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ABSTRACT

JOB EFFECTIVENESS AND PERSONAL ATTRIBUTES
OF MENTAL HEALTH PARAPROFESSIONALS

By
Donna Jean Small

Many residential treatment authorities have depicted mental health paraprofessionals (MHPs), who have direct contact with patients throughout their working hours, as crucial to successful treatment. However, little research attention has been given to MHPs' effectiveness or personal characteristics. This study concerned MHPs' effectiveness, as perceived by their professional supervisors (psychiatrists, psychologists, and social workers), patients, peers, and self-reports. It also explored the linkages of effectiveness indicators with dimensions of interpersonal behavior which have previously been found salient to interpersonal relationships in general, and to helping relationships in particular. Included among these interpersonal variables were measures of: acceptance-rejection of others (ARO), acceptance-rejection of self (SAR), self-disclosure, TAT pathogenesis, number of personal problems acknowledged, like-disliked ratings, and an "I'm OK, You're OK" questionnaire.

This study focused on 43 MHPs, mostly BA degree holders and averaging 24 years of age, employed in residential treatment units for adolescents in a prominent private

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facility. Seven additional MHPs on these units who declined to contribute to some phase(s) of the study averaged less favorable scores than the participants on 17 of 18 different ratings by others. Each MHP's effectiveness was rated by the professional unit supervisor, by four of the "most improved" patients in that unit, by several (mean = 5) unit co-workers, and by self. All four sources (supervisors, patients, peers, and self) made ARO and SAR ratings of each MHP. Self-disclosure ratings were provided by peers and self. Pathogenesis scores were derived from judges' ratings, using an empirical scoring system, of Thematic Apperception Test stories written by MHPs. Mooney Problem Check List responses served as a measure of acknowledged personal problems.

Analyses of seventeen work effectiveness items yielded two distinct four-item clusters which were named Knowledge and Skills (KS) and Role Commitment (RC). In the data from supervisors, co-workers, and self, KS and RC scores correlated only moderately, but they correlated highly (.90) for patients. Across sources there was much consensus about the KS and RC effectiveness ratings, although this was stronger for the KS than RC cluster --perhaps because the KS items had clearer behavioral referents.

Multiple regression analyses and other intercorrelations between all effectiveness indicators and personality measures demonstrated that effectiveness related importantly

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with ARO and SAR, but only when ARO and SAR were not self-reported. Personality self-reports failed to predict effectiveness, except in the dubious case of self-rated effectiveness. Although moderately intercorrelated, peer-rated SAR and job longevity vied to best predict KS effectiveness as perceived by both peers and supervisors. Together, longevity and peer-rated SAR predicted over 56% of the variance in KS effectiveness by either source. The situation was foggier for RC effectiveness. Supervisors' RC ratings were best predicted by supervisors' ARO, followed by supervisors' Liking. Peers' RC effectiveness was best predicted by peers' Liking, patients' SAR, and peers' ARO. Over 50% of the variance in RC effectiveness was wholly predictable from personality measures, as job longevity did not contribute to predicting Role Commitment. Self-disclosure ratings by peers did not appreciably add to the multiple regression prediction of effectiveness. TAT pathogenesis scores, scores on the "I'm OK, You're OK" questionnaire, and number of personal problems failed to correlate significantly with any measure of job effectiveness. However, a qualitative analysis of written additions to Mooney Problem Check List responses suggested that more effective MHPs were more likely than others to claim acceptance of responsibility for personal problems which they were actively trying to resolve.

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Patients showed a unique and curious tendency to favorably rate MHPs who scored as more pathogenic on the TAT and who acknowledged more personal problems. Patients were also unable to differentiate between the KS and RC components of MHPs' effectiveness. These response patterns differed sharply from those of the MHPs and supervisors. On the reasonable assumption that MHPs and supervisors were less maladjusted than the patients, it appears that both groups tended to value persons more like themselves. If confirmed by new studies, this observation would limit confidence in patients' perceptions, contingent upon their degree of disability.

In summary, this study identified two distinctive facets of the effectiveness of mental health paraprofessionals--knowledge and skills versus role commitment--and confirmed the expectation that measures of ARO and SAR would link positively with job effectiveness. Several issues deserving further study were also noted.

JOB EFFECTIVENESS AND PERSONAL ATTRIBUTES
OF MENTAL HEALTH PARAPROFESSIONALS

By

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INTRODUCTION

In a residential treatment program, the Mental Health Paraprofessional (MHP), the worker who is with the patients in their daily activities, plays a major role. In addition to providing physical care and supervision, the MHP becomes actively involved in developing and carrying out treatment recommendations. The relationship between the MHP and the patient is an important therapeutic tool. Within the treatment setting, some MHPs are considered by their co-workers, their patients, and their professional supervisors, to have a beneficial effect, a few are seen as having a negative effect, and most are seen somewhere in the middle of this continuum. What factors contribute to these differences in perception? Some research has been done, though very little, in dealing with the specific question of relating personality variables to job effectiveness of MHPs in residential treatment. Research relating to other types of mental health paraprofessionals may also apply.

There is a growing volume of research that indicates the importance of the variables, acceptance of self, acceptance of others, and self-disclosure, as important in helping relationships. These variables have been examined in parent-child relationships, psychotherapy

relationships, and T-group outcomes. They have not been used specifically to study the effectiveness of MHPs; they are used in this study because of their broad applicability in other helping relationships.

The purpose of this study is to develop theoretical information about the kinds of behavior that is helpful to MHPs, by examining variables that have been found to be important to other helping persons. The variables, acceptance of self, acceptance of others, and self-disclosure, are studied in relation to perceived job effectiveness of MHPs. A measure of pathogenesis, another variable that has been found to be usefully studied in a variety of relationships, will also be used. Another variable, the reporting of personal problems, is included because it has been described as important in the performance of MHPs. Hopefully, in addition to theoretical information, the results will be useful in selecting potential MHPs, and in providing some guidelines in the training of MHPs, by pointing out some areas of personality and interpersonal behavior that may be useful to develop.

REVIEW OF THE LITERATURE

Role of the Mental Health Paraprofessional

The role of the MHP (often called "Mental Health Worker," "Child Care Worker," or "Counselor") in residential treatment varies much from institution to institution. For example, in some, the MHP is the primary therapist for the patient, while in others, his function is primarily as a supervisor of daily activities. Therefore, generalizations are difficult to make. However, over the last several years, there has been a growing realization that MHPs hold a very important position (some say the most important position) in the treatment of the child. (Diggles, 1970; Maier, 1971; Portnoy, Biller, and Davids, 1972; Schwartz, 1968; Trieschman, Whittaker, and Brendtro, 1969; and Whittaker and Trieschman, 1972).

This represents a shift since Lourie and Schulman (1952) described two different viewpoints regarding the function of the residential staff. The first involved a situation where the living group was seen as an adjunctive therapeutic aid, rather than a central part of treatment, i.e., the residential staff was seen as secondary to the individual therapist, and its function was to provide an environment that was benevolent. However, staff members were not to deal directly with the children's problems.

The second viewpoint placed emphasis on the concept of group milieu treatment, using the residential staff to directly handle the children's conflicts and distortions therapeutically, as they appeared in daily living. Most residential treatment centers were of the first type in the 1950's (Lourie and Schulman, 1952).

This emphasis has shifted, and many experts in residential treatment have pointed out the importance of the milieu, and of MHPs as therapeutic agents. MHPs are with the patients for long periods of time, and have an opportunity to provide therapeutic help in the context of a relationship with them.

For example, Trieschman, Whittaker, and Brendtro (1969), believe that the major difficulty in children who need residential treatment is in their development of appropriate relationships with adults; they have become unresponsive to social reinforcers, and have rejected adult role models. The job of the MHP is to establish a relationship with the child; by "establishing a relationship," the authors mean that the MHPs increase the child's communication with him, increase the child's responsiveness to social reinforcers provided by him, and increase the child's tendency to model his behavior. These aspects of the relationship facilitate, respectively, the child's ability to utilize insight learning, reward and punishment learning, and identification-imitation learning.

Holmes (1971) emphasizes the importance of the relationship between worker and patient, stating that the effective psychiatric nurse deals with the patient on a person-to-person level, expressing herself authentically. The skills required are, she says, "that she be able to (a) help the patient accept and appreciate his own inner experiences, which means that she has to be able to tolerate sharing in some of these experiences, and (b) meet the patient in real encounter" (p.99).

Konopka, Kamps, and Wallinga (1961), in writing about a group home setting that evolved into an intensive treatment program, related that the staff became more involved in the treatment program, both with the children and with each other. This led to strong counter-transference feelings and acute anxiety reactions in some staff members; those who were unwilling or unable to cope with this left, but the more effective workers stayed and dealt with the relationships as they developed. Open communication and mutual respect were stressed, as was criticism given and received in the spirit of improving the total treatment program.

The need for emotional involvement between MHPs and children is also stressed by Maier, Hilgeman, Shugart, and Loomis (1955). They state that the worker must feel free to use himself in emotional interaction with the children, and that this involvement is related to self-examination and concern for one's own attitudes, feelings, responses, and problems. They have found that over one-half of the

MHPs discuss their own personal problems with their supervisors, and that they sometimes enter psychotherapy themselves. Their intense relationships with the children and the climate of the psychiatric setting makes it necessary for them to face their own conflicts as they arise in their work.

At the Orthogenic School, the MHPs are the therapists for the children; they are supervised by mental health professionals, but the children do not have any other therapist than the MHPs who are with them on the residence. Much emphasis is put on the MHP's relationships with the children and on his own personal development. It is believed that an important part of becoming a MHP is "to recognize in ourselves those existential experiences that match theirs... To become a Child-Care Worker means first and foremost to become oneself because only then can one become a self to others" (Bettelheim, 1966, p.705). A major task of the supervisor is to help the MHP develop deeper insights into himself, trusting that these insights will benefit both the worker and the children with whom he works. Effective MHPs are seen as young adults who themselves are experiencing a need for emotional and intellectual growth.

"It is his own need for achieving integration, his conviction that through his experiences at the school he will achieve it, that permits the worker to dedicate himself to the children under his care, to create that emotional closeness and unique empathy with the child that will set going again the process of development that broke down in the child's early years" (Bettelheim and Wright, 1955, p. 707).

The Orthogenic School was intensively studied by an anthropologist for over a year, using direct observation of children and MHPs, case records, informal conversations, and a record of daily life at the school (Henry, 1957). Henry concluded that MHPs, as well as the children in their care, are seeking self-understanding, and that this is a main incentive for their work.

"No counselor who does not wish to create a new Self, who is unprepared to solve her own emotional problems, and no one who is unable to take the sick child as a focus for her own development, finds it possible to endure at the School.

In this respect, he pointed out some parallels between the children's and the staff's development: three years is the average length of stay for the children, and three years is also the approximate length of time it takes for MHPs to achieve a "feeling of relative assurance in task performance"; also, six or seven years is the maximum length of stay for the children, and this is also the maximum length of employment for MHPs, in general.

Thus, these narrative accounts of the role of the MHP have stressed the importance of the worker's relationship with the child. Aspects of this relationship include open communication on a person-to-person basis, the sharing of experiences on a feeling level, and the worker serving as a role model. The ongoing personal development and self exploration of the worker is seen as important in his work with the child.

