately.

The advent of multivariate statistical analysis offers some promise in newer work on profile analysis in personality research. Usual analysis of variance techniques can suggest significant differences between specified groups on particular factors in a profile. However, profile factors may be highly related, and the possibility that less than the entire set of significantly different variables is meaningful and or that other variables, nonsignificant by themselves, may be discriminating variables when viewed as an entire profile rather than individually (18, p. 441).

Two studies by Kroll and Petersen (18,19) provided valuable information concerning the profile analysis method of investigating several variables.

In the first study (18), six football teams were selected so as to provide data on winning and losing teams as well as on several collegiate classifications. Profiles on the study of values test were scrutinized through a multiple-discriminant analysis procedure. The multivariate, generalized null hypothesis that the six teams (176 subjects) had similar value orientations toward life was considered untenable.

Significant discrimination also occurred when the sample was divided into winning versus losing teams. The results suggested that both, type of school and success of season, afford a basis for discrimination.

In the second study (19), personality profiles of five collegiate football teams were scrutinized through a multiple-discriminant analysis and a maximum-likelihood classification method. Significant discrimination between teams was demonstrated, with the highest contributors to the derived-discriminant function being intelligence, shy versus bold, confident versus worrying, and casual versus controlled. Based upon actual versus predicted group membership, the percentage of correct classifications was 55. When based upon predictions into winning or losing categories, the percentage of correct classifications was 82.

Social Perception

Gronlund (14) reported that the relationship an individual establishes with his peer group is related to his ability to judge accurately the sociometric status of group members. However, Singer (27) found a markedly negative and almost significant association between an individual's popularity and his ability to perceive accurately his standing within the group structure.

In Fiedler's study (10), the hypothesis that group effectiveness was related to the interpersonal perceptions

which members of the group had toward one another was tested by correlating statements of forced choice question-naires in which the subjects described themselves and their ideal-self, and predicted the responses of their preferred and their rejected teammates. "Interpersonal perception scores of the chosen person are believed to reflect his outlook on other persons and on the task" (10, p. 21). The basketball team choosing "a differentiating person as a preferred co-worker is likely to be more concerned with effective task performance and correspondingly more successful" (10, p. 21).

In a similar study of surveying teams (9), Fiedler concluded that the most congenial teams were not the most productive teams.

Concerning two different aspects of group structure, Gronlund states

The writings of Jennings (15, 16) have suggested that there may be two aspects to group structure: one based on personal criteria related to informal situations and the other based on social, and less personal, criteria related to more formal situations. Examples of personal criteria include choices of seating companions, roommates, associates for leisure-time activities, and similar situations where no goal-directed activities are indicated. The resulting group structure is called "psyche-group" and is assumed to represent choices mainly on personal bases. In contrast, social criteria reflect common goal-directed activities such as working together on a group project. It is assumed that choices on such criteria are influenced more by the contributions individuals can make to group work and less by their personal qualities. This type of social structure is called a "sociogroup" (13, p. 43).

When a comprehensive analysis of the group structure is desired, both types of criteria should be used: psyche (personal) and socio (social or goal-directed).

Tagiuri (29) suggested an important extension of sociometric techniques for the study of group relationships. He
pointed out that two types of information are needed to understand interpersonal relationships: "the first of these is
the nature of the response of each person to the other. The
second aspect consists of the perception that each person
has of the other person's response toward him" (29, p. 91).

The present study attempts to combine the above criteria (psyche and socio) with this extension of sociometric technique (actual and perceived responses) in the study of interpersonal group structures of team members on junior college basketball teams. The personality profile analysis method was also employed in this study for the purpose of analyzing the personality profiles of team members on junior college basketball teams.

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CHAPTER III

METHODS AND PROCEDURES OF THE STUDY

Description of the Population

The subjects who participated in this study were team members from the eight basketball teams of the Texas Eastern Junior College Conference and the seven basketball teams of the Texas Junior College Athletic Conference (North Zone).

Of the fifteen teams that originally participated in the study, only twelve were utilized in the statistical treatment of the study. Three teams were dropped from the study because they did not meet the criteria selected for dividing the teams into two categories—winning and losing teams. Of the twelve teams that met the criteria, six were classified as winners, and six were classified as losers. Team members from this two-category classification were divided into two groups. The team members from the six winning teams represented Group A while the team members from the six losing teams represented Group B.

From these twelve teams 162 team members participated in the pre-test, and 140 team members participated in the post-test. Eighty-two team members represented Group A,

and eighty team members represented Group B for the pretest. For the post-test, Group A had diminished to seventy-six team members, and Group B, to sixty-four team members. The twenty-two team members, who participated in the pretest but did not participate in the post-test, were lost from the squads because of scholastic ineligibility, sickness, or voluntary reasons for quitting the team. Three subjects were absent at the time of the post-test, and these three subjects did not take the personality survey but did take the four near-sociometric scales at a later time.

Conferences, won-loss records, group divisions, and number of subjects who participated in the study are shown in Table I. The information from this table will serve as an aid in describing the population.

The data from Table I show that there were three teams from each conference representing the team members in Group A, and three teams from each conference representing the team members in Group B. The three teams and team members represented by Group C were those not used in the statistical treatment of the study.

TABLE I

CONFERENCES, WON-LOSS RECORDS, GROUP DIVISIONS
AND NUMBER OF SUBJECTS WHO PARTICIPATED
IN THE STUDY

		·		 		1	+	
Conference	Team	Won	Lost	Pct.	Group	Pre- test N	Post- test N	Lost N
È	1	14	0	1.000	A	11.	11	0
E	2	11	3	.786	A	12	12	0
E	3	9	5	.643	A	14	12	2
E	4	8	6	.571	C*	12	10	2
E	5	7	7	.500	C*	14	11	3
E	6	4	10	.286	В	12	10	2
E	7	2	12	.143	В	12	10	2
. E	8	1	13	.071	В	12	12	0
T	1	12	0	1.000	A	13	13	0
T	2	9	3	.750	A	17	14	3
T	3	9	3	.750	A	15	14	1
Т	4	4	8	.333	C∗	12	8	4
T	5	3	9	.250	В	14	11	3
T	6	3	9	.250	В	14	10	<i>L</i> ₊
Ī	7	2	10	.167	В	16	11	5
Total**						162	140	22

^{*}Team members represented by Group C were not used in the statistical treatment of the study. Only team members represented by Groups A and B were used.

^{**}This total does not include Group ${\tt C}$.

Background data on the teams and team members represented by Groups A and B are shown in Table II. This information will serve to further describe the population.

A study of the data from Table II showed that, when comparing the two groups, Group A had a larger average school enrollment, a larger percentage of out-of-state players, and more years of coaching tenure per coach; while Group B had a larger percentage of team members who did not complete the season. Only slight differences were shown between the two groups in average height; average age; and percentage of sophomores on the teams. All six of the teams represented by Group B were losing teams last season, while only one team from Group A was shown to be a loser this past season.

The data from this table are presented as descriptive data and were not used in the statistical treatment of the study.

Instruments Used

The measuring instruments used in this study are the Cuilford-Zimmerman Temperament Survey and four near-socio-metric rating scales (See Appendix B). The four near-socio-metric rating scales were administered prior to the first conference game and then again following the last conference

TABLE II

BACKGROUND DATA ON TEAMS AND TEAM MEMBERS
REPRESENTED BY GROUPS A AND B

	'	
Variables	Winners (Six Teams)	Losers (Six Teams)
School Enrollment- Range (Low-High) Average	400-4500 1475	300-1100 603
Type of School- Church State	1 5	2 4
Number of Years Coach Has Coached at the School- Range (Low-High) Average	2 -1 5 5 . 9	1-4 1.8
Standing in the Conference Last Season- Winner Middle Loser	4 1 1	0 0 6
Height Per Team Member- (Inches) Range (Low-High-Team Average) Average	74.4-74.8 74.7	73.3-75.1 74.2
Age Per Team Member (Years) Range (Low-High-Team Average) Average	18.9 - 19.5 19.3	18.8-19.4 19.1
Percentage of Sophomore Team Members on Squad	. 44	42
Percentage of Team Members Who Did Not Complete the Season	7	20
Percentage of Team Members Attending Out-of-State High Schools	40	24

game. The <u>Guilford-Zimmerman</u> <u>Temperament Survey</u> was administered following the conference season.

The four near-sociometric rating scales were used to assess the subjects' interpersonal relationships. The four scales were as follows: (1) the Actual Psychetele Scale, (2) the Perceived Psychetele Scale, (3) the Actual Sociotele Scale, and (4) the Perceived Sociotele Scale. Special forms were mimeographed for this testing.

