COUNSELOR-CLIENT SIMILARITY AND THE CLIENT'S PERCEPTION OF THE TREATMENT ENVIRONMENT,

by

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CHAPTER 1

Introduction

In the past two decades, many research studies in the helping professions of counseling and psychotherapy have focused on the effectiveness of treatment. These studies have indicated conflicting results. While some studies have indicated positive treatment outcomes of counseling, other results have indicated that there were no significant differences in post-treatment outcome for those who received various types of counseling or therapy and control groups who received none (Moos, 1975; Segal, 1972; Jesness, 1971; Eyseneck, 1952). More recent studies have focused not only on the question of whether counseling was effective, but also on the elements of the counseling relationship that relate to more effective treatment. These research efforts imply that the helping professions recognized the need to delineate the complex components of effective counselor-client relationships.

Theoretical models in the counseling profession have tended to focus on process. As theoretical orientations were translated into practice, it was found that certain approaches and techniques were more effective with certain types of clients than others. Likewise, some counselors were more effective with a particular type of client than with others.
Recent research efforts have gone beyond existing counseling theory and explored the complex and dynamic interpersonal variables that comprise the delicate relationship between counselor and client. The present study is an effort to add to the knowledge concerning the relationship between counselor and client and the impact of this relationship on treatment effectiveness. The focus of this study is on a sparcely researched group of clients: institutionalized female delinquents and the counselors who work with these juvenile offenders.

Research studies have focused on three variables of treatment effectiveness: the therapist, the client, and the treatment model (Barton, Schiavo, and Parsons, 1976). Several components of counseling effectiveness have been identified by recent research. One method that has been identified with increased counseling effectiveness is matching the counselor and client. The matching concept implies that greater similarity between counselor and client is conducive to successful treatment outcome. Several studies based on the matching concept have added to the empirical evidence supporting matching as an important component in counseling effectiveness (Malkiewich and Merluzzi, 1980; Palmer, 1973; McLachlan, 1972; Warren, 1969).

Matching counselor and client is a multi-faceted concept based on a variety of personal attributes. Matching
is sometimes based on demographic variables such as sex, race, cultural background, etc. (Kopel, 1972; Stranges and Riccio, 1970; Herbert, 1967). Other studies define the counselor-client match according to personality variables. Similar personality profiles of counselor and client have been found to relate to successful treatment outcome (Cox and Thoreson, 1977; Carson and Heine, 1962). Other studies have found that counselors with certain dominant personality styles and interpersonal modes are differentially effective with certain types of clients (Palmer, 1973; Warren, 1969).

Several researchers have defined personality characteristics of counselor and client in terms of conceptual level. Conceptual level refers to the individual's level of interpersonal functioning. A person of low conceptual level is characterized by an egocentric and immature personality. The conceptual level continuum progresses to a high level which is characterized by autonomous, self-actualized individuals. Studies based on conceptual level (CL) have found positive relationships between counselor-client match and successful treatment outcome (Malkiewich and Merluzzi, 1980; McLachlan, 1974; Carr, 1970).

An interesting adjunct to the research concerning counselor-client similarity, are findings that indicate that counselor-client personality congruence increases during
therapy as the client identifies with the counselor (Fleischer, 1975, Rosenthal, 1955). Researchers and professionals who work with juvenile delinquents have found that identification and imitation with the counselor is a particularly important aspect of therapeutic effectiveness (Tomblin, 1977; Fleischer, 1975). The adolescent problems of identity and role confusion are generally magnified with delinquent offenders who often have inadequate or absent parental role models (Nir and Cutler, 1978; Fleischer, 1972). Identification with the counselor has been found to be an integral component of successful treatment (Tomblin, 1977; Rosenthal, 1955).

Certain counselor qualities and characteristics that promote a therapeutic relationship and lead to better treatment outcomes for clients have been identified in the literature. These include the characteristics of empathy, warmth, genuineness, and strong relationship skills (Truax, 1971; Parloff, 1961; Seeman, 1948).

A third component of counseling effectiveness that has been identified by research is the client's perception of the treatment milieu. A positive perception of the therapeutic relationship and climate has been found to relate to more successful treatment outcome (Moos, 1975; Wenk and Halatyn, 1973, Truax, 1971).
The environmental variable of concern to the present study is the client's perception of the therapeutic climate, or what Murray defines as **beta press**:

> The press of the environment, as the patient or staff member perceives it, defines what he must cope with and clarifies for him the direction his behavior must take if he is to find satisfaction and reward. Press refers to the phenomenological world of the individual, to the unique and private precept which each person has of the events in which he takes part. (Murray, 1938, p. 122).

Moos (1974) believes that closed environments such as total institutions, hospitals, universities, and other group settings have "personalities" that are as distinct and distinguishable as human personalities. These environmental personalities make up the beta press. Moos contends that:

> Social environments can be portrayed with a great deal of accuracy and detail. Some people are more supportive than others; likewise, some social environments are more supportive than others. Some people feel a strong need to control others; similarly, some social environments are extremely rigid, autocratic and controlling. Order, clarity and structure are important to many people; correspondingly, many social environments strongly emphasize order, clarity and structure. People make detailed plans which regulate and direct their behavior; likewise, environments have overall programs which regulate and direct the behavior of the people within them (Moos, 1974, p. 1).

The facets of environmental press that are of concern to this study are the Relationship Dimension, Program
Dimension, and System-Maintenance Dimension of the treatment environment which are broadly defined by Moos in the preceding quote.

While many research studies in counseling and psychotherapy have focused on personality variables, few studies have been concerned with environmental variables (Moos, 1975; Wenk and Halatyn, 1973). This study will investigate the differences in the consensual perceptions of the treatment environment among the cottage units in the juvenile institution.

Most studies have focused on single variables that affect counseling effectiveness. Few have focused on the interactive process between the various elements that comprise the relationship known as counseling. This study investigates the interaction between two variables that have been identified in the literature as components of effective counseling: (1) matching of counselor and client, and (2) the client's perception of the treatment environment. Malkiewich and Merluzzi (1980) acknowledge the need for research of the treatment-person matching approach and its interaction with the environmental variables that comprise the therapeutic climate.

Matching of counselor and client is based on similarity of personality traits. The client's perception of the treatment environment is based on an instrument that measures the relationship, program and system-maintenance
dimensions of an institutional setting. The subjects of the present study were counselors and their clients at a state residential center for delinquent female offenders.

Statement of the Problem

The present study investigated the relationship of counselor-client similarity to the client's perception of the Relationship, Program, and System-Maintenance Dimensions of the treatment environment. The study also investigated the differences in the treatment environment ratings of different cottage living units within the institutional setting.

The null hypotheses of the present study were:

H₁: There is no significant relationship between the degree of counselor-client similarity and the client's perception of the treatment environment.

H₂: There are no significant differences between group environmental ratings for the cottage living units.

Need of the Study

While other studies in counseling and psychotherapy have focused on single variables, this study investigated the interaction of variables. The variables in this study (similarity of the counselor/client dyad and the client's
perception of the treatment environment) have independently been found to affect counseling effectiveness. Yet, the relationship of the two variables has not been researched. This study was specifically designed to provide information regarding the dynamic interaction of these two variables.

Malkiewich and Merluzzi (1980) express the need for a study of the treatment-person matching approach and its interaction with environmental variables. This study was specifically designed to provide information regarding the dynamic interaction of these two variables. Wenk and Halatyn (1973) in an assessment of correctional climates state that:

Very little work has been done correlating the Correctional Institutional Environment Scale with selected personality variables. The general interaction between the unit "press", psychological variables, and follow-up factors could provide interesting findings about the equation \( B + f(P,E) \) - (Behavior is a function of the interaction of person and environment). The defined interaction between these variables might lead to the prediction of success and failure of treatment for residents (p.99).

Another major factor influencing the need for this study is the sparcity of research on female delinquent populations. Several authors have noted that lack of research in the area of female delinquency (Moinat, 1979; Schlossman and Wallach, 1978, Adler, 1973). Even though female delinquency rates have risen at alarming rates
(according to the Federal Bureau of Investigation's Uniform Crime Report of 1978), few research studies have focused on the female delinquent. The preponderance of research efforts on juvenile delinquents have studied male delinquent offenders.

A recent change in Virginia law (H.B. 518, 1977) prohibited status offenders from being incarcerated. A status offense is an offense for which a juvenile may be charged (running away, truancy, beyond parental control, violating curfew, etc.) but which is not a punishable offense for an adult. This law drastically changed the population composition at the state learning centers, particularly the juvenile facilities for females like the one that this study involves, where "80% of the girls residing there prior to 1977 were status offenders, not criminal offenders" (Virginia State Crime Commission Report, 1978, p.22). Because of the radical change in population composition, updated research is indicated.

Significance of Study

Research in counseling has focused on the components of the counseling relationship that relate to more effective outcome. Counselors in private agencies generally choose the type of client with whom they can be most effective. Those counselors in educational settings or other public agencies generally do not have the option of screening and
working with a select type of client. In choosing to study a correctional facility, the limitation of client selection was applicable. Therefore, within the confines of the treatment setting, this study seeks to examine whether certain combinations of clients and treaters are related to the client's positive perception of the treatment milieu.

The matching of the client and counselor according to various personal characteristics has proven to be effective in promoting more successful treatment outcome (Malkiewich and Merluzzi, 1980; Palmer, 1973; Warren, 1969). The client's positive perception of the treatment environment and his positive relationship with the counselor/therapist have also been found to be important elements in the success rates of treatment outcome (Tomblin, 1977; Truax, 1971; Truax and Wargo, 1966; Grigg and Goldstein, 1957; Rosenthal, 1955).

Other important implications inherent in this study include the following:

1. This study provided the foundation for follow-up studies. The findings of this study provided important information for program planning and assessment. Most treatment outcome assessments have been concerned with demographic variables such as age, race, social class, etc. Moos suggests that:
The prediction and explanation of post-release arrest would be enhanced if personality variables and variables descriptive of the treatment environment were included. It would be of little value to know, for example, that certain high-risk recidivism cases responded better to program X than to program Y if we could not also specify what it was about program X that was so unique and helpful. (Moos, 1975, p.188).

2. Institutional officials could use the results of the clients' and staffs' ratings of the treatment environment to analyze the congruence of the institutional treatment goals and objectives. On an institutional or unit level, this information could generate important discussions regarding program strengths and weaknesses with implications for program change and training needs.

3. The results of client and counselor similarity and its relationship to the client's perception of the therapeutic climate have implications for future personnel choices in the selection of treatment staff. Matching of client and counselor has been found to increase staff satisfaction with their job and resulted in long staff tenure (Palmer, 1973). With a high staff turnover in juvenile institutions, administrators are especially interested in assessing the possible effects of matching on staff satisfaction.
4. Results of this study indicated the differences in consensual perceptions of the treatment environments of the various treatment units. These results could be useful in the placement or referral of different types of clients to "matched" or "more congenial" treatment climates within the institution.

Definition of Terms

The terms used in this study are operationally defined as follows:

1. **Clients** - Institutionalized female delinquents residing at a state operated institution. These girls have been adjudicated "delinquent" by local Juvenile Courts and committed to this state facility for an indefinite amount of time for treatment. The age range of the girls was from 13 to 18 years. The word clients was used interchangably with subjects and residents.

2. **Counselors** - The treatment staff at the state facility for delinquent females, who are designated as Correctional Institutional Counselors and Peer Group Involvement Leaders.

3. **Client-Counselor Similarity** - The degree of similarity in personality traits was assessed by the **California Psychological Inventory** (C.P.I.). Similarity between counselor and client was assessed according to the four

4. Perception of the Treatment Environment - The perception of the treatment environment was assessed by the Correctional Institutions Environment Scale (C.I.E.S.). This instrument is divided into three dimensions that describe the environment of a correctional institution: (1) the Relationship dimension scale; (2) the Program dimension scale; (3) the System-Maintenance scale.

Limitations of the Study

The basic limitations of this study are those inherent in self-report studies. These limitations include the assumptions that the respondents understood themselves and were willing to give accurate and honest answers. Another assumption was that the respondents could read and understand the test items.

This study was limited to residents and the counseling staff at one state facility for delinquent females that uses
a matching system for assigning girls and treatment. Any generalizations of the research findings should be confined to similar populations.

Organization of the Study

Chapter 1 introduces the general nature of the study and included information about the need, purpose and significance of this research. The terms and limitations of the study were also defined in this chapter.

Chapter 2 contains related literature and studies. These include studies on matching client and counselor; the therapeutic value of identification; personal characteristics of the effective counselor; therapeutic strategies with delinquent offenders; and the importance of perceived therapeutic climate.

Chapter 3 describes the methodology of the study. Included are descriptions of subjects, sampling techniques, research design, and instruments. Methods of data collections and data analysis are also presented.

Chapter 4 presents the results of this study. Included are tabular and verbal descriptions of data pertaining to the two hypotheses.

Chapter 5 is a summary of the study in which interpretations and implications of the findings are discussed.
Recommendations based on the findings of the study are presented. Suggestions for further research efforts are also included in Chapter 5.
CHAPTER 2
Review of the Literature

The review of the literature concentrated on five major topical areas: (1) Matching Counselor and Client; (2) The Therapeutic Value of Identification; (3) Personal Characteristics of the Effective Counselor; (4) Therapeutic Strategies with Delinquent Offenders; and (5) The Importance of Perceived Therapeutic Climate and Relationship. These topics were researched for broad, general implications, as well as a narrow search that applied to delinquent offenders.

Matching Counselor and Client

The matching of counselor and client is a multifaceted concept. Essentially, the matching concept concerns pairing counselor and client according to similarity in personal traits. Included in matching paradigms have been studies that focus on demographic characteristics of sex, age, race, etc. (Stranges and Riccio, 1970; Hebert, 1967; Kopel, 1972). Others match the counselor's treatment mode and therapeutic style with the client's need or problem focus (Hutchins, 1978). More abstract qualities of conceptual level and cognitive dimensions, as well as personality and interpersonal style have also been differentially matched to types of clients (Warren, 1969; Palmer, 1973; Lowe,
The present study focused on matching counselor and client according to personality factors. Therefore, the literature search concentrated on various aspects of matching counselor and client on personality traits.

