THE RELATIONSHIP OF TEMPERAMENT AND EXTRAVERSION-INTROVERSION TO SELECTED GROUP COUNSELING OUTCOME MEASURES

DISSERTATION

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By

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The problem of this study was the determination of the relationship between Myers-Briggs personality temperament and extraversion-introversion, and group counseling norms, as reflected by the group counseling outcome measures: Survey of Attraction to Group, self and leader-report Interpersonal Relationship Rating Scale (IRRS), and Sociometric Choice Status Survey. The Myers-Briggs Temperament Indicator (MBTI) and the four outcome measures were administered to a sample population of 103 graduate and undergraduate counselor education students after completion of a semester-long group counseling experience. Fifteen groups of five to nine members were surveyed.

It was expected that group members whose temperaments were compatible with group counseling norms would be more likely to receive confirmation, support, and acceptance in the group, be attracted to the group, receive higher leader and self-report ratings of interpersonal skills, and be more highly valued by other members than would members whose temperaments were incompatible with group norms. It was also thought that extraverts were more likely to be
attracted to the group, receive higher self and leader ratings of interpersonal skills, and to be more highly valued by other members than were introverts.

No significant relationship was found between temperament and the four outcome measures. Possible explanations for this finding were discussed. However, mean scores for extraverts were significantly higher than mean scores for introverts on the Survey of Attraction to Group and leader-report Interpersonal Relationship Rating Scale instruments. A related finding was that the NF temperament was overrepresented in the sample population of counselor education students by a factor of four. The INFP type was overrepresented by a factor of 16.5, and the ENFP type had the highest frequency of occurrence. Together, INFPs and ENFPs constituted 34 percent of the sample. In the general population, INFPs and ENFPs would be expected to account for only six percent of the total.
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CHAPTER I

INTRODUCTION

Group counseling, encounter groups, growth groups, sensitivity groups, T-groups, and laboratory groups are structured around the focus of learning from the immediate experiences, interactions, attitudes, feelings and behaviors of the participants. The emphasis in these types of groups is on using the actual, immediate experiences of the members themselves as the main inputs to learning (Steele, 1968). Maslow (1965) and Mezoff (1982) observed that not all individuals benefit equally from group counseling experiences. Campbell and Dunnette (1968) and Lieberman, Yalom, and Miles (1973) noted that some individuals can even be harmed by group counseling experiences. It appears that individuals who have certain personality characteristics or temperaments tend to be more responsive to group counseling than other types of individuals and also tend to be more comfortable with group counseling. Some individuals function very well in groups, learn from group counseling experiences, and come away with a very positive attitude toward the whole group experience. Conversely, other individuals have a very negative experience in group counseling in terms of functioning, learning, and attitude.
toward the whole experience (Steele, 1968).

Group counseling is characterized by several norms that guide behavior (i.e., the various leader and normative participant expectations, interactions, and tasks which determine acceptable and appropriate behavior in the group counseling situation) (Bennis, 1962; Yalom, 1985). Individuals with certain temperaments or personality dimensions seem to be "compatible" with group counseling norms and are likely to have a positive group counseling experience and to experience growth, change, self insight, and personal and interpersonal enhancement. Persons with other temperaments seem to be "incompatible" with group counseling norms and are likely to have a negative group counseling experience, to experience considerable discomfort and rejection, and to profit very little or even to be harmed by the experience (Kilmann & Taylor, 1974).

The Myers-Briggs Type Indicator (MBTI) has been used extensively in clinical and counseling settings, with over 500 studies catalogued (Carskadon, 1979). Several investigators (Steele, 1968; Gilliard, 1973; Kilmann & Taylor, 1974; Evans, 1982) examined MBTI psychological type and group outcome measures. Each of these psychological type investigations involved correlating each of the four MBTI personality dimensions separately with each of the outcome measures. No one to date has reported the relationship between psychological temperament and group
outcome.

The MBTI is a forced-choice, self-report, inventory which was developed in 1962 by Isabel Myers and Katheryn Briggs (Myers, 1962) to measure four personality dimensions alluded to in Jung's personality typology: Extraversion-Introversion (E-I), Sensing-Intuition (S-N), Thinking-Feeling (T-F), and Judging-Perceiving (J-P). The MBTI yields possible personality types. Keirsey and Bates (1984) group the 16 types into four major temperaments, which they maintain have greater utility for explaining behavior than the concept of type. Their four temperaments are Sensing-Judging (SJs), Sensing-Perceiving (SPs), Intuitive-Thinking (NTs), and Intuitive-Feeling (NFS). The purpose of this study was to determine the relationship between temperament and group counseling norms. Additionally, the relationship between one of the four MBTI personality dimensions—Extraversion-Introversion—and group counseling norms was investigated. It was expected that group members whose temperaments were largely compatible with group norms would be more likely to receive confirmation, support, and acceptance in the group, be attracted to the group, receive higher leader and self-report ratings of interpersonal skills, and be more highly valued by other members than would members whose temperaments were incompatible with group norms. Conversely, group members whose temperaments were incompatible with group norms would be less likely to
receive support and acceptance, be attracted to the group, receive lower ratings of interpersonal skills, and be less highly valued by other group members than would members whose temperaments were compatible with group norms.

Statement of the Problem

The problem of this study is the determination of the relationship between Myers-Briggs personality temperament and extraversion-introversion, and group counseling norms as reflected by the group counseling outcome measures: Survey of Attraction to Group, self and leader-report Interpersonal Relationship Rating Scale (IRRS), and Sociometric Choice Status Survey.

Related Literature

Psychological Type

The Myers-Briggs type Indicator is based on Carl Jung's theory (1923) that much of human behavior is due to certain basic differences in the way people approach life. He theorized that every person has a natural preference for one or the other poles on each of three dichotomous pairs of personality dimensions: Extraversion-Introversion, Sensation-Intuition, and Thinking-Feeling (Carlyn, 1977). Isabel Myers and Katheryn Briggs added a fourth personality dimension to Jung's typology in devising the Myers-Briggs Type Indicator (Myers, 1962).

Each of these four personality dimensions consists of
two attitudes which locate the direction of one's energy (extraversion or introversion), two ways of perceiving (sensation or intuition), two ways of deciding (thinking or feeling), and specification of a preferred way of processing information (judging or perceiving). Preference for using one of a pair of personality dimensions (a preference for thinking rather than feeling as a dominant way of deciding, for example) does not mean that the other auxiliary, dimension (feeling) is excluded from the person's repertoire of mental functions. All individuals use both functions in deciding (thinking and feeling) at different times, but individuals tend to develop a preferred way of deciding, and in fact, cannot apply both types of decision making at the same time (Kilmann & Taylor, 1974).

**Extraversion-Introversion** refers to a person's energy flow or direction of interests. If a person's interests flow mainly to the outer world of people, objects, and actions, and the individual is energized by being around other people, the person shows a preference for extraversion (E). If a person's interests flow mainly to the inner world of concepts and ideas, and the individual requires solitude to replenish energy reserves, the person shows a preference for introversion (I) (Keirsey & Bates, 1984).

**Sensing-Intuition** refers to an individual's preferred method of perception. If data are perceived directly by the four senses and consist of the actual, specific, practical
facts of reality and experience, the individual shows a preference for sensing (S). In contrast, intuitive perception (N) involves perceiving the possibilities, meanings, associations, and hunches which the unconscious adds on to the data that is being received (Kilmann & Taylor, 1974).

Thinking-Feeling refers to an individual's preferred way of making judgments or decisions. Thinking (T) is the objective, logical, analytical, reasoning that results in a particular conclusion. Feeling (F) is the rational process of giving value to any phenomenon or object, and this subjective value then influences whatever conclusions are reached. However one takes in data—either by sensing or intuition—the individual may come to some conclusions about the data either by a logical, impersonal analysis (thinking) or by a subjective, personal attribution of value to the data (feeling) (Keirsey & Bates, 1984).

Judging-Perceiving refers to two types of attitudes toward the outer world. Individuals who are oriented toward judging are concerned mainly with coming to conclusions, making decisions, and prefer to live in a decisive, planned and orderly way, aiming to regulate and control events. Individuals oriented toward perceiving tend to spend time taking data in and becoming aware of people, things, and events in the environment, and prefer to live in a spontaneous, flexible manner, aiming to understand life and
to adapt to it (Keirsey & Bates, 1984).

Taken together, an individual's preferred attitude of energy direction (E or I), preferred way of perceiving (S or N), preferred way of judging (T or F), and preference for either judging or perceiving (J or P), constitute the individual's psychological type and is represented by the initials of the preferred function for each of the four Myers-Briggs personality dimensions. There are sixteen possible psychological types: ESFJ, ESTJ, ISFJ, ISTJ, ESFP, ESTP, ISFP, ISTP, ENTJ, ENTP, INTJ, INTP, ENFJ, ENFP, INFJ, and INFP (Myers, 1980).

**MBTI Temperament**

Keirsey and Bates (1984) grouped the 16 possible MBTI types into four major temperaments composed of four types each:

1. Sensing-Judgers or SJs—ESFJ, ESTJ, ISFJ, and ISTJ;
2. Sensing-Perceivers or SPs—ESFP, ESTP, ISFP, and ISTP;
3. Intuitive-Feelers or NFs—ENFJ, ENFP, INFJ, and INFP; and
4. Intuitive-Thinkers or NTs—ENTJ, ENTP, INTJ, and INTP.

