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LEADER, FOLLOWER, AND NONLEADER PATTERNS
IN EMERGENT LEADERSHIP

BY
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ABSTRACT

In the present research 82 freshmen at the University of Richmond who had previously been administered the Omnibus Personality Inventory (OPI) volunteered for a short discussion session after which each student completed a 9 item leadership scale on each of the other group members. A multiple regression analysis revealed a significant correlation between the Social Extroversion scale of the OPI and ratings of group participation ($r=.38, \alpha < .01$). A post hoc multiple discriminant analysis identified 7 OPI scales which discriminated 64.4% of the cases into correct leadership groups. These findings support a leader-follower-nonleader paradigm for small group participation, identifying unique personality configurations for each group -- leaders who participate actively and who organize the group process, followers who offer suggestions or congeniality, and nonleaders who either refuse to interact or become antagonistic to group goals. Suggestions for future research include a need for observer ratings of group interactions as well as more extensive personality measures of social variables such as dominance and social desirability.

LEADER, FOLLOWER, AND NONLEADER PATTERNS
IN EMERGENT LEADERSHIP

Within small groups individual characteristics involved in emergent leadership have been extensively reviewed (Stogdill, 1948, 1974; Fisek & Ofshe, 1970; & Schultz, 1974). Research has been consistent in revealing behavioral characteristics common to all leaders; for example, Fisek & Ofshe (1970) state, "Emergent leaders talk more often, participate more actively in group discussions, as well as show an ability to sustain and initiate group interaction." Schultz (1974) found leaders to rate higher in giving directions and formulating goals as well as being more self-assured.

In studying the behaviors differentiating leaders from other group members Hollander & Webb (1955) reported leaders shared many of the characteristics of those rated as effective followers. Moment & Zalesnik (1963) likewise found effective followers, those rated as either high in offering ideas or high in congeniality, to be significantly different from those termed the "underchosen" or "nonleader" who were rated low in both offering ideas and congeniality. These nonleaders were more competitive and did not contribute to the

group process. Nelson (1964) also found less-liked or ineffective group members to be significantly different from both liked leaders and liked followers; he reported that liked leaders and liked followers shared several characteristics including ratings of satisfaction with job assignment, acceptance of authority, and motivation to be effective group members. These two groups were also the most similar in attitudinal and behavioral profiles.

These studies suggest that behavioral characteristics can distinguish three potential groups of members within small groups. First, leaders who rate highly in participation, organization, and motivation to reach group goals; second, effective followers who rate highly in either offering ideas or promoting group cohesiveness and who may display some of the behaviors of leaders; third, nonleaders who do not show potential for leader behavior, either because they do not participate in the group or because they are antagonistic and hinder the group goals. Hollander & Webb (1955) suggest that nonleaders are "neither desirable as leaders nor desirable as followers."

In reviewing the literature, Stogdill (1974) found many personality variables to be associated with

emergent leadership, but these variables explained only a small percentage of the common variance, and thus revealed only moderate effectiveness in predicting emergent leadership. Most of the studies reviewed utilized a leader-follower paradigm, collapsing followers and nonleaders into one group. Hollander & Webb's research (1955) suggest that this may be an inappropriate method for the study of leadership. Therefore, the purpose of this research was to examine emergent leadership within the context of the leader-follower-nonleader paradigm; each group along the continuum was identified from behavioral peer ratings as well as associated personality characteristics as measured by the Omnibus Personality Inventory (OPI). The OPI was chosen because of its availability as well as its face validity in identifying possible correlates of leadership.

PERSONALITY SCALES OF THE OPI

The OPI includes 14 scales measuring "selected attitudes, values, and interests, chiefly relevant in the areas of normal ego-functioning and intellectual activity." Following is a description of each scale and

and a brief discussion of how each relates to leadership variables:

Thinking Introversion (TI) reflects a general interest in abstract ideas and concepts as well as a "scholarly orientation." The TI scale correlates significantly with 7 of 8 scholarly behaviors rated by faculty of a small group of graduate students (Heist & Yonge, 1968). Stogdill (1948) reported 23 studies which discriminated leaders on the basis of scholarship. Unlike leaders, low scorers show interests in immediate, practical concerns unrelated to scholarly orientation. Stogdill (1974) reported an additional 25 studies up to 1970 which discriminated leaders on the basis of intelligence.

Theoretical Orientation (TO) reflects problem solving ability, logical thinking, and interest in science. Low scores reflect a preference to have theories explained, rather than attempting to understand them on their own. The TO scale correlates highly with self-reliance and originality (Heist & Yonge, 1968). Stogdill (1974) reported 10 studies which discriminated leaders on the basis of enterprise and initiative.

Estheticism (Es) correlates significantly with interest in artistic matters and sensitivity to esthetic stimulation. Low scorers do not make friends with

sensitive and artistic men and do not have interests in historical changes (Heist & Yonge, 1968). Several studies have found interpersonal sensitivity as well as congeniality to correlate with leadership (Stogdill, 1948, 1974; Moment & Zaleznik, 1963).

Complexity (Co) reflects a flexible orientation relating to "perceiving and organizing phenomena." High scorers prefer novel situations and ideas; low scorers do not like uncertainty or change (Heist & Yonge, 1968). Stogdill (1974) found over 10 studies which discriminated leaders by adaptability or flexibility.

Autonomy (Au) correlates significantly with measures of liberal, non-authoritarian thinking. Mann (1958) found conservatism to significantly discriminate group members from leaders in his review of personality correlates of small group performance.

Religious Orientation (RO) reflects a liberal-fundamentalist range of beliefs about religious viewpoints; RO and Au correlate slightly which reflects an underlying authoritarian factor. Low scorers tend to be conservative and frequently rejecting of other viewpoints. Mann (1958) found conservatism to be significantly related to non-leader behavior.

Social Extroversion (SE) measures the style of relating to others in a social context. High scorers tend to seek social activities, enjoy talking to strangers, and do not mind giving oral reports. Stogdill (1974) found over 15 studies which discriminated leaders by social extroversion.