Fiedler's (1951) study of psychotherapists, revealed that effective psychotherapists perceived their clients as similar to themselves, and used this perceived similarity to promote empathy in therapy. Yet Lesser (1961) did not find a positive relationship between counseling progress and empathic understanding. In Lesser's study of counseling staff and clients at a university counseling center, he reported that the similarity between counselor and client in self-concept was negatively correlated with counseling progress. Jones (1968) also studied the counseling staff and their student clients at a community college and found no significant relationships between the variables of counselor-client similarity and the process or outcome of counseling. However, the preponderance of research findings agree with Fiedler's position that counselor-client similarity increases empathic understanding in the counseling relationship and results in more successful outcome of therapy.

A pilot program of differential treatment for delinquent offenders was begun in the 1960s in Sacramento,
California. The Community Treatment Program (CTP) investigated the differential impact of various treatment strategies with different types of delinquent offenders. The delinquents, both male and female, were categorized into types according to interpersonal maturity levels (I-levels). I-levels allude to a person's manner of interpreting his environment and his dominant personality stance. Delinquent subtypes include nine categories or I-levels: "Asocial, aggressive; Asocial, passive; Immature conformist; Cultural conformist; Manipulator; Neurotic, acting out; Neurotic, anxious; Situational-emotional reaction; and Cultural identifier." (Palmer, 1971, p. 79-80). Treaters displaying different personalities and interpersonal styles (for example, tolerant, concerned with feelings vs. limit setting, direct and outspoken, etc.) were found to be more effective with some types of delinquent offenders than with others.

Ongoing research in CTP has shown that success rates are higher for juvenile offenders who are well matched with their treaters than for those who are not well matched (Warren, 1969). Long term effectiveness was examined in a fifteen-month follow up of CTP releases, with the finding that delinquents who were matched with their treaters had a parole failure rate of 19% compared to a 43% failure rate of the control group of delinquents who were not matched with treaters (Warren, 1969; Palmer, 1973). Of considerable
interest to correctional officials who are concerned with the high rate of staff turnover and the lack of continuity that this causes at the juvenile institutions, is the related finding that treatment workers who were "well matched" were more satisfied with their jobs and had longer tenure (Palmer, 1973).

Matching delinquent offenders, treaters, and treatment by using the interpersonal maturity level classification system has been shown to be effective in the institutional setting also. In a study at a juvenile facility for delinquent males, Jesness (1971) found that the different classes of I-level subtypes perceived their treatment environment differently. Those subjects who perceived the staff as involved and fair showed greater improvement on post-treatment psychological and behavioral measures. It was also found that homogeneity of I-level subtypes of residents in the cottage living units resulted in fewer disturbances and management problems.

Another method of matching focuses on conceptual levels. Conceptual level (CL) is a developmental approach which delineates levels of a person's interpersonal functioning (Hunt, 1974). The conceptual level continuum progresses from an egocentric stance to internalization of societal expectations and norms, to the final stage of autonomy when the norms and values of others are evaluated
in terms of one's own value system and beliefs. The person's conceptual level is measured by degree of complexity. A low degree of complexity corresponds to an egocentric personality (low CL). Likewise, a high degree of complexity corresponds to an autonomous personality (high CL). The conceptual level theory also considers the impact of the environment on the person and classifies environments by their degree of structure. The hypothesis is that a person of low conceptual level (low degree of complexity) will be treated more effectively in a highly structured environment, while a person of high conceptual level will function better in a less structured environment (Carr, 1970).

In their study of the conceptual levels and treatment styles of counselors, Malkiewick and Merluzzi (1980) found that counselors "of low CL are more directive and structured while counselors of high CL are less structured" (P. 454).

McLachlan (1974) studied the effects of matching alcoholic patients and their therapists according to conceptual level and found that 70% of those who were appropriately matched recovered, while only 50% of the mismatched group recovered. When both the patient's therapy and aftercare environment was matched according to CL, recovery for the matched group rose to 77%, while the recovery rate of the mismatched group decreased to 38% (McLachlan, 1974).
Carr (1970) studied residents in psychiatry and the adult patients that they were treating at an outpatient clinic. He hypothesized that cognitive similarity between counselor and client was related to improved patient outcome. Carr defines the cognitive dimension of personality in the following text:

Successful communication between two individuals depends upon a similarity in the cognitive dimensions used by each to communicate with the other and to independently describe environmental events. When these two individuals are a patient and his therapist, successful treatment outcome also appears to relate to cognitive similarity, or more specifically, the therapists' ability to accurately perceive and communicate within the system of cognitive dimensions which comprise the patient's conceptualization of his experience (Carr, 1970, p. 361).

The results of Carr's study supported his hypothesis. Patient-client cognitive similarity was positively related to reduction in the patients' number and frequency of psychiatric symptoms.

Carson and Heine (1962) studied the relationship between patient-therapist similarity and treatment outcome. Similarity was based on personality traits as measured by the MMPI. The population of this study consisted of therapists and patients at a psychiatric outpatient clinic. A curvilinear relationship was found between similarity and
successful treatment. Those patients who were most similar and those patients who were most dissimilar to the therapist had less successful outcomes. The authors suggested that moderately high degrees of patient-therapist similarity were conducive to the therapeutic conditions of empathy and objectivity. The results indicated that a high degree of similarity may result in overidentification. A low degree of similarity may lead to lessened understanding and empathy. Both conditions were indicative of ineffective treatment.

Perceived similarity between institutionalized male delinquents and staff members within a correctional institution (counselors, guards, etc.) was found to correlate with the resident's satisfaction with those groups (Trickett and Moos, 1972).

The available literature on matching client and counselor according to the aforementioned criteria indicates that matching may increase the effectiveness of treatment. The merits of matching counselor and client are worth exploring in any treatment milieu.

The Therapeutic Value of Identification

While the previously cited research focused on matching on an a priori basis, others think that personality
congruence of counselor and client may occur during the therapeutic process. In fact, some believe that identification with the counselor is an essential ingredient of the client's progress in therapy. Tomblin (1977) found that client identification with the counselor was an essential ingredient in the development of a meaningful therapeutic relationship with institutionalized delinquent offenders.

The importance of identification is not a new idea. Freud considered identification a crucial developmental process which allowed the child to internalize parental values that were essential to the development of the superego (Freud, 1920). Yet, recent literature suggests that there has been little emphasis on research concerning identification or imitation of the therapist as an important component of the therapeutic process. Rosenthal (1955) believes that identification with the therapist is a crucial dimension of therapeutic effectiveness. Included in his classic study were non-psychotic patients at an outpatient mental clinic and the psychiatric interns working with them. Rosenthal's study concluded that successful patients tended to become more like their therapist on moral values dimensions, while unsuccessful patients became more divergent.

Fleischer (1975) adheres to the value of client identification with the therapist and states:
The therapists acts as a model and provides an opportunity for the patient to imitate and adopt not so much specific responses but rather broad classes of behaviors such as values, general ways of dealing with situations, problem-solving methods, etc., which then assists him in making a better adjustment to the world. This view implies that much of the learning which occurs in psychotherapy is imitative or occurs through the process of identification (p.43).

In writing about his experience as a psychotherapist working with juvenile offenders, Fleischer (1972) describes the feelings of inadequacy, role confusion and the search for identity that so often characterize delinquent offenders. While these concerns are typical of adolescents in general, the delinquent offender is viewed as being more vulnerable to the developmental crises of adolescence (Fleischer 1975). Many juvenile delinquents come from homes with inadequate or absent parental models. Fleischer describes the plight of many delinquents in the following:

The youth either has no parental model to identify with, or the model which is present is seen as so defective that identification is perceived by the youth as negative rather than self-enhancing. At times the parental standards are perceived as being so high as to make them impossible to achieve, so that he feels himself unworthy of them, or so ungratifying that the youth actively fights against them. The end result seems to be a failure of identification, so that the adolescent has not adequately incorporated parental values. (p. 41-42).
In stressing the need for positive adult role models for delinquents, Nir and Cutler (1978) report that the parents of delinquent children often use the child to "act out their own poorly integrated and forbidden impulses" (p. 444). A study by Eron, Walder, and Leftkowitz (1971) found that children who were described as aggressive had weak parental identification. These findings point to a particular need for the delinquent offender to be paired with a strong, positive adult model with whom he can identify and emulate.

Shachter and Singer (1962) found that individuals who have low self-esteem are more likely to emulate the behaviors of others. Because delinquents have been found to have low self-concepts, the therapeutic value of role modeling is evident. Studies have identified two conditions that facilitate imitation. A study by Rosekrans (1967) indicated that children were more likely to imitate a role model if the models were perceived to be similar to them in personality traits. Also, stronger identifications between adolescent patients and their therapists occur when the therapist is perceived as being "warm, nurturant, and accepting" (Fleischer, 1975, p. 45).

The aforementioned studies indicate that identification can be an integral part of effective counseling, particularly for juvenile delinquents.
Personal Characteristics of the Effective Counselor

Previous research efforts have aimed at ascertaining the personal characteristics of counselors that have been found to be effective in facilitating a therapeutic climate and successful outcome. Several studies by Truax have focused on these "effective qualities". One study with a delinquent population indicated that:

When the therapist is high in empathy, warmth, and genuineness, patients or clients tend to show greater improvement than when the therapists or counselors are low in these qualities. Research has even shown that when therapists are low in these qualities, then there may be negative change or deterioration (Truax, Volksdorf, Wargo, 1970, p. 235).

An investigation of matching counselor and client on Holland's modal personality types found that the social-type counselor was preferred by psychology undergraduate students over the other types, regardless of degree of similarity (Cox and Thoreson, 1977). The researchers concluded that their findings indicate that social or relationship factors greatly influence the client's initial preference for a counselor. They speculated that a client first seeks out a counselor who is obviously strong in relationship skills. Other qualities of the counselor including similarity in interests, personality and values may be considered more important at a latter stage in the counseling relationship.
The importance of the counseling relationship is further evidenced by Grigg and Goldstein's (1957) finding that patients at a psychiatric outpatient clinic, who judged their counselor-client relationship as close, had more successful outcomes than those patients who did not perceive a close relationship with their therapists.

Parloff (1961) also found a positive correlation between the quality of the therapist-client relationship and treatment outcome when he studied group psychotherapists and group members. Patients who had better relationships with their therapist improved more. The patient's perception of his relationship with the therapist relative to other patient-therapist relationships within a group therapy setting was correlated with premature termination of therapy. Those patients who perceived their relationship with the therapist to be lower than other patient-therapist relationships were more likely to drop out of therapy. A similar study found that clients who had positive opinions toward their counselor also had high expectations of the therapeutic outcome. These clients also showed the greatest initial change (Lipkin, 1954).

Several studies have focused on the qualities that Carl Rogers labeled "warmth, unconditional positive regard and genuineness." Seeman (1948) in a study of counselors and clients in a university counseling center, found that the
counselor's qualities of warmth, interest and understanding were primary factors in establishing a positive therapeutic bond between counselor and client. Counseling method was of secondary importance in establishing this relationship. Seeman proposed that future research aim at delineating the personality variables that compose successful counseling relationships.

An examination of the relationship between personality characteristics and the counseling skill of empathic understanding of counselor education students revealed that the personality variables on the California Personality Inventory of Social Presence, Self-Acceptance, Tolerance, Intellectual Efficiency and Flexibility were positively correlated with the counselor's ability to convey empathic understanding (O'Conner, 1977).

Therapeutic Strategies with Delinquent Offenders

While research findings point to the essential ingredient of a close therapeutic relationship between client and counselor, complementary research findings identified additional skills that are necessary for effective treatment of delinquent offenders. Alexander, Barton, Schiavo, and Parsons (1976) studied the influence of the therapist's skills and personality on treatment outcome
of group therapy with non-institutionalized delinquents (males and females) and their families. They concluded that the "global quality of relationship skills made the most significant contribution to outcome variance" (Alexander, Barton, Schiavo, and Parsons, 1976, p. 662). However, this report further states that relationship skills alone have not been found to be effective in treating delinquents and their families. Programs that employed only client-centered approaches with delinquent offenders were found ineffective in changing harmful patterns of interaction within the family unit, and did not reduce the rate of recidivism for the client-centered treatment group (as compared to a control group which received no treatment). Jesness (1971) also found that relationship skills of interpersonal effectiveness are necessary, but not wholly sufficient for affecting change with delinquent offenders. Thus, relationship skills are of paramount importance in the initial phases of counseling, but need to be augmented with other counseling skills for effective treatment outcome.

Sheppard (1973) identified two basic phases of effective counseling for counselors in the correctional setting: the facilitative phase and the action-oriented phase. Previous discussion has focused on the essential components of the facilitative phase. The action-oriented phase is concerned with "confrontation and concreteness" which Sheppard defines as "focusing the interview and
directionalizing explorations combined with constructive attack on the client's defenses" (p. 309).

Sheppard further identified two stumbling blocks to effective counseling in the correctional setting: "the conflict of authority and therapeutic atmosphere, and second, the unwilling client" (p. 313). Carl Rogers maintains that authority and treatment are mutually exclusive (Rogers, 1957). Despite the disadvantages of an unwilling and often unmotivated clientele, correctional agencies strive to provide an effective therapeutic environment.

The research by Truax et. al. (1971) offers evidence that delinquents who are in an institutional environment which is highly facilitative show positive change in both their behavior and personality. The establishment of a facilitating treatment environment depends largely on the counselor. Institutionalized delinquents are generally unwilling and unmotivated clients who tend to hide their feelings beneath a facade of indifference. It would be easy for the counselor to match the delinquent's aloofness with his own. Yet, with the strong evidence of the relationship between a highly facilitative environment and successful treatment outcome, the counselor needs to strive to become actively involved in establishing and maintaining a close interpersonal relationship with the adolescent delinquent.
Fleischer (1972) believes that the effective counselor of delinquent adolescents should:

Be active, involved and direct, rather than passive, distant or non-directive. The therapist should provide a model of a living, breathing person that the adolescent can react to, fight against, identify with and hopefully incorporate (p. 69).