Each of these four temperaments is characterized by two personality preference dimensions which seem most typical of the subgroup: NFs, NTs, SJs, and SPs. According to this categorization of types, each of the four psychological
types within the four temperaments bear important similarities to each other and share similar values, goals, characteristics. Also, each temperament has a predictable distribution pattern in the general population. SJs and SPs comprise 36 percent each of the general population, and NTs and NFs comprise 12 percent each of the general population. (Keirsey & Bates, 1984).

**Group Norms**

According to Yalom (1985) group counseling is characterized by several norms that guide behavior. Desirable group norms are open expression of emotion, active involvement in the group, and extensive self-disclosure and self exploration. He further states that the optimal procedural format in the group is one that is unstructured, unrehearsed, and freely interacting. Lieberman, Yalom, and Miles (1973) found that group members who either deviated from or grossly misperceived group norms had almost no chance of benefitting from the group and actually were likely to suffer negative consequences.

If it is true that individuals with certain personality temperaments are predisposed to be either compatible or incompatible with group counseling norms, then it would be useful to describe group counseling norms in terms of the personality types that would be favored. According to Kilmann and Taylor (1974) it is possible to describe the norms of group counseling in terms of personality dimensions
that can be measured by the MBTI.

Group norms which reflect the traditional, normative focus of group counseling can be stated as:

1. Interpersonal engaging as opposed to intrapersonal processing. This would seem to favor extraverts over introverts.

2. Associating or extrapolating as opposed to describing. This would tend to favor intuition over sensing.

3. Responding affectively as opposed to responding cognitively. This would tend to favor feeling over thinking.

4. A focus on here-and-now immediacy as opposed to categorization of people and events. This would tend to favor perceiving over judging (Bennis, 1962; Kilmann & Taylor, 1974).

Counselor Types

One of the most consistent findings in the MBTI literature is that certain psychological types are found far more frequently among counselors and therapists than in the general population (Carskadon, 1979). Myers and Davis (1964) found, in a study of 4000 medical students, that INFPs, INTPs, and ENFPs were significantly overrepresented in psychiatry. Perry (1975) found that members of the American Psychological Association working in clinical areas were significantly more feeling oriented than members
working in other areas. Galvin (1975) found that paraprofessionals at a suicide and crisis intervention service, and psychologists, psychiatrists, psychiatric nurses, and psychiatric social workers at a community mental health center were predominantly intuitive and feeling oriented. Myers (1980), in a survey of 118 counselor education students at Florida State University, found that self-selection seems confined to the NF (intuitive feeling) types. Each NF type had a self-selection ratio or 1.80 or higher, and no other type had a self-selection ratio higher than 0.61. Carskadon (1979), in a review of 50 MBTI studies, found that most groups of counselors and therapists are overwhelmingly composed of intuitive (as opposed to sensing types) and feeling (as opposed to thinking types).

**Selection of Clients for Group Therapy**

In regard to criteria for selection of clients for group therapy, Yalom (1985) noted that group members who are unable to participate in the group task and who hinder group progress toward completion of the task are much less attracted to the group than participatory members and are motivated to terminate membership. He defined the group task as the development and exploration of all aspects of the relationship of each member to each of the others, to the therapist, and to the group as an aggregate. This definition of group task would seem to favor interpersonally-oriented individuals. Lieberman, Yalom, and
Miles (1973) found that encounter group members who grossly misperceived the group norms had virtually no chance of benefitting from the group and had an increased likelihood of suffering negative consequences. Instruments were used to measure self-esteem, self-ideal discrepancy, interpersonal attitudes and values, defense mechanisms, emotional expressivity, friendship patterns, and major life decisions, after the group experience was completed. They also found that, on pre-group testing, those who benefitted most from the group were those who highly desired personal change, who viewed themselves as deficient in understanding their own feelings and in their sensitivity to the feelings of others, and who had a high expectational set for the group experience.

**Other Psychological Instruments to Predict Group Outcome**

Several investigators have attempted to design new psychological instruments to predict subsequent group outcome and have reported only equivocal results. Examples of the instruments used are variants of the Thematic Apperception Test (Aston, 1966), the Sentence Association Test (Sutherland, Gill, & Phillipson, 1967), the Sentence Completion Test (Ben-Zeev, 1958), personality trait inventories (Anchor, Vojtisek, & Berger, 1972), and a sixty-item, self report Q-sort (Hill, 1955).

**Other Personality Variables and Group Participation**

Other researchers have defined and studied a few
discrete personality variables thought to be relevant to an individual's group participation. Some variables which have been studied are dogmatism (Joure, Frye, Meierhoefer, & Vidulich, 1972), preference for high or low structure (Harrison & Lubin, 1965b), social avoidance (Crews & Melnick, 1976), locus of control (Kilmann & Howell, 1974), social risk-taking propensity (Melnick & Rose, 1979), and interpersonal trust (Robinson, 1980).

Jackson (1962) demonstrated that an individual's attraction to a group is directly proportional to the extent to which this individual is considered valuable by other group members. Festinger, Schacter, & Back (1962) found that the ability of the group to influence an individual is dependent partly on the attractiveness of the group for that member and partly on the degree to which the member communicates with the others in the group.

Yalom, I., Houts, P., Zimerberg, S., and Rand, K. (1967) investigated factors before group therapy that might predict successful outcome. Forty patients in five outpatient therapy groups were studied through one year of group therapy. Outcome was evaluated and correlated with several variables studied before beginning therapy. The only variables predictive of success were the members' attraction to the group and the members' general popularity in the group.

Melnick and Rose (1979) determined each member's risk-
taking propensity and expectational set for the group experience at the onset of the group and then rated members' actual behavior in the group. They found that both high risk-taking propensity and favorable expectations correlated with therapeutically favorable behavior in the group. Goldstein (1960) also found that a positive expectational set is predictive of a favorable group therapy outcome.

According to Stava and Bednar (1979), the personality characteristics of the individual members are thought to be one of the most important factors influencing both process and outcome in group treatment. Reviewers of research of group therapy (Bednar & Lewis, 1971; Yalom, 1975) and of sensitivity training (Campbell & Dunnette, 1968; Gibb, 1971) also have emphasized that the composition of a group in terms of member personality characteristics deserves careful consideration.

**Differential Benefit From Group Work**

Maslow (1965) has noted that because of the skills demanded in the T-group learning situation, perhaps only a small percentage of the population can hope to benefit from it. Further, it appears that some of the interpersonal skills most important for accomplishing the T-group's objectives are also the very skills constituting the major learning goals of the method (Campbell & Dunnette, 1968).

Mezoff (1982) in a review of cognitive style and interpersonal behavior as related to human relations
training, observed the differential effectiveness of different kinds of humans relations training with different "types" of individuals, and speculated that perhaps participants' personality traits account for the differences in how they respond to sensitivity training experiences. A number of researchers have attempted to identify those personality variables (personality style or personal orientation) that differentiate between high and low learners in laboratory training settings (Harrison & Lubin, 1965a; Joure, Frye, Green, & Cassens, 1971; Anderson & Slocum, 1973; Poland & Jones, 1973; Mitchell, 1975).

**MBTI Psychological Type and Group Counseling Outcome**

Several researchers have used the Myers-Briggs Type Indicator to investigate the relationship between cognitive style or personality type and effectiveness in a group counseling experience. Steele (1968) investigated the relationship between the sensing (S)-Intuition (N) dimension of MBTI psychological type and peer ratings of effectiveness as a group member and interpersonal value orientation as measured by the Managerial Behavior Questionnaire. He hypothesized that individuals with certain relatively stable personality traits would tend to be more responsive than other types of individuals to the laboratory training process and also would tend to be more comfortable with the laboratory approach to interpersonal relationships. He found that preference for intuition (N) can be used to
predict tendencies toward interpersonal value orientations and peer ratings of effectiveness as a group member. He further advocated the design of alternative laboratory experiences in which sensing-oriented (S) individuals are specifically helped to generalize to situations that on the surface appear to be very different from the one in which they are immediately located. Additionally, he suggested the generation of a relatively concrete list of goals for laboratory training for sensing individuals.

**MBTI Psychological Type and Norms of Group Counseling**

Kilmann and Taylor (1974) investigated the relationship between MBTI psychological type and the established norms of laboratory training and found that members whose psychological type was congruent with these norms were more satisfied with the group experience than members whose psychological type was incongruent with these same norms. They found that individuals with the MBTI personality dimensions of extraversion (E), intuition (N), feeling (F), and perceiving (P) were more satisfied with group counseling than individuals with the opposing dimensions of introversion (I), sensing (S), thinking (T), and judging (J). They also discussed the implications of their findings in terms of the identification of the rejectors of laboratory training experiences, the design of different laboratories via alternative experiential norms, and utilization of different intervention strategies for
different MBTI personality types.