Impulse Expression (IE) reflects readiness to express impulses and seek gratification. Low scorers are conforming and conventional. Stogdill (1948, 1974) found leadership could be discriminated on the basis of initiative and activity in 10 or more studies.

Personal Integration (PI) correlates highly with a sense of well-being and self-control. Low scorers feel completely inadequate at times and experience strange and peculiar thoughts. Stogdill (1974) found 28 studies which discriminated leaders by self-confidence.

Anxiety Level (AL) reflects the degree of anxiety or worry with low scorers experiencing difficulty in social adjustment and low self-esteem. Stogdill (1948) reported 10 or more studies which discriminated leaders as being high in self-confidence, adaptability, and social participation. Mann (1958) also found leaders to rate higher in adjustment and ego-strength.

Altruism (Am) reflects the degree of orientation for

the welfare of others with high scorers being outgoing, at ease with others, and having higher need to be socially involved. Mann (1958) found leaders to show more interpersonal sensitivity and extroversion.

Stogdill (1948) reported 15 or more studies which found leaders to be higher in activity and social participation.

Practical Outlook (PO) reflects the degree of authoritarianism, conservatism, and non-intellectual interests.

Low scorers like to discuss philosophical problems and are more tolerant of ambiguity. High scorers are pragmatic and do not like uncertainty or unpredictability. Mann (1958) found leaders could be discriminated on the basis of non-conservatism. Reviewing the literature through 1956, Christis and Cook (1958) concluded high authoritarian individuals are rejected as both leaders and friends.

Masculinity-Femininity (MF) reflects the cultural stereotypes derived from masculine and feminine sex roles. High scorers admit to few adjustment problems or feelings of anxiety and show an interest in scientific matters. Mann (1958) reported leaders could be discriminated by MF measures as well as adjustment level.

Response Bias (RB) reflects the student's test-taking

attitude. High scores reflect a need to make a good impression. Extreme scores will not be used in this study.

Intellectual Disposition Categories (IDC) reflect a continuum of intellectual dispositions and are derived from the first 6 scales of the OPI (See Heist & Yonge, 1968). Categories 7 and 8 distinguish the "unintellectual" who seldom express interest in long-range academic careers. Categories 1 and 2 distinguish individuals with broad intellectual interests and high levels of esthetic sensitivity and appreciation. Many studies support the role of intelligence and scholarship in leadership behavior (Stogdill, 1974).

METHOD

OPI profiles of 681 freshmen were in a data bank at the University of Richmond; 499 of these freshmen were contacted through classes or mail and asked to participate in a short problem-solving session. Each freshman was given the option of 1) volunteering for the discussion group and giving permission for the use of his OPI profile 2) refusing to participate in the group discussion, but giving permission for the use of

the OPI 3) refusing to participate in the group discussion and refusing to disclose any personal information (See Table 1).

Those freshmen who volunteered for the group discussion were assigned to one of 18 groups of 4-6 members and met for an approximately 30 minute discussion. Their task was to create a problem to be used as the subject for another group decision-making study (Fisek & Ofshe, 1970) (See Appendix 1). After the discussion each member was asked to complete a leadership rating scale for each of the other group members. The scale was presented and named as a "Member Rating Scale" so as not to disclose the leadership aspect of the research (See Appendix 2). The scale was composed of items found most valid for identifying potential college leaders and had an average item intercorrelation of .85 (Bass & Norton, 1951; Bass & White, 1951).

RESULTS

The OPI and peer ratings of those freshmen who participated in the group discussion and whose Response bias scores fell between ± 2 SD about the

TABLE 1 SUBJECTS' PARTICIPATION IN OPI RESEARCH

Subjects

Volunteered for discussion:

Participated in group 82

Missed group 90

Refused to volunteer for group discussion:

Allowed researcher use of OPI 282

Refused researcher use of OPI 45

mean were analyzed. For each freshman the mean peer rating of leadership (criterion measure) was analyzed by means of a stepwise multiple regression with the 14 OPI variables (predictor variables). A significant relationship was found between leadership ratings and the Social Extroversion scale of the OPI ($r(72) = .38, \alpha < .001$). No other personality trends were interpretively significant in predicting leadership (See Table 2).

The leadership scale, ranging in possible scores between 0 (low) and 36 (high), was arbitrarily divided into 3 groups corresponding to the leader-follower-nonleader paradigm. Leader ratings fell between 27-36 representing high scores on a majority of the 9 scale items. Follower ratings, between 19-24, represented individuals rated about the median and possibly showing both strengths and weaknesses on the scale items. Nonleaders, scoring between 0-16, were rated below the median on a majority of the scale items.

With this group division, a post hoc discriminant analysis revealed a 71.19% correct group prediction from the 14 OPI variables (See Table 3 & 4, Figure 1). All of the 14 variables contributed significantly to the

TABLE 2 SUMMARY TABLE OF MULTIPLE REGRESSION OF LEADERSHIP RATING WITH OPI SCALES

<u>OPI Scales:</u>	<u>Multiple R</u>	<u>R Square</u>	<u>R Square Change</u>	<u>Simple R</u>	<u>Sig.</u>
Social Extroversion	.38473	.14802	.14802	.38473	.001
Masculinity-Femininity	.42275	.17872	.03070	.03852	.001
Estheticism	.43960	.19324	.01452	.08969	.002
Complexity	.46258	.21398	.02074	-.02754	.002
Impulse Expression	.47424	.22490	.01092	.14702	.003
Religious Orientation	.48948	.23959	.01468	-.13029	.004
Autonomy	.50671	.25675	.01717	-.09328	.005
Practical Outlook	.51425	.26446	.00771	.07353	.008
Thinking Introversion	.52422	.27481	.01035	.12278	.010
Intellectual Disposition Category	.54183	.29368	.01878	-.04971	.010
Theoretical Orientation	.54648	.29864	.00506	.10246	.015
Anxiety Level	.54741	.29966	.00102	-.00752	.024
Personal Integration	.54795	.30025	.00059	.03843	.038