Importance of Perceived Therapeutic Climate

Individuals vary in personality traits. Likewise, human environments are viewed as having distinct "personalities." Carl Rogers (1957) stressed the importance of the client's accurate perception of the therapeutic relationship as an integral component of treatment effectiveness. With institutionalized clients (mental patients, penal inmates, in-patient alcoholics, and institutionalized delinquents) the accuracy of their perceptions of the therapeutic environment may be questioned. In studying the relationship between perceived therapeutic conditions and therapeutic outcome, Truax (1971) focused on two institutionalized populations: mental patients and juvenile delinquents. A strong positive relationship was found between the perceived therapeutic environment of the delinquents and successful treatment outcome. There was no such relevant relationship with the mental patients. This finding suggests that the delinquent
group was capable of accurately assessing the therapeutic environment. Truax recommends that delinquents be given a chance to assess their perception of the therapeutic relationship after the first few interviews with the counselor. If a negative relationship is perceived by the delinquent, termination of counseling or referral should follow. Of course, termination of counseling is not a feasible alternative in the juvenile institution, but referral may be an effective alternative if the components of effective counselor-client matching can be identified.

Jesness (1971) found that institutionalized male delinquents who had positive perceptions of the treatment staff's involvement and fairness showed greater improvement in psychological and behavioral variables.

Using the Correctional Institutions Environment Scale (CIES), which measures environmental perceptions of the Treatment Program, Relationship Dimension, and System Maintenance Dimension within correctional institutions, Moos (1975) found that boys in units that were rated high on the CIES dimensions of Relationship and Treatment Program, showed more positive change on withdrawal and social anxiety variables. Another study by Trickett and Moos (1972) found that male institutionalized delinquents were more satisfied with staff members if they perceived themselves to be similar to the staff member.
The aforementioned studies strongly suggest that the client's perception of the treatment environment relates to post-treatment outcome.

SUMMARY

This chapter included a review of the literature concerning several components of the counseling relationship that are related to effective treatment outcome. These components included counselor-client matching, client identification with the counselor, personal characteristics of the counselor, therapeutic strategies and the client's perception of the treatment environment.

Of primary interest to this investigation is the research concerning matching counselor and client. The research findings regarding the Community Treatment Program (CTP) in California were particularly relevant to this study. Research on CTP found that treaters with different personalities and interpersonal styles were more effective with some types of delinquent offenders than with others. When juvenile offenders were well matched with their treaters, according to I-level personality types, the post-release success rates were significantly higher than for unmatched groups. Other studies concerned with counselor-client similarity (or match) also indicated more effective outcome when the counselor and client were matched
on various factors such as personality, cognitive functioning and conceptual level.

Another factor that relates to increased post-treatment success is the client's positive perception of the treatment milieu. Several studies have found a strong positive relationship between the perceived therapeutic environment and successful treatment outcome.

The present study investigated the interaction of counselor-client similarity and the client's perception of the treatment environment. Both factors have been found to affect counseling effectiveness. The emphasis of this study was placed on the dynamic interaction of counselor-client similarity and the client's perception of the treatment environment.
Chapter three describes the methods used in the present study. Included are descriptions of the subjects of the study and procedures followed in collecting the data. In addition, the methods of data analysis are presented.

Sample

The subjects of this study were 96 residents and 9 counselors at a state residential center for delinquent female offenders. Demographic characteristics for both the client and counselor populations are presented in this section.

CLIENTS:

The entire resident population of the state facility for delinquent females comprised the client population of this study. At the time of data collection, 124 girls were assigned to this facility. One hundred of the girls completed the two instruments. Of the 100 test sets, four were not analyzed because they constituted a very small and unrepresentative sample from their cottage population. Of the remaining twenty four (24) residents whose input was not a part of this study; 10 were not able to read on a level necessary for understanding the instruments; 3 were away
from the institution on home visits; 5 were absent without leave (had previously absconded from the institution); 3 refused to participate in the study, and 3 returned test instruments that were not scorable or were judged invalid. The remaining 96 residents who comprised the client population of the study are further described according to age, I.Q., race, educational level, and length of time in counseling.

**Age:** The range of the clients' ages was from 13 to 18 years, with a mean of 15.4 years and a mode of 16 years. See Appendix A for a graphic representation of the clients' ages.

**I.Q.:** The range of I.Q. scores of the client population was 73 points with a minimum score of 54 and a maximum score of 127. The mean of the I.Q. scores was 96.6 with a mode of 100 and standard deviation of 14.5 points. The graphic representation of I.Q. scores of the population appears in Appendix B. This chart shows that the I.Q. scores of the research population roughly conform to the normal curve, as does the distribution of I.Q. scores of normal populations.

**Race:** Of the 96 participants of this study, 63 (65.6%) are white and 33 (34.4%) are black.

**Educational Level:** Educational level was defined as "last grade completed". The educational levels of the
subjects of this study were dispersed between the 6th and 12th grade educational levels. The majority of the subjects (73.9%) were in the 7th, 8th, and 9th grade levels. A small percentage of the subjects (7.3%) had been enrolled in special education or educably mentally retarded classes. (Appendix C).

Length of time in counseling: The length of time that each girl had been involved in counseling in the institutional setting was measured in months. The range of counseling time was one month to eleven months. The mean time in counseling was 4.77 months.

COUNSELORS:

The research population also included treatment staff at the institution with the job titles of Institutional Rehabilitation Counselors and Peer Group Involvement leaders. Nine counselors participated in the present study. There was one Institutional Rehabilitation Counselor per cottage living unit. In the two group counseling cottages, there was an additional Peer Group Involvement leader.

All of the counselors were female. Other identifying characteristics of the counselor population include race, age, educational discipline and length of professional experience in counseling.
Race: Of the nine counselors, three (33.3%) were black and six (66.6%) were white.

Age: The age range of the counselors was from 24 to 42 years. See Appendix D for a more complete description of counselors' ages.

Education: All of the counselors had bachelor's degrees. Three had degrees in social work and social welfare; three in psychology, two in education, one in philosophy and one in marriage, housing and family development. It should be noted that the state requires counselors to complete a minimum of forty hours of job-related training per year. While most training for counselors concerns counseling theories and techniques, other specialized training such as treatment of drug and alcohol dependency, women's issues, assertiveness training, etc. are offered. The professional training was offered by the Department of Corrections Training staff, area graduate schools, and various private and publically supported agencies, such as the Department of Delinquency and Crime Prevention, Mental Health agencies, Drug Abuse Prevention and Treatment agencies, etc.

Length of Professional Experience in Counseling: The range of professional experience of the counselors ranged from a minimum of twelve (12) months to a maximum of two hundred and twenty-eight (228) months. The mean of the length of professional experience was 69 months. Appendix E
contains a more complete description of the length of counseling experience per counselor.

RESEARCH SETTING:

The state facility for delinquent females has a physical layout of nine cottage living units, a school, an administration building, treatment staff building, and smaller units for vocational training and maintenance needs.

TREATMENT

The overall treatment approach was behavioral. Essentially, this orientation stressed that behavior is learned and that maladjustment (i.e., delinquent behavior) results from poor learning or negative learning. In a program handbook for this treatment facility, the behavioral philosophy is described in the following excerpt:

All behavior, whether positive and constructive or negative and destructive, is learned, and it is learned in the same way, according to specific psychological principles. Behavior that is rewarded or reinforced will be repeated, and behavior that is ignored or extinguished will eventually disappear. It is important to remember that our program was designed to help the girls learn more appropriate ways of interacting with their environment, better ways of getting their needs met. We must remind ourselves that, "The child's behavior does not cause a problem, it is the problem" (Payton, 1978, P. 1-2).

All cottage living units employ a system of earning points or days and progressing through levels with the ultimate goal of release from the institution. Positive
points are earned for appropriate behaviors such as completing school work and cottage chores, promptness, good manners at mealtimes, etc. Negative points are earned for such behaviors as physical and verbal aggression, non-compliance with institutional rules, etc. As the girl progresses (or regresses) from one level to the next, she earns different privileges and assumes different responsibilities. An example of an earned privilege on level three of a five level system may be a weekend visit home. An institutional manual describes the level system and states that:

As she progresses through the levels toward release, the requirements become more difficult. She must exercise greater and greater self-control (Payton, 1978, p. 4).

Major rule violations such as running away from the institution, assault on staff or students, possession of drugs, etc. are dealt with in institutional hearings which may result in disciplinary action such as returning to Level I.

In addition to overall behavioral objectives for the institution, each girl has specific targeted behaviors that she must work on such as physical aggression, being easily misled by others, lying, etc. These targeted behaviors are part of the Evaluation Service Plans that are developed when the girl first enters the state institutional system at a Reception and Diagnostic Center. This plan is routinely reviewed and modified to meet each girl's treatment needs during her stay at the state facility.
Each cottage living unit has an Institutional Rehabilitation Counselor and four or five other members of a Treatment Team. The Treatment Team consists of teachers, houseparents, and other institutional personnel who interact with the girls on a daily basis. The Treatment Team is composed of a fixed membership for each cottage and is chaired by the Institutional Rehabilitative Counselor. It is the responsibility of the Treatment Team to help the girls in their cottage meet the treatment objectives that have been outlined in their individual Evaluation Service Plans.

The behavioral treatment philosophy is a campus-wide approach. It is the basis for each girl's treatment plan. Yet, the treatment modes and methods vary according to the different cottage living units.

In seven of the cottage living units, individual counseling comprised the primary mode of treatment. The remaining two cottages use group counseling, labeled Peer Group Involvement (P.G.I.). In these cottages, responsibility for each girl's progress in solving her problems and progressing through the level system is shared by the other members of her group, as well as the Treatment Team. An institutional handbook states that:

"P.G.I. utilizes the effect of peer pressure to change the behavior and values of adolescents whose previous behavior and values have been in conflict with society's expectations" (Payton, 1978, p.5).
Of the 96 clients who participated in this study, 68 were residing in the individual counseling cottages and 28 were living in the group counseling cottages.

COTTAGE ASSIGNMENT:

The girls are assigned to cottage living units by an Institutional Classification Committee. The committee membership included the Assistant Superintendent for Treatment, two Counselor Supervisors (Cluster Leaders), the Vice-Principal of the school and a teacher. The committee studies the Evaluation Service Plan (E.S.P) on each girl. The E.S.P. is prepared by the Reception and Diagnostic Center. These service plans include test measures of intelligence, abilities, and other psychometric measures; educational records; Court records (which include a comprehensive study of family background information, history of offenses, past treatment and outcomes, etc.); psychological reports and medical and dental records.

Using the aforementioned information, the committee assigns the girl to the cottage that they think will best meet her needs, with two exceptions: (1) one cottage houses the youngest group of juveniles (all girls who are 14 and under); and, (2) at times, cottage assignment must be based on the practical consideration of available bed space.

OTHER TREATMENT STRATEGIES AND PROGRAMS:

In addition to the personal problem orientation that is represented by individual and group treatment modes, the
institution also emphasize the practical problem orientation of preparing students for additional educational or vocational pursuits once they leave the institutional setting. Vocational training includes the occupational areas of nurse's aide, office occupations, commercial sewing, food services, occupational child care, and cosmetology.

Academic subjects of grammar, literature, science, math and social sciences are taught on a remedial level to a senior high school level. Girls can earn their General Educational Development (G.E.D.) high school equivalency diploma directly from the institutional school.

The institution also has a work-release program. The girls work at various local businesses and return to the institutional campus after work.

The present study focused on the cottage living units rather than the vocational or educational divisions of institutional life.

Instrumentation

The present study was based on two standardized self-report instruments: the California Psychological Inventory (C.P.I.) and the Correctional Institutions Environment Scale (C.I.E.S.).

C.P.I.: Personality variables were assessed by the California Psychological Inventory. This is a well-known and
recognized instrument that has been used in well over 300 studies. This instrument is a 480 item questionnaire with a true-false format. Eighteen subscales measure the following personality characteristics: dominance; capacity for status; sociability; social presence; self-acceptance; sense of well-being; responsibility; socialization; self-control; tolerance; good impression; communality; achievement via conformance; achievement via independence; intellectual efficiency; psychological mindedness; flexibility and femininity.

The 18 scales of the C.P.I. are grouped into four personality clusters which represent interpretational as well as psychometric entities. The analysis of counselor-client similarity is based on these four major subscales. These four subscales of the C.P.I. are "Class I, Measures of Poise, Ascendancy, Self-Assurance, and Inter-Personal Adequacy: Class II, Measures of Socialization, Responsibility, Intrapersonal Values, and Character; Class III, Measures of Achievement Potential and Intellectual Efficiency; and Class IV, Measures of Intellectual and Interest Modes" (Gough, 1956, p.5).

The author reports that test-retest reliability with a lapse of twelve months resulted in reliability ranges of .57 to .77 for all scales except the psychological-mindedness and
communality subscales, which had lower reliability co-efficients (Gough, 1956). Content, construct and criterion-related validity have been thoroughly assessed on each of the 18 subscales of the C.P.I. Data regarding its convergent validity result from studies of the C.P.I.'s relationship to other well-known tests and to other criterion such as measurable behavioral variables.

The C.P.I. has been used extensively to study delinquent populations (Megargee, 1972; Gough, 1969; Mizushima and Devos, 1967). Megargee (1972) stated that the C.P.I. has often been used to compare the personality characteristics of delinquent and non-delinquent groups.

The C.P.I. manual states that it is an appropriate instrument for normal populations from age twelve and up.

While the C.P.I. manual states that it takes 45 to 60 minutes on the average to complete the C.P.I., the instrument is not timed. Most of the girls in this study required over an hour to complete the scale, which is an acceptable time frame.

C.I.E.S.: The Correctional Institutions Environment Scale was used to assess the clients' and the counselors' perceptions of the therapeutic environment. Developed by Rudolf H. Moos in 1974, this scale was designed to measure the social environments of juvenile and adult correctional
institutions. The scale is a 90 item questionnaire of true-false format. The three subscales measure the Relationship Dimension (Involvement, Support, and Expressiveness); the Treatment Program Dimension (Autonomy, Practical Orientation, and Personal Problem Orientation) and the System-Maintenance Dimension (Order and Organization, Clarity, and Staff Control).

Content and criterion-related validity have been assessed. Test-retest reliability ranges are from .65 to .80. It takes approximately twenty minutes to complete the C.I.E.S.

Summary of Terminology Used in Computer Analysis of the Data

For the convenience of the reader, a summary of the titles that were used in the computer analysis of the present study, and which also appear in the tables follows.