**Relationship Between MBTI Type and Attraction to Group**

Evans (1982) investigated the relationship between MBTI psychological type and attraction to group, early, midway, and late in the group's development. In exploring the relationship between the four psychological type variables (extraversion-introversion, sensing-intuition, thinking-feeling, and judging-perceiving) and attraction to group, Evans found that only the feeling preference of the thinking-feeling dimension was significantly related to attraction to group and only midway through the group. He found no relationship between the other psychological type variables and attraction to group.

**MBTI Type and Sociometric Status Related to Group Problem Solving Effectiveness**

Jannes (1984) studied the effect of psychological type and group choice (sociometric) status on group effectiveness of problem solving groups, and reported that groups with greater sociometric choice status and similarity of MBTI psychological type demonstrated better group problem solving effectiveness.

**Previous Research Related to MBTI Type and Group Outcome**

Gilliard (1973) investigated the relationship between all four dimensions of MBTI psychological type and (a) sociometric interpersonal ratings, (b) self and sociometric ratings of group member effectiveness, and (c) self-reported
group satisfaction. Pearson product-moment correlations indicated no significant relationship between MBTI psychological type dimensions and any of the three outcome measures. Gilliard's sample consisted of only one group composed of nine graduate students, who met for a total of twenty-two hours over the course of a weekend. One of Gilliard's recommendations for further study was the replication of the study using a larger sample.

Although there have been several studies of the relationship between MBTI psychological type and various group outcome measures, there have been no studies to date which investigate the relationship between MBTI temperament and various group outcome measures. The present study incorporated Gilliard's recommendation for replication using a larger sample (15 groups of five to nine students each, n=103, meeting weekly for a semester), and examined the relationship between MBTI temperament and extraversion-introversion and selected group counseling outcome measures (Sociometric Choice Status Survey, Interpersonal Relationship Rating Scale, and Survey of Attraction to Group).

Brinton, Jarvis, and Harris (1984) investigated the relationship between MBTI temperament and preference for a small-group instruction option in medical school curriculum for 100 sophomore medical students. Significant associations were found between one temperament and reaction
to small group instruction. The intuitive-feelers (NFs) were more apt to apply for the small-group option, and they more frequently indicated an interest in having more small-group experiences than did subjects of the other temperaments.

**Extraversion-Introversion**

The introvert's main interests are in the inner world of concepts and ideas, while the extravert is more involved with the outer world of people and things (Myers, 1980). The person who prefers solitude to recover energy tends toward introversion, while the person who chooses people as a source of energy renewal prefers extraversion. Other differences between extraversion and introversion, are, respectively: breadth as opposed to depth, interaction as opposed to concentration, multiplicity of relationships as opposed to limited relationships, and interest in external happenings as opposed to interest in internal reactions (Keirsey & Bates, 1984).

Marshall (1971) studied preference for privacy as related to the MBTI and other instruments. He found that the two MBTI dimensions most closely associated with privacy are introversion and thinking and that the two dimensions most closely associated with affiliation are extraversion and feeling. He also found that the most important aspects of privacy for introverts and thinking types are personal space and lack of pressure for self-disclosure.
Previous Research Investigating Introversion-Extraversion and Interpersonal Affiliation

Shapiro and Alexander (1964) found that extraverts waiting in a high anxiety experimental situation were more likely to affiliate with others while waiting than they would under less anxious circumstances, while introverts under less anxious circumstances were less likely to want to be with others. Nechworth (1979) observed that under normal circumstances introverts reserved more interpersonal space for themselves than extraverts did. Carskadon (1979) noted that when experimental subjects were asked to give a talk in front of a group of judges, extraverts stood closer to the judges and had less silence during their talk than introverts did.

Previous Research Investigating Extraversion-Introversion and Group Counseling

Boller (1974) investigated the differential effects of two T-group styles on introverts and extraverts. He attempted to determine if there were observable differences in positive affect level for introverts and extraverts for sensory awareness or verbal cognitive training groups. He found that extraverts experienced a significantly higher positive affect level than introverts for both training group modalities. He concluded that extraverts appear to benefit more from these two training group modalities than do introverts. He implied that contrasting group styles
apparently affect different personality types in different ways and that the group counselor should be aware of this in assigning clients to groups.

Recommendations for Research in Group Counseling

According to Yalom (1985), there is a lack of systematic outcome studies demonstrating a relationship between patient trait or behavior and subsequent outcome in group therapy. He labeled the preceding set of conditions a glaring defect which must be corrected before it is possible to establish a sound scientific basis for selection of group therapy members.

Mezoff (1982) defined cognitive style as a characteristic mode of mental functioning or a typical pattern of organizing information and observed that there is little research on cognitive style in human relations training settings, partly due to the fact that research on cognitive styles and interpersonal behavior is in its infancy.

Melnick and Woods (1976), in a review of group composition research and theory for psychotherapeutic and growth-oriented groups, noted that group composition guidelines will develop no faster than researchers are able to develop valid pretherapy screening techniques and selection criteria. They suggested further research in the identification and development of reliable measures of interpersonal personality dimensions critical to group
composition such as group compatibility, individual compatibility with the group culture, interpersonal skills, and attitudes toward dominance.

Campbell & Dunnette (1968), in a review of T-group effectiveness, noted that certain kinds of individuals may benefit from T-group training while others may actually be harmed, and suggested the incorporation of more measures of individual differences in future T-group studies. These researchers further observed that most researchers seem to act as if laboratory training should have similar effects for everyone, and suggested that more research effort must be expended toward correlating individual differences with relevant laboratory interactions.

Summary of Related Literature

A survey of the literature reveals that not all individuals benefit equally from group counseling (Maslow, 1965; Steele, 1968; Kilmann & Taylor, 1974; Mezoff, 1982) and that some individuals may actually be harmed by the experience (Campbell & Dunnette, 1968). Several investigators have used various instruments and personality variables in attempts to predict group outcome. Several researchers examined the relationship between MBTI psychological type or individual scales of the Myers-Briggs Type Indicator and group outcome and found that:

1. A preference for intuition (N) tends to predict tendencies toward peer ratings of effectiveness as a group
member (Steele, 1968);

2. Individuals with the MBTI dimensions of E, N, F, and P were more satisfied with the group experience than individuals with the opposing dimensions of I, S, T, and J (Kilmann & Taylor, 1974);

3. A preference for feeling (F) on the thinking-feeling dimension was related to attraction to group, but only midway through the group (Evans, 1982);

4. No relationship was found between any of the four MBTI dimensions and interpersonal ratings, group satisfaction, and group member effectiveness (Gilliard, 1973);

5. In a non-group counseling setting:
   a. Extraverts were more likely than introverts to affiliate with others in a high anxiety experimental situation (Shapiro & Alexander, 1964),
   b. Introverts reserved more interpersonal space for themselves than did extraverts in a normal situation (Nechworth, 1979), and
   c. Introverts (I) and thinking types (T) prefer personal space and lack of pressure for self-disclosure (Marshall, 1971); and

6. In a group counseling situation, extraverts experienced a significantly higher positive affect level than did introverts for two different training group
modalities (Boller, 1974).

One group of researchers (Britton, Jarvis, and Harris, 1984) examined the relationship between temperament and preference of medical students for a small-group instructional modality in medical school. They found that one temperament (NFs or intuitive-feelers) more frequently indicated an interest in having more small-group experiences.

Several investigators recommended further group counseling research in the areas of:

1. Member trait and subsequent group outcome (Yalom, 1985),

2. Cognitive style as related to human relations training (Mezoff, 1982),

3. Personality dimensions critical to group composition (Melnick & Woods, 1976),

4. Personality differences and group interactions (Campbell & Dunnette, 1968), and

5. MBTI type and interpersonal ratings, group satisfaction, and sociometric status (Gilliard, 1973).

Although several investigators have examined the relationship between MBTI psychological type or individual scales of the MBTI and various group outcome measures, no researcher to date has investigated the relationship between MBTI psychological temperament and extraversion-introversion and group counseling outcome measures, which was the focus of the present study.
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CHAPTER II

PROCEDURES

Purpose of the Study

The purpose of this study was to determine which, if any, of the four personality temperaments and which of the two extraversion-introversion personality dimensions, as measured by the Myers-Briggs Type Indicator, seem to be related to the norms of group counseling. It was expected that group members whose temperaments were largely compatible with group norms would be more likely to receive confirmation, support, and acceptance in the group, be attracted to the group, receive higher leader and self-report ratings of interpersonal skills, and be more highly valued by other members than would members whose temperaments were incompatible with group norms.

Also, since the extraversion-introversion MBTI personality dimension indicates a preference for either interacting with people as a source of energy (extraversion) or requiring solitude to recover energy (introversion) (Keirsey & Bates, 1984), the extraversion-introversion (E-I) dimension was thought to be especially relevant to the group counseling norm of interpersonal engaging as opposed to intrapersonal processing (Kilmann & Taylor, 1974). It was
thought that extraverts were more likely to be attracted to the group, receive higher self and leader ratings of interpersonal skills, and to be more highly valued by other members than were introverts.

Accordingly, mean scores for the four different temperaments and the two extraversion-introversion personality dimensions on four group counseling outcome measures (self and leader-report Interpersonal Relationship Rating Scale, Survey of Attraction to Group, and Sociometric Choice Status Survey) were compared for significant differences after a semester-long group counseling experience, using simple analysis of variance and the .05 level of significance.