Research on MHPs

There is a marked paucity of research in the area of MHP effectiveness. One of the few studies that has been done establishes MHPs as effective role models. Portnoy (1973) asked children in residential treatment to perform a task after watching models perform the same task. Some models were presented as people who would be Child Care Workers at the institution, some as people who would be therapists, and some as visitors (neutral figures). They found that the Child Care Worker figures were more effective models than the neutral figures, the therapist figures were also more effective models than the neutral figures, and the Child Care Worker figures were more effective models than the therapist figures, when the two were directly compared. Portnoy concluded that "the Child Care Worker, by the nature of his role, is an extremely influential figure for children in residential treatment" (p. 19).

In a study of job effectiveness of MHPs at The Oaks in 1973, Sturman found few correlations between scores on the 16 PF and ratings of job effectiveness. Out of 128 possible correlations, only four were significant at the .05 level. Ratings for Individual Counseling Skills were slightly related to a tendency to be affected by feelings, rather than emotionally stable. Ratings for Group Counseling Skills were related to assertiveness and to being imaginative and non-conforming; Group Counseling Skills were also slightly related to a tendency to be reserved rather than

outgoing. There were no significant correlations between the 16 PF and the job rating categories of General Employability, Ability to Function on a Team, Milieu Counseling Skills, Administrative Skills, Personal Growth, or the Total Rating. It appears that the 16 PF has limited application for the purpose of studying MHP effectiveness. The results that indicate a positive relationship between job effectiveness and tendencies to be emotionally unstable and reserved were thought to be due to the fact that MHPs could be more effective if they had had some experience with what the patients were going through.

Davids, Laffey, and Cardin (1969) obtained some related findings in their study of MHPs at Bradley Hospital in Rhode Island. They found that workers who obtained the highest ratings from their supervisors in job effectiveness, rated themselves higher on alienation traits and lower on affiliation traits. The authors conclude that these results

"might indicate insight or lack of defensiveness on the workers' part... or, it might be that a certain degree of personal and social maladjustment, as indicated in these self-ratings, is desirable for working well with emotionally disturbed children" (p. 76).

In sum, research has supported the notion of MHPs as effective role models. Further, effective MHPs tend to describe themselves as slightly emotionally unstable, reserved, and alienated, as well as aggressive, imaginative, and non-conforming. These results are fairly consistent with narrative accounts of the role of the MHP. Both emphasize his/her function as a role model. The findings on

alienation traits and emotional instability seem consistent with descriptions of the effective MHP as a person in touch with his/her own problems and in search of his/her own answers.

Research on Interpersonal Behavior

Because there has been so little research done specifically on MHPs, studies relating more generally to interpersonal behavior and to other kinds of helping persons were examined. Since MHPs are also helping persons in the interpersonal realm, it is reasonable to expect that some variables that have been found to be important to other kinds of relationships, especially helping relationships, will also be important to MHPs.

Evidence from several diverse areas of study, including psychotherapy, child development, encounter groups, and psychiatric patients, indicates that there are two important factors of interpersonal behavior that show up repeatedly. These factors have been given different labels by different researchers, but basically they refer to self-acceptance-rejection (SAR) and acceptance-rejection of others (ARO) (J.R. Hurley, 1976c). These dimensions have been found to be independent of each other, and can be represented by two orthogonal axes that separate all interpersonal behavior into four quadrants that correspond to the positions, I am OK, you are OK; I am OK, you are not OK; I am not OK, you are OK; and I am not OK, you are not OK. These positions have been popularized in Harris' (1967) best-selling book.

J.R. Hurley (1976b) has cited research that supports these dimensions in the diverse areas of general personality descriptions, behavior in group settings, family relationships, and psychopathology and psychotherapy. Both of these dimensions are important to mental health and well-being (J.R. Hurley, 1976b); in fact, the product of SAR and ARO has been used as a measure of social competence (Hurley and Force, 1971). The dimensions SAR and ARO have proved useful for research in many areas.

For example, Bierman (1969), who refers to these dimensions as acceptance-rejection and active-passive, reports on studies of the psychotherapy relationship. It has been demonstrated that therapist positive regard (corresponding with ARO) is positively related to client outcome. Therapist activeness (corresponding with SAR) has many effects on the client. For example, therapist activeness has been shown to be positively correlated with client activeness. This is true for both quantitative measures of activeness (frequency and length of utterances), and for qualitative aspects of activeness, in terms of deepening self exploration and insight. Therapists who take an active part in structuring the interview by letting the client know what to expect, following up client leads, and probing specific areas, rather than passively accepting anything the client brings up, being ambiguous, and providing few clues to guide the client, tend to make clients feel less anxious and more satisfied with the therapy relationship. Therapists

who are active in the quantitative sense (talking more frequently and longer) also tend to be active in the qualitative sense (provide some structure in the interview); therapists also tend to have a fairly constant level of activity, across various clients. Therapist passiveness tends to lead to more broken appointments, complaints about the therapy relationship, and premature termination. Active therapists tend to have better client attendance, more desirable process behavior in clients, and more favorable outcomes. This relationship breaks down if the activeness goes to controlling, dominating behavior that permits little freedom of response in the client; this interaction of the two dimensions, self-acceptance and other-rejection, does not produce positive results. Confrontation leads to increased client self-exploration only if it is done in the context of empathy and positive regard.

Bierman (1969) points out that attending-empathic-understanding behavior appears to be related to the positive aspects of both dimensions, acceptance and activity. Accurate empathy of the therapist has been shown to facilitate productive process behavior on the part of the client, as well as improved life functioning at termination. Therapist genuineness or transparency produces greater transparency or self-exploration in the client; this is thought to be facilitated because the therapist removes ambiguity and provides a model for the client. When therapists are low on the dimensions of acceptance and activity,

clients have been found to get worse.

Bierman also reports some findings from the field of child development, and concludes that

"conditions of active engagement in the context of positive regard and accurate empathic understanding are optimal for personal development and well-being. The consistency of effects of therapist-offered conditions with the effects of parent- and teacher-offered conditions lends support to the generality of the two-dimensional model" (p.348).

Support for the generality of this model also comes in a report of several empirical studies of maternal behavior; Shaefer (1959) demonstrated that many existing concepts of maternal behavior could be ordered within a two dimensional space. Only molar social and emotional interactions were used, since the important factor in personality development is the total pattern of a child's experience, rather than specific practices. He developed a circumplex order of maternal behavior; this is a circular order than can be portrayed by a two dimensional diagram with two axes, both of which correlate highly with other variables within the matrix, but which have zero or low correlations with each other. The axes in this study were labeled love-hostility (corresponding to ARO) and autonomy-control (corresponding to SAR).

Similar dimensions were also obtained by Lorr, Bishop, and McNair (1965), who used currently observable interpersonal behavior to classify non-psychotic psychiatric patients. Across three samples of 525 patients, they derived four types that correspond well with the four

positions under discussion. Their types were: (I) inhibited, submissive, and abasive, with low ratings in dominance, competitiveness, and hostility (corresponds with self-rejection); (II) agreeableness, nurturance, affection, sociability, with low ratings on hostility, mistrust, and detachment (corresponds with other-acceptance); (III) hostility, mistrust, detachment, with low ratings in agreeableness, nurturance, love, and sociability (corresponds with other-rejection); (IV) exhibitionistic, dominant, competitive, hostile, with low ratings on inhibition, submissiveness, and abasiveness (corresponds with self-acceptance).

Adams (1964) emphasized the interpersonal behavior aspect of mental illness, pointing out that all interpersonal behavior can be meaningfully categorized within the frame of reference of two axes. "The Dominance-Submission axis defines the degree of acceptance or rejection of self, while the Affection-Hostility axis defines the degree of acceptance or rejection of the other" (p. 195). The four quadrants correspond to the four traditional temperaments, sanguine, choleric, melancholic, and phlegmatic. These dimensions have recurred in factor-analytic studies of the MMPI, and they have also been used in interpreting the Rorschach and Thematic Apperception Test.

"It is clear that the same fundamental patterns have been repeatedly observed by many contemporary and historical writers, even though the words used may seem very different. These similarities and convergences would not have been so consistently noted unless there were certain universal features in all human conduct" (p. 196).

Thus, evidence has come from many researchers, indicating the importance of two aspects of interpersonal behavior. One of these aspects reflects the feelings and attitudes that a person has about himself, and the concepts used to describe this aspect include activity versus passivity, autonomy versus control, dominance versus submission, and "I am OK," versus "I am not OK." All of these concepts reflect the degree of acceptance or rejection a person has about himself.

The other aspect that has shown up repeatedly reflects the feelings and attitudes that a person has about others, and the concepts used to describe this aspect include acceptance versus rejection, love or affection versus hostility, "you are OK" versus "you are not OK," and agreeableness, nurturance, and sociability versus mistrust and detachment. All of these concepts reflect the degree of acceptance or rejection a person has about others.

Both of these aspects, acceptance of self (SAR) and acceptance of others (ARO), are involved in the attending, empathic, understanding behavior that has been found to be helpful in psychotherapists.

A variable that is closely related to the concepts of SAR and ARO is self-disclosure. J.R. Hurley (1976c), in addition to pointing out the usefulness of the concepts of SAR and ARO in studying encounter groups, also points out that self-disclosure of the trainer was found to be a major facilitator of T-group participant gains in three

independent, dissimilar studies. In other studies, self-disclosure of group members was found to be related to positive regard from other group members, and to ratings of self- and other-acceptance.

Hurley and Force (1971) found positive changes of participants in T-groups to be highly correlated with self-disclosing and feedback-seeking behavior of trainers. This was an extension of Culbert's (1968) earlier finding that trainers who were more self-disclosing had the effect of temporarily accelerating the participants' self-awareness in the early phase of a T-group. In the Hurley and Force study, ratings of trainers were found to be quite consistent over time and in different T-groups. The product-moment correlation between the participants' ratings of the effectiveness of their trainers and a change score obtained six months post-lab was .98. The most important variable related to trainer effectiveness was self-disclosure ratings by others, not by self-report. Feedback-seeking behavior of the trainer was a second important variable.

The validity of self-disclosure, as measured by self-report instruments, is questionable. Hurley and Hurley (1969) obtained positive correlations between the Jourard Self-Disclosure Questionnaire scores (obtained by self-report) and a peer-rated measure of self-concealment in a study of 50 students in a graduate course on groups. They also obtained negative, though not significant, correlations between this self-report measure and three peer-rated

measures of self-disclosure. All peer-ratings of self-disclosure and self-concealment tended to support the validity of each other.

Self-disclosure has been shown to be effective in producing desired changes. In a study of effectiveness of interviewer behavior, Powell (1968) compared three forms of interviewer intervention: (1) approval-supportive; (2) reflection-restatement; (3) open disclosure, or "statements designed to match the subject's self-reference with a statement from the experimenter about his own thoughts, feelings, or experiences about the pertinent topic." Results indicated that negative self-reference statements increased when reinforced by a reflection-restatement or by open disclosure, but positive self-reference statements increased only when reinforced by open disclosure. The reason that approval-supportive responses were ineffective was felt to be that, especially in this experimental situation, this kind of blanket support could be seen as a lack of interest or understanding. The researcher concludes that "self-disclosure encourages self-disclosure in a face-to-face interview ... open disclosure seems well designed to convey the experimenter's interest, acceptance, and understanding."