TABLE 3 SUMMARY TABLE OF DISCRIMINANT ANALYSIS PREDICTING LEADERSHIP GROUP FROM
14 OPI SCALES

<u>OPI Scales</u>	<u>Wilks Lambda</u>	<u>Sig.</u>	<u>Discriminant Function Coefficients</u>	
			1	2
Social Extroversion	.87474	.024	-.57119	-.04586
Practical Outlook	.78407	.009	-1.06069	-.60166
Theoretical Orientation	.74585	.013	-.85590	-.16849
Religious Orientation	.71150	.018	1.02170	.68069
Autonomy	.58905	.001	-.73514	-1.13607
Impulse Expression	.56804	.003	-.84800	.70228
Complexity	.53871	.003	.42936	-.73905
Personal Integration	.51214	.004	-.37107	-.90344
Anxiety Level	.48182	.004	-.13376	.93474
Thinking Introversion	.45693	.005	-.13710	.54073
Estheticism	.44721	.009	-.68849	.27618
Masculinity-Femininity	.43672	.014	-.35460	.31717
Altruism	.42739	.023	-.13376	.93474
Intellectual Disposition Category	.41926	.037	-.53578	.31357

TABLE 4 SUMMARY TABLE OF DISCRIMINANT ANALYSIS
 FOR PREDICTED VS. ACTUAL GROUP
 MEMBERSHIP USING 7 AND 14 OPI VARIABLES.

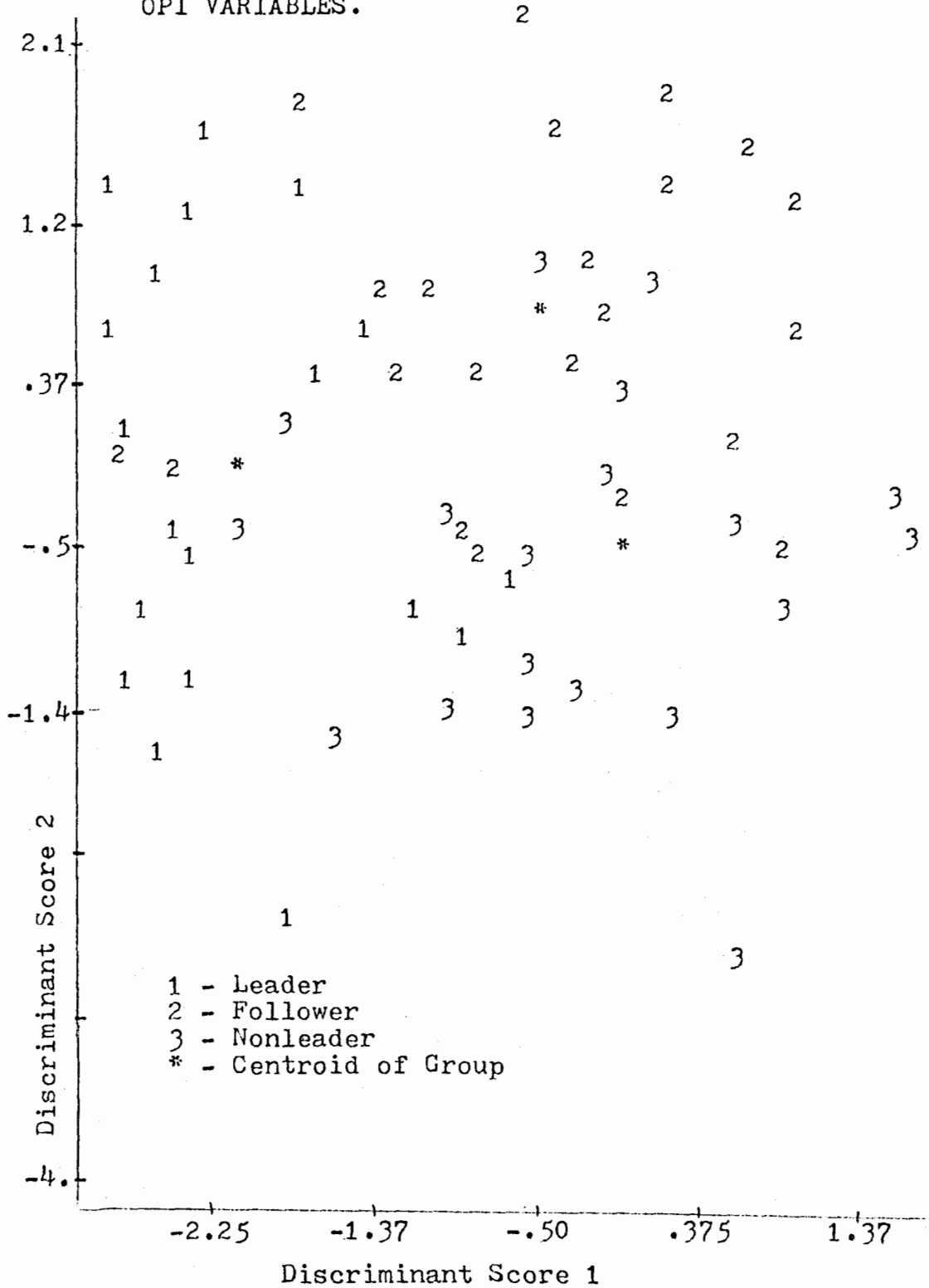
14 OPI Variables

Actual Group	N	<u>Predicted Group Membership</u>		
		<u>1</u>	<u>2</u>	<u>3</u>
1 (leader)	19	15	1	3
2 (follower)	22	2	15	5
3 (nonleader)	18	3	3	12

7 OPI Variables

Actual Group	N	<u>Predicted Group Membership</u>		
		<u>1</u>	<u>2</u>	<u>3</u>
1 (leader)	19	14	4	1
2 (follower)	22	3	14	5
3 (nonleader)	18	5	3	10

FIGURE 1 DISCRIMINANT SCORE 1 AND DISCRIMINANT SCORE 2 FOR LEADERSHIP GROUP PREDICTION USING 14 OPI VARIABLES.



discrimination. The Standardized Discriminant Function Coefficients were then used to reduce the predicting variables from 14 to 7 without a significant loss of accuracy; this also aided in naming the discriminant functions (See Table 5). The 7 predictive variables were able to predict 64.4% of the cases into correct leadership groups using 2 discriminant functions (See Table 4, Figure 2, 3, 4, 5). The first function relied mainly on the Practical Outlook, Religious Orientation, Impulse Expression, and Social Extroversion scales, while the second function was derived mainly from the Autonomy, Personal Integration, and Anxiety Level scales.