Each subject received eight scores from the four near-sociometric rating scales. The subject received actual and perceived ratings on these four variables: psychetele status, sociotele status, discrepancy status, and total status.

The <u>Guilford-Zimmerman Temperament Survey</u> was selected as a valid and reliable instrument to measure the following personality traits: General Activity, Restraint, Ascendance, Sociability, Emotional Stability, Objectivity, Friendliness, Thoughtfulness, Personal Relations, and Masculinity. The following information is given concerning the reliability and validity of this instrument:

The reliability with which each of the traits is assessed is shown to be of the order .80; and their intercorrelations are, as the authors say, "gratifyingly low," the implication being that all the approximately orthogonal in factor terms, that is, that

unique traits are involved (3, p. 95)....

The validity of the scores is principally based on the factor analytic studies in which the traits were isolated. It is further indicated that a practical validation study has been carried out, but the details are not given (3, p. 96).

Procedures for Collecting Data

Four near-sociometric rating scales were administered to the team members from the eight basketball teams of the Texas Eastern Junior College Conference and the seven basketball teams of the Texas Junior College Athletic Conference (North Zone).

The scales were administered by the investigator during a two-week period prior to the 1966-67 conference basketball season. These were paper and pencil type tests and were administered at various times during the day. Some were administered in the classroom and others in the gymnasium. The four near-sociometric scales were administered again during the week immediately following each team's final conference game. The post-test scales were administered under the same conditions as those of the pre-test with three exceptions: (1) two of the schools were visited twice during the same week in order to test all of the team members, (2) two teams participated in post-season play and were not given the post-test scales until the completion of their

season; and (3) three team members were absent, and copies of the four scales were left with the coach, who administered the scales and mailed the results to the investigator.

These three members did not take the personality survey.

The four near-sociometric scales were the Actual Psychetele Scale, the Perceived Psychetele Scale, the Actual Sociotele Scale, and the Perceived Sociotele Scale. The instructions for administering the scales are shown in Appendix A.

The <u>Guilford-Zimmerman Temperament Survey</u> was administered to the team members from the eight basketball teams of the Texas Eastern Junior College Conference and the seven basketball teams of the Texas Junior College Athletic Conference (North Zone). This survey was administered at the same times and places as the four near-sociometric scales during the post-test sessions. The <u>Guilford-Zimmerman</u>

<u>Temperament Survey</u> was administered with adherence to the instructions given on the first page of the test booklet.

Each team member was asked to supply the following information on the top of the answer sheet for the personality survey: last name, age, height, high school attended, and college classification. Other information was received, concerning the school and the team, through an interview with the coach or team captain, during the post-test session.

This information was given in detail earlier in the study.

From the results of the five measuring instruments used in this study, the following scores were obtained for each team member:

- 1. A score assessing Actual Psychetele Status
- 2. A score assessing Perceived Psychetele Status
- 3. A score assessing Actual Sociotele Status
- 4. A score assessing Perceived Sociotele Status
- 5. A score assessing Actual Total Status
- 6. A score assessing Perceived Total Status
- 7. A score assessing Actual Status Discrepancy
- 8. A score assessing Perceived Status Discrepancy
- 9. A score from one to thirty on each of the ten personality traits from the <u>Guilford-Zimmerman Temperament Survey</u>.

Procedures for Treating Data

In order to test the hypotheses of this study, the data were examined and treated statistically in the following manner:

1. Hypothesis One stated that there will be no significance of difference between the mean scores, as determined for the eight sociometric variables, for Groups A and B

prior to the beginning of the conference season. Hypothesis One was tested by obtaining sociometric status scores on all participants prior to the conference season. At the end of the season, team members were then divided into Groups A and Mean sociometric status scores were then calculated for Groups A and B on the eight sociometric variables. The group mean scores were obtained by averaging the mean scores of each team member in the group on the eight sociometric variables. Each team member's mean scores were obtained by assigning score values of five, four, three, two, and one to the five columns of the near-sociometric scales and then making the necessary calculation for the specified status score. Five points were given for a check mark in column one, and one point was given for a check mark in column five. Actual status scores were determined by taking the total of each team member's ratings from others and then dividing by the number of raters. Perceived status scores were determined by taking the total of each team member's perceived ratings from others and then dividing by the number of perceived raters. Discrepancy status scores were determined by obtaining the difference between the sociotele and psychetele ratings, regardless of sign. Total status scores were determined by obtaining the sum of the sociotele and psychetele ratings.

Fisher's \underline{t} test for independent small samples was utilized to test the significance of the difference between the mean scores from Groups A and B on the eight sociometric variables. The formula (8, p. 109) is as follows:

$$t = \frac{M_A - M_B}{\sqrt{\left(\frac{N_A \sigma_{S_A}^2 + N_B \sigma_{S_B}^2}{N_A + N_B - 2}\right) \left(\frac{1}{N_A} + \frac{1}{N_B}\right)}}$$

 M A = Mean of Group A

 ^{M}B = Mean of Group B

 $^{
m N}$ A = Number of subjects in Group A

 $^{\rm N}$ B = Number of subjects in Group B

 $\sigma_{\text{S}_{\text{A}}}$ = Standard deviation of Group A

 σ_{SB} = Standard deviation of Group B

2. Hypothesis Two stated that there will be no significance of difference between the mean scores, as determined for each of the eight sociometric variables, for Groups A and B following the conference season. Hypothesis Two was tested by obtaining mean sociometric status scores on the eight sociometric variables from Groups A and B following the conference season. The procedures in Step One were then repeated for each of the eight sociometric variables.

3. Hypothesis Three stated that there will be no significance of difference between the pre-test mean scores and the post-test mean scores of Group A on the eight sociometric variables. Hypothesis Three was tested by calculating the significance of the change in the mean scores, from pre-test to post-test, on the eight sociometric variables for Group A.

Fisher's <u>t</u> test, for small correlated samples, was utilized to test the significance of the change in the mean scores on the eight sociometric variables. The formula (8, p. 108) is as follows:

$$\underline{t} = \underbrace{\frac{\mathbf{Z}D^2}{N} - \mathbf{M}D^2}_{N}$$

MD = Mean difference--pre-test to post-test difference within the same group

 $2D^2$ Sum of the differences squared

N = The number of difference scores

4. Hypothesis Four stated that there will be no significance of difference between the pre-test mean scores and the post-test mean scores of Group B on the eight sociometric variables. Hypothesis Four was tested by repeating the same procedures as used in testing Hypothesis Three.

- 5. Hypothesis Five stated that there will be no significance of difference between the mean score changes shown by Group A and those shown by Group B on the eight sociometric variables. Hypothesis Five was tested by calculating the significance of the difference between the mean score changes, from pre-test to post-test, within Groups A and B. The same procedures used in Step One were repeated for each of the eight sociometric variables, except that the scores were difference scores.
- 6. Hypothesis Six stated that there will be no significance of difference between the mean score personality profiles of Groups A and B following the conference season. Hypothesis Six was tested by Hotelling's T² test to determine if a significance of difference existed between the mean score personality profiles of Groups A and B. Hotelling's T² test is a procedure of multivariate statistical analysis used for testing the difference between two groups on several measures (1, pp. 108-109).

Each of the six hypotheses was also tested for the subdivision of regular players from Groups A and B.

The .05 level of significance was arbitrarily selected as the point for rejecting the null hypotheses.

All computations were made at the IBM Computer Center at North Texas State University.

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CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

The basic purposes of this study were (1) to investigate the actual and perceived sociometric status structures; (2) to study the changes in status structures during a conference season; and (3) to investigate the personality profiles of team members representing two categories of junior college basketball teams.

Eight sociometric variables were used in studying two groups of junior college basketball team members, classified as Groups A and B. Group A was represented by eighty team members in the pre-test and seventy-six team members in the post-test. Group B was represented by eighty team members in the pre-test and sixty-four team members in the post-test. Data on the sociometric variables were obtained prior to and following the conference season. The eight sociometric variables in the study were as follows:

- 1. Actual Psychetele Status
- 2. Perceived Psychetele Status
- 3. Actual Sociotele Status
- 4. Perceived Sociotele Status

- 5. Actual Total Status
- 6. Perceived Total Status
- 7. Actual Status Discrepancy
- 8. Perceived Status Discrepancy

Ten personality variables were involved in the profile analysis study of Groups A and B. Data on the personality variables were obtained following the conference season. The ten personality variables measured by the <u>Guilford-Zimmerman</u> Temperament Survey were as follows:

- 1. General Activity
- 2. Restraint
- 3. Ascendance
- 4. Sociability
- 5. Emotional Stability
- 6. Objectivity
- 7. Friendliness
- 8. Thoughtfulness
- 9. Personal Relations
- 10. Masculinity

Following the presentation of data on Groups A and B, data will then be presented on the regular players from Groups A and B.