Research Questions

1. Which, if any, of the four MBTI temperaments and which of the MBTI extraversion-introversion personality dimensions are significantly related to Self-Report Interpersonal Relationship Rating Scale scores?

2. Which, if any, of the four MBTI temperaments and which of the MBTI extraversion-introversion personality dimensions are significantly related to Leader-Report Interpersonal Relationship Rating Scale scores?

3. Which, if any, of the four MBTI temperaments and which of the MBTI extraversion-introversion personality dimensions are significantly related to Survey of Attraction to Group scores?
4. Which, if any, of the four MBTI temperaments and which of the MBTI extraversion-introversion personality dimensions are significantly related to Sociometric Choice Status Survey scores?

Definition of Terms

The following terms have restricted meaning for this study.

**Group counseling norms:** the various staff, trainer, and participant expectations, interactions, and tasks which determine acceptable and appropriate behavior in the group counseling situation. These norms can be stated as interpersonal engaging (E), associating (N), valuing (F), and processing (P) as opposed to intrapersonal engaging (I), describing (S), conceptualizing (T), and closuring (J) (Kilmann & Taylor, 1974).

**MBTI temperament:** Keirsey and Bates (1984) grouped the 16 possible MBTI types into four major temperaments composed of four types each:

1. Sensing-Judgers or SJs--ESFJ, ESTJ, ISFJ, and ISTJ;
2. Sensing-Perceivers or SPs--ESFP, ESTP, ISFP, and ISTP;
3. Intuitive-Feelers or NFs--ENFJ, ENFP, INFJ, and INFP; and
4. Intuitive-Thinkers or NTs--ENTJ, ENTP, INTJ, and INTP.

Each of these four temperaments is characterized by two
personality preference dimensions which seem most typical of the subgroup: NFs, NTs, SJs, and SPs. According to this categorization of types, each of the four psychological types within the four temperaments bear important similarities to each other and share similar values, goals, characteristics. Also, each temperament has a predictable distribution pattern in the general population. SJs and SPs comprise 38 percent each of the general population, and NTs and NFs comprise 12 percent each of the general population. (Keirsey & Bates, 1984).

**MBTI type:** taken together, an individual's preferred attitude of energy direction (E or I), preferred way of perceiving (S or N), preferred way of judging (T or F), and preference for either judging or perceiving (J or P), constitute the individual's psychological type and this is represented by the initials of the preferred function for each of the four Myers-Briggs personality dimensions. There are sixteen possible psychological types: ESFJ, ESTJ, ISFJ, ISTJ, ESFP, ESTP, ISFP, ISTP, ENTJ, ENTP, INTJ, INTP, ENFJ, ENFP, INFJ, and INFP (Myers, 1980).

**Subjects**

The subjects in this study were 103 students (35 undergraduate and 68 graduate) enrolled in group counseling classes in the Counselor Education department at North Texas State University. As part of their course requirement, these students participated as members of personal growth
groups which met weekly for one hour and 45 minutes for 14
weeks. There were 15 groups of 5 to 9 members. There were
13 different group leaders, as one leader led three groups.
Two of the group leaders were master's level counselors and
11 group leaders were doctoral counselor education students.
The purpose of the groups was to give the counseling
students experiential knowledge of group counseling
processes through participation as a member in a group
counseling setting for one semester. The format of the
groups was to give and receive feedback on an affective
level in order to enhance self-exploration and interpersonal
relationship skills.

Participation in this study was voluntary.
Participants were told that their responses would be
included in a dissertation, that their responses would be
held in confidence, and that no names or identifying
information would be reported in the dissertation. Data
from eight students were not included in this study. Seven
students did not return surveys and one student returned an
incomplete survey.

Instruments

Myers-Briggs Type Indicator

The Myers-Briggs Type Indicator (MBTI) Form G is a
forced-choice, self-report inventory which was developed to
measure the variables in Jung's personality typology. Two
variations of the MBTI exist—Form F and Form G. According
to Willis (1984), Forms F and G can be used interchangeably as almost no differences exist on the questions that are scored. The MBTI consists of four scales: Extraversion-Introversion (E-I), Sensation-Intuition (S-N), Thinking-Feeling (T-F), and Judgment-Perception (J-P). Although the Judging-Perceiving index is not a direct application of Jung's type theory, this index does relate to his idea that one end of a personality dimension will tend to dominate in one's interactions with the environment. The MBTI is widely used in a variety of educational, clinical, counseling, business, and research settings (Carlson, 1985).

Validity.

It would be premature to consider research on the MBTI as more than tentative beginnings toward the establishment of clearly defined, objective, and quantifiable personality constructs. Jung's theory itself is often vague and concepts are ill-defined, and attempts to operationalize it in the form of the MBTI often leave out conceptual steps that would allow for clear empirical assessment of related constructs (Carlson, 1985). Nevertheless, some evidence for content and construct validity has been obtained by correlating subjects' MBTI scores with their scores on the Gray Wheelwright Questionnaire. The Gray Wheelwright Questionnaire (Gray & Wheelwright, 1946) is another instrument designed to identify Jungian types. The Gray Wheelwright Questionnaire is similar to the MBTI in that it
utilizes continuous scores to assign subjects to the E-I scale, the S-N scale, and the T-F scale, but it has no J-P scale (Carlyn, 1977).

Stricker and Ross (1964) compared continuous scores received on the MBTI and the Gray Wheelwright Questionnaire using a sample of 47 college students. The two E-I scales exhibited a .79 correlation, the S-N scales showed a .58 correlation, and the T-F scales showed a .60 correlation. Bradway (1964) compared the scores of 28 Jungian analysts on the Gray Wheelwright Questionnaire and the MBTI, and found that 96 percent of the analysts received the E-I classification, 75 percent received the S-N classification, 72 percent received the same T-F classification, and 54 percent received identical classification on all three dimensions tests.

These studies suggest that the individual scales of the Myers-Briggs Type Indicator measure important dimensions of personality which seem to be quite similar to those formulated by Jung. The MBTI appears to be a reasonably valid instrument which potentially useful for a variety of purposes in business, education, and counseling (Carlyn, 1977).

**Reliability.**

The type-preference scores may be converted into four continuous scores (either through computation or using a table in Myers and McCaulley, 1985) for computing
correlations. The original reliability studies, reported in The Myers-Briggs Manual (Myers, 1962) yielded split-half reliability coefficients commonly exceeding .80. Carlyn (1977) reviewed the MBTI literature through 1975 and reported split-half reliability coefficients ranging from .66 to .92, and concluded that "estimated reliabilities of type categories appear to be satisfactory in most cases" (Carlyn, 1977, p. 465) irrespective of the scales examined.

Carlyn (1977) also reviewed test-retest reliability studies and concluded that scores of college students appear to be reasonably stable over time in terms of type category, and that older subjects' scores appear to be even more stable. Analyses of continuous scores yielded correlation coefficients ranging from .69 to .83 across a two month period.

The Interpersonal Relationship Rating Scale

The Interpersonal Relationship Rating Scale (IRRS) was developed specifically to meet the special needs of human relations training and is designed to test for outcomes in personal growth experiences. In designing the items for the scale the author (Hipple, 1972) considered the following specifications:

1. The content of the items should attempt to measure attitudes and/or behaviors in the individual's relationships with others and how he sees himself;

2. The statements should assess observable behaviors
and/or attitudes as much as possible; and

3. The scale had to examine behavior that would presumably be affected by participation in personal growth group experiences of human relations training.

The scale is a self-administered paper and pencil inventory which takes approximately ten minutes to complete. It consists of 24 seven-point numerical rating scales, written in such a way that high ratings are "positive" and low ratings are "negative." The instrument is designed so that participants and persons who know them well may respond.

Validity.

(Brown & Sullivan, 1979) administered the IRRS to 96 graduate counseling students. The results were factor analyzed and six scales were formed. The IRRS was then administered to two classes of students in group counseling who had been meeting together for fourteen weeks, both in class and in group experiences. The second group of students rated themselves and other group members on the IRRS. Discrepancy scores (the difference between self-rating on a scale and mean rating by others on that scale) were set at ±1. Both groups had significantly more discrepancy scores than would be expected by chance alone. The results indicate that the IRRS has potential for assessing interpersonal relationships. All scales have face validity and are components of the interpersonal
relationship.

Reliability.

Hipple (1972) used one control group comprised of members of an educational psychology class and a second control group comprised of randomly rejected laboratory applicants to evaluate the reliability of the instrument. Change was defined as any shift in the value of the scale scores. Reliability was studied by means of a test-retest after a one-week interval and a six-week interval, using control group members as subjects. After one week the average of the 24 coefficients was .59, with a range from .29 to .78. The six-week estimate of stability had an average of .51, with a range of .14 to .70.

Stability of the IRRS was also studied by computing Spearmen rank-order correlations between average profiles. For the educational psychology control group the average profile for a test-retest after a one-week interval was a coefficient of .83, while the six-week interval coefficient was .85. The control group composed of rejected applicants had an average profile test-retest rank-order coefficient of .85 at one week and .82 at six weeks. Identified significant others for the rejected applicants had a coefficient of .82 for a six-week test-retest. These estimates indicate a high degree of stability for mean profiles for both self-reports and reports of observers (Hipple, 1972). The IRRS was used to measure both self
ratings and leader ratings of the interpersonal relationship skills of members.