A post hoc analysis also revealed that the OPI Masculinity-Femininity scale discriminated male and female students ($\chi^2(81)=22.6, \alpha < .05$) (See Table 6, Figure 6), while being unrelated to leadership; a 2 X 3 Chi Square analysis of Sex X Group revealed no differences in the proportion of males and females rated as leaders, followers, or nonleaders (See Table 7).

DISCUSSION

Predicting leadership from personality variables

TABLE 5 SUMMARY TABLE OF DISCRIMINANT ANALYSIS PREDICTING LEADERSHIP GROUP FROM
7 CPI SCALES:

<u>CPI Scales</u>	<u>Wilks Lambda</u>	<u>Sig.</u>	<u>Discriminant Function Coefficients</u>	
			1	2
Social Extroversion	.87474	.024	-.61282	.37552
Practical Outlook	.78407	.009	-1.03713	-.36811
Autonomy	.74998	.015	-.63536	-.98361
Religious Orientation	.66500	.005	.85718	.40047
Impulse Expression	.63614	.007	-.70083	.13346
Personal Integration	.61681	.011	-.46747	-.95283
Anxiety Level	.57993	.011	.09534	.96970

FIGURE 2 DISCRIMINANT SCORE 1 AND DISCRIMINANT SCORE 2 FOR LEADERSHIP GROUP PREDICTION USING 7 OPI VARIABLES.

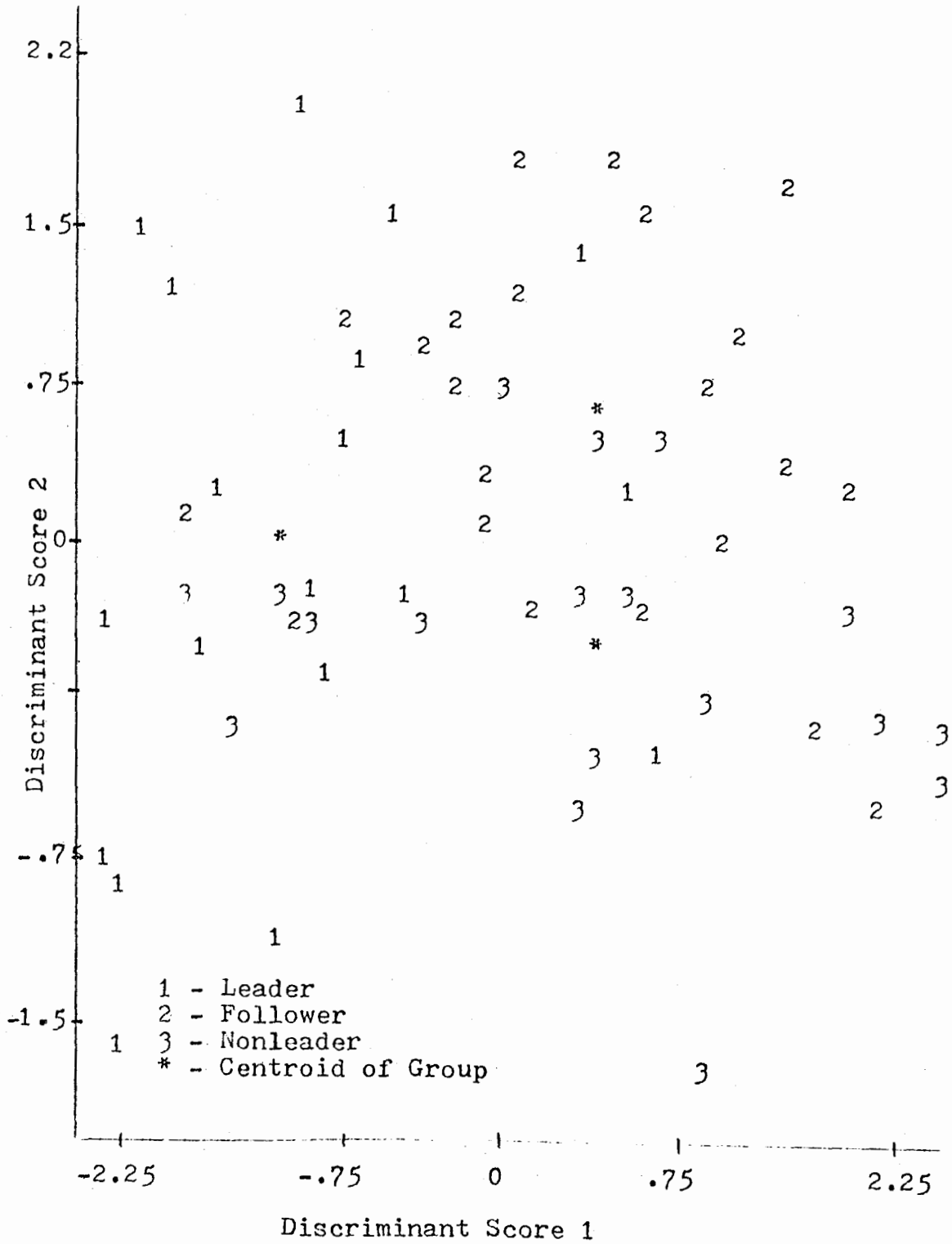


FIGURE 3 DISCRIMINANT SCORE 1 AND DISCRIMINANT SCORE 2 FOR LEADERS SHOWING CORRECTLY CLASSIFIED CASES (Marked off by dashed lines).