Data on Groups A and B

Means, standard deviations, Fisher's \underline{t} , and levels of significance for Groups A and B on the eight sociometric variables prior to the conference season are shown in Table III.

TABLE III

MEANS, STANDARD DEVIATIONS, FISHER'S t AND
LEVELS OF SIGNIFICANCE FOR GROUPS A
AND B ON THE EIGHT SOCIOMETRIC
VARIBLES PRIOR TO THE
CONFERENCE SEASON

	Group A		Group B			
Variables	N = 82		N = 80		Fisher's <u>t</u>	LS
	Mean_	S.D.	Mean	S.D.	<u> </u>	
Actual Psyche-						
tele Status	3.89	.34	3.77	.43	2.07	.05
Perceived Psy-						
chetele Status	3.87	•35	3.74	.38	2.33	.05
Actual Sociotele			_		_	_
Status	4.05	.70	4.02	.64	.26	NSD
Perceived Socio-	. 0-	(5	A 40	(6)		0.3
tele Status	4.07	.61	3.80	.63	2.74	.01
Actual Total	F. C.	0/	77 770	04	1 00	NT CIT
Status	7.94	.96	7.79	•98	1.00	NSD
Perceived Total	7.94	.83	7.54	.88	2.89	.01
Status Actual Status	1.74	ره.	7 • 24	•00	2.09	.01
Discrepancy	.48	.29	.43	.30	1.07	NSD
Perceived Status	•40	• ~ 7	•47	•)	1.07	I NOD
Discrepancy	.48	.33	.43	.42	.92	NSD

A study of the data in Table III indicates that the mean scores of Group A were higher than the mean scores of Group B on all eight variables. Although all of the mean scores of

Group A were higher, only four of these were significantly higher than the mean scores of Group B. Group A rated significantly higher than Group B on the following: Actual Psychetele Status, at the .05 level; Perceived Psychetele Status, at the .05 level; Perceived Sociotele Status, at the .01 level; and Perceived Total Status, at the .01 level. On a possible 5.00 scale, the Group A mean on Actual Psychetele Status was 3.89, while the Group B mean was 3.77. The Group A mean on Perceived Psychetele Status was 3.87, while the Group B mean was 3.74. Group A rated 4.07, while Group B rated 3.80 on Perceived Sociotele Status. On a possible 10.00 scale, the Group A mean was 7.94, while the Group B mean was 7.54 on Perceived Total Status.

No significant differences were found between the two groups on the variables Actual Sociotele Status, Actual Total Status, Actual Status Discrepancy, and Perceived Status Discrepancy.

The above data are presented in relationship to

Hypothesis One, which stated that there will be no significance
of difference between the mean scores, as determined for the
eight sociometric variables, for Groups A and B prior to the
beginning of the conference season. Hypothesis One was accepted for the variables Actual Sociotele Status, Actual Total
Status, Actual Status Discrepancy, and Perceived Status

Discrepancy. It was rejected for the variables Actual Psychetele Status, at the .05 level; Perceived Psychetele Status, at the .05 level; Perceived Sociotele Status, at the .01 level; and Perceived Total Status, at the .01 level.

The interpersonal group structures of the teams represented by Group A are more cohesive than those of the teams represented by Group B on both sociotele and psychetele variables prior to the conference season. More acceptance of others as friends, and as players is shown by Group A than by Group B. Group A also perceived themselves as being accepted by others as players more than did Group B. There was no difference shown between the two groups on actual acceptance of others as players.

Means, standard deviations, Fisher's <u>t</u>, and levels of significance for Groups A and B on the eight sociometric variables following the conference season are shown in Table IV.

A study of the data in Table IV indicates that the mean scores of Group A are higher than the mean scores of Group B on all variables with exception of Actual Status Discrepancy. Significant differences are found between the two groups on two of the variables, as Group A rated significantly higher than Group B on Perceived Sociotele Status, at the .01 level, and Perceived Total Status, at the .05 level. On Perceived

TABLE IV

MEANS, STANDARD DEVIATIONS, FISHER'S t AND
LEVELS OF SIGNIFICANCE FOR GROUPS A
AND B ON THE EIGHT SOCIOMETRIC
VARIABLES FOLLOWING THE
CONFERENCE SEASON

	Group A N = 76		Grou	р В		:	
Variables			N = 64		Fisher's t	LS	
	Mean	S.D.	Mean	S.D.			
Actual Psyche-							
tele Status	4.05	.26	4.02	.47	•55	NSD	
Perceived Psy-		ŀ		,			
chetele Status	4.00	•45	3.91	.47	1.13	NSD	
Actual Sociotele							
Status	4.22	.49	4.08	•59	1.48	NSD	
Perceived Socio-							
tele Status	4.17	.52	3.90	.64	2.80	.01	
Actual Total	İ						
Status	8.27	.68	8.10	.98	1.20	NSD	
Perceived Total							
Status	8.17	.81	7.81	1.01	2.29	.05	
Actual Status						,	
Discrepancy	•35	.24	.36	.25	16	NSD	
Perceived Status							
Discrepancy	.42	•37	.32	•33	1.58	NSD	

Sociotele Status, Group A rated 4.17, as compared to 3.90 for Group B. Group A rated 8.17 on Perceived Total Status, as compared to 7.81 by Group B. The higher Perceived Sociotele Status for Group A means that Group A tended to perceive themselves as being rated, by their fellow teammates, as someone wanted as a player on their team.

No significant differences were found between the two groups on the other six variables--Actual Psychetele Status,

Perceived Psychetele Status, Actual Sociotele Status, Actual Total Status, Actual Status Discrepancy, and Perceived Status Discrepancy.

The above data are presented in relationship to Hypothesis Two, which states that there will be no significance of difference between the mean scores, as determined for each of the eight sociometric variables, for Groups A and B following the conference season. Hypothesis Two was accepted for the variables Actual Psychetele Status, Perceived Psychetele Status, Actual Sociotele Status, Actual Total Status, Actual Status Discrepancy, and Perceived Status Discrepancy. It was rejected for the variables Perceived Sociotele Status, at the .01 level, and Perceived Total Status, at the .05 level.

The interpersonal group structures are more alike for the teams represented by Groups A and B following the conference season. The only difference found between Groups A and B is in their perception of being accepted, by fellow teammates, as players on the teams. Group A perceived higher acceptance on this variable than did Group B.

Means, mean changes, standard deviations, Fisher's \underline{t} , and levels of significance for Group A on the eight sociometric variables are shown in Table V.

A study of the data in Table V indicates that significant mean changes were shown by Group A on six of the eight variables.

TABLE V

MEANS, MEAN CHANGES, STANDARD DEVIATIONS, FISHER'S t, AND LEVELS OF SIGNIFICANCE FOR GROUP A ON THE EIGHT .

SOCIOMETRIC VARIABLES

						
			N	= 76		
Variables	Pre- test Mean	Post- test Mean	Mean Change	s.D.	Fisher's <u>t</u>	LS
Actual Psyche- tele Status	3.90	4.05	.15	.20	6.60	.001
Perceived Psy- chetele Status	3.86	4.00	.14	• 44	2.66	.01
Actual Sociotele Status	4.07	4.22	.15	.33	3.91	.001
Perceived Socio- tele Status	4.07	4.17	.10	.49	1.77	NSD
Actual Total Status	7.97	8.27	.30	.46	5.62	.001
Perceived Total Status	7.93	8.17	.24	.64	3.38	.01
Actual Status Discrepancy	.48	.35	13	.22	-5.11	.001
Perceived Status Discrepancy	.50	.42	08	•37	-1.87	NSD

An increase in mean scores, significant at the indicated level, is shown on the variables Actual Psychetele Status, at the .Ol level; Actual Sociotele Status, at the .OOl level; Actual Total Status, at the .OOl level; and Perceived Total Status,

at the .01 level. A decrease in mean score, significant at the .001 level, is shown on Actual Status Discrepancy. The increases shown mean that Group A showed significant improvement during the season on nearly all variables. The decrease shown on Actual Status Discrepancy mean that the team members had a tendency to choose the same person for both, the psychetele and sociotele criteria, as the season progressed. No significant mean changes were shown on the variables Perceived Sociotele Status and Perceived Status Discrepancy.

The above data are presented in relationship to Hypothesis Three, which stated that there will be no significance of difference between the pre-test mean scores and the post-test mean scores of Group A on the eight sociometric variables. Hypothesis Three was accepted for the variables Perceived Sociotele Status and Perceived Status Discrepancy. It was rejected for the variables Actual Psychetele Status, at the .001 level; Perceived Psychetele Status, at the .01 level; Actual Sociotele Status, at the .001 level; Actual Total Status, at the .001 level; Perceived Total Status, at the .01 level; and Actual Status Discrepancy, at the .001 level.