I. Measures of Similarity between Counselor and Client: The absolute difference between the counselor's and client's scores on the four major scales of the C.P.I. determined the degree of similarity in personality traits (Appendices F - J). These four major scales are labeled POISE, SOCIAL, ACHIEVE, and SMART in the analysis. A total index of similarity, labeled TOTSIM, is also included in the analysis.

A. POISE: Class I of the C.P.I. encompasses measures of poise, ascendency and self-assurance. It includes six scales entitled Dominance, Capacity for Status,

B. SOCIAL: Class II of the C.P.I. concerns measures of socialization, maturity and responsibility. This class includes six scales entitled Responsibility, Socialization, Self-Control, Tolerance, Good impression, and Communality. (Appendix G).

C. ACHIEVE: The Class III measures concern achievement potential and intellectual efficiency. Class III includes three subscales which are labeled Achievement via Independence, Achievement via Conformance, and Intellectual Efficiency. (Appendix H).

D. SMART: Class IV measures personality components of intellectual and interest modes and includes three scales: Psychological-mindedness, Flexibility, and Femininity. (Appendix I).

E. TOTSIM: This is the label for the grand index of similarity which includes all eighteen scales of the C.P.I.

II. Measures of the Client's Perception of the Treatment Environment: The Correctional Institutions Environment Scale (C.I.E.S.) was used to assess the client's perception of the treatment environment. The C.I.E.S. is
divided into three major components that are labeled RELATION, PROGRAM, and SYSTEM in this study.

A. RELATION: This category includes the Relationship Dimension of the C.I.E.S. and includes the first three subscales which are labeled Involvement, Support, and Expressiveness.

B. PROGRAM: This category includes the Treatment Program Dimension of the C.I.E.S. and includes the three scales that measure the degree of Autonomy, Practical Orientation, and Personal Problem Orientation of the treatment environment.

C. SYSTEM: This category includes the System-Maintenance Dimension of the treatment environment. It includes the three subscales which are labeled Order and Organization, Clarity, and Staff Control.

III. Demographic Characteristics of the Population: Several demographic characteristics of the population of this study were used in the multiple regression and analysis of covariance. The codes for these demographic variables are as follows:

A. AGECL: The age of the client.

B. I.Q.: The I.Q. of the client.

C. RACECL: The race of the client.
D. **CLIETIME**: The length of time (in months) that a client has been involved in counseling with the counselor that they are paired with in this study.

E. **EDCL**: The educational level of the client.

F. **AGECO**: The age of the counselor.

G. **RACECO**: The race of the counselor

**Data Collection**

Data were collected by administering the two instruments, the California Psychological Inventory and the Correctional Institutions Environment Scale. The researcher explained the purpose of the study and gave instructions for the completion of the two instruments to each cottage living unit. The girls in each cottage unit completed the two instruments during a two-hour period that was allotted for data collection. The researcher scheduled testing in two cottages per day. Testing in all cottage units of the institutional campus was completed within a one week period.

The researcher was present during the entire testing period at each cottage. Interest and cooperation was encouraged by a thorough explanation of the purpose of this project. The counselors and the group leaders were present during test administration. They introduced the researcher to the residents of the cottage and showed much support and interest in the study. The counselors also completed test instruments at the same time that the girls completed theirs.
The show of support and the willingness of the counselors to complete the instruments seemed to have a positive effect on the girls' willingness to participate in the study. Only 3 girls in the total population refused to participate.

The researcher has the only key to the coded identities of the subjects in this study. The researcher assured the counselors and the girls that their individual responses would be kept confidential. The researcher also offered to present the major findings at the completion of the study to staff and residents at the institution. This presentation was based on aggregate findings and implications of those findings.

Data collection occurred during the last week of June, 1981. The researcher had met with the institutional counseling staff in May, 1981 to explain the purpose and need of this study. The counseling staff was very supportive of the study. They expressed their opinion that the study had practical implications.

The counseling staff facilitated data collection by participating in the study and by gathering the demographic information (I.Q., race, educational level, age, and length of time in counseling) on each of the girls assigned to their cottages.
Research Design

A descriptive research design was employed in this study. The aim of descriptive research is to describe the present or existing status of the subjects, situations, or phenomena under investigation. A correlation study is a type of descriptive research which seeks to determine the degree of relationship between variables (Ary, Jacobs, Razavieh, 1979).

The lack of descriptive research in this area has been documented by several authors. Malkiewich and Merluzzi (1980) express the need for a study of the treatment-matching approach and its interaction with environmental variables. Wenk and Halatyn (1973) also indicate the need for such descriptive research which they believe could be instrumental in identifying variables associated with successful outcome of treatment.

Data Analysis

Analysis of the research data was based on selected programs from the Statistical Package for the Social Sciences (SPSS).

The first hypothesis of this study concerns the relationship between counselor-client similarity and the client's perception of the treatment environment. The linear relationship between the two variables was assessed by Pearson
correlation. Multiple regression procedures were utilized to control for the effects of client's age, educational level, race, I.Q., and length of time in counseling. The effects of the counselor's age, race, and length of professional experience were also controlled for with multiple regression.

There are several methods for determining the degree of similarity between counselor and client that have been cited in previous research (Carson and Heine, 1962; Palmer, 1973). In this study, the degree of similarity between counselor and client was assessed by taking the absolute difference between the counselor's and their client's scores on each of the four scales of the C.P.I. Dyadic similarity in this case is based on the concept of frequency matching, or rather, matching in terms of an aggregate sense of a total score. Because the interpretation of the C.P.I. is based on the magnitude of the overall score within each subscale, this method of assessing counselor-client similarity preserves the integrity of the meaning of the C.P.I. interpretation.

The data were analyzed according to the four major clusters of personality factors that compose the C.P.I. scale. The author of the C.P.I., Harrison Gough, stated that the four classes (or clusters) that the C.P.I. was divided into represented interpretational as well as psychometric entities.
The second hypothesis of this study concerns the differences in the clients' environmental ratings of the different cottage living units. Analysis of variance was used to assess the differences between cottages and also between the two treatment modes (individual and group counseling). Analysis of covariance was used to remove extraneous variation of environmental ratings which may be due to the client's I.Q., age, educational level and race. The length of time that a client had been in counseling was also analyzed as a covariate.

Due to the field based and action-oriented nature of the present study, the .10 level of confidence was used to test for significance.
CHAPTER 4
Presentation of Results

The findings related to the hypotheses of this study are presented in this chapter. The results of each hypothesis will be explained and tabular results of each hypothesis will also be included. The results of this study include some unhypothesized relationships that were observed during the conduct of the study. These findings are presented in tandem with the findings of the major hypotheses of the study.

HYPOTHESIS I

Hypothesis I was the major question of this study and concerned the relationship between counselor-client similarity and the client's perception of the treatment environment.

The null hypothesis was stated thus:

\[ H_1: \text{There is no significant relationship between the degree of counselor-client similarity and the client's perception of the treatment environment.} \]

The data pertaining to Hypothesis I were analyzed according to the four major scales of the C.P.I., which measured the degree of similarity between counselor and client (labeled POISE, SOCIAL, ACHIEVE, and SMART). A fifth measure of similarity based on the total score of the counselor and client on the C.P.I. (TOTSIM) was also included in the analysis.
The five measures of similarity were the independent variables of the study. They were correlated with the client's environmental ratings on the C.I.E.S. The C.I.E.S. ratings were analyzed according to the three scales of the C.I.E.S. (labeled RELATION, PROGRAM, and SYSTEM). These were the dependent variables of the study.

Pearson correlation analysis of the independent and dependent variables indicated several relationships that were significant at the .10 level of confidence. The correlation between POISE and RELATION was .1351 and was significant at the .095 level of confidence. The correlation between SOCIAL and RELATION was -.1649 and was significant at the .054 level of confidence. The correlation between SOCIAL and PROGRAM was -.1673 and was significant at the .052 level of confidence. The correlation between TOTSIM and PROGRAM was -.1403 and was significant at the .086 level of confidence. The personality matches involving the clusters labeled ACHIEVE and SMART did not relate significantly to the dependent variables. The SYSTEM component of the dependent variable also indicated no significant relationship with the personality variables. The findings related to Hypotheses I are presented in Table 1.

It would appear that counselor-client similarity on the personality variables of POISE and SOCIAL, as well as the overall profile of similarity, TOTSIM, are differentially related to the client's perception of the Relationship and Program Dimensions of the treatment environment. However,
Table 1: PEARSON CORRELATION OF CLIENT-COUNSELOR SIMILARITY AND THE CLIENT'S PERCEPTION OF THE TREATMENT ENVIRONMENT (N=96)

<table>
<thead>
<tr>
<th>C.P.I.</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>POISE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOCIAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACHIEVE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMART</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTSIM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>POISE</th>
<th>SOCIAL</th>
<th>ACHIEVE</th>
<th>SMART</th>
<th>TOTSIM</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.I.E.S.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I. RELATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>r=.1351</td>
<td>r=-.1649</td>
<td>r=.0156</td>
<td>r=-.0943</td>
<td>r=-.0329</td>
<td></td>
</tr>
<tr>
<td>p=.095*</td>
<td>p=.054*</td>
<td>p=.440</td>
<td>p=.180</td>
<td>p=.375</td>
<td></td>
</tr>
<tr>
<td>II. PROGRAM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>r=-.059</td>
<td>r=-.1673</td>
<td>r=-.1233</td>
<td>r=-.0196</td>
<td>r=-.1403</td>
<td></td>
</tr>
<tr>
<td>p=.284</td>
<td>p=.052*</td>
<td>p=.116</td>
<td>p=.425</td>
<td>p=.086*</td>
<td></td>
</tr>
<tr>
<td>III. SYSTEM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>r=-.003</td>
<td>r=-.0459</td>
<td>r=-.0384</td>
<td>r=.0802</td>
<td>r=-.0256</td>
<td></td>
</tr>
</tbody>
</table>

*Level of Confidence greater than .10
other factors inherent to the population may have a significant influence on the degree of the relationship between the independent and dependent variables and be confounding these results. Correlational analysis was used to determine whether certain demographic variables were related to the independent variable (counselor-client similarity) or dependent variable (client's perception of the treatment environment).

The linear relationships among the independent variables (similarity of counselor and client measures), the dependent variables (the measures of the client's perception of the treatment environment), and control variables (client's I.Q., age, race, educational level and length of time in counseling, as well as the counselor's age and race) are represented in Table 2.

The findings that are represented in Table 2 indicate that the client's age was significantly related to the independent variable of POISE at the .052 level of confidence, with a correlation coefficient of -.1670. The negative relationship indicates that the older the client, the less the absolute difference between counselor and client. Similarity between counselor and client increases as the client's age increases.
Table 2. PEARSON CORRELATION OF CONTROL VARIABLES WITH MEASURES OF COUNSELOR-CLIENT SIMILARITY AND THE CLIENT'S PERCEPTION OF THE TREATMENT ENVIRONMENT

<table>
<thead>
<tr>
<th>Control Variables</th>
<th>AGECL</th>
<th>I.Q.</th>
<th>RACECL</th>
<th>CLIETIME</th>
<th>EDCL</th>
<th>AGECO</th>
<th>RACECO</th>
</tr>
</thead>
<tbody>
<tr>
<td>POISE (C.P.I. I)</td>
<td>(r=-.1670)</td>
<td>(r=-.0733)</td>
<td>(r=.0931)</td>
<td>(r=-.1719)</td>
<td>(r=-.2250)</td>
<td>(r=.1455)</td>
<td>(r=-.1357)</td>
</tr>
<tr>
<td>(C.P.I. II)</td>
<td>(p=.052^*)</td>
<td>(p=-.239)</td>
<td>(p=.183)</td>
<td>(p=.047^*)</td>
<td>(p=.014^*)</td>
<td>(p=.079^*)</td>
<td>(p=.094^*)</td>
</tr>
<tr>
<td>SOCIAL (C.P.I. II)</td>
<td>(r=-.0426)</td>
<td>(r=-.0579)</td>
<td>(r=.1700)</td>
<td>(r=-.1790)</td>
<td>(r=.0663)</td>
<td>(r=.1956)</td>
<td>(r=.2008)</td>
</tr>
<tr>
<td>(C.P.I. II)</td>
<td>(p=.340)</td>
<td>(p=.288)</td>
<td>(p=.049^*)</td>
<td>(p=.041^*)</td>
<td>(p=.261)</td>
<td>(p=.028^*)</td>
<td>(p=.025^*)</td>
</tr>
<tr>
<td>TOTSIM (C.P.I. TOTAL)</td>
<td>(r=-.1046)</td>
<td>(r=-.0725)</td>
<td>(r=-.0587)</td>
<td>(r=-.2274)</td>
<td>(r=-.0964)</td>
<td>(r=.3103)</td>
<td>(r=.0029)</td>
</tr>
<tr>
<td>(C.P.I. TOTAL)</td>
<td>(p=.155)</td>
<td>(p=.241)</td>
<td>(p=.285)</td>
<td>(p=.013^*)</td>
<td>(p=.175)</td>
<td>(p=.001^*)</td>
<td>(p=.489)</td>
</tr>
<tr>
<td>RELATION (C.I.E.S. I)</td>
<td>(r=-.0438)</td>
<td>(r=.0275)</td>
<td>(r=-.1122)</td>
<td>(r=-.1076)</td>
<td>(r=.0650)</td>
<td>(r=-.1429)</td>
<td>(r=.0359)</td>
</tr>
<tr>
<td>(C.I.E.S. I)</td>
<td>(p=.336)</td>
<td>(p=.395)</td>
<td>(p=.138)</td>
<td>(p=.148)</td>
<td>(p=.265)</td>
<td>(p=.082^*)</td>
<td>(p=.364)</td>
</tr>
<tr>
<td>PROGRAM (C.I.E.S. II)</td>
<td>(r=.0270)</td>
<td>(r=.1162)</td>
<td>(r=-.2420)</td>
<td>(r=-.1024)</td>
<td>(r=.1599)</td>
<td>(r=-.0974)</td>
<td>(r=-.0407)</td>
</tr>
<tr>
<td>(C.I.E.S. II)</td>
<td>(p=.397)</td>
<td>(p=.130)</td>
<td>(p=.009^*)</td>
<td>(p=.160)</td>
<td>(p=.060^*)</td>
<td>(p=.173)</td>
<td>(p=.347)</td>
</tr>
</tbody>
</table>

Control Variables:
AGECL = Age of Client
I.Q. = I.Q. of Client
RACECL = Race of Client
CLIETIME = Client's length of time in counseling
EDCL = Educational level of Client
AGECO = Age of counselor
RACECO = Race of counselor
The client's I.Q. was not significantly related to any of the dependent or independent variables assessed. This was the only client variable that was related neither to the independent nor dependent variables.