Truax and Carkhuff (1965) report other studies that indicate successful therapy outcomes are related to more self-exploration and transparency on the part of the patient, and that patient transparency is related to therapist transparency. They describe two functions of therapist

transparency: (1) to serve as a model for patients to imitate; (2) to remove ambiguity in the situation and therefore lessen anxiety and fears in the therapy encounter; this would be expected to make patient transparency more likely.

In summary, then, it can be said that interpersonal behavior has been usefully studied in terms of the concepts of SAR and ARO; these dimensions are stable and independent, and the presence of both in a relationship is conducive to mental health and growth. Helping persons with high scores on both dimensions have been found to be more effective than those with lower scores. Self-disclosure is related to high scores on both of these dimensions, and is facilitative of positive change.

Research on Pathogenesis

Another variable that has been found to be important to mental health and to the helping professions is pathogenesis (Melnick and Hurley, 1969; Meyer and Karon, 1967; Mitchell, 1968, 1969; and Vandenbos and Karon, 1971). This is a measure of the extent to which the dominant person in a relationship takes the needs of the dependent person into account. To obtain this measure, Thematic Apperception Test stories are scored by an objective set of criteria (Meyer and Karon, 1967). A high (pathogenic) score indicates that the person, when in the dominant position of a dominant-dependent relationship, does not consider the needs of the

other person when the needs are in conflict. In fact, he may unconsciously use the dependent person for the satisfaction of his own needs. On the other hand, a low (benign) score indicates that the person, when in the dominant position, does take the needs of the dependent person into account.

The pathogenesis score was initially used to differentiate mothers of schizophrenics from mothers of normals, and it did so very effectively. It also has successfully differentiated mothers of severely disturbed schizophrenics from mothers of less disturbed schizophrenics; mothers and fathers of schizophrenics, delinquents, and normals; child-abusive mothers from non-abusive mothers; and effective therapists from less effective therapists. In this last study, Vandenbos and Karon (1971) found that schizophrenic patients of benign therapists, more than the schizophrenic patients of pathogenic therapists, were functioning at higher levels after six months of treatment, as measured by intellectual tests, clinical status interviews, and length of hospitalization.

Relating these findings to studies on interpersonal behavior, it seems that the pathogenesis score would be negatively correlated with measures of ARO, since both measures reflect behavior toward other people.

Statement of the Problem

In an attempt to study some factors involved in job effectiveness of MHPs, a variety of variables were examined. These variables had their origination in other areas of human relationships, because there has been such a small amount of research done with MHPs.

In the study of interpersonal behavior, SAR has been found to be an important variable for helping persons. In the study of MHPs, positive correlations between job effectiveness, and aggressiveness and imagination seem to be similar to the SAR measure. Therefore, because SAR is important to other helping persons, and because the concept of self-acceptance seems consistent with the concepts of aggressiveness and imagination, it seemed reasonable to assume that the investigation of this variable in relation to job effectiveness of MHPs would be fruitful.

The variable, ARO, also found to be important to helping persons, has not been studied in MHPs. It was included here, along with SAR, as the other dimension that has shown up repeatedly in studies of interpersonal behavior. The importance of acceptance of others seems often to be taken for granted in the field of residential treatment; this may explain the lack of research that has specifically included this variable.

Self-disclosure, related to high scores on both SAR and ARO, has also been shown to be important in the helping professions. This seems to be related to the importance,

discussed in narrative accounts, of the self-involvement and personal development of the effective MHP; open communication and sharing of feelings have been stressed in these accounts. Thus, it seemed likely that effective workers would tend to score higher on measures of self-disclosure than less effective workers. Since self-ratings have been found to have little correlation with ratings by others, both types of ratings were used here.

The concept of pathogenesis has not been studied in MHPs, although it has been shown to be an important variable in other kinds of relationships. Since the concept of pathogenesis involves a relationship between a dominant person and a dependent person, the relationship between the MHP and patient parallels this; i.e., the MHP is responsible for "caring for" the patient. This measure was included in the study for this reason, as well as for the reason that the concept of pathogenesis has successfully differentiated subjects in different kinds of relationships in other studies. Theoretically, it seemed that the pathogenesis score would be negatively correlated with ARO, since the ARO score reflects the degree of acceptance of others, and the pathogenesis score reflects the degree of not considering the needs and feelings of others.

Because the ideas of personal growth and active examination of one's own feelings and problems are stressed in narrative accounts of the role of the MHP, a measure of the extent to which problems are reported was included in this

study. It was expected that more effective workers would report more personal problems.

A scale for degree of liking was included, in order to ascertain if something as simple as liking would differentiate as well as other, more complicated measures.

Design

Effectiveness of MHPs at a residential treatment center was rated by the workers' supervisors, by their patients, by their co-workers, and by themselves. These different types of raters were used in order to determine whether effectiveness is viewed similarly or dissimilarly by the different rater groups. Because of differences in role, as well as in age, training, and experience, the various rater types could be expected to view effectiveness differently. On the other hand, the pattern of functioning in residential treatment could possibly reduce these differences between rater types. This is because the MHPs of each residence are trained by, and tend to model their behavior and perceptions on, the therapist of that residence. Also, the patients, after being in treatment for a period of time, begin to model their behavior and perceptions on the MHPs and therapist. Therefore, it may be that the various types of raters report on effectiveness of MHPs in similar ways.

All four types of raters also gave ratings of SAR and ARO, for the same reasons.

Self-disclosure was rated by self and by co-workers. Ratings by self and by others were both included because of

previous findings that indicated little or no correlations between the two. Co-workers were selected to do the ratings by others because it was felt that they were in the best position, as co-workers, to evaluate the degree of MHP self-disclosure.

Each MHP also completed a self-report measure of SAR and ARO, a pathogenesis measure, and a report of personal problems.

The effectiveness measure was then correlated with all the other measures, as tests of the hypotheses.

The following hypotheses were examined:

Hypothesis 1. Effectiveness of MHPs is positively correlated with SAR.

Hypothesis 2. Effectiveness of MHPs is positively correlated with ARO.

Hypothesis 3. Effectiveness of MHPs is positively correlated with self-disclosure.

Hypothesis 4. Effectiveness of MHPs is negatively correlated with pathogenesis.

Hypothesis 5. Effectiveness of MHPs is positively correlated with the number of personal problems reported.

Because the variables under examination may well be interrelated with each other, the correlations with effectiveness alone could be incomplete. Therefore, as a secondary addition, a multiple regression analysis was done after the other analyses, to ascertain the independent contribution of variables to the effectiveness rating.

METHOD

Setting

The Oaks is a residential treatment center of the Brown Schools, located in Austin, Texas. It is licensed as a private psychiatric hospital and treats emotionally disturbed children and adolescents who are believed to have a chance to return to the community after treatment. Diagnostic categories of the patients include severe adjustment reaction, behavior disorder, personality disorder, neurosis, and psychosis.

There are ten residences, each with a capacity of twelve patients; at the time of this study, there were three residence units for adolescent girls (approximate ages 13 to 17), four for adolescent boys, one coed residence for adolescents, one coed group of younger children (ages 9 to 13), and one group of boys, age 10 to 14. There is also an Intensive Care Unit on campus with six beds; this is used for patients of the other units who need a closed setting and more intensive treatment in a time of crisis during the course of treatment, for a period of up to three months.

Each residence group has a therapist (social worker, psychologist, or psychiatrist) who is responsible for providing treatment and acting as administrator for that

residence. The treatment team for each residence includes the therapist, the chief MHP, five to eleven other MHPs, and a teacher representative. This team meets weekly to discuss the twelve patients and develop plans for their treatment. The duties of the residence therapist include individual therapy with each of the twelve patients, family therapy, group meetings on the residence, hiring and training MHPs, generally establishing and maintaining the group milieu, and coordinating the individual treatment program for each patient. The MHPs work 8-hour shifts on the residence, and their function is to provide supervision for the patients, develop relationships with them, record their daily progress on the residence, participate in the development of the treatment plan for each individual, and carry out treatment recommendations in the context of their relationship with the patients.

Subjects

An attempt was made to include as subjects all MHPs at The Oaks who had been employed for at least one month on one of the adolescent residences. Only the adolescent residences were used, in order to eliminate possible complications due to different types of treatment with different age groups.

Each subject received payment of six dollars, approximating their regular hourly wages for the two-to-three hour time period that was required.

Of the 50 MHPs who fit the criteria for inclusion as subjects, 43 completed the data-gathering procedure. Of the seven that did not, two reported they were too busy to come in for three hours, two had terminated employment and could not be reached, two were unwilling to be included, and one could not be reached after failing to arrive at a scheduled time. Most of the MHPs are college-age young people. Of the 50 that were eligible for this study, four were older women; three of these women did not participate.

Among the 43 subjects, there were 18 females and 25 males. The mean age was 23.7, and the age range was 20 to 38 (excluding the one 38-year-old woman, the age range was 20 to 28). There were 34 single, 6 married, 1 separated, and 2 divorced MHPs. Thirty-nine had no children, two had one child, one had two children, and one had three children. All but one had some college education, and 24 had bachelor's degrees; the mean number of years of education was 15.3, and the range was 10 to 18. Seventeen of the subjects were currently enrolled in college. Their major fields of study included Psychology (16 subjects), Sociology (5), Education (4); also, there was one subject in each of the fields of Political Science, Communication, Criminology, History, Nursing, Anthropology, and Fine Arts (not all subjects listed a major field of study). The mean length of time at The Oaks was one year, three months, with a range from zero years, two months, to four years, zero months.

Instruments

The Mental Health Worker Rating Sheet (MHW Rating Sheet, Table 1) is a new form, developed for the purpose of this study. Several sources of ideas and information were used in the development of this scale.

The rating sheet that had long been in use at The Oaks included ten qualities, each of which was rated on a four-point scale from excellent to poor. These qualities were skill, initiative, loyalty to organization, ability to get along with others, dependability, health, personal habits and conduct, honesty, attendance, and supervisory ability. The rating sheet was used for MHPs, as well as for all other employees at The Oaks, and therefore did not well represent the specific skills of the MHP. A later rating sheet was developed at The Oaks for this purpose, including ratings in the seven categories of general employment requirements, ability to function within the organizational structure, milieu therapy and child care skills, administrative abilities, individual counseling skills, group counseling skills, and personal initiative and growth potential. This was an improvement, but the rating sheet included detailed descriptions of each of these categories, and required the rater to read four pages of such descriptions in order to make the rating.

Therefore, rating scales in use elsewhere were sought. Davids, et. al. (1969) used a rating scale that included five factors: ability to get along well with others, skills

Table 1

MENTAL HEALTH WORKER RATING SHEET

MHW _____ Rater _____

Residence _____ Date _____

	poor	below average	average	above average	very good	outstanding
1. Dependability, attendance _____						
2. Handling daily routines: meals, cleanup, physical needs _____						
3. Relationship with USO, administration _____						
4. Relationship with other MHWs _____						
WORKING WITH RESIDENTS:						
5. Likeability to the residents _____						
6. Ability to maintain control and set limits _____						
7. Ability to understand psychological processes _____						
8. Desire to help _____						
9. Individual counseling skills _____						
10. Group counseling skills _____						
11. Activities planning and participation _____						
12. Desire to learn new skills and insights _____						
13. Interest in changing and growing personally _____						
14. Takes initiative _____						
15. Supports team decisions _____						
16. General impression of this worker _____						

and abilities, parental functions, frustration tolerance, and potential for growth. Schwartz (1968) described several functions and skills necessary for effective functioning of MHPs, although he did not incorporate them into a rating scale.