The changes shown, during a season of conference play, in the interpersonal group structures of the teams represented by Group A were all improvements. The teams represented by

Group A were more cohesive groups following the season than they were prior to the conference season.

Means, mean changes, standard deviations, Fisher's \underline{t} , and levels of significance for Group B on the eight sociometric variables are shown in Table VI.

TABLE VI

MEANS, MEAN CHANGES, STANDARD DEVIATIONS,
FISHER'S to AND LEVELS OF SIGNIFICANCE
FOR GROUP B ON THE EIGHT
SOCIOMETRIC VARIABLES

	N = 64								
Variables	Pre- test Mean	Post- test Mean	Mean Change	S.D.	Fisher's <u>t</u>	LS			
Actual Psyche-									
tele Status Perceived Psy-	3.85	4.02	.17	.36	3.78	.001			
chetele Status Actual Sociotele	3.77	3.91	.14	•45	2.55	.02			
Status Perceived Socio-	4.15	4.08	07	.48	-1.19	NSD			
tele Status Actual Total	3.89	3.90	.01	.48	.19	NSD			
Status Perceived Total	8.00	8.10	.10	.79	•99	NSD			
Status Actual Status	7.66	7.81	.15	.75	1.33	NSD			
Discrepancy Perceived Status	. 45	.36	09	.30	-2.45	.02			
Discrepancy	.43	.32	11	.46	-1.90	NSD			

A study of the data in Table VI indicates that increases in mean scores were shown by Group B on five of the variables

and decreases in mean scores were shown on the other three variables. Only three of these mean changes were significant. Mean increases, significant at the level indicated, are shown on Actual Psychetele Status, at the .001 level, and Perceived Psychetele Status, at the .02 level. A decrease in mean score is shown on Actual Status Discrepancy, significant at the .02 level. No significant mean changes, from pre-test to post-test, are shown for Group B on the variables Perceived Sociotele Status, Actual Sociotele Status, Actual Total Status, Perceived Total Status, and Perceived Status Discrepancy. In brief, improvement was shown by Group B on the psychetele criteria during a conference season, but no improvement was shown on the sociotele criteria.

The above data are presented in relationship to Hypothesis Four, which stated that there will be no significance of difference between the pre-test mean scores and the posttest mean scores of Group B on the eight sociometric variables. Hypothesis Four was accepted for the variables Actual Sociotele Status, Perceived Sociotele Status, Actual Total Status, Perceived Total Status, and Perceived Status Discrepancy. It was rejected for the variables Actual Psychetele Status, at the .001 level; Perceived Psychetele Status, at the .02 level; and Actual Status Discrepancy, at the .02 level.

Changes in the interpersonal group structures of the teams represented by Group B were only shown on the psychetele and discrepancy variables. This means that the teams represented by Group B became more cohesive groups, in their acceptance of others as friends and in their perception of being accepted by others as friends, than they were prior to the conference season. Also there was more of a tendency to choose the same person for both criteria, sociotele and psychetele, as the season progressed. Group B did not show improvement on the sociotele variables during the conference season. Their acceptance of others and their perceptions of being accepted by others, as players on the team, was no different following the season than it was prior to the season.

Mean changes, standard deviations, Fisher's \underline{t} , and levels of significance for Groups A and B on the eight sociometric variables are shown in Table VII.

A study of the data in Table VII indicates that an increase in mean scores was shown by both groups on the following variables: Actual Psychetele Status, Perceived Psychetele Status, Perceived Sociotele Status, Actual Total Status, and Perceived Total Status. Although increases were shown on the mean scores of these five variables for each group, no significant differences were found in the mean score changes shown between the two groups on these five variables. It was also

MEAN CHANGES, STANDARD DEVIATIONS, FISHER'S t,
AND LEVELS OF SIGNIFICANCE FOR GROUPS A AND
B ON THE EIGHT SOCIOMETRIC VARIABLES

	Grou N =		Grou N =					
Variables	Mean Change		Mean Change		Fisher's <u>t</u>	LS		
Actual Psyche- tele Status	.15	.20	.17	.36	35	NSD		
Perceived Psy- chetele Status	.14	•44	.14	. 45	- ,12	NSD		
Actual Socio- tele Status	.15	.33	07	.48	3.18	.01		
Perceived Socio- tele Status	.10	.49	.01	.48	1.07	NSD		
Actual Total Status	.30	.46	.10	•79	1.83	NSD		
Perceived Total Status	.24	.64	.15	•75	1.05	NSD		
Actual Status Discrepancy	13	.22	09	.30	84	NSD		
Perceived Status Discrepancy	08	•37	11	.46	•44	NSD		

found that mean score decreases were shown by both groups on the variables Actual Status Discrepancy and Perceived Status Discrepancy. These decreases in mean scores were not significantly different between the two groups.

The only variable showing a difference in mean score change between the two groups was Actual Sociotele Status, significant at the .01 level. Group A increased .15 on this variable while Group B decreased .07. This means that team members of Group A increased in their ratings, from fellow teammates, on the criterion of someone wanted as a player on their team. Group B team members rated fellow teammates lower on this variable following the conference season, than they did prior to the conference season.

The above data are presented in relationship to

Hypothesis Five, which stated that there will be no significance of difference between the mean score changes shown by

Group A and those shown by Group B on the eight sociometric
variables. Hypothesis Five was accepted for the variables

Actual Psychetele Status, Perceived Psychetele Status, Perceived Sociotele Status, Actual Total Status, Perceived Total

Status, Actual Status Discrepancy, and Perceived Status Discrepancy. It was rejected for the Actual Sociotele Status

Variable, at the .01 level of significance.

This means that the changes shown, during a season of conference play, in interpersonal group structures of teams represented by Group A were no different from the changes shown by Group B, with exception of changes on Actual Sociotele Status. An improvement, from pre-test to post-test, was

shown by Group A in acceptance of others, as players, while no improvement was shown, from pre-test to post-test by Group B on this variable.

Means, variances, Hotelling's T², F ratio, and level of significance for Groups A and B on the ten variables of the <u>Guilford-Zimmerman Temperament Survey</u> following the conference season are shown in Table VIII.

A study of the data in Table VIII indicates that when the ten personality variables were analyzed as profiles, rather than separate individual traits, no significance of difference was found between the two groups.

Although the profile analysis indicated no significance of difference between the two groups, a further study of Table VIII indicates that higher mean scores were shown by Group A on eight of the ten variables. Higher mean scores were shown by Group A on the following variables: Restraint, Ascendance, Friendliness, Personal Relations, and Masculinity. Higher mean scores were shown by Group B on the variables General Activity and Thoughtfulness.

The above data are presented in relationship to

Hypothesis Six, which stated that there will be no significance

of difference between the mean score personality profiles of

Groups A and B following the conference season. The hypoth
esis was accepted.

TABLE VIII

MEANS, VARIANCES, HOTELLING'S T², F RATIO, AND LEVEL OF SIGNIFICANCE FOR GROUPS A AND B
ON THE TEN VARIABLES OF THE GUILFORDZIMMERMAN TEMPERAMENT SURVEY
FOLLOWING THE CONFERENCE
SEASON

Variable	Grou N =	1p A 75*	Group B N = 62*		
variable	Mean	Variance	Mean	Variance	
General Activity	16.84	20.69	17.97	29.22	
Restraint .	14.89	16.76	14.66	21.19	
Ascendance	15.83	22,81	14.56	22.79	
Sociability	19.39	31.68	17.27	38.97	
Emotional Stability	15.45	24.57	13.65	31.26	
Objectivity	14.71	20.85	12.60	28.82	
Friendliness	12.28	23.05	11.92	14.69	
Thoughtfulness	17.93	16.33	17.95	17.63	
Personal Relations	14.84	13.63	14.03	16.55	
Masculinity	18.19	18.13	17.53	17.60	
$T^2 = 17.38$	$F = \frac{10}{126} =$	- 1.62	LS = NSD		

^{*}The N of 75 and N of 62 give a total of 137. This is three less than the total N on the other scales. These three members were absent and did not take this survey.