The client's race was significantly related to two variables. The match between counselor and client on the SOCIAL dimension with a correlation of -.1700, was significant at the .049 level of confidence. The client's perception of the PROGRAM dimension of the treatment environment was significant at the .009 level of confidence with a correlation of -.2420. Race was coded as a dichotomous variable with white = 1 and black = 2. There was a negative relationship between the client's race and the match between counselor and client on SOCIAL. This indicates that black clients are more similar to their counselors on the Class II (SOCIAL) dimension of the C.P.I.

There was also a negative relationship between the client's race and the client's perception of the program dimension of the treatment environment. This finding indicates that white clients have higher ratings of the program dimension of the treatment environment.
The length of time that a client had been in counseling with a particular counselor (CLIETIME) was significantly related to the personality match variables of POISE, SOCIAL, AND TOTSIM. POISE and CLIETIME had a correlation of -.1719 and was significant at the .047 level of confidence. SOCIAL and CLIETIME had a correlation of -.1790 and was significant at the .041 level of confidence. TOTSIM and CLIETIME had a correlation of -.2274 and was significant at the .013 level of confidence. All three relationships were negative, which indicate that the greater the number of months in counseling, the smaller the absolute difference between counselor and client on the Class I, Class II, and total C.P.I. scores. Similarity between counselor and client increased as the time in counseling increased.

The client's educational level was significantly related to the client-counselor personality match on the variable POISE with a correlation of -.2250 which was significant at the .014 level of confidence. The negative relationship indicates that the higher the educational level, the lower the absolute difference between counselor and client on C.P.I. Class I. In essence, there is greater similarity between counselor and client (on POISE) when the client is at a higher educational level.

The client's educational level was also significantly related to the client's perception of the PROGRAM dimension of
the treatment environment. The correlation of .1599 was significant at the .06 level of confidence. A positive correlation indicates that clients at higher educational levels had higher scores on the program dimension of the treatment environment.

The age of the counselor was significantly related to four of the five variables analyzed. The correlation between POISE and AGECO was .1455 and was significant at the .079 level of confidence. The correlation between SOCIAL and AGECO was .1956 and was significant at the .028 level of confidence. The correlation between TOTSIM and AGECO was .3103 and was significant at the .001 level of confidence. The positive relationship between the age of the counselor and POISE, SOCIAL, and TOTSIM indicates that the higher the age of the counselor, the higher the absolute difference of scores between counselor and client. More specifically, there was greater similarity between counselor and client when the counselor was younger.

There was a negative relationship between the age of the counselor and RELATION. The correlation was -.1429 and was significant at the .082 level of confidence. This indicates that youth of the counselor was related to higher scores of the clients' perceptions of the Relationship Dimension of the treatment environment.

The race of the counselor was significantly related to POISE at the .094 level of confidence with a correlation of -.1357. SOCIAL was related to RACECO with a correlation of .2008 and was significant at the .025 level of confidence.
The race of the counselor was coded as a dichotomous variable, with white = 1 and black = 2. A negative correlation between POISE and race of the counselor indicated that black counselors are more similar to their clients on the C.P.I. Class I dimension of personality. A positive relationship between SOCIAL and race of the counselor indicates that white counselors are more similar to their clients on the C.P.I. Class II dimension of personality.

Multiple regression analysis was used to adjust for the effects of the control variables on the dependent variables, RELATION and PROGRAM. With the influence of the confounding factors controlled for, a clearer indication of the strength of the association between independent and dependent variables results. Multiple regression analysis also determines the order and magnitude of the influence that each variable has on the dependent variable. Multiple regression analysis yields the proportion of the variation in the dependent variables which was attributable to the independent variables, POISE, SOCIAL and TOTSIM.

The effects of the client's age, I.Q., educational level, race, and length of time in counseling, as well as the counselor's age and race were adjusted for by multiple regression analysis. The findings indicated that once the effects of the control variables were adjusted for, the only significant relationship between counselor-client similarity and the client's perception of the treatment environment that remained was between the variables labeled SOCIAL and RELATION. This relationship was significant at the .01 level of confidence. This is a highly significant relationship, yet
the total amount of variability within the RELATION measure that can be accounted for by the counselor-client match on SOCIAL is small (Table 3).

To determine the effect of the counselor's score on the significant relation found between SOCIAL and RELATION, multiple regression analysis was used to adjust for the effects of the initial control variables (client's age, race, I.Q., educational level and length of time in counseling and the counselor's age and race) and the counselor's score on the C.P.I. Class II dimension. When the counselor's score was included in the regression analysis, the amount of variability in RELATION that could be attributed to SOCIAL was no longer significant (Table 4).

The null hypothesis was accepted; i.e. there is no significant relationship between counselor-client similarity and the client's perception of the treatment environment.

**HYPOTHESIS II**

Hypothesis II concerned the differences in the clients' environmental ratings of the different cottage living units. The null hypothesis was stated as:

\[ H_2: \text{There are no significant differences between group environmental ratings of the cottage living units.} \]

<table>
<thead>
<tr>
<th>RELATION</th>
<th>PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple R = 0.27798</td>
<td>Multiple R = 0.35850</td>
</tr>
<tr>
<td>R Square = 0.07727</td>
<td>R Square = 0.12852</td>
</tr>
<tr>
<td>RSQ Change = 0.03268</td>
<td>RSQ Change = 0.03724</td>
</tr>
<tr>
<td>F = 4.160*</td>
<td>F = 1.245</td>
</tr>
<tr>
<td>*Significance of F = .01</td>
<td></td>
</tr>
<tr>
<td>Multiple R = 0.40149</td>
<td>Multiple R = 0.36618</td>
</tr>
<tr>
<td>R Square = 0.16120</td>
<td>R Square = 0.13409</td>
</tr>
<tr>
<td>RSQ Change = 0.07810</td>
<td>RSQ Change = 0.00557</td>
</tr>
<tr>
<td>F = 1.565</td>
<td>F = 0.276</td>
</tr>
<tr>
<td>Multiple R = 0.40212</td>
<td>Multiple R = 0.36720</td>
</tr>
<tr>
<td>R Square = 0.16170</td>
<td>R Square = 0.13484</td>
</tr>
<tr>
<td>RSQ Change = 0.00051</td>
<td>RSQ Change = 0.00075</td>
</tr>
<tr>
<td>F = 0.051</td>
<td>F = 0.073</td>
</tr>
</tbody>
</table>
Table 4: Multiple Regression Analysis of the Relationship Between Counselor-Client Similarity and the Client's Perception of the Relationship Dimension of the Treatment Environment Adjusting for Control Variables and the Counselors' Scores on C.P.I. Class II.

<table>
<thead>
<tr>
<th>RELATION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple R =</td>
<td>.29543</td>
</tr>
<tr>
<td>R Square =</td>
<td>.08728</td>
</tr>
<tr>
<td>RSQ Change=</td>
<td>.01070</td>
</tr>
<tr>
<td>F=</td>
<td>1.008</td>
</tr>
</tbody>
</table>
Nine cottages participated in this study, but two of these cottages had fewer than 35% of their client population completing the two instruments. It was decided that the small percentage of residents completing the instruments in the two cottages was not representative samples of the units. Therefore, Cottage 4 and Cottage 6 were excluded from the analysis of variance of the aforementioned hypothesis. The client environmental ratings of the other seven cottages were analyzed. The populations of each cottage (and thus the cell size of the multiple analysis of variance) was roughly equivalent with a minimum of 13 and a maximum of 16 in each cottage living unit.

Of the seven cottages analyzed, five used a technique of individual counseling and two cottages used group therapy as the primary treatment mode. This analysis also looked at the differences in the clients' environmental ratings for the two categories of treatment modes (Individual and Group).

Analysis of covariance was used to remove extraneous variation of the environmental ratings which may be due to the client's I.Q., age, educational level, race and length of time in counseling.
The analysis of variance by cottage units concerning the clients' consensual perceptions of the Relationship Dimension of the treatment environment is presented in Table 5. The effects of the covariates were controlled. With an F of 3.848, the variation between cottage units regarding the clients' perceptions of the relationship dimension of the treatment environment was significant at the .002 level of confidence. Therefore the null hypothesis regarding the differences between cottage units is rejected for the Relationship Dimension. There are significant differences between the cottage units regarding the clients' perceptions of the Relationship Dimension. To determine the pattern of consensual ratings for each cottage unit, a multiple classification analysis was performed. Again the effects of the covariates were controlled. The multiple classification analysis is presented in Table 6.

With a grand mean of 15.89, Cottage 2 and Cottage 3 showed the greatest amounts of deviation from the grand mean. Cottage 2 had a mean of 19.63, which revealed a higher consensual perception of the relationship dimension of the treatment environment. Cottage 3 had a mean of 13.67 which indicates a lower consensual perception. Higher scores on the C.I.E.S. Relationship Dimension indicate that the residents perceive a higher degree of involvement, support and open expression within their cottage unit. Lower scores on the C.I.E.S. Relationship Dimension indicate a lesser degree of
Table 5: ANALYSIS OF VARIANCE BY COTTAGE UNIT OF THE CLIENTS' PERCEPTION OF THE RELATIONSHIP DIMENSION OF THE TREATMENT ENVIRONMENT

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariates</td>
<td>43.769</td>
<td>5</td>
<td>8.754</td>
<td>0.583</td>
<td>0.713</td>
</tr>
<tr>
<td>I.Q.</td>
<td>4.261</td>
<td>1</td>
<td>4.261</td>
<td>0.284</td>
<td>0.596</td>
</tr>
<tr>
<td>AGECL</td>
<td>4.707</td>
<td>1</td>
<td>4.707</td>
<td>0.313</td>
<td>0.577</td>
</tr>
<tr>
<td>CLIETIME</td>
<td>12.552</td>
<td>1</td>
<td>12.552</td>
<td>0.836</td>
<td>0.363</td>
</tr>
<tr>
<td>EDCL</td>
<td>4.320</td>
<td>1</td>
<td>4.320</td>
<td>0.288</td>
<td>0.593</td>
</tr>
<tr>
<td>RACECL</td>
<td>16.218</td>
<td>1</td>
<td>16.218</td>
<td>1.080</td>
<td>0.302</td>
</tr>
<tr>
<td>Main Effects</td>
<td>346.640</td>
<td>6</td>
<td>57.773</td>
<td>3.848</td>
<td>0.002</td>
</tr>
<tr>
<td>COTTAGE</td>
<td>346.640</td>
<td>6</td>
<td>57.773</td>
<td>3.848</td>
<td>0.002</td>
</tr>
<tr>
<td>Explained</td>
<td>390.409</td>
<td>11</td>
<td>35.492</td>
<td>2.364</td>
<td>0.013</td>
</tr>
<tr>
<td>Residual</td>
<td>1261.321</td>
<td>84</td>
<td>15.016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1651.730</td>
<td>95</td>
<td>17.387</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 6: MULTIPLE CLASSIFICATION ANALYSIS OF THE CLIENTS' CONSENSUAL PERCEPTIONS OF THE RELATIONSHIP DIMENSION OF THE TREATMENT ENVIRONMENT BY COTTAGE UNIT

GRAND MEAN = 15.89

<table>
<thead>
<tr>
<th>Cottage</th>
<th>N</th>
<th>UNADJUSTED</th>
<th>ADJUSTED FOR DEV'N ETA</th>
<th>ADJUSTED FOR COVARIATES**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cottage 1</td>
<td>13</td>
<td>-0.73</td>
<td></td>
<td>-1.07</td>
</tr>
<tr>
<td>Cottage 2*</td>
<td>16</td>
<td>3.74</td>
<td></td>
<td>4.11</td>
</tr>
<tr>
<td>Cottage 3</td>
<td>15</td>
<td>-2.22</td>
<td></td>
<td>-2.17</td>
</tr>
<tr>
<td>Cottage 4</td>
<td>13</td>
<td>-0.27</td>
<td></td>
<td>-0.15</td>
</tr>
<tr>
<td>Cottage 5*</td>
<td>12</td>
<td>-0.47</td>
<td></td>
<td>0.09</td>
</tr>
<tr>
<td>Cottage 6</td>
<td>13</td>
<td>-0.58</td>
<td></td>
<td>-1.31</td>
</tr>
<tr>
<td>Cottage 7</td>
<td>14</td>
<td>-0.03</td>
<td></td>
<td>-0.10</td>
</tr>
</tbody>
</table>

* Group Counseling Cottages

**Covariates = I.Q., AGEL, CLIETIME, EDCL, RACECL
the aforementioned environmental components. The other cottage unit ratings deviated from the mean by less than one point.

When the effects of the covariates were adjusted for, the deviation of Cottage 2 from the grand mean was even greater. Cottage 3 had an adjusted deviation that was slightly less than the unadjusted deviation. Both cottages retained their relative direction of variance, with Cottage 2 well above the mean and Cottage 3 below.

Cottage 2 and Cottage 5 were the two cottage living units that employ group counseling as the primary treatment mode. When the deviations are adjusted for the effects of the covariates, Cottage 2 and 5 are the only cottages with scores above the mean. The other cottages that employ individual counseling as the primary treatment modality (Cottages 1, 2, 4, 6, and 7) all have mean scores below the grand mean.