Survey of Attraction to Group

This is a self-report inventory consisting of 12 seven-point numerical scales, written in such a way that high ratings are "positive" and low ratings are "negative." This survey attempts to assess the psychosocial relationship of the individual member to the group—the attractiveness of the group, the feeling of belongingness or a sense of membership and inclusion in the group (Lieberman, Yalom, & Miles, 1973).

This survey was a modified form of one instrument that Lieberman, Yalom, and Miles (1973) used in assessing group outcomes in their investigation of the effect of encounter groups on racial attitudes and other personality dimensions—a classic encounter group study involving 210 Stanford University students in eighteen encounter groups. The instrument was used to assess a quality termed "belongingness." Those members who did not report experiencing belongingness in the group suffered negative consequences from their participation in the group.

The 12 questions in the survey are identical to those used by Lieberman, Yalom, and Miles (1973) with the exception that the rating scales have been expanded to a seven-point numerical scale written in such a way that high scores are "positive" and low scores are "negative." A 13th
question concerned with change in racial attitudes was deleted as not germane to this study.

Validity and Reliability.

Although the Survey of Attraction To Group seems to be measuring group attraction, belongingness, and cohesion, and seems to be directly related to positive group outcomes, the survey was designed and used only by Lieberman, Yalom, and Miles (1973) in their encounter group study, and thus no data are available as to validity and reliability. The items are assumed to have face validity.

Sociometric Choice Status Survey

A sociometric technique may be used to assess the attractions and repulsions within a group. One such technique requires that each member of a group privately specify a number of other persons in the group with whom the member would like to engage in some particular activity, and, further, specify the persons with whom the member would not like to participate in the activity (Lindzey & Byrne, 1968). The requirements of the sociometric measure originally advocated by Moreno (1953) are: (a) the limits of the group should be indicated to the subjects; (b) the subjects should be permitted an unlimited number of choices or rejections; (c) the subjects should be asked to indicate the individuals they choose or reject in terms of specific criteria; (d) the results of the sociometric measure should be used to restructure the group; (e) the subjects should be
permitted to make their choices and rejections privately, without other members of the group being able to identify the responses; and (f) the questions used should be gauged to the level of understanding of the members of the group. Current use of sociometric measures seldom involves the subsequent restructuring of the group (Lindzey & Byrne, 1968).

For this study, group members will be asked the following sociometric choice status question:

Which members of the group (excluding yourself and the leader) would you prefer to be with in a similar group counseling situation? You may list as many members as you like or no members.

Validity.

Mouton, Blake, and Fruchter (1955) reviewed 53 studies relevant to the validity of sociometric responses and concluded that predictions of performance from sociometric measures have yielded significant results for a variety of social, recreational, industrial, academic, military, and professional situations. The validity of sociometric measures has been illustrated by positive correlations between sociometric measures and criteria such as naval officer fitness reports (.40) (Hollander, 1965), staff ratings of Air Force ROTC cadets (.83) (Reynolds, 1966), marine officer candidate standings (.84) (Hoffman & Rohrer, 1954), numerical grade average in medical school (.62)
(Kubany, 1957), and teacher judgments of their pupils' sociometric status (.59) (Gronlund, 1951).

Reliability.

Most investigators report a relatively high degree of consistency of sociometric test results over time (Jennings, 1950). For relatively short time periods (up to one week) test-retest coefficients over .90 were reported (Gardner, 1956; Horowitz, 1962; McCandless, Castenada, & Palermo, 1956; Witryol & Thompson, 1953). For a longer time period (one week to two months), researchers have reported that stability of response ranges from .45 to .90 (Davis & Warnath, 1957; Dunnington, 1957; McCandless & Marshall, 1957; Moore & Updegraff, 1964). Even for relatively long time periods, test-retest reliability coefficients remained statistically significant: .57 for a three-month period (Croft & Grygier, 1956) and .56 for a three-year period (Davis & Warnath, 1957).

Data Collection

At the twelfth group meeting, members were given survey packets containing the Myers-Briggs Type Indicator and the four outcome instruments and asked to return the completed instruments the following week if they chose to participate in the study. The group leaders were given a leader-report Interpersonal Relationship Rating Scale to complete on each of their members and return the following week.
Procedures for Data Analysis

After collection of the data each of the measures was scored. Each respondent was assigned to the appropriate temperament category (NF, NT, SJ, or SP) indicated by the Myers-Briggs Type Indicator results. The sample size of this study (n=103) precluded comparison of dependent variable scores for each of the 16 different personality types. Accordingly, the 16 personality types were collapsed into four temperaments: The SJ temperament includes four psychological types: ESTJs, ESFJs, ISFJs, and ISTJs. The SP temperament includes the four psychological types: ESFPs, ESTPs, ISFPs, AND ISTPs. The NF temperament includes the four psychological types: ENFJs, ENFPs, INFJs, and INFPs. The NT temperament includes the four psychological types: ENTJs, ENTPs, INTJs, and INTPs. Mean scores for each temperament on the dependent variables were compared for the four outcome measures. Additionally, mean scores for introverts were compared to mean scores for extraverts on the dependent variables.

Each of the four temperaments was analyzed by means of simple analysis of variance, using the .05 level of significance, for differences on the mean scores for each temperament for each of the four outcome measures: (a) Survey of Attraction to Group, (b) Self rating on the Interpersonal Relationship Rating Scale, (c) Leader ratings on the Interpersonal Relationship Rating Scale, and (d)
Sociometric Choice Status. Additionally, mean scores for extraverts were compared to mean scores for introverts for each of the four outcome measures by simple analysis of variance at the .05 level of significance. All four temperament groups had more than five members and consequently no temperament group was excluded from the study.

The Survey Of Attraction To Group yields a possible score of 84 (12 questions multiplied times the highest positive rating of 7 on a Likert scale). An average score for each temperament was computed.

The Interpersonal Relationship Rating Scale yields a possible score of 168 (24 questions multiplied times the highest positive rating of 7 on a Likert scale). Members rated themselves, and the group leader also rated each member. Average scores for each temperament were computed for self-rating and for leader-rating.

The Sociometric Choice Status Survey was used to compute a sociometric index of choice status according to the formula:

\[ CS = \frac{\text{Summation of Choices}}{N - 1} \]

CS = the choice status of the individual
Summation of Choices = the sum of the times the individual is chosen by other group members
N = the number of individuals in the group (N - 1 is
used because individuals cannot choose themselves) (Turney & Robb, 1971).

The choice status of an individual may vary from zero (if no other member chooses the individual) to one, if every other member chooses the member. A mean sociometric index of choice status was computed for each temperament.


Gardner, G. (1956). Functional leadership and popularity in
small groups. *Human Relations*, 2, 491-509.


Moreno, J.L. (1953). *Who shall survive?* (2nd ed.). Beacon,
NY: Beacon House.


CHAPTER III

RESULTS AND DISCUSSION

Analysis of Data

The data on 103 subjects were analyzed to test the hypotheses of this study. The distribution of the two independent measures (temperament, and extraversion-introversion) among the 103 subjects is summarized in Table 1.

Table 1

Distribution of Independent Measures Among the 103 Subjects

<table>
<thead>
<tr>
<th>Temperament</th>
<th>Extravert</th>
<th>Introvert</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>Percent</td>
<td>n</td>
</tr>
<tr>
<td>NF</td>
<td>27</td>
<td>48.2</td>
<td>23</td>
</tr>
<tr>
<td>SJ</td>
<td>12</td>
<td>21.4</td>
<td>15</td>
</tr>
<tr>
<td>NT</td>
<td>12</td>
<td>21.4</td>
<td>5</td>
</tr>
<tr>
<td>SP</td>
<td>5</td>
<td>8.9</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>56</td>
<td>100.0</td>
<td>47</td>
</tr>
</tbody>
</table>

Three tables summarize the differences in subjects on the four dependent measures based on groups consisting of the categories of the two independent measures. These three tables present the descriptive information which was evaluated with the ANOVA procedure.
### Table 2

**Means and Standard Deviations Summarized by Temperament (Temp.) (Extraverts Only)**

<table>
<thead>
<tr>
<th>Temp.</th>
<th>IRRS Self-Report Mean</th>
<th>IRRS Leader-Report Mean</th>
<th>Survey of Attraction to Group Mean</th>
<th>Sociometric Choice Status Survey Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S.D.</td>
<td>S.D.</td>
<td>S.D.</td>
<td>S.D.</td>
</tr>
<tr>
<td>NF</td>
<td>128.70</td>
<td>12.80</td>
<td>121.19</td>
<td>22.88</td>
</tr>
<tr>
<td>SJ</td>
<td>127.00</td>
<td>13.75</td>
<td>123.92</td>
<td>17.01</td>
</tr>
<tr>
<td>NT</td>
<td>127.42</td>
<td>7.84</td>
<td>119.42</td>
<td>19.28</td>
</tr>
<tr>
<td>SP</td>
<td>116.60</td>
<td>13.43</td>
<td>117.60</td>
<td>26.95</td>
</tr>
<tr>
<td>Total</td>
<td>126.98</td>
<td>12.33</td>
<td>120.64</td>
<td>20.83</td>
</tr>
</tbody>
</table>