The findings from the data which have been presented on Groups A and B can be summarized as follows:

- 1. The interpersonal group structures of teams represented by Group A were more cohesive than those of teams represented by Group B prior to the conference season.
- 2. The interpersonal group structures of teams represented by Groups A and B were more alike following the conference season, than they were prior to the conference season.
- 3. The interpersonal group structures of teams represented by Group A improved on all variables during a season of conference play.
- 4. The interpersonal group structures of teams represented by Group B improved on the psychetele variables—not on the sociotele variables—during a conference season.
- 5. The changes shown during a conference season, in interpersonal group structures, by teams representing Group A were no different from those shown by teams representing Group B, with exception of changes shown on Actual Sociotele Status. Group A improved during the conference season, in acceptance of others, as players, while no improvement was shown on this variable by Group B during the conference season.
- 6. There was no significance of difference shown between Groups A and B when their mean score personality profiles were analyzed.

Data on the Regular Players From Groups A and B

The six hypotheses tested for Groups A and B were also tested for the thirty-four regular players from Group A and the thirty-six regular players from Group B.

Means, standard deviations, Fisher's \underline{t} , and levels of significance for the regular players from Groups A and B on the eight sociometric variables prior to the conference season are shown in Table IX.

TABLE IX

MEANS, STANDARD DEVIATIONS, FISHER'S ±, AND LEVELS OF SIGNIFICANCE FOR THE REGULAR PLAYERS FROM GROUPS

A AND B ON THE EIGHT SOCIOMETRIC VARIABLES PRIOR TO THE CONFERENCE SEASON

Variables	Group A N = 34		Grou N =	рВ 36		
variables	Mean	S.D.	Mean	S.D.	Fisher's <u>t</u>	LS
Actual Psyche-						
tele Status	3.99	.20	3.95	.30	.69	NSD
Perceived Psy- chetele Status	3.91	.38	3.78	•37	1.37	NSD
Actual Socio- tele Status Perceived Socio-	4.60	.36	4.52	.32	•94	NSD
tele Status Actual Total	4.41	.48	4.08	.51	2.73	.01
Status Perceived Total	8.59	.51	8.47	.53	.96	NSD
Status Actual Status	8.32	.77	7.86	.84	2.19	.05
Discrepancy Perceived Status	.64	.22	.58	.32	.90	NSD
Discrepancy	•57	•33	.43	.32	1.78	NSD

A study of the data in Table IX indicates that the mean scores of Group A were higher than the mean scores of Group B on all eight variables. Even though higher mean scores were shown by Group A on all eight variables, only Perceived Sociotele Status, at the .01 level, and Perceived Total Status, at the .05 level, were significantly different from the mean scores of Group B. No significance of difference was found between the two groups on the variables Actual Psychetele Status, Perceived Psychetele Status, Actual Sociotele Status, Actual Total Status, Actual Status Discrepancy, and Perceived Status Discrepancy.

The above data are presented in relationship to Hypothesis One for the regular players, which stated that there will be no significance of difference between the mean scores, as determined for the eight sociometric variables, for Groups A and B prior to the beginning of the conference season. Hypothesis One for the regular players was accepted for the variables Actual Psychetele Status, Perceived Psychetele Status, Actual Total Status, Actual Status Discrepancy, and Perceived Status Discrepancy. It was rejected for the variables Perceived Sociotele Status, at the .01 level, and Perceived Total Status, at the .05 level.

The interpersonal group structures of the teams represented by the regular players from Groups A and B tended to

be very similar prior to the conference season. The only difference between the two groups was that Group A perceived themselves as being accepted, as players, more than did Group B.

Means, standard deviations, Fisher's <u>t</u>, and levels of significance for the regular players from Groups A and B on the eight sociometric variables following the conference season are shown in Table X.

A study of the data in Table X indicates that higher mean scores were shown by Group A on all eight sociometric variables. No significance of difference was found between the two groups on the variables Actual Psychetele Status, Perceived Psychetele Status, and Actual Total Status. Significant differences were found between the two groups on the five remaining variables. Higher mean scores were shown by Group A than by Group B, significant at the indicated level, on the variables Actual Sociotele Status, at the .05 level; Perceived Sociotele Status, at the .02 level; Perceived Total Status, at the .05 level; Actual Status Discrepancy, at the .01 level; and Perceived Status Discrepancy, at the .02 level.

The data are presented in relationship to Hypothesis.

Two for the regular players, which stated that there

TABLE X

MEANS, STANDARD DEVIATIONS, FISHER'S <u>t</u>, AND LEVELS OF SIGNIFICANCE FOR THE REGULAR PLAYERS FROM GROUPS A AND B ON THE EIGHT SOCIOMETRIC VARIABLES FOLLOWING THE CONFERENCE SEASON

Variables	Group A N = 34		Group B N = 35*		Fisher's <u>t</u>	LS		
	Mean	S.D.	Mean	S.D.	· · · · · · · · · · · · · · · · · · ·			
Actual Psyche- tele Status	4.11	.23	4.08	.49	.29	NSD		
Perceived Psy- chetele Status	4.09	•49	3.91	.46	1.59	NSD		
Actual Socio- tele Status	4.59	.29	4.39	•49	2.06	.05		
Perceived Socio- tele Status	4.39	.52	4.06	.58	2.51	.02		
Actual Total Status	8.70	•45	8.47	•94	1.28	NSD		
Perceived Total Status	8.48	.87	7.97	.96	2.31	.05		
Actual Status Discrepancy	.50	.22	•35	.23	2.95	.01		
Perceived Status Discrepancy	.47	•35	.26	.33	2.43	.02		

*N for Group B on Table IX shows 36. One team lost a regular player during the season.

will be no significance of difference between the mean scores, as determined for each of the eight sociometric variables, for Groups A and B following the conference season. Hypothesis

Two was accepted for the variables Actual Psychetele Status, Perceived Psychetele Status, and Actual Total Status. It was rejected for the variables Actual Sociotele Status, at the .05 level; Perceived Sociotele Status, at the .02 level; Perceived Total Status, at the .05 level; Actual Status Discrepancy, at the .01 level; and Perceived Status Discrepancy, at the .02 level.

This means that following the conference season, Group A teams tended to be more cohesive than Group B teams on the sociotele variables; but Group A showed more discrepancy than Group B in choices for the sociotele and psychetele criteria. Acceptance of others and perceived acceptance by others, as players, were shown to be higher in Group A. On the discrepancy variables, Group A had a tendency to choose and to perceive being chosen by a different person for the sociotele and psychetele criteria, while Group B had a tendency to choose and to perceive being chosen by the same person for both criteria.

Means, mean changes, standard deviations, Fisher's \underline{t} , and levels of significance for the regular players of Group A on the eight sociometric variables are shown in Table XI.

A study of the data in Table XI indicates that a mean increase was shown by Group A, from pre-test to post-test,

TABLE XI

MEANS, MEAN CHANGES, STANDARD DEVIATIONS, FISHER'S t, AND
LEVELS OF SIGNIFICANCE FOR THE REGULAR PLAYERS OF
GROUP A ON THE EIGHT SOCIOMETRIC VARIABLES

				· · · · · · · · · · · · · · · · · · ·	<u></u>	
	-	_	N	= 34		
Variables	Pre- test Mean	Post- test Mean	Mean Change	s.D.	Fisher's <u>t</u>	LS
Actual Psy- chetele Status	3.99	4.11	.12	•19	3.77	.001
Perceived Psy- chetele Status	3.91	4.09	.18	•49	2.16	.05
Actual Socio- tele Status	4.60	4.59	01	.29	15	NSD
Perceived Socio- tele Status	4.41	4.39	02	.50	23	NSD
Actual Total Status	8.59	8.70	.11	.43	1.56	NSD
Perceived Total Status	8.32	8.48	.16	.73	1.53	NSD
Actual Status Discrepancy	.64	.50	14	.20	-3.83	.001
Perceived Status Discrepancy	• 5 7	.47	10	.38	-1.53	NSD

on four of the variables and a mean decrease was shown on the other four variables. Only three of the changes shown by Groups A during the season were significant changes. Mean increases were shown on Actual Psychetele Status, significant

at the .001 level, and Perceived Psychetele Status, significant at the .05 level. A mean decrease was shown on Actual Status Discrepancy, significant at the .001 level.

The above data are presented in relationship to Hypothesis Three for the regular players, which stated that there will be no significance of difference between the pre-test mean scores and the post-test mean scores of Group A on the eight sociometric variables. Hypothesis Three was accepted for the variables Actual Sociotele Status, Perceived Sociotele Status, Actual Total Status, Perceived Total Status, and Perceived Status Discrepancy. It was rejected for the variables Actual Psychetele Status, at the .001 level; Perceived Psychetele Status, at the .05 level; and the Actual Status Discrepancy, at the .001 level.

This meant the teams represented by the regular players of Group A showed some improvement in interpersonal group structures during the conference season. They improved on the psychetele and discrepancy variables only. No improvement was shown on the sociotele variables. The improvement shown on the psychetele variables meant that Group A teams became more cohesive groups, as the season progressed, in acceptance of others and perceived acceptance by others, as friends. On the discrepancy variable, a tendency was shown

by Group A to choose the same person for the psychetele and sociotele criteria.