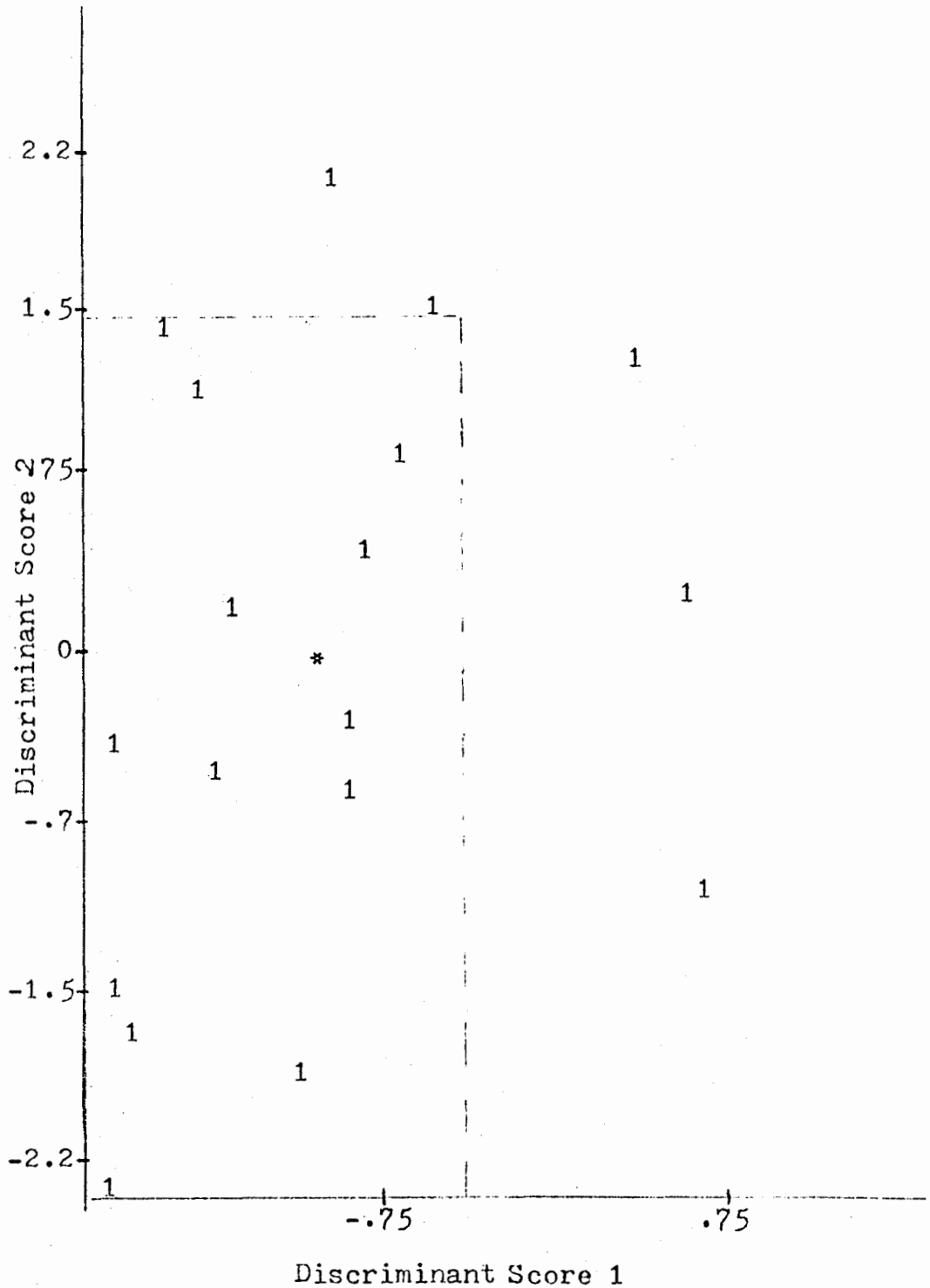


FIGURE 4 DISCRIMINANT SCORE 1 AND DISCRIMINANT SCORE 2 FOR FOLLOWERS SHOWING CORRECTLY CLASSIFIED CASES (Marked off by dashed lines).