Analysis of Program Dimension

The analysis of variance by cottage units of the clients' consensual perceptions of the Program Dimension of the treatment environment is presented in Table 7. The effects of the covariates (I.Q., AGECL, CLIETIME, EDCL, and RACECL) are controlled for by analysis of covariance. With an F of 2.629, the variation between cottage units is significant at the .022 level of confidence. Therefore, the null hypothesis regarding the differences between cottage units on the clients' perceptions of the Program Dimension of the treatment
Table 7: ANALYSIS OF VARIANCE BY COTTAGE UNIT OF THE CLIENTS' PERCEPTION OF THE PROGRAM DIMENSION OF THE TREATMENT ENVIRONMENT

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariates</td>
<td>95.202</td>
<td>5</td>
<td>19.040</td>
<td>1.554</td>
<td>0.182</td>
</tr>
<tr>
<td>I.Q.</td>
<td>0.035</td>
<td>1</td>
<td>0.035</td>
<td>0.003</td>
<td>0.958</td>
</tr>
<tr>
<td>AGECL</td>
<td>0.048</td>
<td>1</td>
<td>0.048</td>
<td>0.004</td>
<td>0.950</td>
</tr>
<tr>
<td>CLTETIME</td>
<td>5.299</td>
<td>1</td>
<td>5.299</td>
<td>0.432</td>
<td>0.513</td>
</tr>
<tr>
<td>EDCL</td>
<td>9.986</td>
<td>1</td>
<td>9.986</td>
<td>0.815</td>
<td>0.369</td>
</tr>
<tr>
<td>RACECL</td>
<td>47.440</td>
<td>1</td>
<td>47.440</td>
<td>3.871</td>
<td>0.052</td>
</tr>
<tr>
<td>Main Effects</td>
<td>193.273</td>
<td>6</td>
<td>32.212</td>
<td>2.629</td>
<td>0.022</td>
</tr>
<tr>
<td>COTTAGE</td>
<td>193.273</td>
<td>6</td>
<td>32.212</td>
<td>2.629</td>
<td>0.022</td>
</tr>
<tr>
<td>Explained</td>
<td>288.475</td>
<td>11</td>
<td>26.225</td>
<td>2.140</td>
<td>0.026</td>
</tr>
<tr>
<td>Residual</td>
<td>1029.350</td>
<td>84</td>
<td>12.254</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1317.825</td>
<td>95</td>
<td>13.872</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
environment is rejected. There are significant differences between cottage units regarding the clients' perceptions of the Program Dimension.

To determine the pattern of consensual ratings for each cottage unit, a multiple classification analysis was performed. This is presented in Table 8.

With a grand mean of 16.21, (see Table 8), Cottage 2 showed the greatest deviation from the grand mean. With a mean of 19.30, Cottage 2 is more than 3 points above the grand mean. Cottage 3 showed the greatest deviation in a negative direction. With a mean of 14.74, Cottage 3 is 1.47 points below the grand mean. The other cottage unit ratings were around the grand mean, with deviations of less than one point. When the effects of the covariates were adjusted for, the deviation of Cottage 2 from the grand mean increased slightly. The ratings of Cottage 5 increased slightly also. Cottage 1 was the only other cottage with adjusted mean ratings above the grand mean, with Cottage 3 and Cottage 6 showing the greatest negative deviation. Again, as in the Multiple Classification Analysis of the Relationship Dimension, the group cottage ratings are above the grand mean. All individual counseling cottages, with the exception of Cottage 1, have mean ratings below the grand mean.

Higher scores on the C.I.E.S. Program Dimension indicate that the residents perceive a higher degree of autonomy, practical orientation and personal problem orientation in the
Table 8: MULTIPLE CLASSIFICATION ANALYSIS OF THE CLIENTS' CONSENSUAL PERCEPTIONS OF THE PROGRAM DIMENSION OF THE TREATMENT ENVIRONMENT BY COTTAGE UNIT

GRAND MEAN = 16.21

<table>
<thead>
<tr>
<th>Cottage</th>
<th>N</th>
<th>Unadjusted</th>
<th>Adjusted for Dev'n ETA</th>
<th>Adjusted for Covariates**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cottage 1</td>
<td>13</td>
<td>0.25</td>
<td>0.12</td>
<td></td>
</tr>
<tr>
<td>Cottage 2*</td>
<td>16</td>
<td>3.04</td>
<td>3.09</td>
<td></td>
</tr>
<tr>
<td>Cottage 3</td>
<td>15</td>
<td>-1.47</td>
<td>-1.39</td>
<td></td>
</tr>
<tr>
<td>Cottage 4</td>
<td>13</td>
<td>-0.90</td>
<td>-0.86</td>
<td></td>
</tr>
<tr>
<td>Cottage 5*</td>
<td>12</td>
<td>0.29</td>
<td>0.43</td>
<td></td>
</tr>
<tr>
<td>Cottage 6</td>
<td>13</td>
<td>-0.75</td>
<td>-1.08</td>
<td></td>
</tr>
<tr>
<td>Cottage 7</td>
<td>14</td>
<td>-0.85</td>
<td>-0.72</td>
<td></td>
</tr>
</tbody>
</table>

* Group Counseling Cottages

**Covariates = I.Q., AGEL, CLIETIME, EDCL, RACECL
treatment environment. Lower scores on the C.I.E.S. Program Dimension indicate a lesser degree of the aforementioned environmental components.

Analysis of System-Maintenance Dimension

The analysis of variance by cottage units of the clients' consensual perceptions of the System-Maintenance dimension of the treatment environment is presented in Table 9. The effect of the covariates (I.Q., AGEL, CLLETIME, EDCL, and RACECL) are controlled for by analysis of covariance. With an F of 2.702, the variation between cottage units is significant at the .019 level of confidence. Therefore the null hypothesis regarding the differences between cottage units on the clients' perceptions of the System-Maintenance dimension of the treatment environment is rejected. There are significant differences between cottage units regarding the clients perceptions of the System-Maintenance Dimension.

To determine the pattern of consensual ratings for each cottage unit, a multiple classification analysis was performed. Again the effects of the covariates were controlled for. The multiple classification analysis is presented in Table 10.

With a grand mean of 18.82, Cottage 4 showed the greatest deviation from the grand mean with 2.44 points (Table 9). Cottages 2 and 3 deviated the least with deviations of .86 and .71 points respectively. Cottages 5 and 6 were about 1.5 points below the mean and Cottages 1 and 7 were approximately
Table 9: ANALYSIS OF VARIANCE BY COTTAGE UNIT OF THE CLIENTS' PERCEPTION OF THE SYSTEM-MAINTENANCE DIMENSION OF THE TREATMENT ENVIRONMENT

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariates</td>
<td>158.417</td>
<td>5</td>
<td>31.683</td>
<td>2.882</td>
<td>0.019</td>
</tr>
<tr>
<td>I.Q.</td>
<td>5.787</td>
<td>1</td>
<td>5.787</td>
<td>0.526</td>
<td>0.470</td>
</tr>
<tr>
<td>AGECL</td>
<td>4.960</td>
<td>1</td>
<td>4.960</td>
<td>0.451</td>
<td>0.504</td>
</tr>
<tr>
<td>CLINETIME</td>
<td>49.600</td>
<td>1</td>
<td>49.600</td>
<td>4.512</td>
<td>0.037</td>
</tr>
<tr>
<td>EDCL</td>
<td>24.227</td>
<td>1</td>
<td>24.227</td>
<td>2.204</td>
<td>0.141</td>
</tr>
<tr>
<td>RACECL</td>
<td>44.121</td>
<td>1</td>
<td>44.121</td>
<td>4.014</td>
<td>0.048</td>
</tr>
<tr>
<td>Main Effects</td>
<td>178.221</td>
<td>6</td>
<td>29.703</td>
<td>2.702</td>
<td>0.019</td>
</tr>
<tr>
<td>COTTAGE</td>
<td>178.221</td>
<td>6</td>
<td>29.703</td>
<td>2.702</td>
<td>0.019</td>
</tr>
<tr>
<td>Explained</td>
<td>336.638</td>
<td>11</td>
<td>30.603</td>
<td>2.784</td>
<td>0.004</td>
</tr>
<tr>
<td>Residual</td>
<td>923.344</td>
<td>84</td>
<td>10.992</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1259.982</td>
<td>95</td>
<td>13.263</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 10: MULTIPLE CLASSIFICATION ANALYSIS OF THE CLIENTS' CONSENSUAL PERCEPTIONS OF THE SYSTEM DIMENSION OF THE TREATMENT ENVIRONMENT BY COTTAGE UNIT

<table>
<thead>
<tr>
<th>Cottage</th>
<th>N</th>
<th>Unadjusted</th>
<th>Adjusted for DEV'N ETA</th>
<th>Adjusted for COVARIATES**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cottage 1</td>
<td>13</td>
<td>1.41</td>
<td></td>
<td>1.59</td>
</tr>
<tr>
<td>Cottage 2*</td>
<td>16</td>
<td>0.86</td>
<td></td>
<td>0.68</td>
</tr>
<tr>
<td>Cottage 3</td>
<td>15</td>
<td>0.71</td>
<td></td>
<td>0.23</td>
</tr>
<tr>
<td>Cottage 4</td>
<td>13</td>
<td>-2.44</td>
<td></td>
<td>-1.85</td>
</tr>
<tr>
<td>Cottage 5*</td>
<td>12</td>
<td>-1.49</td>
<td></td>
<td>-1.54</td>
</tr>
<tr>
<td>Cottage 6</td>
<td>13</td>
<td>-1.28</td>
<td></td>
<td>-1.64</td>
</tr>
<tr>
<td>Cottage 7</td>
<td>14</td>
<td>1.68</td>
<td></td>
<td>2.06</td>
</tr>
</tbody>
</table>

* Group Counseling Cottages

**Covariates = I.Q., AGEL, CLIETIME, EDCL, RACECL
the same amount (1.5) above the mean. When the effects of the
covariates were adjusted for, the deviations changed somewhat,
with Cottage 7 showing the greatest deviation (2.06). The
deviation of Cottage 4 decreased from -2.44 to -1.85. The
other deviations remained relatively stable and in the same
direction.

Higher scores on the C.I.E.S. System-Maintenance
dimension indicate that the residents perceive a higher degree
of order and organization, clarity, and control in the
treatment environment. Lower scores on the C.I.E.S.
System-Maintenance dimension indicate a lesser degree of the
aforementioned environmental components.

On the first two measures of the treatment environment
(Relationship and Program dimension), a common pattern was
noted; i.e., the group counseling cottages scored above the
mean and individual counseling cottages scored below or at the
mean. To assess the significance of this observed pattern, an
analysis of variance according to cottage treatment modality
(labeled COTTYPE) was performed. Again the effects of client
I.Q., age, educational level, race and months of time in
counseling were controlled for by covariant analysis.

The Statistitical Package for the Social Sciences (SPSS)
ANOVA subprogram was used in this analysis. The authors state
that:

ANOVA relies on the general linear hypothesis
approach to analysis of variance, which is
basically a stepwise multiple regression,....
and can cope with unequal cell sizes (Nie, Hull,
Jenkins, Steinbrenner, Bent, 1975, p.398).
This is an important consideration due to the difference in population size for the two groups that are formed according to treatment modality.

The analysis of variance by cottage treatment type \((\text{COTTYPES})\) of the clients' consensual perceptions of the Relationship Dimension of the treatment environment is presented in Table 11. The effect of the covariates are controlled for by analysis of covariance. With an \(F\) of 12.856, the variation between COTTYPES is significant at the .001 level of confidence. There are significant differences between the two COTTYPES regarding the clients' perceptions of the Relationship Dimension of the treatment environment.

To determine the pattern of consensual ratings between COTTYPES, a multiple classification analysis was performed. Again the effects of the covariates were controlled. The multiple classification analysis by COTTYPES of the clients' perceptions of the Relationship Dimension of the treatment environment is presented in Table 12.

With a grand mean of 15.89, the group counseling cottages scored 1.94 points above the grand mean, and the individual counseling cottages averaged .80 of a point below the grand mean. When the effects of the covariates were adjusted for, the mean score of the group cottages increased to 2.55 points above the grand mean. The individual cottages mean increased in a negative direction to -1.05 from the grand mean. Higher scores on the C.I.E.S. Relationship Dimension indicate that
Table 11: ANALYSIS OF VARIANCE OF THE CLIENTS' PERCEPTIONS OF THE RELATIONSHIP DIMENSION OF THE TREATMENT ENVIRONMENT BY COTTAGE TREATMENT TYPE (COTTYPE)

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariates</td>
<td>43.769</td>
<td>5</td>
<td>8.754</td>
<td>0.555</td>
<td>0.735</td>
</tr>
<tr>
<td>I.Q.</td>
<td>4.261</td>
<td>1</td>
<td>4.261</td>
<td>0.270</td>
<td>0.605</td>
</tr>
<tr>
<td>AGECL</td>
<td>4.707</td>
<td>1</td>
<td>4.707</td>
<td>0.298</td>
<td>0.586</td>
</tr>
<tr>
<td>CLIETIME</td>
<td>12.552</td>
<td>1</td>
<td>12.552</td>
<td>0.795</td>
<td>0.375</td>
</tr>
<tr>
<td>EDCL</td>
<td>4.320</td>
<td>1</td>
<td>4.320</td>
<td>0.274</td>
<td>0.602</td>
</tr>
<tr>
<td>RACECL</td>
<td>16.218</td>
<td>1</td>
<td>16.218</td>
<td>1.027</td>
<td>0.314</td>
</tr>
<tr>
<td>Main Effects</td>
<td>202.948</td>
<td>1</td>
<td>202.948</td>
<td>12.856</td>
<td>0.001</td>
</tr>
<tr>
<td>COTTYPE</td>
<td>202.948</td>
<td>1</td>
<td>202.948</td>
<td>12.856</td>
<td>0.001</td>
</tr>
<tr>
<td>Explained</td>
<td>246.717</td>
<td>6</td>
<td>41.120</td>
<td>2.605</td>
<td>0.023</td>
</tr>
<tr>
<td>Residual</td>
<td>1405.013</td>
<td>89</td>
<td>15.787</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1651.730</td>
<td>95</td>
<td>17.387</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 12: MULTIPLE CLASSIFICATION ANALYSIS OF THE CLIENTS' PERCEPTIONS OF THE RELATIONSHIP DIMENSION OF THE TREATMENT ENVIRONMENT BY COTTAGE TREATMENT TYPE (COTTYPE)

GRAND MEAN = 15.89

<table>
<thead>
<tr>
<th>VARIABLE + CATEGORY</th>
<th>N</th>
<th>UNADJUSTED</th>
<th>ADJUSTED FOR DEV'N ETA</th>
<th>COVARIATES**</th>
</tr>
</thead>
<tbody>
<tr>
<td>COTTYPE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 Group</td>
<td>28</td>
<td>1.94</td>
<td>2.55</td>
<td></td>
</tr>
<tr>
<td>1 Individual</td>
<td>68</td>
<td>-0.80</td>
<td>-1.05</td>
<td></td>
</tr>
</tbody>
</table>

**COVARIATES = Client's I.Q., Age, Race, Educational level, and length of time in counseling
residents perceive a higher degree of involvement, support and open expression within their cottage units. Lower scores on the Relationship Dimension indicate a lesser degree of the aforementioned environmental components. The findings imply that the group cottages promote a better perception of the Relationship Dimension (involvement, support, and expressiveness) among the residents involved, as compared to the perceptions of the residents involved in individual counseling cottages.