Means, mean changes, standard deviations, Fisher's \underline{t} , and levels of significance for the regular players of Group B on the eight sociometric variables are shown in Table XII.

MEANS, MEAN CHANGES, STANDARD DEVIATIONS, FISHER'S t, AND LEVELS OF SIGNIFICANCE FOR THE REGULAR PLAYERS OF GROUP B ON THE EIGHT SOCIOMETRIC VARIABLES

						
			I,	V = 35		
Variables	Pre- test Mean	Post- test Mean	Mean Change	S.D.	Fisher's <u>t</u>	LS
Actual Psy- chetele Status	3.94	4.08	.14	.39	2.14	.05
Perceived Psy- chetele Status	3.79	3.91	.12	.46	1.49	NSD
Actual Socio- tele Status	4.53	4.39	14	.48	-1.69	NSD
Perceived Socio- tele Status	4.11	4.06	05	.48	57	NSD
Actual Total Status	8.47	8.47	.00	.84	.03	NSD
Perceived Total Status	7.90	7.97	.07	•79	.31	NSD
Actual Status Discrepancy	- 59	.35	24	.23	-6.09	.001
Perceived Status Discrepancy	.43	.26	17	.42	-2.43	.05

A study of the data in Table XII indicates no significant mean score changes shown by Group B on five of the eight sociometric variables. Although mean increases were shown on Perceived Psychetele Status, Actual Total Status, and Perceived Total Status, these increases were not significant at the .05 level. The other non-significant mean score changes were decreases in Actual Sociotele Status and Perceived Sociotele Status. Significant mean score changes were shown for the following: a mean increase, significant at the .05 level was shown on Actual Psychetele Status; a mean decrease, significant at the ,001 level, was shown on Actual Status Discrepancy; and a mean decrease, significant at the .05 level, was shown on Perceived Status Discrepancy.

The above data are presented in relationship to Hypothesis Four for the regular players, which stated that there will be no significance of difference between the pre-test mean scores and the post-test mean scores of Group B on the eight sociometric variables. Hypothesis Four was accepted for the variables Perceived Psychetele Status, Actual Sociotele Status, Perceived Sociotele Status, Actual Total Status, and Perceived Total Status. It was rejected for the variables Actual Psychetele Status, at the .05 level; Actual Status Discrepancy, at the .001 level; and Perceived Status Discrepancy at the .05 level.

This means that the teams represented by the regular players from Group B showed very little improvement in interpersonal group structures during a conference season. They did improve in acceptance of others, as friends, and in the tendency to choose and to perceive being chosen by the same person for both sociotele and psychetele criteria.

Mean changes, standard deviations, Fisher's <u>t</u>, and levels of significance for the regular players from Groups A and B on the eight sociometric variables are shown in Table XIII.

A study of the data in Table XIII indicates that mean score increases were shown by both groups on the variables Actual Psychetele Status, Perceived Psychetele Status, Actual Psychetele Status, Perceived Psychetele Status, Actual Total Status, and Perceived Total Status. Although increases were shown on the mean scores of these four variables, no significance of difference was found between the two groups on these changes. It was also found that decreases were shown by both groups on the variables Actual Sociotele Status, Perceived Sociotele Status, and Perceived Status Discrepancy. These three changes in mean scores were not significantly different between the two groups.

The only variable showing a significant difference in mean score change between the two groups is Actual Status

TABLE XIII

MEAN CHANGES, STANDARD DEVIATIONS, FISHER'S t, AND LEVELS
OF SIGNIFICANCE FOR THE REGULAR PLAYERS FROM GROUPS
A AND B ON THE EIGHT SOCIOMETRIC VARIABLES

Variables	Group A N = 34		Group B N = 35		Fisher's t	LS
Variables	Mean Change	S.D.	Mean Change	s.D.	1 15H01 0 <u>0</u>	
Actual Psyche- tele Status	.12	.19	.14	. 39	29	NSD
Perceived Psy- chetele Status	.18	•49	.12	•46	.58	NSD
Actual Socio- tele Status	01	.29	14	.48	1.35	NSD
Perceived Socio- tele Status	01	.50	05	.48	.22	NSD
Actual Total Status	.11	.43	.00	.84	.68	NSD
Perceived Total Status	.16	.73	.07	•79	.82	NSD
Actual Status Discrepancy	14	.20	24	.23	2.04	.05
Perceived Status Discrepancy	10	.38	17	.42	•73	NSD

Discrepancy, significant at the .05 level. Group A decreased .14, while Group B decreased .24 on this variable.

The data are presented in relationship to Hypothesis Five for the regular players, which stated that there will be no significance of difference between the mean score changes shown by Group A and those shown by Group B on the eight sociometric variables. Hypothesis Five was accepted for the variables Actual Psychetele Status, Perceived Psychetele Status, Actual Sociotele Status, Perceived Sociotele Status, Actual Total Status, Perceived Total Status, and Perceived Status Discrepancy. It was rejected for the variable Actual Status Discrepancy, at the .05 level.

This means that the changes in interpersonal group structures shown by the teams represented by the regular players from Group A were no different than those shown by the teams represented by the regular players from Group B, with exception of Actual Status Discrepancy. Group A had a tendency to choose a different person while Group B had a tendency to choose the same person for both sociotele and psychetele criteria.

Means, variances, Hotelling's T², F ratio, and level of significance for the regular players from Groups A and B on the ten variables of the <u>Guilford-Zimmerman Temperament Survey</u> are shown in Table XIV.

A study of the data in Table XIV indicates that when the ten personality traits were analyzed as mean profiles, rather than separate individual traits, no significance of difference was shown between the two groups.

TABLE XIV

MEANS, VARIANCES, HOTELLING'S T², F RATIO, AND LEVEL OF SIGNIFICANCE FOR THE REGULAR PLAYERS FROM GROUPS A AND B ON THE TEN VARIABLES OF THE CUILFORD-ZIMMERMAN TEMPERAMENT SURVEY FOLLOWING THE CONFERENCE SEASON

Variable	Grou N ≖	ip A 33*	Group B N = 35*	
-	Mean	Variance	Mean	Variance
General Activity	16.91	17.48	19.14	24.47
Restraint	15.06	18.97	14.14	17.72
Ascendance	16.30	22.88	14.66	20.63
Sociability	20.09	28.39	17.60	42.53
Emotional Stability	16.21	25.08	13.63	28.06
Objectivity	15.15	24.80	12.77	21.09
Friendliness	12.48	24.43	12.31	11.70
Thoughtfulness	17.52	20.31	17.57	14.19
Personal Relations	15.12	13.08	13.74	11.68
Masculinity	18.45	16.79	16.94	18.00
$T^2 = 19.46$	$F = \frac{1}{5}$	$\frac{0}{7} = 1.68$	LS =	NSD ·

*The N's for the other scales show N's of 34 and 35. One regular player was absent during the post-test and did not take this survey.

Although the mean profile analysis indicates no significance of difference between the two groups, a further study of Table XIV indicates that higher mean scores were shown by Group A on eight of the ten personality variables. Higher mean scores were shown by Group A on the following variables: Restraint, Ascendance, Sociability, Emotional Stability, Objectivity, Friendliness, Personal Relations, and Masculinity. Higher mean scores were shown by Group B on the variables General Activity and Thoughtfulness.

The above data are presented in relationship to Hypothesis Six for the regular players, which stated that there will be no significance of difference between the mean score personality profiles of Groups A and B following the conference season. Hypothesis Six was accepted.

The findings from the data which have been presented on the regular players from Group A and B can be summarized as follows:

- 1. The interpersonal group structures of teams represented by the regular players from Groups A and B tended to be very similar prior to the conference season. The only difference between the two groups was that Group A preceived themselves as being accepted by others, as players, more than did Group B.
- 2. The interpersonal group structures of teams represented by the regular players from Group A were more cohesive

groups on the sociotele variables and less cohesive groups on the discrepancy variables than the Group B teams following the conference season.

- 3. Some improvement in interpersonal group structure was shown by Group A during a conference season. Improvement was shown on both psychetele variables and the actual discrepancy variable.
- 4. Some improvement in interpersonal group structure was shown by Group B during a conference season. Improvement was shown on one psychetele variable and both discrepancy variables.
- 5. The changes in interpersonal group structures shown by the teams represented by the regular players from Group A were no different than those shown by the teams represented by the regular players from Group B, with exception to one discrepancy variable. Group A had a tendency to choose a different person while Group B had a tendency to choose the same person for both sociotele and psychetele criteria.
- 6. There was no significance of difference between Groups A and B when their mean score personality profiles were analyzed.