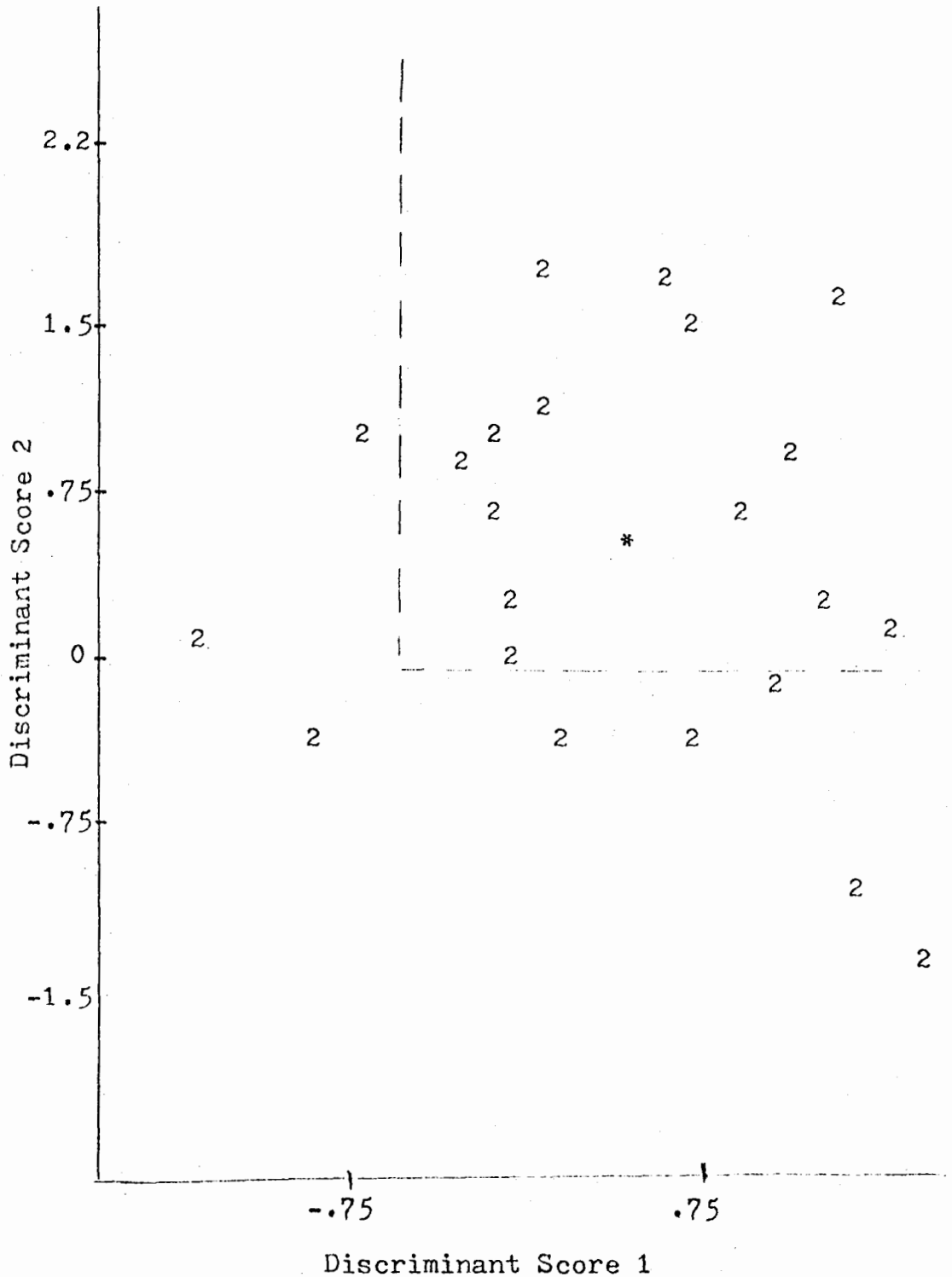


FIGURE 5 DISCRIMINANT SCORE 1 AND DISCRIMINANT SCORE
 2 FOR NONLEADERS SHOWING CORRECTLY
 CLASSIFIED CASES (Marked off by dashed lines).

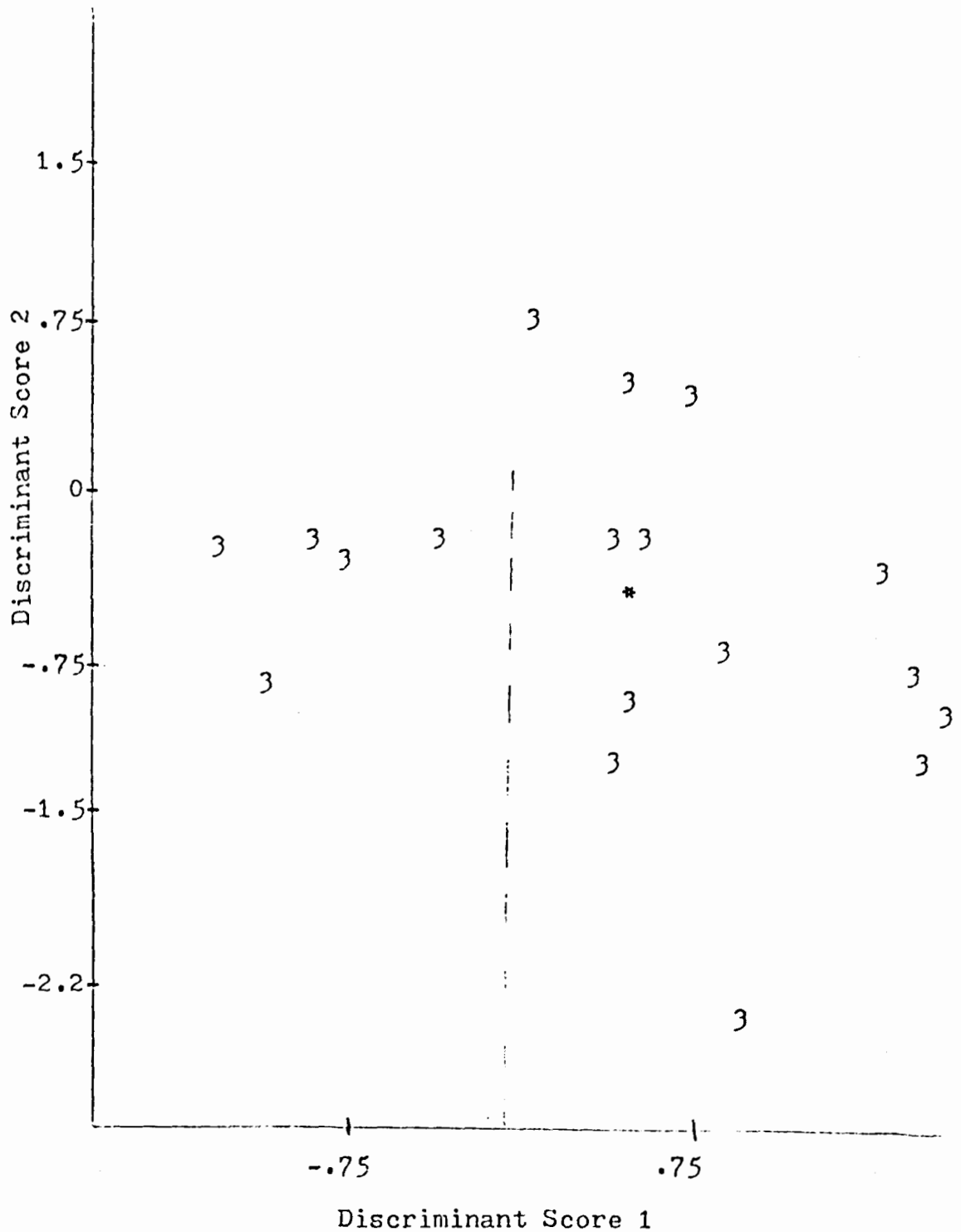


TABLE 6 SUMMARY TABLE OF CHI SQUARE ANALYSIS OF
MASCULINITY-FEMININITY SCORE X SEX.