### Table 3

**Means and Standard Deviations Summarized by Temperament (Temp.) (Introverts Only)**

<table>
<thead>
<tr>
<th>Temp.</th>
<th>IRRS Self-Report Mean</th>
<th>IRRS Leader-Report Mean</th>
<th>Survey of Attraction to Group Mean</th>
<th>Sociometric Choice Status Survey Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S.D.</td>
<td>S.D.</td>
<td>S.D.</td>
<td>S.D.</td>
</tr>
<tr>
<td>NF</td>
<td>123.78</td>
<td>13.13</td>
<td>110.09</td>
<td>23.44</td>
</tr>
<tr>
<td>SJ</td>
<td>119.47</td>
<td>13.15</td>
<td>106.60</td>
<td>27.25</td>
</tr>
<tr>
<td>NT</td>
<td>126.00</td>
<td>14.20</td>
<td>100.80</td>
<td>20.46</td>
</tr>
<tr>
<td>SP</td>
<td>116.25</td>
<td>14.38</td>
<td>115.25</td>
<td>25.85</td>
</tr>
<tr>
<td>Total</td>
<td>122.00</td>
<td>13.20</td>
<td>108.43</td>
<td>24.12</td>
</tr>
</tbody>
</table>

### Table 4

**Means and Standard Deviations Summarized by Temperament (Temp.) (All Subjects)**

<table>
<thead>
<tr>
<th>Temp.</th>
<th>IRRS Self-Report Mean</th>
<th>IRRS Leader-Report Mean</th>
<th>Survey of Attraction to Group Mean</th>
<th>Sociometric Choice Status Survey Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S.D.</td>
<td>S.D.</td>
<td>S.D.</td>
<td>S.D.</td>
</tr>
<tr>
<td>NF</td>
<td>126.44</td>
<td>13.06</td>
<td>116.08</td>
<td>23.57</td>
</tr>
<tr>
<td>SJ</td>
<td>122.81</td>
<td>13.70</td>
<td>113.41</td>
<td>24.13</td>
</tr>
<tr>
<td>NT</td>
<td>127.00</td>
<td>9.65</td>
<td>113.94</td>
<td>20.89</td>
</tr>
<tr>
<td>SP</td>
<td>116.44</td>
<td>12.95</td>
<td>115.56</td>
<td>24.80</td>
</tr>
<tr>
<td>Total</td>
<td>124.71</td>
<td>12.92</td>
<td>115.07</td>
<td>23.10</td>
</tr>
</tbody>
</table>
The means for Self-Report IRRS range from a low of 116.44 for SPs to 127.00 for NTs, and the standard deviations range from 9.65 for NTs to 13.70 for SJs. The means for Leader-Report IRRS range from a low of 113.41 for SJs to 116.56 for SPs, and the standard deviations for range from 20.89 for NTs to 24.90 for SPs. The means for Survey of Attraction to Group range from a low of 55.65 for NTs to 60.94 for NFs, and the standard deviations range from 10.61 for SJs to 14.28 for SPs.

Research Question One: IRRS Self-Report

The first research question asks whether there is a difference in IRRS self-report scores for individuals with different temperaments or for extraverts versus introverts. Table 5 shows the results of the two-way ANOVA for the first research question.

Table 5

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperament</td>
<td>868.622</td>
<td>3</td>
<td>289.541</td>
<td>1.789</td>
<td>.155</td>
</tr>
<tr>
<td>E-I</td>
<td>552.256</td>
<td>1</td>
<td>552.256</td>
<td>3.412</td>
<td>.068</td>
</tr>
<tr>
<td>Interaction</td>
<td>134.218</td>
<td>3</td>
<td>44.739</td>
<td>.276</td>
<td>.842</td>
</tr>
<tr>
<td>Residual</td>
<td>15378.143</td>
<td>95</td>
<td></td>
<td>161.875</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>17015.262</td>
<td>102</td>
<td></td>
<td>166.816</td>
<td></td>
</tr>
</tbody>
</table>
As Table 5 shows, there was not a significant difference on IRRS Self-Report scores for different Temperaments or for Extraverts versus Introverts. The F ratio for temperament was 1.789 and for extraversion-introversion was 3.412, and neither reached the criterion for significance at .05.

Research Question Two: Leader-Report IRRS

The second research question asks whether there is a difference in IRRS Leader-Report scores for individuals with different temperaments or for extraverts versus introverts. Table 6 shows the results of the two-way ANOVA for the second research question.

Table 6
ANOVA for Leader-Report IRRS for Temperament (Temp.) and Extraversion-Introversion

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperament</td>
<td>243.987</td>
<td>3</td>
<td>81.329</td>
<td>.155</td>
<td>.926</td>
</tr>
<tr>
<td>E-I</td>
<td>3891.002</td>
<td>1</td>
<td>3891.002</td>
<td>7.401</td>
<td>.008</td>
</tr>
<tr>
<td>Interaction</td>
<td>438.276</td>
<td>3</td>
<td>146.092</td>
<td>.278</td>
<td>.841</td>
</tr>
<tr>
<td>Residual</td>
<td>49942.083</td>
<td>95</td>
<td>525.706</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>54438.524</td>
<td>102</td>
<td>533.711</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As Table 6 shows, there was not a significant difference on Leader-Report IRRS scores for different temperaments. However, there was a significant difference
for extraverts versus introverts. Tables 2 and 3 show that the mean Leader-Report IRRS scores for extraverts was 120.64 and for introverts was 108.43, and the difference of 12.21 was significant at the .008 level.

Research Question Three: Survey of Attraction to Group

The third research question asks whether there is a difference in Survey of Attraction to Group scores for individuals with different temperaments or for extraverts versus introverts. Table 7 shows the results of the two-way ANOVA for the third research question.

Table 7
ANOVA for Survey of Attraction to Group for Temperament (Temp.) and Extraversion-Introversion

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperament</td>
<td>486.203</td>
<td>3</td>
<td>162.068</td>
<td>1.348</td>
<td>.264</td>
</tr>
<tr>
<td>E-I</td>
<td>690.554</td>
<td>1</td>
<td>690.554</td>
<td>5.743</td>
<td>.019</td>
</tr>
<tr>
<td>Interaction</td>
<td>141.723</td>
<td>3</td>
<td>47.241</td>
<td>.393</td>
<td>.758</td>
</tr>
<tr>
<td>Residual</td>
<td>11423.833</td>
<td>95</td>
<td>120.251</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>12631.262</td>
<td>102</td>
<td>123.836</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As Table 7 shows, there was not a significant difference on Survey of Attraction to Group scores for different temperaments. However, there was a significant difference for extraverts versus introverts. Tables 2 and 3 show that the mean Survey of Attraction to Group scores for
extraverts was 61.46 and for introverts was 56.70. This difference of 4.71 is significant at the .019 level.

Research Question Four: Sociometric Choice Status Survey

The fourth research question asks whether there is a difference in Sociometric Choice Status Survey scores for individuals with different temperaments or for extraverts versus introverts. Table 8 shows the results of the two-way ANOVA for the fourth research question.

Table 8

ANOVA for Sociometric Choice Status Survey for Temperament (Temp.) and Extraversion-Introversion

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperament</td>
<td>.033</td>
<td>3</td>
<td>.011</td>
<td>.178</td>
<td>.911</td>
</tr>
<tr>
<td>E-I</td>
<td>.173</td>
<td>1</td>
<td>.173</td>
<td>2.797</td>
<td>.098</td>
</tr>
<tr>
<td>Interaction</td>
<td>.103</td>
<td>3</td>
<td>.034</td>
<td>.554</td>
<td>.647</td>
</tr>
<tr>
<td>Residual</td>
<td>5.891</td>
<td>95</td>
<td>.062</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6.187</td>
<td>102</td>
<td>.061</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As Table 8 shows, there was not a significance difference in Sociometric Choice Status Survey scores for different temperaments or for extraverts versus introverts. The F ratio for temperament was .178 and for extraversion-introversion was 2.797, and neither reached the criterion for significance at .05.
Discussion

This study examined the relationship between temperament and extraversion-introversion on selected group counseling outcome measures. A total of 103 undergraduate and graduate group counseling students completed the Myers-Briggs Type Indicator and four group counseling outcome measures to provide the data used in this study.

Temperament and Outcome Measures

No significant differences were found between the four temperaments and scores on any of the four outcome instruments. These results would seem to contradict Kilmann and Taylor's (1974) study of laboratory acceptors and rejectors. They found that individuals with the MBTI personality dimensions E, N, F, and P were much more prone to accept the laboratory experience than individuals with the opposing MBTI personality dimensions I, S, T, and J. According to their line of reasoning, individuals with the NF personality temperament should be more compatible with the norms of group counseling than any other temperament, and would be expected to score significantly higher on the outcome measures than any other temperament. The findings of the current study did not support their hypothesis.