From these various sources, from long discussions with administrators and other therapists at The Oaks, and from personal experience, I integrated the various ideas into the MHW Rating Sheet that is used in this study. It includes 16 items, each of which is checked in one of six categories from 'poor' to 'outstanding'.

The MHW Rating Sheets were given with the following instructions:

Please rate each MHW in each area of job functioning. Do not omit any ratings; if you are unsure, make your best guess. Feel free to write in additional comments at the bottom or on the back of the sheet.

The Semantic Differential Scales provide a measure of SAR and ARO, as described by J.R. Hurley (1976a), who also established the construct validity of this instrument.

In this study, each worker was rated by his supervisor, by four of his patients, by his co-workers, and by himself on a 10-point continuum for each of nine scales. Scales for self-acceptance were: shows feelings - hides feelings, expressive - guarded, active - passive, and independent - dependent. Scales for other-acceptance were: warm - cool, helps others - harms others, involved - detached, and accepts others - rejects others. An additional scale of like - dislike was also included.

The scales were administered on nine pages, with a different scale on each page. Every MHP on each residence was listed at the side of the page; each worker was rated on the first scale, then on the second scale, etc. The SAR and ARO scales were alternated. The instructions were:

Please "X" in the space on each of these scales best representing your personal impression of how each person on your team has behaved recently, including yourself. If you use the full range as much as possible, the ratings will be more informative. Please avoid omissions. This first scale is somewhat different from all others in that it asks how much you like each group member, rather than requesting a rating of that person's behavior.

The Self-Disclosure Measure (S.J. Hurley, 1967) describes various behaviors from "overtly self-concealing" to "self-disclosing," along an eight-point continuum (see Appendix A). This measure has been found to correlate with other peer-rated measures of self-disclosure, whether administered at the same time, after five weeks, or after nine weeks (Hurley & Hurley, 1969). Thus, both consensual validity and predictive validity have been demonstrated.

Scores on this measure have been found to be significantly correlated with effectiveness of T-group trainers (Hurley & Force, 1971); it should be pointed out, however, that the measure is not a pure reflection of the concept of self-disclosure, but includes evaluative overtones that may be related to many aspects of personality or behavior, such as rigidity, inhibition, defensiveness, and concern for others' feelings.

Each worker in this study was placed somewhere along

the eight-point continuum by each of his co-workers and by himself.

The "OK" Questionnaire was used as a secondary measure of SAR and ARO. Since it is a self-report measure, it would have value in the selection process of MHPs, if it proved successful in differentiating workers on the basis of effectiveness.

This measure is an improved form of that used by Allen (1973), who used it as a measure of interpersonal position; i.e., he placed subjects into four groups, depending on their relative feeling of their own "OK-ness" and the "OK-ness" of others. Results in his study generally supported the hypothesis relating interpersonal position and adjustment. Subjects in the "I am OK, you are OK" group received the highest adjustment scores; subjects in the "I am not OK, you are not OK" group received the lowest adjustment scores; subjects in the "I am OK, you are not OK" and the "I am not OK, you are OK" groups received intermediate adjustment scores.

One advantage of the "OK" Questionnaire is that it takes into account the fact that people have differing feelings about the degree of OK-ness of themselves and of others, depending on the situation they are in and on the trait being considered. On this questionnaire, the subject rates himself and others on a six-point scale from "very negative" to "very positive" for three different traits in each of 20 situations (see Appendix B). A score for

"OK Self" and "OK Other" is derived as a sum of the self ratings in all the items.

The Mooney Problem Check List, Adult form, was used as a measure of the extent to which MHWs reported having problems in the areas of health, economic security, self-improvement, personality, home and family, courtship, sex, religion, and occupation. This test is a list of 288 problems in the various areas, and subjects are asked to underline those problems which are troubling to them, and to circle those which are most troubling. The score for each area is the sum of problems underlined, plus the sum of the problems circled (thus, those problems most troubling are counted twice).

The subjects also were asked to reply in narrative form to the following:

1. Use the space below to indicate any additional problems that you may have.
2. Write a brief summary of what you consider to be your chief problems.
3. Would you like to talk to someone about some of your problems?

The Thematic Apperception Test was used as a measure of pathogenesis. Ten cards were selected for inclusion on the basis of their differentiating more pathogenic from benign themes in previous studies; these cards were 1, 3GF, 3BM, 4, 8 GF, 9GF, 11, 12M, 15, and 19. The test was group administered in written form and each story was judged for pathogenesis by two raters independently (see Meyer and Karon, 1967, for a description of the rating procedure). Both raters were female; one, age 24, had completed a

bachelor's degree in Social Science and was beginning a graduate program in Special Education. The other, age 23, was an undergraduate student in Drama.

Written instructions were given to the subjects as follows:

This is a test of imagination. Look at the ten pictures and the ten sheets of paper; notice that each card has a code number/letter on the back, matching the codes on the sheets of paper. Your task will be to make up as dramatic a story as you can for each picture. Tell what has led up to the event shown in the picture, describe what is happening at the moment, including what the characters are feeling and thinking, and then give the outcome. Write your thoughts as they come to your mind. Do not take more than about 5 minutes for each picture.

Remember, use a separate sheet for each story, so that the code on the back of the picture matches the code on the sheet of paper. To make corrections, draw a single line through the corrected words. Be sure to include:

What happened before the picture?

What is happening in the picture?

What are the characters thinking and feeling?

How does it end?

Do not write your name on the pages.

Procedure

Data from therapists. The eight therapists who worked with adolescent groups were asked to list the MHPs who had worked on their residence for at least one month. Then they were asked to name the four patients on the residence who were "farthest along in treatment, in the sense that they have progressed well, have learned about themselves and about relating to others, and are generally closer to discharge."

The therapists then completed a MHW Rating Sheet and the Semantic Differential Scales for each MHP on their residence. To determine the reliability of the MHW Rating Sheet, the therapists repeated their ratings after a six-week interval.

On two of the residences, the therapist worked part time, and was assisted by a Mental Health Associate, a Bachelor's level worker with several years of experience at The Oaks. Since, on these residences, the Mental Health Associates were more closely involved with supervising the MHWs, and since one of these therapists was the experimenter, the Mental Health Associate's ratings were used, rather than the therapist's ratings. To determine the patients farthest along in treatment on these two residences, the therapist and Mental Health Associate made a joint decision.

Of the therapists who completed the rating scales, there were six MSWs and two Mental Health Associates. There were five males and three females, and the age range was 23 to 35 (mean 29.5). Four were married and four were single; five had no children, two had one child, and one had two children. The length of their clinical experience ranged from 8 months to 7 1/2 years (mean 5 years, 7 months), and the length of their employment at The Oaks ranged from 8 months to 5 years (mean 3 years, 5 months).

Data from patients. The four patients selected as being farthest along in treatment completed a MHW Rating

Sheet and the Semantic Differential Scales for each MHP on their residence. This data was collected in small groups. Of the 32 patients initially selected as farthest along in treatment, 28 completed the rating scales. Of the others, two ran away and were discharged, and two refused to participate at their scheduled times; another time could not be arranged before discharge. Another patient was selected by the therapist as a substitute for one of these patients, but because of patient and staff turnover, it was felt that it would be better not to substitute a patient who knew the MHPs less well on the other residences. Therefore, there were 29 patients who completed the rating scales; one of the residences (contributing seven MHPs to the sample) had three patients instead of four who completed the scales, and one residence (contributing three MHPs to the sample) had two patients instead of four who completed the scales.

Diagnostic categories of these patients were: schizophrenia, latent type (2 patients), anxiety neurosis (1), hysterical neurosis (1), depressive neurosis (3), cyclothymic personality (1), schizoid personality (1), obsessive-compulsive personality (3), passive-aggressive personality (3), inadequate personality (1), borderline personality (1), other personality disorder (3), behavior disorder (1), adjustment reaction of adolescence (3), overanxious reaction of adolescence (2), unsocialized aggressive reaction of adolescence (2), other reaction of adolescence (1).

Data from MHPs. Each MHP, in groups of one to six, was given a packet including, in order:

- (1) A letter of introduction and background information sheet (see Appendix C)
- (2) MHW Rating Sheets (with instructions to rate himself, as well as his co-workers)
- (3) Semantic Differential Scales (with instructions to rate himself, as well as his co-workers)
- (4) Self-Disclosure Measure (with instructions to rate himself, as well as his co-workers)
- (5) The "OK" Questionnaire (a self-report instrument)
- (6) Mooney Problem Check List (a self-report instrument)
- (7) Thematic Apperception Test

Scores

Means and standard deviations of effectiveness scores and other variables for the 43 subjects are presented in Table 2. It is interesting to note that self-ratings are higher than ratings by the other raters in all cases. Peer-ratings of SAR and ARO are lower than the SAR and ARO ratings by other raters.

Mean effectiveness and semantic differential scores for therapist-, patient-, and peer-ratings of the seven MHPs who did not complete the data-gathering process are presented in Appendix D, along with the means of the MHPs who did complete the data-gathering process. Of interest is the fact that, in 17 comparisons out of 18, the subjects received higher scores and more favorable scores than did

Table 2

Means and Standard Deviations of Variables

Variable	Possible Range	Type of Rater							
		Therapist		Patient		MHP-Peer		MHP-Self	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
Effectiveness:									
Total	16-96	72.7	13.0	72.4	11.1	72.0	10.6	75.0	10.4
RC	4-24	19.3	3.5	19.4	2.5	19.0	2.5	20.2	2.9
KS	4-24	17.3	4.2	18.1	3.4	17.8	3.4	18.3	3.3
Semantic Diff:									
SAR	0-36	23.5	6.2	23.4	5.5	22.7	4.7	25.1	4.5
ARO	0-36	27.6	4.8	28.1	5.3	26.6	4.0	28.6	3.7
Like	0-9	7.1	1.6	7.1	1.4	7.1	1.2	7.9	1.2
Self-Disclosure	1-8					6.0	1.2	6.9	0.9
OK Questionnaire:									
Self	60-360							268.3	26.4
Other	60-360							258.5	25.0
Pathogenesis	.00-1.0							.56	.22
Mooney:									
Health	0-72							4.6	3.2
Economic Security	0-72							6.8	4.3
Self-Improvement	0-72							12.5	7.9
Personality	0-144							16.7	11.1
Home & Family	0-72							5.3	4.8
Courtship	0-36							3.9	3.5
Sex	0-36							2.3	2.5
Religion	0-36							1.5	2.3
Occupation	0-36							2.7	2.8

the MHPs who did not complete the data-gathering process.

Effectiveness scores, semantic differential scores, and personality variable scores of each MHP are presented in Appendices E, F, and G, respectively.