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CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

This study concerns an analysis of interpersonal group structures and personality profiles of team members representing two categories of junior college basketball teams.

The purposes of the study were as follows: (1) to determine the actual and perceived sociometric status structures of team members representing two categories of junior college basketball teams (winners and losers); (2) to determine the stability of these structures through a conference season; (3) to determine the status structure differences between the two groups of team members representing these two categories of junior college basketball teams; and (4) to determine the differences in mean score personality profiles between these two groups of team members, referred to in the study as Groups A and B.

Four near-sociometric rating scales were administered to the team members from the eight basketball teams of the Texas Eastern Junior College Conference and the seven basketball teams of the Texas Junior College Athletic Conference (North Zone) prior to their conference season. The four scales were

readministered to the same groups following the conference The Guilford-Zimmerman Temperament Survey was also administered during the post-test. Of the fifteen teams that originally participated in the study, only twelve were utilized in the statistical treatment of the study. Three teams were dropped from the study because they did not meet the criteria selected for dividing the teams into two categories -- winning and losing teams. Of the twelve teams that met the criteria, six were classified as winners, and six were classified as losers. Team members from the winning teams were referred to as Group A, and those from the losing teams were referred to as Group B. From the twelve teams, 162 team members participated in the pre-test, and 140 team members participated in the post-test. Groups A and B were compared on eight sociometric variables from the four nearsociometric instruments, both prior to and following the conference season. Groups A and B were also compared on mean score profiles received from the results of the personality survey, following the conference season.

Each of the above comparisons was also utilized for a subdivision of regular players from Groups A and B.

The results of these comparisons are listed below with the hypothesis which was stated for each:

- 1. The first hypothesis was stated as follows: there will be no significance of difference between the mean scores, as determined for each of the following variables, for Groups A and B prior to the beginning of the conference season:
 - a. Actual Psychetele Status
 - b. Actual Sociotele Status
 - c. Actual Discrepancy Status
 - d. Actual Total Status
 - e. Perceived Psychetele Status
 - f. Perceived Sociotele Status
 - g. Perceived Discrepancy Status
 - h. Perceived Total Status

Fisher's <u>t</u> yielded results which indicated the above hypothesis was partially sustained. Hypothesis One was accepted for the variables Actual Sociotele Status, Actual Total Status, Actual Status Discrepancy, and Perceived Status Discrepancy. It was rejected for the variables Actual Psychetele Status, at the .05 level; Perceived Psychetele Status, at the .05 level; Perceived Sociotele Status, at the .01 level; and Perceived Total Status, at the .01 level. Group A rated significantly higher than Group B on these four variables, meaning that the interpersonal group structures of teams represented by Group A were more cohesive than those of teams represented by Group B prior to the conference.

- The second hypothesis was stated as follows: will be no significance of difference between the mean scores, as determined for each of the eight sociometric variables, for Groups A and B following the conference season. t yielded results which indicated the above hypothesis was partially sustained. Hypothesis Two was accepted for the variables Actual Psychetele Status, Perceived Psychetele Status, Actual Sociotele Status, Actual Total Status, Actual Status Discrepancy, and Perceived Status Discrepancy. rejected for the variables Perceived Sociotele Status, at the .Ol level; and Perceived Total Status, at the .O5 level. Group A rated higher than Group B on these two variables. The interpersonal group structures of teams represented by Groups A and B were more alike following the conference season than they were prior to the conference season. Perceived acceptance by others, as players, was shown to be higher among the teams represented by Group A.
- 3. The third hypothesis was stated as follows: there will be no significance of difference between the pre-test mean scores and the post-test mean scores of Group A on the eight sociometric variables. Fisher's <u>t</u> yielded results which indicated the above hypothesis was partially sustained. Hypothesis Three was accepted for the variables Perceived

Sociotele Status and Perceived Status Discrepancy. It was rejected for the variables Actual Psychetele Status, at the .001 level; Perceived Psychetele Status, at the .01 level; Actual Sociotele Status, at the .001 level; Actual Total Status, at the .001 level; Perceived Total Status, at the .01 level; and Actual Status Discrepancy, at the .001 level. All of these changes were improvements; therefore, the interpersonal group structures of teams represented by Group A showed improvement on nearly all variables during a season of conference play.

4. The fourth hypothesis was stated as follows: there will be no significance of difference between the pre-test mean scores and the post-test mean scores of Group B on the eight sociometric variables. Fisher's tyielded results which indicated the above hypothesis was partially sustained. Hypothesis Four was accepted for the variables Actual Sociotele Status, Perceived Sociotele Status, Actual Total Status, Perceived Total Status, and Perceived Status Discrepancy. It was rejected for the variables Actual Psychetele Status, at the .001 level; Perceived Psychetele Status, at the .02 level; and Actual Status Discrepancy, at the .02 level. These changes were improvements. It was found that the interpersonal group structures of teams represented by Group B improved during

the conference season on some of the variables. Improvement was not shown on the sociotele variables as was shown by Group A. This variable referred to the acceptance of others, as players, on their team.

5. The fifth hypothesis was stated as follows: there will be no significance of difference between the mean score changes shown by Group A and those shown by Group B on the eight sociometric variables. Fisher's t yielded results which indicated the above hypothesis was partially sustained. Hypothesis Five was accepted for the variables Actual Psychetele Status, Perceived Psychetele Status, Perceived Sociotele Status, Actual Total Status, Perceived Total Status, Actual Status Discrepancy, and Perceived Status Discrepancy. It was rejected for the variable Actual Sociotele Status, at the .Ol level. Group A increased .15 on this variable, while Group B decreased .07. This means that the changes shown during a conference season, in interpersonal group structures, by teams representing Group A were no different than those shown by teams representing Group B, with exception of changes shown on Actual Sociotele Status. Group A improved during the conference season in acceptance of others, as players, while no improvement was shown on this variable by Group B during the conference season.

6. The sixth hypothesis was stated as follows: there will be no significance of difference between the mean score personality profiles of Groups A and B following the conference season. Hotelling's T² yielded results which indicated no significance of difference between the two groups when the personality profiles were analyzed. Hypothesis Six was accepted.

Each of the above hypotheses was also tested for the regular players from Groups A and B.

as follows: there will be no significance of difference between the mean scores on the eight sociometric variables for Groups A and B prior to the beginning of the conference season. Hypothesis One was accepted for the variables Actual Psychetele Status, Perceived Psychetele Status, Actual Sociotele Status, Actual Total Status, Actual Status Discrepancy, and Perceived Status Discrepancy. It was rejected for the variables Perceived Sociotele Status, at the .01 level; and Perceived Total Status, at the .05 level. Group A showed higher mean scores on both of these variables. The group structures represented by both groups were very similar prior to the conference season. The only difference between the two groups was that Group A perceived themselves as being

accepted by others, as players, on their team, more than did Group B.

- 2. Hypothesis Two for the regular players was stated as follows: there will be no significance of difference between the mean scores, as determined for each of the eight sociometric variables, for Groups A and B following the conference season. Hypothesis Two was accepted for the variables Actual Psychetele Status, Perceived Psychetele Status, and Actual Total Status. It was rejected for the variables Actual Sociotele Status, at the .05 level; Perceived Sociotele Status, at the .02 level; Perceived Total Status, at the .05 level; Actual Status Discrepancy, at the .01 level; and Perceived Status Discrepancy, at the .02 level. Group A rated higher than Group B on all five of these variables. This meant that the interpersonal group structures of teams represented by the regular players from Group A were more cohesive groups on the sociotele variables and less cohesive groups on the discrepancy variables than the Group B teams following the conference season.
- 3. Hypothesis Three for the regular players was stated as follows: there will be no significance of difference between the pre-test mean scores and the post-test mean scores of Group A on the eight sociometric variables. Hypothesis

Three was accepted for the variables Actual Sociotele Status, Perceived Sociotele Status, Actual Total Status, Perceived Total Status, and Perceived Status Discrepancy. It was rejected for the variables Actual Psychetele Status, at the .001 level; Perceived Psychetele Status, at the .05 level; and Actual Status Discrepancy, at the .001 level. These were mean increases except for Actual Status Discrepancy. This meant that some improvement was shown by Group A during the conference season. Improvement was shown on both psychetele variables and the actual discrepancy variable.