Analysis of Program Dimension by Cottage Treatment Type:

The analysis of variance by cottage treatment type (COTTYPE) of the clients' consensual perceptions of the Program Dimension of the treatment environment is presented in Table 13. The effect of the covariates are controlled for by analysis of covariance. With an F of 10.549, the variation between COTTYPES is significant at the .002 level of confidence. There are significant differences between the two COTTYPES regarding the clients' perceptions of the Program Dimension of the treatment environment.

To determine the pattern of consensual ratings between COTTYPES, a multiple classification analysis was performed. Again the effects of the covariates were controlled for. The multiple classification analysis by COTTYPE of the clients' perceptions of the Program Dimension of the treatment environment is presented in Table 14.
Table 13: ANALYSIS OF VARIANCE OF THE CLIENTS' PERCEPTIONS OF THE PROGRAM DIMENSION OF THE TREATMENT ENVIRONMENT BY COTTAGE TREATMENT TYPE (COTTYPE)

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariates</td>
<td>95.202</td>
<td>5</td>
<td>19.040</td>
<td>1.550</td>
<td>0.182</td>
</tr>
<tr>
<td>I.Q.</td>
<td>0.035</td>
<td>1</td>
<td>0.035</td>
<td>0.003</td>
<td>0.958</td>
</tr>
<tr>
<td>AGECL</td>
<td>0.048</td>
<td>1</td>
<td>0.048</td>
<td>0.004</td>
<td>0.950</td>
</tr>
<tr>
<td>CLIETIME</td>
<td>5.299</td>
<td>1</td>
<td>5.299</td>
<td>0.431</td>
<td>0.513</td>
</tr>
<tr>
<td>EDCL</td>
<td>9.986</td>
<td>1</td>
<td>9.986</td>
<td>0.813</td>
<td>0.370</td>
</tr>
<tr>
<td>RACECL</td>
<td>47.440</td>
<td>1</td>
<td>47.440</td>
<td>3.863</td>
<td>0.052</td>
</tr>
<tr>
<td>Main Effects</td>
<td>129.558</td>
<td>1</td>
<td>129.558</td>
<td>10.549</td>
<td>0.002</td>
</tr>
<tr>
<td>COTTYPE</td>
<td>129.558</td>
<td>1</td>
<td>129.558</td>
<td>10.549</td>
<td>0.002</td>
</tr>
<tr>
<td>Explained</td>
<td>224.760</td>
<td>6</td>
<td>37.460</td>
<td>3.050</td>
<td>0.009</td>
</tr>
<tr>
<td>Residual</td>
<td>1093.065</td>
<td>89</td>
<td>12.282</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1317.825</td>
<td>95</td>
<td>13.872</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 14: MULTIPLE CLASSIFICATION ANALYSIS OF THE CLIENTS' PERCEPTIONS OF THE PROGRAM DIMENSION OF THE TREATMENT ENVIRONMENT BY COTTAGE TREATMENT TYPE (COTTYPE)

GRAND MEAN = 16.21

<table>
<thead>
<tr>
<th>VARIABLE + CATEGORY</th>
<th>N</th>
<th>UNADJUSTED</th>
<th>ADJUSTED FOR DEV'N ETA</th>
<th>ADJUSTED FOR COVARIATES**</th>
</tr>
</thead>
<tbody>
<tr>
<td>COTTYPE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 Group</td>
<td>28</td>
<td>1.86</td>
<td>2.04</td>
<td></td>
</tr>
<tr>
<td>1 Individual</td>
<td>68</td>
<td>-0.77</td>
<td>-0.84</td>
<td></td>
</tr>
</tbody>
</table>

**COVARIATES = Client's I.Q., Age, Race, Educational level, and length of time in counseling
With a grand mean of 16.21, the group counseling cottages scored 1.86 points above the grand mean, and the individual counseling cottages averaged .77 of a point below the grand mean. When the effects of the covariates were adjusted for, the mean score of the group cottages increased to 2.04 points above the grand mean. The individual cottages mean increased in a negative direction to -0.84 from the grand mean.

Higher scores on the C.I.E.S. Program Dimension indicate that the residents perceive a higher degree of autonomy, practical orientation and personal problem orientation in the treatment environment. Lower scores indicate a lesser degree of the aforementioned environmental components.

Analysis of System-Maintenance Dimension by Cottage Treatment Type:

The analysis of variance by cottage treatment type of the clients' consensual perceptions of the System-Maintenance Dimension of the treatment environment is presented in Table 15. The effect of the covariates are controlled for by analysis of covariance. With an F of .035, the differences between COTTYPES is far from approaching significance. There is no significant difference between COTTYPES regarding the clients' perceptions of the System-Maintenance Dimension of the treatment environment.

Multiple classification analysis of the clients' perceptions of the System-Maintenance Dimension show minute differences between COTTYPES (Table 16).
Table 15: ANALYSIS OF VARIANCE OF THE CLIENTS' PERCEPTIONS OF THE SYSTEM-MAINTENANCE DIMENSION OF THE TREATMENT ENVIRONMENT BY COTTAGE TREATMENT TYPE (COTTYPE)

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariates</td>
<td>158.417</td>
<td>5</td>
<td>31.683</td>
<td>2.561</td>
<td>0.033</td>
</tr>
<tr>
<td>I.Q.</td>
<td>5.787</td>
<td>1</td>
<td>5.787</td>
<td>0.468</td>
<td>0.496</td>
</tr>
<tr>
<td>AGECL</td>
<td>4.960</td>
<td>1</td>
<td>4.960</td>
<td>0.401</td>
<td>0.528</td>
</tr>
<tr>
<td>CLIE TIME</td>
<td>49.600</td>
<td>1</td>
<td>49.600</td>
<td>4.009</td>
<td>0.048</td>
</tr>
<tr>
<td>EDCL</td>
<td>24.227</td>
<td>1</td>
<td>24.227</td>
<td>1.958</td>
<td>0.165</td>
</tr>
<tr>
<td>RACECL</td>
<td>44.121</td>
<td>1</td>
<td>44.121</td>
<td>3.566</td>
<td>0.062</td>
</tr>
<tr>
<td>Main Effects</td>
<td>0.439</td>
<td>1</td>
<td>0.439</td>
<td>0.035</td>
<td>0.851</td>
</tr>
<tr>
<td>COT TYPE</td>
<td>0.439</td>
<td>1</td>
<td>0.439</td>
<td>0.035</td>
<td>0.851</td>
</tr>
<tr>
<td>Explained</td>
<td>158.856</td>
<td>6</td>
<td>26.476</td>
<td>2.140</td>
<td>0.056</td>
</tr>
<tr>
<td>Residual</td>
<td>1101.125</td>
<td>89</td>
<td>12.372</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1259.982</td>
<td>95</td>
<td>13.263</td>
<td></td>
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</tr>
</tbody>
</table>
Table 16: MULTIPLE CLASSIFICATION ANALYSIS OF THE CLIENTS' PERCEPTIONS OF THE SYSTEM-MAINTENANCE DIMENSION OF THE TREATMENT ENVIRONMENT BY COTTAGE TREATMENT TYPE (COTTYPE)

GRAND MEAN = 18.82

<table>
<thead>
<tr>
<th>VARIABLE + CATEGORY</th>
<th>N</th>
<th>UNADJUSTED</th>
<th>ADJUSTED FOR DEV'N ETA</th>
<th>ADJUSTED FOR COVARIATES**</th>
</tr>
</thead>
<tbody>
<tr>
<td>COTTYPE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 Group</td>
<td>28</td>
<td>-0.14</td>
<td>-0.12</td>
<td></td>
</tr>
<tr>
<td>1 Individual</td>
<td>68</td>
<td>0.06</td>
<td>0.05</td>
<td></td>
</tr>
</tbody>
</table>

**COVARIATES = Client's I.Q., Age, Race, Educational level, and length of time in counseling
While the perceptions of the residents regarding the Relationship and Program dimensions differed significantly according to COTTYPE, the clients' perceptions of the degree of clarity, control, order and organization that is measured by the System-Maintenance Dimension, is relatively unaffected by the cottage treatment mode.

Summary

Hypothesis I concerned the relationship between counselor-client similarity and the client's perception of the treatment environment. An initial correlational analysis indicated that the similarity measures of POISE (C.P.I. I), SOCIAL (C.P.I. II), and TOTSIM (C.P.I. Total) were significantly related to the client's perceptions of the Relationship and Program Dimensions of the treatment environment.

Correlational analysis was used to determine whether certain characteristics of the population were related to the independent variable (counselor-client similarity) or dependent variable (client's perception of the treatment environment). The variables that were assessed included the client's age, I.Q., educational level, race, and length of time in counseling. The relationships of the counselor's age and race and the independent and dependent variables were also assessed. The results indicated several significant relationships between these variables and SOCIAL, POISE, TOTSIM, RELATION, and PROGRAM.
Counselor-client similarity on the personality dimension labeled POISE is enhanced when the client is older, at a higher educational level and has been in counseling for a longer period of time. There is greater similarity on POISE also if the counselor is younger.

Counselor-client similarity on the personality dimension labeled SOCIAL is greater when the client is black and has been in counseling longer. There is also greater similarity if the counselor is younger. The client and counselor are more similar on all four scales of the C.P.I. when the counselor is younger and when the client has been in counseling longer.

The client's perception of the Relationship dimension of the treatment environment was higher when her counselor was younger. White clients and those clients at higher educational levels were more apt to view the Program dimension of the treatment environment more favorably.

While these are interesting findings, separate studies of the influence of personality characteristics on counselor-client similarity and the client's perception of the treatment environment are needed before more definite implications can be suggested. These findings did indicate that client and counselor characteristics could be confounding the results of the simple correlation between independent and dependent variables.
Multiple regression analysis was used to control for the effects of the control variables on the dependent variables. Control variables included the client's age, race, I.Q., educational level and length of time in counseling, as well as the counselor's age and race. Once the effects of the control variables were adjusted for, the only significant relationship that remained was between the counselor-client similarity measure labeled SOCIAL, and the client's perception of the Relationship dimension of the treatment environment. This was significant at the .01 level of confidence, yet the amount of variability of RELATION that could be accounted for by SOCIAL was small. Another regression analysis adjusted for the counselor and client control variables plus the initial level of the counselor's score on the C.P.I. Class II (SOCIAL) dimension. When the effects of the counselor's score were adjusted for, the amount of variability in RELATION that was attributable to counselor-client similarity on SOCIAL was no longer significant. The null hypothesis was accepted; i.e., there was no significant relationship between counselor-client similarity and the client's perception of the treatment environment.

Hypothesis II concerned the differences in the clients' consensual ratings of the treatment environment by cottage living units. The null hypothesis II was rejected.
There were significant differences between cottage living units concerning the clients' ratings on all three dimensions of the treatment environment (Relationship, Program, and System-Maintenance).

When analyzing the environmental ratings between cottage units, a pattern was noted. The two cottages who were involved in group counseling scored higher on the Relationship and Program dimensions of the C.I.E.S. than did cottage units using individual counseling. Analysis of variance by cottage treatment type indicated significant differences concerning the Relationship and Program dimensions between the consensual ratings of clients involved in group counseling and those involved in individual counseling. These results indicate that the group counseling clients have a better perception of the Relationship dimension (involvement, support, and expressiveness) and the Program dimension (autonomy, personal problem, and practical orientation) of the treatment environment when compared with clients in individual counseling cottages.
CHAPTER 5

Summary, Discussion of Results, and Conclusions

Recent research efforts in the helping professions of counseling and psychotherapy have focused on the components of the counseling relationship that relate to counseling effectiveness and increased post-treatment success. The present study contributed to the knowledge concerning the elements of the counseling relationship that relate to therapeutic effectiveness. The study investigated a sparsely researched population: institutionalized female delinquents and the counselors who work with these girls.

Previous research indicated that matching the counselor and client according to personality, cognitive similarity, and conceptual level resulted in better treatment outcome. Certain characteristics of the counselor, such as empathy, warmth, and genuineness have also been identified in the literature as contributing to successful treatment outcome. For institutionalized delinquent populations, the client's positive perception of the treatment environment is also related to behavioral and psychological improvement and to post-release success.

The present study investigated two of the variables that have been identified in the literature as components of counseling effectiveness: counselor-client similarity and the client's perception of the treatment environment. While many studies in counseling and psychotherapy have focused on
personality variables, few have looked at environmental variables. This study is unique in that it investigated the dynamic interaction of personality variables and environmental variables.

Summary

The study investigated the relationship between counselor-client similarity and the client's perception of the treatment environment. All girls residing at a state institution for delinquent females were included in the study. All of the counseling staff at this state facility also participated in the study.

Similarity of counselor and client was based on personality measures of the California Psychological Inventory. Dyadic similarity between counselor and client was based on the concept of frequency matching in the aggregate sense of a total score. The degree of similarity was assessed by taking the absolute difference between the counselor's score and client's score on the four scales of the C.P.I.

The client's perception of the treatment environment was based on the Correctional Institutions Environment Scale. The C.I.E.S. is divided into three major dimensions of the treatment environment: Relationship Dimension, Program Dimension, and System-Maintenance Dimension. Analysis of the client's perception of the treatment environment was based on these three dimensions. Both the C.P.I. and the C.I.E.S. are self-report instruments and were administered to both the counselors and their clients.
This study was organized around two major hypotheses. The first concerned the relationship between counselor-client similarity and the client's perception of the treatment environment. After controlling for the effects of the client's age, race, I.Q., length of time in counseling, and educational level, and the counselor's age, race, and score on the C.P.I., there was no significant relationship between counselor-client similarity and the client's perception of the treatment environment.