RESULTS

Effectiveness Scores

Reliability. The test-retest reliability of the therapists' ratings, after a six-week interval, was determined by product-moment correlation coefficients. The correlations for the eight residences are presented in Table 3. In this table and in others that follow, decimal points are omitted. Residence F. involved a change of therapist, so that a different person rated the MHPs on retest; this therapist began working during the week of the initial testing, so he had known the MHPs for six weeks at the time of the second ratings.

The number of MHPs that were rated by therapists is different from the number included in the remainder of the study, because 7 of the 50 MHPs that were rated by therapists did not complete the data-gathering procedure.

The lowest correlation is .30, and 20 of the 24 correlations range from .65 to .82. There tended to be less stability for the Role Commitment scores and more stability for the Knowledge and Skills scores, than for the total effectiveness scores.

The initial therapist ratings were used for correlations with the other instruments. This was done because the initial rating was completed nearer to the time of the other

Table 3
Product-Moment Correlations of Test-Retest Ratings
of MHP Effectiveness by Therapists

Residence	<u>n</u> **	<u>Reliability</u>		
		Total	RC	KS
A	6	53	68	82
B	7	65	39	75
C	6	81	67	81
D	6	64	38	69
E	7	65	71	72
F*	7	67	78	77
G	4	71	30	47
H	7	72	80	79

*Test and retest ratings were given by two different raters on this residence.

** n = 50

data-gathering.

Treatment of effectiveness scores. In order to determine how to treat the MHW Rating Sheet data, an elementary linkage analysis (McQuitty, 1957) was done, using the 16 individual MHW Rating Sheet items for therapist-ratings, for patient-ratings, for MHP-ratings (excluding self-ratings), and for MHP self-ratings. This method yields typal structures in which all members of a given type correlate more highly with at least one other member of that type, than with non-members. These typal structures are presented in Figure 1.

Because item 16, "general impression," assumed a central clustering position in all the typal analyses except the patient-ratings, the typal analyses were repeated, with item 16 omitted (see Figure 2, p.43). With the "general impression" item omitted, an additional type emerged for the therapist-, MHP-, and self-ratings, and the types became more distinct. The patient types showed almost no change with the omission of item 16.

There were two decisions to be made, with regard to the treatment of the effectiveness scores:

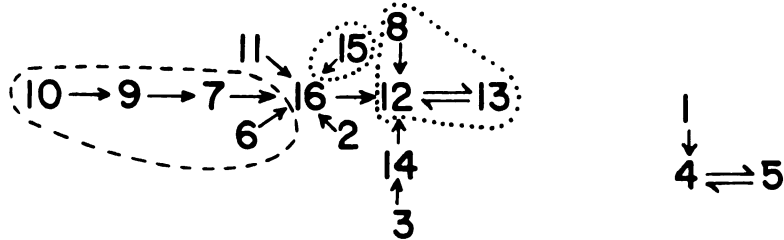
1. The therapist-, MHP-, and patient-ratings could be combined, or they could be treated separately. Because the typal structures were dissimilar in the various groups, it was decided to treat them separately.

2. The 16 items in the rating sheet could be treated separately, they could be combined into a single effectiveness

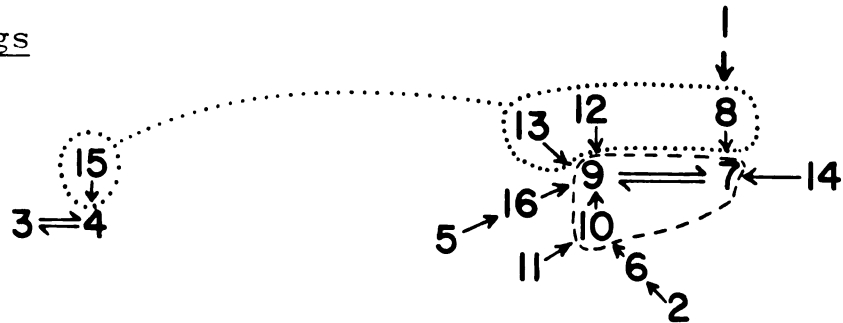
Figure 1

Typal Analyses of Individual Items on the MHW Rating Sheet
(General Impression, #16, Included)

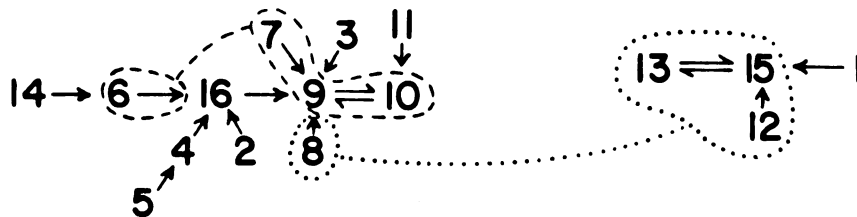
Therapist-Ratings



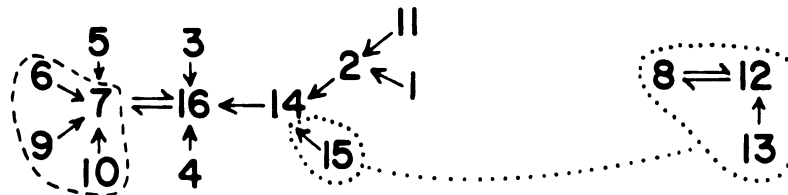
Patient-Ratings



Peer-Ratings



Self-Ratings



Type I

Type II

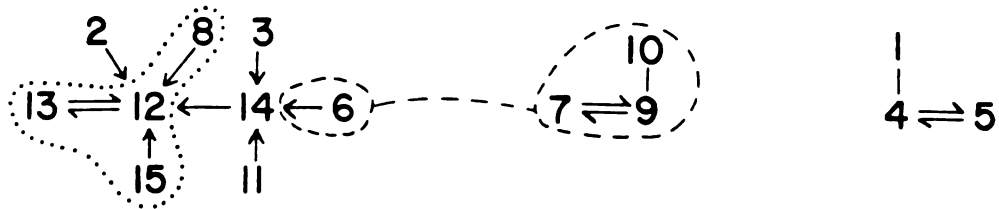
Note. = RC items (8. desire to help; 12. desire to learn new skills and insights; 13. interest in changing and growing personally; 15. supports team decisions)

----- = KS items (6. ability to maintain control and set limits; 7. ability to understand psychological processes; 9. individual counseling skills; 10. group counseling skills)

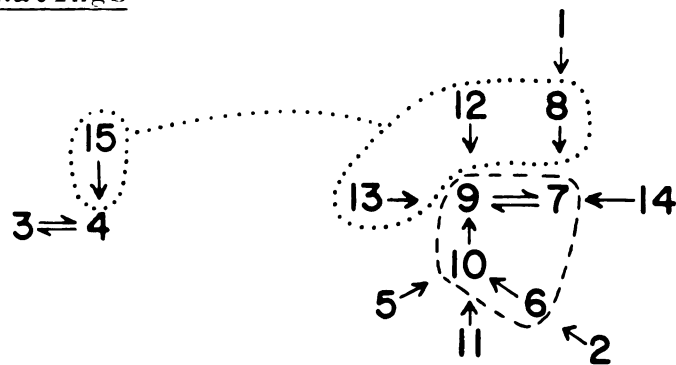
Figure 2

Typal Analyses of Individual Items on the MHW Rating Sheet
(General Impression, #16, Omitted)

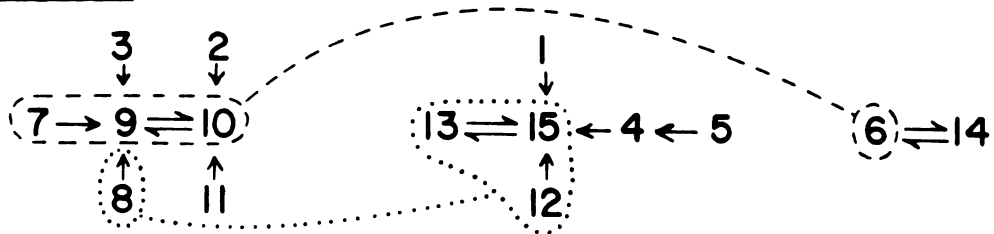
Therapist-Ratings



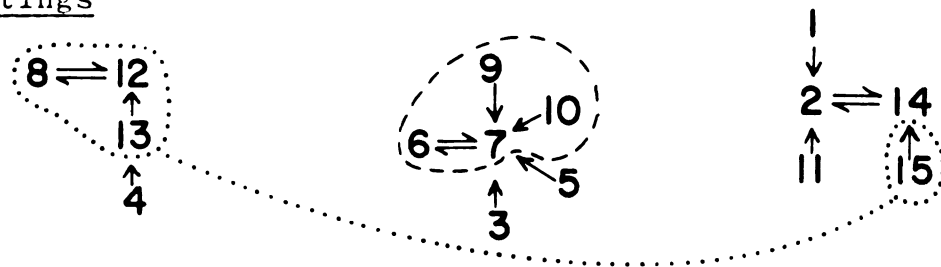
Patient-Ratings



Peer-Ratings



Self-Ratings



Type I

Type II

Type III

Note. = RC items (8. desire to help; 12. desire to learn new skills and insights; 13. interest in changing and growing personally; 15. supports team decisions)

----- = KS items (6. ability to maintain control and set limits; 7. ability to understand psychological processes; 9. individual counseling skills; 10. group counseling skills)

score, or they could be divided into a number of groups or clusters of similar items. For help in making this decision, image analysis was also available, in addition to the elementary linkage analysis. Image analysis, similar to factor analysis, was computed with a program designed to give the simplest structure, selecting from all the structures obtained, using different possible numbers of factors (Veldman, 1974). Image analysis results are presented in Table 4. Both image analysis and elementary linkage analysis produced only moderate consistencies between the groups of raters, for two clusters of items. The two clusters that emerged were:

(a) Role Commitment (RC): items 8 - desire to help, 12 - desire to learn new skills and insights, 13 - interest in changing and growing personally, and 15 - supports team decisions.

(b) Knowledge and Skills (KS): items 6 - ability to maintain control and set limits, 7 - ability to understand psychological processes, 9 - individual counseling skills, and 10 - group counseling skills.