	Masculinity-Femininity Scaled Score	
	Below 50	Above 50
Male	13	24
Female	38	6

$\chi^2=22.6, \alpha < .05.$

FIGURE 6 LEADERSHIP RATINGS AND MASCULINITY-FEMININITY SCALE SCORES FOR MALES AND FEMALE STUDENTS.

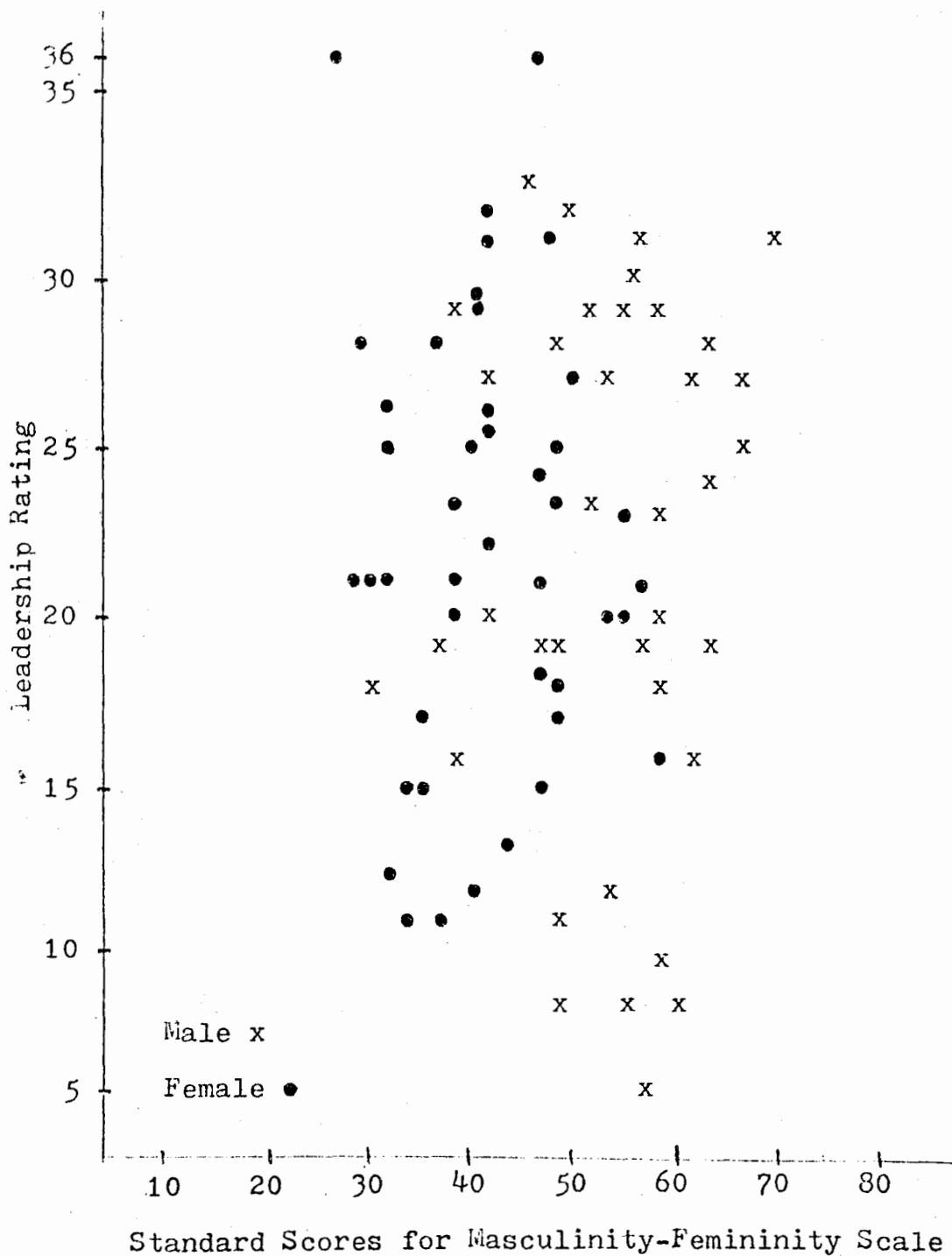


TABLE 7 SUMMARY TABLE OF CHI SQUARE ANALYSIS OF
GROUPS X SEX.

	Groups		
	Leader	Follower	Nonleader
Male	11	6	9
Female	9	18	11

$\chi^2=4.62, \alpha > .05.$

has long been an imprecise and tenuous endeavor (Brainard, 1971; Roberts, 1969). In examining a variety of intellectual and social variables, the present research identified only one characteristic, social extroversion, which correlated significantly with leadership.

In light of research supporting a continuum of leader-follower-nonleader participation, it becomes clearer why leadership prediction has revealed extensive inconsistencies. Since followers may display leader behavior under certain circumstances, peer nominations of leadership may be identifying both leaders and followers, who in the present setting have chosen to lead. Hollander & Webb (1955) report a correlation of $r=.92$ between peer nominations of leadership and followership. With this common variance, leadership and followership become difficult to distinguish. Further down the continuum, the differences between followers and nonleaders may likewise become vague, obscuring prediction.

Of the intellectual and social variables involved in this research, social extroversion deals most directly with how an individual specifically functions within a social context; high scores become a

prerequisite for leadership, since the leader takes an active role in the group process. Variables such as altruism, estheticism, and intellectual variables may vary with individuals so that leaders, followers, and nonleaders score similarly. These variables relate less directly with how an individual presents himself in a group, and thus may not lend themselves to leadership prediction. This was also found to be true with sex differences; the Masculinity-Femininity scale of the OPI discriminated male and female students, males scoring disproportionately higher than females; however, no differences were found between the proportion of males and females rated as leaders, followers, or nonleaders. This suggests that women are presently functioning at levels equal to men within small groups in the university setting.

Leadership prediction, then, appears to be best approached from a multivariate analysis, identifying patterns, rather than single variables to identify leaders. The present research identified 2 discriminant functions in predicting leader-follower-nonleader patterns. The first function identified the following characteristics as discriminating leaders from followers and nonleaders (in order of importance):

interest in practical applications of theories, preference for predictability, certainty, and order, belief in religion, tendency to act on the spur of the moment, and preference for social functions and large groups. This personality configuration described the leader as goal-directed, initiating, and resourceful, as has past research (Stogdill, 1974).