The second hypothesis looked at the differences in the consensual perceptions of clients. The differences were analyzed between cottage unit groups and between treatment modes (individual counseling and group counseling). The results indicated significant differences in the clients' consensual perceptions between cottage units. Multiple classification analysis of the pattern of differences in the consensual ratings of the cottage units revealed a trend of group counseling cottages having higher scores on the Relationship and Program dimensions, as compared to individual counseling cottages. Analysis of variance of the differences between cottage treatment types indicated significant differences between group and individual counseling cottages. The group counseling cottages had significantly higher ratings on the Relationship and Program dimensions of the treatment environment.
Discussion

The findings of the present study have interesting implications for counselors and particularly for treatment personnel working with delinquent offenders. The findings pertaining to Hypothesis I indicated that when the effects of the control variables (client age, race, I.Q., educational level, length of time in counseling, and counselor's age, race, and C.P.I. score) were adjusted for by multiple regression analysis, there was no significant relationship between counselor-client similarity and the client's perception of the treatment environment.

The findings pertaining to Hypothesis II indicated significant differences between cottage units regarding the clients' perceptions of the Relationship, Program, and System-Maintenance Dimensions of their cottage treatment environment. The fact of perceptual differences in the psychological environments of the units has many implications and raises many unanswered questions.

Research findings have indicated that positive perceptions of the treatment environment relate to successful treatment outcome, improved psychological and behavioral indices, greater satisfaction and less hostility. The identification of units with high scores may provide important information for improving the overall treatment environment of
the institution. Future research is needed to delineate the elements (personality of unit staff, treatment philosophy, resident personality type, etc.) that contribute to a higher consensual score in some cottages as opposed to others. With more information about the elements that increase the positive perception of the treatment environment, training may be implemented that will aid staff members in developing the qualities that promote a more positive perception of the treatment environment.

More studies are needed to determine the differential effects of the treatment environments on post-release outcome. Do girls in cottages that rate higher on environmental perceptions have better success rates? Also, studies of the relationships between environmental ratings and dependent variables such as abscondance rates, discharge rates, re-admission rates, frequency of aggressive behavior, etc., could provide much needed information that could lead to the establishment of more ideal environments within juvenile institutions.

Perhaps delinquent types need different psychological environments in order to achieve maximum benefit from treatment. This study implies that the residents' perceptions of their units vary. If these unit environments can be classified according to psychological similarity, and the
impact on treatment outcome predicted based on type of client and type of environment, a more objective means of assigning and transferring delinquents may be forthcoming.

More research is needed to delineate the elements that comprise the environmental "press" of the units. This research may provide some vital "missing links" in the treatment of delinquent offenders. The implications of the interaction between environmental press, personality factors, and treatment outcome could have profound impact on the correctional rehabilitation of delinquent offenders.

A pattern of high and low scores associated with treatment type prompted an investigation of the association of treatment mode on the clients' perception of the treatment environment. An analysis of variance revealed that there were significant differences in the clients' perceptual ratings between the group counseling cottages and the individual counseling cottages. Group counseling cottages showed significantly higher scores on the Relationship and Program Dimensions of the treatment environment. Higher scores on the Relationship Dimension indicate that the residents perceive a higher degree of involvement, support and open expression within their cottage unit. Higher scores on the Treatment Program Dimension indicate that the residents perceive a higher degree of autonomy, and emphasis on personal problem areas as well as a practical orientation.
The higher scores of clients involved in group counseling prompts questions regarding the reasons for these differences. Were those assigned to the group counseling cottages different from those assigned to the individual cottages? With the effects of the client's race, age, educational level, I.Q., and length of time in counseling controlled for with analysis of covariance, the differences between group counseling clients and individual counseling clients remained highly significant.

The highly significant differences between the environmental ratings of individual counseling clients and group counseling clients leads one to question the qualities of the group treatment mode that may contribute to the higher ratings. Group counseling has the advantage of exposing the residents to the problems and perceptions of other peers within the group. With the leadership of a competent group counselor, the learning from others that occurs within the group counseling setting can have a positive effect on the girl's perception of reality. A counseling group emphasizes that group members help each other. It is reasonable to assume that these helping responsibilities might result in higher degree of involvement, support and expressiveness (as measured by the C.I.E.S. Relationship Dimension). The sense of belongingness that is promoted in a counseling group and
the feelings of worth that one realizes when they are able to help others, may have positive consequences on the self-esteem of group members.

Jesness (1975) studied the impact of treatment modality on the clients' perception of the treatment environment. With institutionalized delinquent boys, he found that the environmental ratings of those residents in a transactional analysis program was significantly higher than the ratings of residents in a behavior modification program. The results of this study further strengthen the implication that various treatment modes differentially affect the client's perception of the treatment environment.

The findings regarding Hypothesis II have some important practical applications for juvenile correctional institutions. We know that certain cottages promote a significantly better perception of the treatment environment. Further study is needed to delineate the elements that contribute to more positive perceptions. Counselors especially need to conduct more research aimed at delineating factors which contribute to higher scores on the Relationship and Treatment Program dimensions. These two dimensions are particularly relevant to the therapeutic climate of the treatment environment. Information from such research could be instrumental in establishing a more "ideal" treatment mileau that could increase the effectiveness of counseling.
Further research of the "environmental press" of cottage units could also lead to a more objective means of classifying the perceptual impact of the units on different types of clients. We know that perceptual differences occur on an individual basis, and also on a consensual basis. The fact that there are significant differences in the consensual perceptions among the cottage units implies that there are common perceptions regarding a unit environment that differentiate them from other units. If these environments can be classified, then their effect on different types of delinquents can be studied.

Conclusions

The major thrust of the present study concerned the relationship between counselor-client similarity and the client's perception of the treatment environment. The findings lead to the conclusion that counselor-client similarity is not significantly related to the client's perception of the treatment environment.

The findings also indicated that there were significant differences between cottage units regarding the clients' consensual perceptions of the treatment environment. This finding leads to the conclusion that there are common perceptions regarding a unit environment that differentiate it from other units. This information could be useful in classifying units according to types and examining the effects of different environments on different types of clients. This could lead to a systematic manner of assigning residents to more congenial treatment units.
An analysis of the differences of environmental ratings between the clients engaged in group counseling and other clients involved in individual counseling revealed that group counseling clients had significantly higher ratings of the Relationship and Program dimensions of the treatment environment. This finding leads to the conclusion that inherent characteristics of the group counseling mode of treatment account for higher perceptual ratings of the degree of support, involvement and expressiveness in the treatment environment. Also the emphasis on autonomy, personal problems, and practical orientation is enhanced by the group counseling mode of treatment.

Recommendations

It is recommended that consideration be given to expansion of the group counseling mode of treatment due to the significantly better perceptions of the treatment environment among group counseling clients.

There are many areas that need further refinement and several questions that have been raised by the results of this study. Recommendations for future research include the following:

1. Studies of the relationships of demographic variables and counselor-client similarity measures
may help in determining which elements affect similarity.

2. Studies of the relationships of demographic variables and the client's perceptions of the treatment environment would indicate which variables independently affect the client's perception of the treatment environment.

3. Measures of pre-treatment personality traits of the client should be compared with time-series or post-treatment measures of changes in personality characteristics. Such a study would help to identify the relative influence of identification with the counselor on counselor-client similarity.

4. Follow-up studies are needed to determine the relationship of environmental perceptions (individual as well as consensual perceptions) of the treatment environment and actual post-release outcome.

5. A study of the relationship of treatment modality and the client's postrelease outcome is also recommended.

6. Studies of the relationship between environmental ratings and dependent variables such as abscondance rates, discharge rates, re-admission rates, frequency of aggressive behavior, etc., could
provide much needed information that could lead to the establishment of more therapeutic environments within juvenile institutions.

The results of this study have exciting and practical implications for the field of delinquency treatment. The classification of "environmental press" within cottage units, and the impact of treatment mode on the client's perception of the treatment environment are major directions for future research that are suggested by the results of this study.
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Lipkin, S. Clients' Feelings and Attitudes in Relation to the Outcome of Client-Centered Therapy. Psychological Monographs, 1954, 1, 68.


APPENDICES

112
APPENDIX A: CHART OF CLIENTS' AGES

Actual Frequency

12 13 14 15 16 17 18 19
0 7 16 25 29 14 5 0
APPENDIX B: CHART OF I.Q. SCORES OF CLIENT POPULATION

Range: 54 - 127
Mean: 96.16 Mode: 100
Standard Deviation: 14.5
### APPENDIX C: EDUCATIONAL LEVELS OF CLIENT POPULATION

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<thead>
<tr>
<th>Clients Educational Level</th>
<th>Absolute Frequency</th>
<th>Relative Frequency</th>
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<tbody>
<tr>
<td>1. Special Education</td>
<td>5</td>
<td>5.2%</td>
</tr>
<tr>
<td>2. Educably Mentally Retarded Classes</td>
<td>2</td>
<td>2.1%</td>
</tr>
<tr>
<td>3. Grade 6</td>
<td>7</td>
<td>7.3%</td>
</tr>
<tr>
<td>4. Grade 7</td>
<td>25</td>
<td>26.0%</td>
</tr>
<tr>
<td>5. Grade 8</td>
<td>26</td>
<td>27.1%</td>
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<tr>
<td>6. Grade 9</td>
<td>20</td>
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<tr>
<td>7. Grade 10</td>
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<td>8.3%</td>
</tr>
<tr>
<td>8. Grade 11</td>
<td>1</td>
<td>1.0%</td>
</tr>
<tr>
<td>9. Grade 12</td>
<td>2</td>
<td>2.1%</td>
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</table>
## APPENDIX D: AGE RANGE OF COUNSELOR POPULATION

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<th>Counselor's Age</th>
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<tbody>
<tr>
<td>1. 24 years</td>
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<td>2. 25 years</td>
<td>2</td>
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<tr>
<td>3. 26 years</td>
<td>1</td>
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<tr>
<td>4. 29 years</td>
<td>1</td>
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<tr>
<td>5. 30 years</td>
<td>2</td>
</tr>
<tr>
<td>6. 38 years</td>
<td>1</td>
</tr>
<tr>
<td>7. 42 years</td>
<td>1</td>
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# APPENDIX E: LENGTH OF COUNSELING EXPERIENCE

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<th>Counselor</th>
<th>Length of Counseling Experience (in months)</th>
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<td>Counselor 2</td>
<td>24</td>
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<tr>
<td>Counselor 3</td>
<td>29</td>
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<td>Counselor 4</td>
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<td>Counselor 7</td>
<td>36</td>
</tr>
<tr>
<td>Counselor 8</td>
<td>72</td>
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<tr>
<td>Counselor 9</td>
<td>228</td>
</tr>
</tbody>
</table>
APPENDIX F: COUNSELOR-CLIENT SIMILARITY MEASURE ON CLASS I DIMENSION OF THE C. P. I. (POISE)

Number of Cases = 96

Mean = 46.250

Mode = 22.000

Median = 44.500

Range = 87

Minimum absolute difference = 13
Maximum absolute difference = 100

Standard Deviation = 18.881
APPENDIX G:  COUNSELOR-CLIENT SIMILARITY MEASURE ON CLASS II DIMENSION OF THE C. P. I. (SOCIAL)

Number of Cases = 96

Mean = 65.406

Mode = 59.00

Median = 60.00

Range = 100

Minimum absolute difference = 22

Maximum absolute difference = 122

Standard Deviation = 23.785
APPENDIX H: COUNSELOR-CLIENT SIMILARITY MEASURE ON CLASS III DIMENSION OF THE C. P. I. (ACHIEVE)

Number of Cases = 96

Mean = 34.708

Median = 32.750

Mode = 25.000

Range = 70

Minimum absolute difference = 6

Maximum absolute difference = 76

Standard Deviation = 15.221
APPENDIX I: COUNSELOR-CLIENT SIMILARITY MEASURE ON CLASS IV DIMENSION OF THE C. P. I. (SMART)

Number of Cases = 96

Mean = 13.438

Median = 12.278

Mode = 11.000

Range = 26

Minimum absolute difference = 2

Maximum absolute difference = 28

Standard Deviation = 5.599
APPENDIX J: TOTAL INDEX OF SIMILARITY BETWEEN COUNSELOR AND CLIENT ON ALL EIGHTEEN SUBSCALES OF THE C. P. I. (TOTSIM)

Number of Cases = 96

Mean = 159.802

Median = 151.167

Mode = 121.000

Range = 205.000

Minimum absolute difference = 72.000

Maximum absolute difference = 277.000

Standard Deviation = 50.474
The three page vita has been removed from the scanned document. Page 1 of 3
The three page vita has been removed from the scanned document. Page 2 of 3
The three page vita has been removed from the scanned document. Page 3 of 3
COUNSELOR-CLIENT SIMILARITY AND THE CLIENT'S PERCEPTION OF THE TREATMENT ENVIRONMENT

by

Donna Boone Towberman

(ABSTRACT)

Similarity between counselor and client has been identified by research as a component of successful treatment outcome. The client's positive perception of the treatment milieu has also been found to have a positive relationship with post-treatment success. The present study focused on the dynamic relationship between counselor-client similarity and the client's perception of the treatment environment. The subjects were residents and the counseling staff at a state institution for delinquent female offenders.

Counselor-client similarity was assessed by the California Psychological Inventory (C.P.I.). Similarity was based on the differences between counselor and client scores on the four classes of personality assessment of the C.P.I. The client's perception of the treatment environment was measured by the Correctional Institutions Environment Scale (C.I.E.S.). This instrument measures the client's perceptions of the treatment program, the degree of interpersonal relationships, and the emphasis on institutional order and control within the correctional
environment.

The institution had nine separate cottage living units. One counselor was assigned to each cottage. While the overall treatment philosophy was behavioral, there were two modes of treatment: individual counseling and group counseling.

In addition to the major question regarding counselor-client similarity and the client's perception of the treatment environment, the study investigated the differences in the clients' consensual ratings of the treatment environments in the different cottage living units. The differences between the clients' consensual ratings in the two treatment modes were also analyzed.

The control variables of the client's age, race, educational level, I.Q., length of time in counseling, and the counselor's age, race, and score on the C.P.I. were adjusted for with multiple regression analysis. Findings indicated no significant relationship between counselor-client similarity and the client's perception of the treatment environment.

Significant differences were found between the cottage units regarding the clients' consensual perceptions of their treatment environments. Significant differences were also found between the consensual perceptions of
clients involved in group counseling and those in individual counseling, with group counseling clients giving higher ratings of their treatment environment.