Because these clusters were only fairly consistent, it was decided to use the total combined score, in addition to the two clusters, in the correlations with the other data. Correlations between groups of raters on the total effectiveness scores and on the two cluster scores are given in Table 5. Self-ratings of MHPs are presented separately from ratings by peers. Thus, each MHP received four sets of

Table 4

Image Analysis Results for Individual MHW Rating Sheet Items

Therapist Ratings

- Factor 1. Role Commitment; items 12, 8, 16, 15, 11, 13
- Factor 2. Knowledge and Skills; items 9, 7, 10, 6
- Factor 3. Dependability; item 1
- Factor 4. Sociability; item 5, 4
- Factor 5. Initiative; item 14
- Factor 6. Administrative; item 3
- Factor 7. Psychological knowledge; item 7

MHP Ratings

- Factor 1. Knowledgeable involvement; items 9, 10, 14, 6, 7, 3, 11, 16, 8
- Factor 2. Team functioning; items 15, 13, 12, 4
- Factor 3. Likeability to patients; item 5
- Factor 4. Dependability; item 1
- Factor 5. Daily routines; item 2

Patient Ratings

- Factor 1. Knowledgeable involvement; items 12, 7, 9, 14, 8, 10, 13, 6, 11, 2
- Factor 2. Staff relationships; items 4, 3
- Factor 3. Likeability; items 5, 16
- Factor 4. Dependability; item 1
- Factor 5. Supportive of team; item 14

Table 5
Product-Moment Correlations of Various Effectiveness Scores

Effectiveness Scores	Therapist			Patient			MHP-Peer			MHP-Self		
	Total	RC	KS	Total	RC	KS	Total	RC	KS	Total	RC	KS
Therapist:												
Total				51**	52**	48**	61**	44**	60**	56**	25	66**
Rca	88**	88**	62**	25	31*	22	43**	40**	36*	45**	25	50**
Ksb	88**	62**	61**	61**	59**	63**	63**	41**	71**	53**	23	68**
Patient:												
Total	51**	25	61**	94**	94**	96**	39**	10	52**	22	04	32*
RC	52**	31*	59**	94**	31*	90**	33*	08	44**	24	08	30*
KS	48**	22	63**	96**	90**	90**	34*	03	51**	22	07	34*
MHP-Peer:												
Total	61**	43**	63**	39**	33*	34*	86**	86**	93**	57**	26	71**
RC	44**	40**	41**	10	08	03	86**	68**	68**	43**	26	50**
KS	60**	36*	71**	52**	44**	51**	93**	68**	68**	54**	21	75**
MHP-Self:												
Total	56**	45**	53**	22	24	22	57**	43**	54**	82**	82**	87**
RC	25	25	23	04	08	07	26	26	21	82**	54**	54**
KS	66**	50**	68**	32*	30*	34*	71**	50**	75**	87**	54**	54**

Note: Boxes contain correlations within the same source of data

aRC = Role Commitment
bKS = Knowledge and Skills
*p < .05, two-tailed test
**p < .01, two-tailed test

scores: one by the therapist on his residence (his supervisor); one reflecting a composite score of 2, 3, or 4 patients on his residence; one reflecting a composite score of 2, 4, 5, or 6 of his co-workers (the "MHP-peer" rating); and one self-rating (the "MHP-self" column). The therapist scores and the MHP-self scores are given by a single rater for each MHP, whereas the patient scores and the MHP-peer scores are derived by pooling data from more than one rater.

Within all rater types except patients, there is a clear distinction between RC and KS clusters. That is, the correlations between these two clusters are much lower than the correlations of either with the total effectiveness score.

Between rater types, there is greater across-perceiver consensus about the KS cluster than about the RC cluster; this is true in every comparison between rater type groups. This finding indicates that different raters are in agreement with each other about the knowledge and skills of MHPs (their ability to maintain control and set limits, their ability to understand psychological processes, their individual counseling skills, and their group counseling skills), to a much greater extent than they are in agreement with each other about the role commitment of MHPs (their desire to help, their desire to learn new skills and insights, their interest in changing and growing personally, and their support of team decisions). This is probably

because the knowledge and skills of MHPs are comparatively easily and directly observable kinds of behavior to all raters, while the components of role commitment of MHPs are less directly observable kinds of feelings, attitudes, and motivations, which require a greater degree of interpretation of observable behavior. This is consistent with the higher reliability scores for the KS cluster than for the RC cluster.

There is a considerable difference between the self-ratings of RC and the self-ratings of KS; in all cases, the self-rated KS scores correlated much more highly with the scores by other raters, than did the self-rated RC scores.

Intercorrelations among MHW Rating Sheet items, for therapist-, patient-, peer-, and self-ratings, are presented in Appendices H, I, J, and K. Frequency of ratings for individual MHW Rating Sheet items, for each rater class, are presented in Appendix L.

Pathogenesis Scores

The product-moment correlation coefficient for inter-rater reliability of the TAT pathogenesis scores was .78. A combined score of both raters was used for the correlations with the other data; the corrected reliability for the combined score, using the Spearman-Brown formula, was .88.

The mean pathogenesis score in this study cannot be meaningfully related to mean scores in other studies, since the TAT cards used here were different.

Self-Disclosure Scores

The correlation of self-ratings of self-disclosure with team member ratings of self-disclosure was .05.

Hypotheses

Hypothesis 1: Effectiveness of MHPs is positively correlated with SAR (self acceptance-rejection).

When using the Semantic Differential Scale as a measure of SAR, Hypothesis 1 is confirmed (see Table 6). Of 48 correlations between effectiveness scores and SAR scores, 36 reached statistical significance. Only self-ratings and/or patient-ratings did not reach significance.

When using the "OK" Questionnaire as a measure of SAR, Hypothesis 1 is not confirmed. The problem may well be within this measure, however, as no scores derived from it correlated significantly with any of the effectiveness scores (see Appendix M).

Hypothesis 2: Effectiveness of MHPs is positively correlated with ARO (acceptance-rejection of others).

When using the Semantic Differential Scale as a measure of ARO, Hypothesis 2 is confirmed (see Table 6). Of 48 correlations between effectiveness scores and ARO scores, 33 reached statistical significance. All of those that did not reach significance involve self-ratings and/or patient-ratings.

When using the "OK" Questionnaire as a measure of ARO, Hypothesis 2 is not confirmed. The scores derived from this

Table 6

Product-Moment Correlations of Effectiveness Ratings with Personality Descriptions of MHPs

Effectiveness	Therapist			Patient			MHP-Peer			MHP-Self				
	SAR	ARO	Like	SAR	ARO	Like	SAR	ARO	Like	SD	SAR	ARO	Like	SD
Therapist:														
Total	65**	66**	59**	53**	42**	24	64**	53**	55**	59**	42**	07	05	-04
RC	54**	64**	56**	30*	18	11	43**	42**	48**	44**	36*	01	02	-21
KS	50**	44**	45**	55**	45**	27	61**	46**	45**	55**	38*	17	19	-06
Patient:														
Total	39**	45**	31**	76**	84**	65**	36*	34*	24	38*	22	19	-10	03
RC	32*	47**	32*	70**	74**	56**	27	26	25	35*	24	21	-09	-01
KS	29	32*	22	73**	79**	61**	32*	27	18	34*	22	17	-09	03
MHP-Peer:														
Total	48**	54**	52**	20	26	08	75**	75**	75**	65**	48**	35*	30*	27
RC	32*	50**	47**	-08	-04	-19	60**	75**	76**	58**	27	31*	32*	14
KS	45**	41**	41**	33*	35*	19	71**	60**	56**	52**	51**	33*	26	29
MHP-Self:														
Total	39**	47**	38**	16	06	-13	69**	36*	54**	52**	69**	45**	32*	23
RC	19	34*	25	01	-04	-14	37*	16	44**	39**	51**	49**	22	10
KS	48**	43**	37*	24	13	-04	69**	46**	53**	52**	67**	34*	33*	20

Note: Within each effectiveness versus personality subrow, the strongest correlation is underscored. Boxes contain correlations within the same source of data.

* $p < .05$, two-tailed test

** $p < .01$, two-tailed test

measure did not correlate significantly with any of the effectiveness scores (see Appendix M).

Hypothesis 3: Effectiveness of MHPs is positively correlated with self-disclosure.

Results are presented in Table 6. When team member ratings of self-disclosure are used, Hypothesis 3 is confirmed; all correlations between effectiveness scores and MHW ratings of self-disclosure reach statistical significance.

When self-ratings of self-disclosure are used, there are no statistically significant correlations.

Hypothesis 4: Effectiveness of MHPs is negatively correlated with pathogenesis.

Results are presented in Appendix M. Hypothesis 4 is not confirmed; none of the correlations reached statistical significance.

Hypothesis 5: Effectiveness of MHPs is positively correlated with the number of personal problems reported.

Results are presented in Appendix N. Hypothesis 5 is not confirmed. There was only one correlation that reached statistical significance, and this is no more than would be expected by chance.

Relationships among Variables

Intercorrelations among the personality variables and effectiveness scores for each kind of rater are presented in Tables 7-10. McQuitty typal analyses of these intercorrelations are presented in Figure 3 (p. 56). In this

Table 7

Product-Moment Intercorrelations of Personality Variables
and Effectiveness Scores, for Ratings by Therapists

	SAR	ARO	Like	SD	Total Eff	RC	KS	Path	OK Self	OK Other
SAR	00	64	77	52	65	54	50	-05	00	-04
ARO	64		65	68	66	64	44	-11	-14	-08
Like	77	65		57	59	56	45	08	-11	-07
SD	52	68	57		59	44	55	-15	-02	08
Total Eff	65	66	59	59		88	88	-18	-08	-08
RC	54	64	56	44	88		62	-12	-09	-16
KS	50	44	45	55	88	62		-18	-07	-04
Path	-05	-11	08	-15	-18	-12	-18		-02	-21
OK Self	00	-14	-11	-02	-02	-08	-09	-02		62
OK Other	-04	-08	-07	08	-08	-16	-04	-21	62	

Table 8

Product-Moment Intercorrelations of Personality Variables
and Effectiveness Scores, for Ratings by Patients

	SAR	ARO	Like	SD	Total Eff	RC	KS	Path	OK Self	OK Other
SAR	00	76	50	25	75	70	73	-06	00	-07
ARO	76		83	31	84	74	79	14	-05	00
Like	50	83		12	65	56	61	28	-20	-23
SD	25	31	12		38	35	34	-15	-02	08
Total Eff	75	84	65	38		94	96	11	-14	-10
RC	70	74	56	35	94		90	05	-20	-15
KS	73	79	61	34	96	90		09	-13	-05
Path	-06	14	28	-15	11	05	09		-02	-21
OK Self	00	-05	-02	-02	-14	-20	-13	-02		62
OK Other	-07	00	-23	08	-10	-15	-05	-21	62	

Table 9

Product-Moment Intercorrelations of Personality Variables
and Effectiveness Scores, for MHP-Peer-Ratings

	SAR	ARO	Like	SD	Total Eff	RC	KS	Path	OK Self	OK Other
SAR		75	68	71	75	60	71	-16	08	11
ARO	75		81	79	75	75	60	-21	01	14
Like	68	81		77	75	76	56	-26	-02	06
SD	71	79	77		65	58	52	-15	-02	08
Total Eff	75	75	75	65		86	93	-05	-05	02
RC	60	75	76	58	86		68	-16	-06	08
KS	71	60	56	52	93	68		02	-06	-03
Path	-16	-21	-26	-15	-05	-16	02		-02	-21
OK Self	08	01	-02	-02	-05	-06	-06	-02		62
OK Other	11	14	06	08	02	08	-03	-21	62	

Table 10

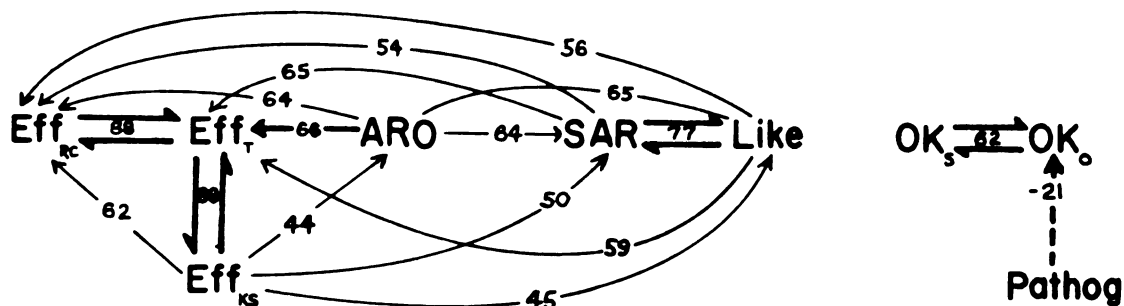
Product-Moment Intercorrelations of Personality Variables
and Effectiveness Scores, for MHP-Self-Ratings