4. Hypothesis Four for the regular players was stated as follows: there will be no significance of difference between the pre-test mean scores and the post-test mean scores of Group B on the eight sociometric variables. Hypothesis Four was accepted for the variables Perceived Psychetele Status, Actual Sociotele Status, Perceived Sociotele Status, Actual Total Status, and Perceived Total Status. It was rejected for the variables Actual Psychetele Status, at the .05 level; Actual Status Discrepancy, at the .001 level, and Perceived Status Discrepancy, at the .05 level. A mean increase was shown on Actual Psychetele Status while mean decreases were shown on the two discrepancy variables. All three of these changes were improvements in group structures

for Group B during the season; therefore, Group B did show some improvement during the season.

- as follows: there will be no significance of difference between the mean score changes shown by Group A and those shown by Group B on the eight sociometric variables. Hypothesis Five was accepted for the variables Actual Psychetele Status, Perceived Psychetele Status, Actual Sociotele Status, Perceived Sociotele Status, Actual Total Status, Perceived Total Status and Perceived Status Discrepancy. It was rejected for the variable Actual Status Discrepancy, at the .05 level. It was found that the changes shown by Group A during a conference season were no different than the changes shown by Group B, with exception to one discrepancy variable. Group A had a tendency to choose a different person while Group B had a tendency to choose the same person for both sociotele and psychetele criteria.
- 6. Hypothesis Six for the regular players was as follows: there will be no significance of difference between the mean score personality profiles of Groups A and B following the conference season. Hypothesis Six was accepted. There was no significance of difference found between Groups A and B when their mean score personality profiles were analyzed.

Summary of the Findings

The findings which have been presented can be summarized as follows:

- 1. Prior to the conference season teams represented by Group A were found to be more cohesive in interpersonal group structures than teams represented by Group B. The mean scores of Group A were significantly higher on both psychetele variables and one of the sociotele variables.
- 2. Both groups improved in status during the season, but the means of Group B did not reach those of Group A.
- 3. Both groups improved on the psychetele variables, but only Group A improved on the sociotele variables during the conference season.
- 4. Following the conference season the two groups were more alike than they were prior to the conference season.

 The one variable that was significantly different between the two groups both prior to and following the conference season was Perceived Sociotele Status. Higher mean scores were shown for Group A than for Group B on this variable.
- 5. Both groups decreased in status discrepancies as the season progressed. As status discrepancies decreased, the status structures became more cohesive.
- 6. It was found that Group A and Group B revealed similar changes during a conference season, with exception of

Actual Sociotele Status. Group A improved on this variable while Group B showed no improvement.

- 7. No differences were found between the two groups in mean personality profiles following the conference season.
- 8. Similar findings to those of Groups A and B are also shown for the regular players from Groups A and B. There were three exceptions; they are as follows:
 - a. For the regular players, Group A was found to be more like Group B in structure prior to the beginning of the conference season.
 - b. For the regular players, Groups A and B did not show quite as much improvement on the status variables during the season as was shown by the total groups.
 - c. For the regular players, more discrepancy between the sociotele and psychetele variables was shown by Group A than by Group B.

Conclusions

An analysis of the results of this study leads to the following conclusions.

1. Effectiveness as a team tends to be associated with the interpersonal group structure prior to the conference season.

- 2. An organized basketball team, playing through a season, will show sociometric gains as the season progresses.
- 3. Friendships among team members on a team are not affected by the effectiveness or ineffectiveness of the team.
- 4. Winning teams and losing teams are more alike in interpersonal group structures following the season than they are prior to the season.
- 5. Membership on a winning team is enhancing to the self-concept of the players.
- 6. Raters tend to choose the same person for both friend and work companion in a task oriented situation as they become more familiar with the group.
- 7. Winning tends to be associated with one's confidence in the playing ability of fellow teammates while losing tends to have the opposite effect.
- 8. Personality profiles of players from winning and losing teams are similar.
- 9. Regular players from teams tend to characterize the teams they represent.
- 10. Regular players from winning teams tend to show more discrepancy of choice between friend and work companion than regular players from losing teams.

Implications

The following implications are drawn from the findings and conclusions of this study:

- 1. It was observed that the team members from Group A had a tendency to score higher on all sociometric variables, than did Group B, both prior to and following the conference season. These differences in scores between the two groups were not always significant. This seems to imply that effectiveness as a team is associated with effective interpersonal relationships among the team members.
- 2. Since winning nor losing seems to be related to a deterioration in the interpersonal group structures of the teams, it is implied that there must be other factors involved when teams show a deterioration in their group structures.
- 3. It is implied that some of the improvements in structures shown by the losing teams may have been influenced by the loss of a number of players during the season.
- 4. The reaction of Group B on the sociotele variable implies that some work needs to be applied to the building of self-confidence in the players.
- 5. Although more improvement was shown on some of the variables by Group B, the scores of Group B did not reach those of Group A. This may be an indication that after reaching a certain point, scores may begin to taper off.

6. It appears that a team member's perceptions and his attitudes toward others on the team might be as important to the effectiveness of the team as certain physical aspects.

Recommendations

On the basis of the findings and the conclusions of the study, the following are recommended:

- 1. That similar studies be made with different task oriented groups using a larger population in an attempt to establish some type of interpersonal group score norms for identifying effective interpersonal group patterns.
- 2. That methods of group dynamics be employed in the teacher education curricula for all coaches.
- 3. That studies similar to this one be conducted on the junior and senior high level so that a coach could be with a group for a number of years and experiment with group dynamics on a long range plan.
- 4. That other factors which might influence the interpersonal relationships of the group be studied, such as coaching methods, abilities of players, attitudes of players, and general attitude of the school toward the activity.
- 5. That coaches' personalities be studied in relation to the personalities of the players, and how these relationships affect the interpersonal group climate.

- 6. That further study be conducted on self-confidence and its relation to winning in athletics.
- 7. That coaches and teachers attempt action research on new ways to improve the relations between the coach or teacher and the group members.
- 8. That more use be made of sociometric instruments in working with task-oriented groups similar to basketball teams.

APPENDIX A

Instructions for the Actual Psychetele Scale

Directions: Next to each player's name you are to place a check mark in one of five columns. Column One means that this player is one of your best friends. Column Two means that this player is one of your good friends. Column Three means that this player is someone you do not know well. Column Four means that you would not prefer this player as a friend. Column Five means that you do not want this player for a friend.

Place only one check mark by each name, but there is no limit to the number of check marks you may have in each column. Do not sign the scale. When you come to your own name, either rate yourself or leave it blank.

Instructions for the Perceived Psychetele Scale

Directions: Next to each player's name you are to place a check mark in one of five columns. Column One means that you think, "This person would want me as his best friend." Column Two means that you think, "This person would want me as a good friend." Column Three means that you think, "This person does not know me well." Column Four means that you think, "This person would not prefer me as his friend." Column Five means that you think, "This person would definitely not want me as his friend."

Place only one check mark by each name, but there is no limit to the number of checks you may have in each column. Do not sign the scale. When you come to your own name, either rate yourself or leave it blank.

The instructions for the Actual Sociotele Scale and the Perceived Sociotele Scale were comparable to the directions above; however, the criteria for selection were that of someone

wanted as a player on your team, and someone that you thought wanted you as a player on his team.

APPENDIX B

SAMPLE OF ACTUAL PSYCHETELE NEAR-SOCIOMETRIC SCALE

	One of My Best Friends	One of My Good Friends	Someone I Do Not Know Well	Someone I Would Not Prefer As a Friend	Someone I Do Not Want for a Friend
Name					
Name					
Name					
Name					

SAMPLE OF PERCEIVED PSYCHETELE NEAR-SOCIOMETRIC SCALE

	· · · · · · · · · · · · · · · · · · ·					<u> </u>
	This Person Would Want Me As His Best Friend	This Person Would Want Me As a Good Friend	This Person Does Not Know Me Well	This Person Would Not Prefer Me As His Friend	This Person Would Definitely Not Want Me As His Friend	
Name						
Name						
Name						
Name						

SAMPLE OF ACTUAL SOCIOTELE NEAR-SOCIOMETRIC SCALE

	 	·-			
	This Person I Definitely Want As A Player on My Team	This Person I Would Like To Have As A Player On My Team	This Person I Would Not Care Whether Or Not He Is A Player On My Team	This Person I Would Not Like To Have As A Player On My Team	This Person I Definitely Do Not Want As A Player On My Team
Name	,				
Name					
			· · · · ·		
Name				<u>.</u>	
Name				•	

SAMPLE OF PERCEIVED SOCIOTELE NEAR-SOCIOMETRIC SCALE

					
	This Person Would Definitely Want Me As A Player On His Team	This Person Would Like To Have Me As A Player On His Team	This Person Does Not Care Whether Or Not I Am A Player On His Team	This Person Would Not Like To Have Me As A Player On His Team	This Person Defi- nitely Does Not Want Me. As A Player On His Team
Name					•
Name		·			
		* * * * *			• • • •
Name					
Name		-			

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