The finding of no significant relationship between temperament and the four group counseling outcome instrument instruments is consistent with Gilliard's (1973) finding of no relationship between any of the four MBTI dimensions and
interpersonal ratings, group satisfaction, and group member effectiveness. This result (no significant relationship between temperament and group outcome measures) is inconsistent with Brinton, Jarvis, and Harris' (1984) finding that medical students with the MBTI intuitive-feeling (NF) personality preferred a small group medical instruction modality and reacted more positively to it than the other temperaments. However, their study was only peripherally related and suggestive of possible trends for this study rather than directly applicable, as it was concerned with small group medical instruction rather than with group counseling.

One possible explanation for the finding of no significant differences in outcome scores for the four different temperaments is that some self-selection of temperaments had already occurred in the sample population. According to Keirsey and Bates (1984) each temperament has a known distribution in the general population. SJs and SPs comprise 38 percent each of the general population, and NFs and NTs comprise 12 percent of the general population. Of the 103 students enrolled in group counseling classes in the Counselor Education department, who comprised the sample group for this study, the temperament distribution was markedly different, as Table 9 shows.
Table 9

**Expected and Actual Temperament Distribution Within Sample (n=103)**

<table>
<thead>
<tr>
<th>Temperament</th>
<th>Expected Distribution</th>
<th>Distribution in Study</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>NF</td>
<td>12.4</td>
<td>12</td>
</tr>
<tr>
<td>NT</td>
<td>12.4</td>
<td>12</td>
</tr>
<tr>
<td>SJ</td>
<td>39.1</td>
<td>38</td>
</tr>
<tr>
<td>SP</td>
<td>39.1</td>
<td>38</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>103.0</td>
<td>100</td>
</tr>
</tbody>
</table>

NFs, who comprise only 12 percent of the general population, were overrepresented in the sample population by a factor of four and comprised 48.5 percent of the sample rather than the expected 12 percent. NTs, who comprise 12 percent of the general population, were slightly overrepresented and comprised 16.5 percent of the sample. SJs, who comprise 38 percent of the general population, were slightly underrepresented and comprised 26.2 percent of the sample. SPs, who comprise 38 percent of the general population, were grossly underrepresented in the sample and comprised only 8.8 percent of the sample.

Evidently, the different temperaments have differing affinities for counseling classes and, by extrapolation, for group counseling and counseling in general. NFs seem to be strongly attracted to the counseling profession. According
to Myers (1980) NFs have higher self-selection ratios than any other temperament for Counselor Education. The reason she posits for this is that the combination of intuition (N) and feeling (F) practically defines counseling: "The province of intuition is to see the possibilities, and the province of feeling is a concern for people, which makes the exercise of intuition doubly rewarding when it is possibilities for people that are sought and found" (p. 47).

NTs seem to have somewhat of an affinity for counseling classes and possibly for counseling in general as they are slightly overrepresented (16.5 rather than the expected 12 percent) in the sample population. Thus, possibly, due to positive self-selection ratios, NTs and NFs should not be significantly different on the group outcome measures.

It would seem that SPs are particularly hesitant to participate in counseling classes and possibly to participate in counseling. This is consistent with the observations of Keirsey and Bates (1984) that SPs tend to be spontaneous, impulsive, and action-oriented rather than reflective and insight-oriented. Keirsey and Bates (1984) noted that "SPs do not get very excited about complex problems of motivation" (p. 39). Possibly, the few (only 9 out of 103) SPs who participated in this study are qualitatively different from the majority of SPs in the general population who seem to have very little interest in counseling or complex problems of human motivation.
The same can be said for individuals with the SJ temperament, though not to the same extent as for SPs. Since SJs are slightly underrepresented (only 26.2 rather than the expected 38 percent) in the Counselor Education population, perhaps those SJs who choose to participate in counseling classes and group counseling experiences are qualitatively different from SJs in the general population.

Another possible explanation for the finding of no significant differences for different temperaments on the outcome measures is the fact that seven individuals chose not to participate in the study. It would seem likely that those individuals least interested in and least invested in the group counseling experience would be those most likely not to choose to participate in a study involving extra time and effort to fill out several survey instruments. These individuals could have been dissatisfied with the group counseling experience, and perhaps the inclusion of responses from them could possibly have made a difference in the outcome of the study.

**Extraversion-Introversion and Outcome Measures**

There was a significant difference between means for Leader-Report *Interpersonal Relationship Rating Scale* scores for Extraverts and Introverts. Tables 2 and 3 show that the mean IRRS Leader-Report for Extraverts was 120.64 and for Introverts was 108.43. There was also a significant difference between means for Survey of Attraction to Group
scores for Extraverts and Introverts. Tables 2 and 3 show that the mean Survey of Attraction to Group scores for Extraverts was 61.46 and for Introverts was 56.70. Leader ratings on the Interpersonal Relationship Rating Scale reflect the member's skill in interacting with people and amount and quality of openness, self-disclosure, and risk-taking in the group rather than the member's skill in intrapersonal processing and reflection. The Survey of Attraction to Group instrument reflects a member's satisfaction with and acceptance of the group experience.

These two findings would tend to support the research of Kilmann and Taylor (1974) that the group counseling norm of interpersonal engaging rather than intrapersonal processing favors the extraversion rather than the introversion MBTI personality dimension. These findings are also consistent with Myers' (1980) observation that introverts are more concerned with the inner world of concepts and ideas while the extravert is more concerned with the outer world of people and things. These results also support Keirsey and Bates' (1984) observations that extraverts as opposed to introverts exhibit the following differences respectively: interaction as opposed to concentration, multiplicity of relationships as opposed to limited relationships, interest in external happenings as opposed to interest in internal reactions, and preference
for people as a source of energy renewal as opposed to preference for solitude to recover energy.

These findings would also tend to support Marshall's (1971) finding that introverts dislike pressure to self-disclose and Nechworth's (1979) observation that introverts reserve more interpersonal space for themselves than do extraverts. The finding of significantly higher Survey of Attraction to Group scores for extraverts is consistent with Boller's (1974) finding that extraverts experienced a significantly higher positive affect level than introverts for two different training group modalities.

These findings of differential attraction to group and differential interpersonal relationship skill levels for extraverts and introverts have some important implications for group leaders, who play a major in influencing group norms (Yalom, 1985; Kilmann & Taylor, 1974). One of the traditional norms of group counseling is that the members will interact freely on an affective level. The findings of this study would suggest that extraverts are more skilled at interacting with others in a group situation and that they feel a greater attraction for and are more comfortable with the group counseling experience than are introverts. A simple explanation of these differences in interactional style to group members by the group leader could greatly reduce the discomfort and anxiety of the group situation for introverts by normalizing their feelings. The group leader
could establish a group norm that would allow introverts more interpersonal space and time for intrapersonal processing in the group rather than pressuring them to interact and self-disclose immediately. Perhaps introverts could be given permission to reflect on and internally process what they are experiencing in the group and report back to the group as soon as they are able—perhaps at the end of the group session or at the beginning of the next session.

Related Findings

The overrepresentation (48.5 percent rather than the expected 12 percent) of the NF temperament among the counselor education student sample has already been mentioned. Another interesting finding is the gross overrepresentation of one MBTI type within the NF temperament. According to Keirsey and Bates (1984) there is a predictable distribution of each of the 16 MBTI types within the general population. Table 10 displays the expected distribution of each type (Keirsey & Bates, 1984) directly above the actual occurrence of each type within the sample population for this study.
Table 10

Expected and Actual Type Distribution Within Sample (n=103)

<table>
<thead>
<tr>
<th></th>
<th>ENFP</th>
<th>ENFJ</th>
<th>INFP</th>
<th>INFJ</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expected Number</strong></td>
<td>5.2 (5%)</td>
<td>5.2 (5%)</td>
<td>1.03 (1%)</td>
<td>1.03 (1%)</td>
</tr>
<tr>
<td><strong>Actual Number</strong></td>
<td>18</td>
<td>9</td>
<td>17</td>
<td>6</td>
</tr>
<tr>
<td><strong>Self-Selection Ratio</strong></td>
<td>3.5</td>
<td>1.75</td>
<td>16.5</td>
<td>5.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>ENTJ</th>
<th>ENTP</th>
<th>INTJ</th>
<th>INTP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expected Number</strong></td>
<td>5.2 (5%)</td>
<td>5.2 (5%)</td>
<td>1.03 (1%)</td>
<td>1.03 (1%)</td>
</tr>
<tr>
<td><strong>Actual Number</strong></td>
<td>7</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td><strong>Self-Selection Ratio</strong></td>
<td>1.35</td>
<td>.97</td>
<td>2.9</td>
<td>1.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>ESFJ</th>
<th>ESTJ</th>
<th>ISFJ</th>
<th>ISTJ</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expected Number</strong></td>
<td>13.4 (13%)</td>
<td>13.4 (13%)</td>
<td>6.2 (6%)</td>
<td>6.2 (6%)</td>
</tr>
<tr>
<td><strong>Actual Number</strong></td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td><strong>Self-Selection Ratio</strong></td>
<td>.45</td>
<td>.45</td>
<td>.97</td>
<td>1.45</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>ESFP</th>
<th>ESTP</th>
<th>ISFP</th>
<th>ISTP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expected Number</strong></td>
<td>13.4 (13%)</td>
<td>13.4 (13%)</td>
<td>6.2 (6%)</td>
<td>6.2 (6%)</td>
</tr>
<tr>
<td><strong>Actual Number</strong></td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td><strong>Self-Selection Ratio</strong></td>
<td>.37</td>
<td>0</td>
<td>0</td>
<td>.65</td>
</tr>
</tbody>
</table>
The self-selection ratio is the ratio of predicted type frequency among the general population to the actual type frequency found in the sample population. It is interesting to note that all four types (ENFP, ENFJ, INFP, and INFJ) within the NF temperament exhibit self-selection ratios significantly greater than one. All four types (ENTJ, ENTP, INTJ and INTP) within the NT temperament exhibit self-selection ratios approximating one or above. Of the four types (ESFJ, ESTJ, ISFJ, and ISTJ) within the SJ temperament, two show self-selection ratios approximating one or larger and two show self-selection ratios significantly less than one. Of the four types (ESFP, ESTP, ISFP and ISTP) within the SP temperament, two are completely absent and the other two show self-selection ratios significantly less than one.