	SAR	ARO	Like	SD	Total Eff	RC	KS	Path	OK Self	OK Other
SAR		52	27	43	69	51	66	04	37	17
ARO	52		44	18	45	49	34	07	27	17
Like	27	44		17	32	22	33	05	19	06
SD	43	18	17		22	10	20	11	30	35
Total Eff	69	45	32	22		82	87	-11	21	14
RC	51	49	22	10	82		54	-11	14	18
KS	66	34	33	20	87	54		-18	17	07
Path	04	07	05	11	-11	-11	-18		-02	-21
OK Self	37	27	19	30	21	14	17	-02		62
OK Other	17	17	06	35	14	18	07	-21	62	

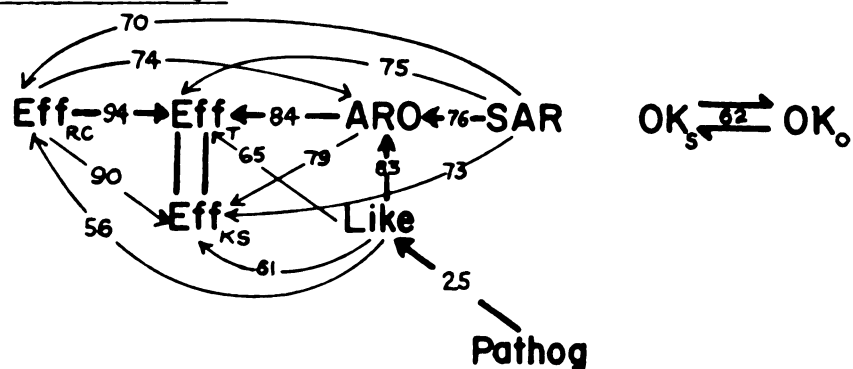
Figure 3

Structure of Linkages between Job Effectiveness
and Personality Attributes

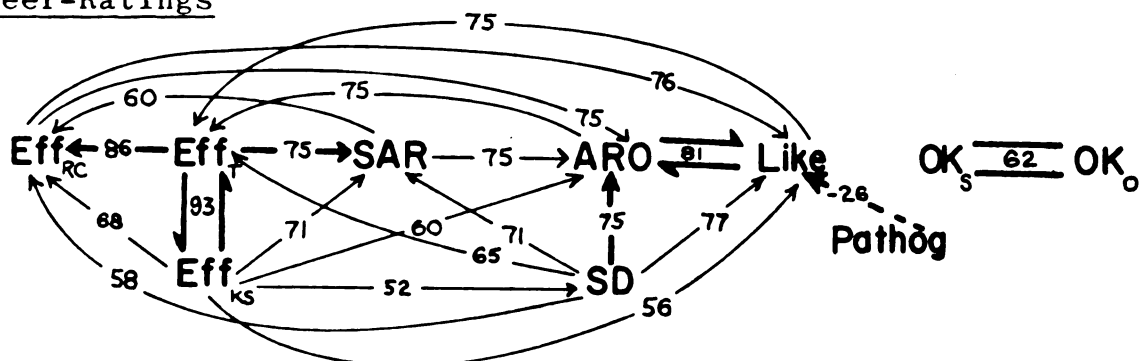
Therapist-Ratings



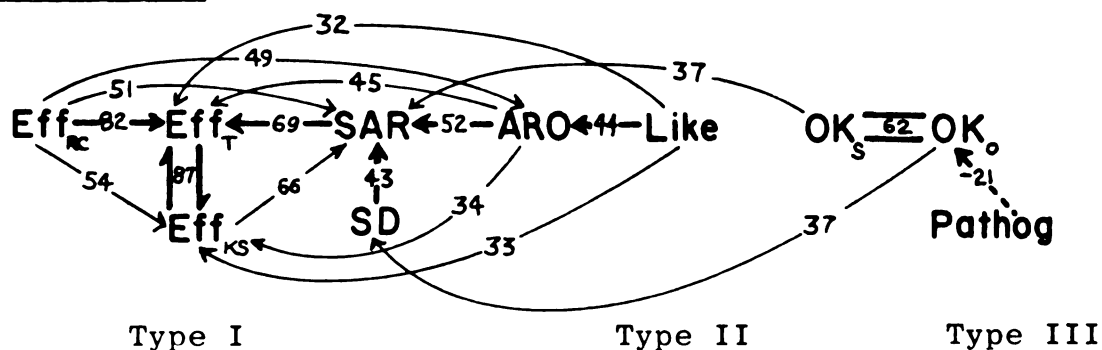
Patient-Ratings



Peer-Ratings



Self-Ratings



Type I

Type II

Type III

figure, heavy bonds show typal linkages. McQuitty's typal structure has been supplemented by depicting all other statistically significant correlations in lighter bonds. Correlations between variables are given, and arrows point toward the variable which contributed more to the total covariance of the intercorrelational matrix.

The three effectiveness scores are linked with each other for all four kinds of raters. The patient-ratings and MHP self-ratings link SAR, ARO, and like scores with the effectiveness scores. Therapist-ratings of ARO and MHP peer-ratings of SAR are linked with effectiveness scores. For therapist-ratings, SAR and like scores form a second type, and for MHP peer-ratings, ARO and like scores form a second type. Thus, for therapists, acceptance of others is linked with effectiveness, while acceptance of self is linked with liking. For MHP peers, acceptance of others is linked with liking.

For all kinds of raters, the OK self and OK other scores formed a separate type. The pathogenesis score was linked to the OK other score for therapist and MHP self-ratings; for patient- and MHP peer-ratings, the pathogenesis score was linked to liking. An interesting contrast is evidenced in the correlation between pathogenesis and liking which is positive for patient-ratings but negative for MHP peer-ratings; that is, patients tend to like workers with high pathogenesis scores, while MHP peers tend to like workers with low pathogenesis scores.

From all the typal analyses presented (Figures 1, 2, and 3), it appears that patients have a consistently more simple view of the world. Their ratings produce fewer and less complicated types than do the ratings of the other kinds of raters.

Qualitative Aspects of Reported Problems

In considering the lack of statistically significant findings with the Mooney Problem Check List scores, several possible reasons present themselves.

The number of problems reported might, but does not necessarily reflect the number of problems a person has. It may be more related to a response set, or threshold, beyond which a person checks an item as being a problem.

More importantly, the number of problems checked does not give any idea of the attitude of the subject about the problems. Narrative accounts of the role of MHPs have stressed the importance of the MHP to be actively involved in finding himself, and in finding his own answers to his own problems. An item checked as a problem on the Mooney Problem Check List might indicate an area that the worker is struggling with, or it might be a passive complaint.

In an effort to look beyond the numerical scores in problem areas, I made an attempt to determine whether qualitative differences could be found, on the basis of the narrative responses at the end of the checklist. This was a page with three requests for a narrative response:

"1. Use the space below to indicate any additional problems that you may have. 2. Write a brief summary of what you consider to be your chief problem. 3. Would you like to talk to someone about some of your problems?"

To make this qualitative comparison, I developed a high effective group and a low effective group of eleven MHPs each. These groups were formed on the basis of having a high or low total effectiveness score by all three rater types (therapist, MHP, and patient, excluding self-ratings). There is no overlap of rating scores between the high and low groups.

The written responses of the high- and low-effective groups were examined on the basis of the amount of responsibility that was taken for the problems listed. There were differences between subjects in attitudes about problems, particularly in terms of whether the problems were owned (as opposed to being blamed on other people or environmental factors), and whether the person was doing something about the problem. Brief condensations of these attitudes are listed here, with the number of subjects from the high and low groups that fit each category. (These statements were not made by the subjects, but represent an impression of their attitudes about their problems, based on a qualitative judgment of their narrative responses.)

<u>Attitude</u>	<u>Effectiveness</u>	
	High	Low
I have a few problems, but nothing serious.	0	2
My only problems are money and going back to school.	0	1
I have problems, but it's because of money and/or it's someone else's fault.	1	1
I have problems which I accept as mine, but have a hopeless feeling about them, and therefore can do nothing.	1	2
I have problems which I accept as mine (No mention of doing anything, but seems to have resistance to it)	0	1
I have problems which I accept as mine. (No mention of doing anything, but no resistance)	2	2
I have problems which I accept as mine, and I know I need to make my own decision.	0	1
I have problems which I accept as mine, and I am talking to someone about them.	3	1
I have problems which I accept as mine, and I am working on them.	3	0
I have problems which I accept as mine, I am working on them, and making progress.	1	0

In sum, there are more workers who say they have problems that they accept as their own, and who are actively involved in doing something about them, in the high effective group than in the low effective group.

Length of Employment

After the high and low groups were developed, a comparison of background information of the two groups revealed a clear difference between them in length of employment. All eleven workers in the low-effective group were employed for less than one year, but only two in the high-effective group were employed for less than one year. The mean length of employment was 23 months for the high-effective

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group, and 6 months for the low-effective group. Thus, the more effective workers tend to be those who have been employed longer.

Correlations between length of employment and effectiveness scores are given in Table 11. Eight of the 12 correlations are statistically significant. For every kind of rater, the correlation between length of employment and KS is higher than the correlation between length of employment and RC.

Multiple Regression Analysis

In order to clarify the independent contribution of each personality variable as a predictor of effectiveness, a multiple regression analysis was done after the other correlation coefficients were obtained (Kim, 1975). This analysis used the 'default options' and limited the predictors to the first nine extracted. Since length of employment at The Oaks differentiated between the high and low effective groups, this variable was included in the analysis. A summary of the multiple regression correlations is given in Table 12, with all predictors shown until the next would not add significantly ($p < .05$) to the regression equation.