The second function differentiated followers from nonleaders on the following characteristics (in order of importance): tendency for authoritarian thinking, denial of anxiety, feelings of inadequacy at times, wondering who they really are, and to a lesser extent being conservative and judgmental. The follower configuration presents a considerable amount of ambivalence which may explain the inconsistent nature of follower participation; for example, the follower denies anxiety, while at the same time admits to feelings of isolation and rejection. It would appear that in situations where inadequacy prevails, followers do not emerge as leaders, while the resources of authoritarianism and rigidity may, at different times, allow the follower to participate possibly introducing order or strong opinionated beliefs to the group setting.

The second discriminant function also identified

the nonleader group as being on an opposite end of the bipolar personality variables describing the follower group. Opposite the follower, the nonleader feels a need for independence of authority, may have difficulty adjusting to the social environment and experience anxiety, holds fairly conservative religious beliefs, and admits to few of the attitudes that characterize the emotionally disturbed individual. The nonleader shows strengths in his ability to be nonconforming and independent, and if not extreme, these qualities may be adaptive and resourceful. This nonleader configuration can explain either the isolate or acting out role the nonleader may play in group participation; by withdrawing from social demands and regulations, the nonleader can avoid anxiety arising from inadequate social adjustment and the pressures of authority; on the other hand, if independence and nonconformity are extreme, the nonleader may present himself as antagonistic and competitive.

In the present research the exact nature of the group interaction was not observed, so that information is lacking in identifying the exact nature of the status evolution. This would appear to hold promise in identifying and discriminating the leader-follower-

nonleader groups more precisely. Various observer scales such as Bales' 12 interaction categories would further discriminate the interaction process; likewise, it would appear promising for further research to use a more extensive variety of social-emotional variables such as dominance, achievement needs, and social desirability variables.

Overall, the multivariate approach to leadership prediction can provide a broader, more comprehensive view of how individuals interact within group settings. By approaching a variety of characteristics, research is better able to describe the determinants involved in leadership emergence; this research has also provided some insights into other group members, partially explaining the processes that may be involved in less active group members. More importantly, this research has supported the leader-follower-nonleader paradigm, showing personality trends unique to each group; it has provided a basis for further research to explore the differences existing in those group members who do not lead and who were previously all classified as followers.

REFERENCES

- Aries, Elizabeth. Interaction patterns and themes of male, female, and mixed groups. Small Group Behavior, 1976 (Feb), Vol 7(1), 7-18.
- Bass, B.M. An analysis of the leaderless group discussion. J. Applied Psychology, 1949, 33, 527-33.
- Bass, B.M. and Norton, F.M. Group size and leaderless discussions. J. Applied Psychology, 1951, 35, 397-400.
- Bass, B.M. and White, O.L. Situational Tests: III Observer's ratings of leaderless group discussion participants as indicators of external leadership status. Educ. and Psych. Measurements, 1951, 11, 355-61.
- Brainard, S.R. Correlates of leadership effectiveness in personnel assistants. DAI, 1971, 32:2542A.
- Dugger, June A. A study of measurable personal factors of leaders and non-leaders among university freshmen women. DAI, 1969, 30: 1817A.
- Christis, R. and Cook, P.A. A guide to published literature relating to the authoritarian personality through 1956. J. Psychology, 1958, 45, 171-9.
- Fisek, M.H. and Ofshe, R. The process of status evolution. Sociometry, 1970, 33, 327-46.
- Heist, P. and Yonge, G. Omnibus Personality Inventory Manual Form F. New York: The Psychological Corporation, 1968.
- Hollander, E.P. and Webb, W.B. Leadership, followership, and friendship: an analysis of peer nominations. J. Abnormal and Social Psychology, 1955, 50, 163-67.
- Mann, R.A. A review of the relationships between personality and performance in small groups. Psychological Bulletin, 1958, 56, 241-70.

REFERENCES (CONT.)

- Moment, D. and Zalesnik, A. Role Development and Interpersonal Competence. Boston: Harvard University Graduate School of Business Administration, 1963.
- Morrison, Donald G. On the interpretation of Discriminant Analysis. J. Marketing Research, 1969, 6, 156-163.
- Nelson, P.D. Similarities and differences among leaders and followers. J. Social Psychology, 1964, 63, 161-7.
- Roberts, B.B. The leader, group, and task variables of leader selection in college. DAI, 1969, 29, 2360A.
- Schultz, B. Characteristics of emergent leaders of continuing problem-solving groups. J. Psychology, 1974 (Nov), 88(2), 167-173.
- Stogdill, R.M. Personal factors associated with leadership. J. Psychology, 1948, 25, 35-71.
- Stogdill, R.M. Handbook of Leadership: A Survey of Theory and Research. New York: Free Press, 1974.

APPENDIX 1 DIRECTIONS FOR GROUP DISCUSSION SESSIONS

During the next 30 minutes, it will be your task as a group to create a problem to be used as the subject for another group decision-making study. The problem will have to be one which the group members will find interesting; but a problem in which no member is likely to have special knowledge or hold strong value positions about. You will have up to 30 minutes to complete the task; when complete, you should have arrived at one problem that will be given to the experimenter.

APPENDIX 2 MEMBER RATING SCALE

Member: _____

1. Was effective in saying what he/she wanted to say:
a great deal _ _ _ _ _ not at all
2. Offered good solutions to the problem discussed:
a great deal _ _ _ _ _ not at all
3. Showed initiative:
a great deal _ _ _ _ _ not at all
4. Clearly defined the problem:
a great deal _ _ _ _ _ not at all
5. Motivated others to participate in the discussion:
a great deal _ _ _ _ _ not at all
6. Led the discussion:
a great deal _ _ _ _ _ not at all
7. Influenced the participants:
a great deal _ _ _ _ _ not at all
8. Seemed interested in the discussion:
a great deal _ _ _ _ _ not at all
9. Knew about the topic:
a great deal _ _ _ _ _ not at all