All four MBTI types within the NF temperament are significantly overrepresented as compared to the general population. All four MBTI types in the NT temperament approximate the type distribution in the general population. Of the four types in the SJ temperament, two types approximate the type distribution in the general population and two types show significant underrepresentation. Of the four types in the SP temperament, two are completely absent and the other two show significant underrepresentation.

It is interesting to note that although the INFP MBTI type represents only one percent of the general population,
there were 17 INFP personality types in the sample population. INFPs were overrepresented by a factor of 16.5. The type with the highest frequency was ENFP, with 18 members. Together, INFPs and ENFPs constituted 35 group members and 34 percent of the sample. Kilmann and Taylor (1974) identified four group norms and described them in terms of the MBTI personality dimensions they would favor. The norms were interpersonal engaging (favoring extraversion or E), associating or extrapolating (favoring intuition or N), valuing (favoring feeling or F), and processing (favoring perceiving or P). It would seem that three of these norms (N, F, and P) may also describe the MBTI personality preferences most commonly occurring in counseling students as 34 percent of the counseling students in the sample exhibited a preference for these three dimensions.

The subjects in this study varied in terms of age, education, and background, and were participating in the group counseling experience to fulfill degree requirements. Also, different group leaders led the different groups. Because of these factors it is difficult to generalize the results of this study to a broader population. Nevertheless, the findings have important implications for group leaders for establishing alternative group norms. In addition, there are implications for future research with the MBTI.
The findings of this study did not establish a relationship between temperament and the norms of group counseling. However, evidence was discovered that suggests that there is a relationship between extraversion and these same group counseling norms, as evidenced by significantly higher scores on Survey of Attraction to Group and Leader-Report Interpersonal Relationship Rating Scale for extraverts than for introverts. These findings could be used by group leaders to establish alternate group norms allowing introverts more interpersonal space and time for intrapersonal processing and reflection before reporting back to the group.

The concept of temperament seems to be very useful in terms of conceptualizing, understanding and accepting the basic differences in the way people view themselves and others. Although this study did not establish a relationship between temperament and group counseling norms, the topic warrants further research. It would be useful for further studies to investigate larger samples of counselor education students, as self-selection factors limit the number of SP and SJ temperaments in the counselor education student population. Sample populations of 300-400 counselor education students would need to be surveyed in order to obtain sufficient numbers of the SP types to be representative of the general population. A longitudinal study of from three to five years' enrollments of group
counseling students would be very useful. With a larger sample size it would be possible to investigate the relationship between individual types, as well as temperament, and outcome measures.

Another fruitful area of related research would be a similar study of group counseling or group therapy clients in private practice or in mental health counseling centers. It would be interesting to compare the type frequencies and temperament distribution patterns of these different populations of group counseling members as compared to group counseling students.

The Myers-Briggs Type Indicator has been used extensively by professionals in a wide variety of areas, with well over 500 studies known and catalogued (Carskadon, 1979). A substantial body of research has accumulated relating to various clinical and counseling aspects of the instrument. A very useful extension of the traditional concept of MBTI psychological type is the broader concept of MBTI psychological temperament developed by Keirsey and Bates (1984). The concept of temperament is useful for identifying different personalities and different interactional patterns. Further research into this concept in terms of differential affinities for different treatment modalities is warranted.
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APPENDIX A

INSTRUCTIONS FOR COMPLETING SURVEY
INSTRUCTIONS FOR COMPLETING SURVEY

Please take a few moments of your time to complete this survey concerning your attitudes about group counseling and other group members. Your names and any identifying information will be held in strict confidence and will not be reported in the dissertation.

1. Before doing anything else, please write your name and the name of your group counseling leader on the outside of this packet in the spaces provided. This information is essential for the results to be interpreted correctly.

2. Please mark your answers to the 95 question Myers-Briggs Type Indicator on the blue answer sheet with a PENCIL. Please do not write on the test itself.
   a. Write your name and sex (scoring keys are different for males and females) on the answer sheet blacken the circles underneath.

3. Please mark your answers on the 24 item Interpersonal Relationship Rating Scale directly on the instrument itself by circling whichever number best describes the degree to which the statement fits you.

4. Please mark your answers to the Survey Of Attraction To Group directly on the test itself by circling the number which best describes the degree to which the statement fits you.

5. Please complete the Sociometric Choice Status Survey by listing the names of your group members which you would prefer to be with in a similar group counseling situation. You may list as many members as you like, or no members.

6. If you would like a copy of your Myers-Briggs Type Indicator personality profile and a brief interpretation, include a stamped, self-addressed envelope in your packet, and I will mail you this information as soon as time permits.

Thanks very much for your time in completing this survey. I really appreciate it. If you have any questions, please call me.

Sincerely,

Don Hays
Doctoral Counseling Student, NTSU
11026 Scotsmeadow
Dallas, Texas 75218
214-349-9149
APPENDIX B

CONSENT FORM
CONSENT FORM

I agree to have Donald G. Hays, a doctoral candidate in Counseling at the University of North Texas, include the data I provide in his dissertation research on temperament and group counseling outcome measures. I understand that the information gathered will be included with that of others in the reporting and that my identity will be kept completely confidential. I also understand that should I have any questions concerning the procedures, they will be addressed and that I am free to withdraw from this study at any time.

I have read and understand the procedures described above and agree to participate in the study.

Signature __________________________

Witness __________________________
APPENDIX C

SURVEY OF ATTRACTION TO GROUP
**Survey of Attraction to Group**

For each of the following items, circle the number that best describes the degree to which the statement fits you.

1. In the group I have talked about intimate details of my life:
   - Not at all
   - 1
   - 2
   - 3
   - 4
   - 5
   - 6
   - 7
   - A
   - Great deal

2. I have expressed my feelings of irritation, annoyance, sorrow or warmth in the group:
   - Not at all
   - 1
   - 2
   - 3
   - 4
   - 5
   - 6
   - 7
   - A
   - Great deal

3. When expressing feelings of irritation, annoyance, sorrow or warmth, I feel:
   - Extremely uneasy
   - 1
   - 2
   - 3
   - 4
   - 5
   - 6
   - 7
   - Extremely comfortable

4. Since the last session I have thought about the group:
   - Not at all
   - 1
   - 2
   - 3
   - 4
   - 5
   - 6
   - 7
   - All of the time

5. How well do you like the group you are in?
   - Dislike it very much
   - 1
   - 2
   - 3
   - 4
   - 5
   - 6
   - 7
   - Like it very much

6. I feel that working with this particular group will enable me to attain my personal goals for which I sought an encounter group:
   - Definitely not
   - 1
   - 2
   - 3
   - 4
   - 5
   - 6
   - 7
   - Definitely

7. How often do you think your group should meet?
   - Much less often
   - 1
   - 2
   - 3
   - 4
   - 5
   - 6
   - 7
   - Much more often

8. If most of the members in your group decided to dissolve the group by leaving, would you try to dissuade them?
   - I would definitely
   - I would try very hard to not try to persuade
   - 1
   - 2
   - 3
   - 4
   - 5
   - 6
   - 7
   - persuade them to stay

9. If you could replace members of your group with other "ideal" group members, how many would you exchange? (Excluding the group leader):
   - Six—Five—Four—Three—Two—One—None

10. To what degree do you feel that you are included by the group in its activities?
    - I don't feel that
    - I feel that I am the group includes
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - Included in all of its group's activities

11. How do you feel about the group leader?
    - I am extremely dissatisfied
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - I am extremely satisfied

12. Compared to other groups in your class, how well would you imagine that your group works together?
    - Probably the worst
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - Probably the best

Adapted from "Feelings About the Group" questionnaire.

APPENDIX D

SOCIOMETRIC CHOICE STATUS SURVEY
SOCIOMETRIC CHOICE STATUS SURVEY

1. WHICH MEMBERS OF YOUR GROUP (EXCLUDING YOURSELF AND THE LEADER) WOULD YOU PREFER TO BE WITH IN A SIMILAR GROUP COUNSELING SITUATION? YOU MAY LIST AS MANY MEMBERS AS YOU LIKE, OR NO MEMBERS.

__________________________  __________________________

__________________________  __________________________

__________________________  __________________________

__________________________  __________________________

__________________________  __________________________
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