As the table indicates, 18 of the predictors are SAR scores (2 contribute negatively), 12 are ARO scores (3 contribute negatively), 6 are like scores (3 contribute negatively), 4 are self-disclosure scores (all 4 contribute negatively), 1 is a Mooney Problem Check List total score, and 6 are length of employment scores (1 contributes

Table 11
Product-Moment Correlations of Length of Employment
with Effectiveness Scores

	<u>r</u>
Therapist-ratings:	
Total eff	45**
RC	23
KS	65**
Patient-ratings:	
Total eff	46**
RC	39**
KS	50**
Peer-ratings:	
Total eff	40**
RC	19
KS	51**
Self-ratings:	
Total eff	11
RC	02
KS	38*

*p < .05

**p < .01

Table 12

Summary of Multiple Correlation Coefficients (shown in numbers) for Predicting Effectiveness Indicators
with All Statistically Significant Predictors Ranked in Importance Downward from Top of Each Column

<u>Therapists (T)</u>			<u>Patients (P)</u>			<u>Co-Workers (C)</u>			<u>Self-Ratings (S)</u>		
<u>Total</u>	<u>RC</u>	<u>KS</u>	<u>Total</u>	<u>RC</u>	<u>KS</u>	<u>Total</u>	<u>RC</u>	<u>KS</u>	<u>Total</u>	<u>RC</u>	<u>KS</u>
ARO:T 66	ARO:T 64	Long. 65	ARO:P 84	ARO:P 74	ARO:P 79	SAR:C 74	Like:C 78	SAR:C 71	SAR:S 69	SAR:S 51	SAR:C 68
SAR:P 76	Lik:T 67	SAR:C 76	SAR:P 86	ARO:T 78	Long. 82	Lik:C 80	SAR:P 80	Long. 75	SAR:C 76	ARO:S 57	SAR:S 78
SAR:C 80	-SD:S 72	SAR:P 79	ARO:T 88	SAR:P 81	Probs 85		ARO:C 83			Lik:C 61	
-SD:S 81	SAR:S 77	-SD:S 82	-Lik:T 89	-SAR:T 84			-Lik:P 85			-ARO:C 70	
Long. 83	-ARO:S 79		Long. 90				Lik:T 86			SAR:C 74	
-ARO:S 86							-SD:C 87			-Long. 77	
SAR:S 86											

Note: A minus sign (-) before the variable indicates that it makes a negative contribution to the effectiveness prediction equation. Long. - number of months employment at The Oaks.

negatively).

SAR ratings are generally the best predictors of effectiveness scores, especially for peer- and patient-ratings of SAR. Self-ratings of SAR are good predictors of self-rated effectiveness only, and secondarily of therapist-rated role commitment. Therapist-ratings of SAR, surprisingly, do not add significantly to the predictability of effectiveness by any kind of rater, including therapists.

After SAR ratings, ARO ratings are the next best predictor, but only for role commitment and total effectiveness (except patient-ratings of ARO, which also predict patient-ratings of knowledge and skills). This occurs within rater types; across rater types, therapist-ratings of ARO also predict patient-ratings of role commitment and total effectiveness. Self-ratings of ARO correlate negatively with therapist-ratings of role commitment, and peer-ratings of ARO correlate negatively with self-ratings of role commitment.

Length of employment was a good predictor of knowledge and skills, whether rated by therapist, peer, or patient, but not by self.

Liking by peers is a good predictor of peer- and self-rated role commitment, and of peer-rated total effectiveness. Liking by therapist predicts therapist-rated role commitment, and, more distantly, peer-rated role commitment; liking by therapist correlates negatively with patient-rated total effectiveness. Liking by self is not a good predictor; liking by patients predicts peer-rated role

commitment, but negatively and secondarily.

Peer-rated self-disclosure scores do not add significantly to other predictors of effectiveness. Self-rated self-disclosure scores are moderate negative predictors of therapist-rated role commitment, knowledge and skills, and total effectiveness.

The OK Questionnaire scores, the Mooney Problem Check List scores, and the pathogenesis score, are not good predictors of effectiveness.

DISCUSSION

Effectiveness

Effectiveness scores, derived from the MHW Rating Sheet, are reliable (Table 3) and consensually valid (Table 5). Since the RC and KS clusters correlate less with each other than with total effectiveness, these clusters seem to represent distinctive facets of effectiveness. Over half of the variance of each cluster is independent of the other, except for ratings by patients. The consensual support for the KS cluster exceeded that of the RC cluster; the KS cluster is also more related to length of employment than is the RC cluster.

Effectiveness and Acceptance of Self and of Others

Results strongly support the importance of SAR and ARO in job effectiveness of MHPs. Workers who are perceived as effective in role commitment (RC), knowledge and skills (KS), and total effectiveness, are also perceived as accepting of themselves and accepting of others. This correlation holds, in general, for ratings by supervisors, patients, peers, and self-ratings. Correlations tend to be higher between effectiveness and self- and other-acceptance scores within the same rater class; i.e., therapists' ratings of effectiveness generally correlate more highly

with therapists' ratings of acceptance than do acceptance ratings by MHPs (peers or self) or patients. However, the correlations across rater classes are also largely positive and frequently attained statistical significance. Multiple regression analyses also highlight the predictability of effectiveness scores from measures of SAR and ARO.

These results further support the importance of the SAR and ARO dimensions in helping relationships. MHPs in residential treatment can now be added to the list of populations for whom these dimensions have been found relevant. Encompassing the areas of behavior in group settings, family relationships, psychopathology, psychotherapy, maternal behavior, and now, workers in residential treatment, the dimensions SAR and ARO appear indeed to have broad applicability.

With respect to research on MHPs, acceptance of self seems to reflect the assertative, imaginative, non-conforming qualities that Sturman (1973) found to be related to group counseling skills, and both acceptance of self and of others seem to reflect the mutual respect discussed by Konopka et. al. (1961).

The three classes of raters show interesting variations in linkages between effectiveness scores and the acceptance scores. Correlation coefficients between effectiveness and acceptance scores indicate that therapist-ratings of self-acceptance tend to relate more strongly with the KS

cluster, while therapist-ratings of other-acceptance link more with RC and total effectiveness. The multiple regression analyses underscore the potency of therapist's ARO ratings to predict RC and total effectiveness, but therapist's SAR scores do not add significantly to the predictability of the KS cluster, or of any other effectiveness score. This means that although therapist ratings of SAR correlate with KS, these SAR ratings do not make an independent contribution, apart from their correlation with other predictors, to the KS score.

Patient's SAR ratings correlate more strongly with therapist- and self-ratings of effectiveness, while patient-ratings of other-acceptance correlate more strongly with patient- and peer-ratings of effectiveness. Multiple regression analysis indicates that patient-ratings of ARO are good predictors of patient-rated effectiveness, but do not add significantly to the predictability formula for peer-rated effectiveness. On the other hand, patient-ratings of SAR are good predictors of both therapist- and patient-rated effectiveness.

Peer- and self-ratings of SAR correlate more strongly with effectiveness ratings, especially the total effectiveness and the KS cluster, than do peer- and self-ratings of ARO. These correlations carry independent predictive value, as indicated in the multiple regression analysis.

Self-ratings of effectiveness are best predicted by self-rated SAR, while patient-ratings of effectiveness are

best predicted by ARO. The therapist- and peer-rated KS cluster is best predicted by SAR, while the therapist- and peer-rated RC cluster is best predicted by ARO.

The KS effectiveness score tends to be more related to self-acceptance, while the RC score relates more to other-acceptance. This indicates that good working knowledge and skills go along with self-acceptance in MHPs, while a strong role commitment goes along with other-acceptance.

MHP self-ratings are generally weak predictors of effectiveness, and no notable correlations obtain between patients' ratings of effectiveness and MHP self-ratings on personality variables. This means that patient-perceived effectiveness has little to do with MHP self-rating on SAR or ARO, and that patients' SAR and ARO ratings of MHPs have little to do with MHP self-reported effectiveness. In contrast, nearly 40 percent (8 of the 21) of the correlations between MHP peer-ratings and patient-ratings were statistically significant.

Correlations between peer-rating of RC and patient's ratings of both SAR and ARO are trivial ($-.08$ and $.04$), whereas the peer-rated KS correlates significantly ($.33$ and $.35$) with patient's ratings of both self- and other-acceptance.

Self-Disclosure

Another major finding of this study is the consistent correlation between peer-rated self-disclosure and effectiveness scores. The near-zero correlation ($.05$) between

self-disclosure as rated by self versus co-workers is consistent with findings reported by Hurley and Hurley (1967). Co-worker's ratings of self-disclosure correlate significantly with every effectiveness score by all raters, unlike the consistently trivial correlations of effectiveness with self-rated self-disclosure.

Correlations of self-disclosure scores with other variables are presented in Appendix O. MHPs' ratings of self-disclosure are significantly correlated with SAR and ARO scores of therapists, MHPs, and self-ratings, and with patient-rated ARO. Self-ratings of self-disclosure, however, only correlate significantly with self-rating of SAR, and self- and other-acceptance as measured by the "OK" Questionnaire.

Self-disclosure, as found by multiple regression analysis, does not add significantly to other variables in the prediction of effectiveness scores. This means that the self-disclosure scores are largely subsumed by other variables and make little independent contribution to the predictability of effectiveness. Thus, it seems likely that self-disclosure is, at least in large part, a combination of the qualities of self- and other-acceptance in a person. An MHP who is accepting of self and of others would, likely, be an effective worker he or she would also, likely, be self-disclosing. But the self-disclosing qualities are not independent of the acceptance qualities, and so add no new information on the predictability of effectiveness.

Only when self-disclosure is rated by others, not by the self, does the present study support the importance of self-disclosure in helping relationships. This clarifies prior findings that established self-disclosure as an important factor in T-group trainer effectiveness (Culbert, 1968; J.R. Hurley, 1976c), in interviewer behavior (Powell, 1968), and in psychotherapy relationships (Truax & Carkhuff, 1965).

Self-disclosure, as studied here, seems to be consistent with the emphasis, in narrative accounts of the role of the MHP, on open communication (Konopka et al., 1961), authentic self-expression on a person-to-person level (Holmes, 1971), and a lack of defensiveness (Davids et al., 1969).

Length of Employment

Length of employment is significantly correlated with KS and total effectiveness, but not with RC, except for patient-ratings. In addition, multiple regression analysis shows that length of employment is a strong predictor of KS, but not of RC. These findings indicate that the skills represented by the KS cluster are largely learned by training and experience, while the RC cluster represents characteristics less related to the kinds of training and experience emphasized at The Oaks. This is consistent with my impressions, from experience at The Oaks, that the RC items of the MHW Rating Sheet (desire to help, desire to learn new skills and insights, interest in changing and growing personally,

and supports team decisions) are good early predictors of workers who will choose to remain longer at The Oaks. In contrast, the KS items (ability to maintain control and set limits, ability to understand psychological processes, individual counseling skills, and group counseling skills) tend to increase as length of employment increases. The reason for this is that MHPs at The Oaks receive very little pre-job training. They are mostly college students who have little or no formal training in mental health care delivery. After an interview with the therapist, a new MHP works two or three shifts with an experienced MHP who provides further explanations and serves as a role model, and then the new MHP works shifts as any other worker. As he or she works longer, the knowledge and skills increase.

"OK" Questionnaire

There are not statistically significant correlations between effectiveness scores and "OK" Questionnaire scores for self-acceptance or other-acceptance. (See Appendix O for correlations of "OK" Questionnaire scores with other variables.) Thus, this instrument is not useful in the selection of potential MHPs. This instrument's self-report character may contribute to these negative results, but cannot completely explain the lack of positive findings, in view of the many statistically significant correlations for self-report scores on SAR and ARO.

This discrepancy is probably due to other facets of the questionnaire's make-up, in that the semantic differential scales ask for a comparison of all team members with each other, with the instruction to "use the full range as much as possible," while the "OK" Questionnaire involves no comparison between self and others. Also, it's instructions give no emphasis to using the full range. Therefore, the "OK" Questionnaire appears highly susceptible to response sets.

In addition, the semantic differential scales ask for general impressions of recent behavior, while the "OK" Questionnaire asks for responses to specific situations with regard to specific traits. Subjects presumably responded to the "OK" Questionnaire in the context of their general feelings about that specific situation; i.e., their answers would mean, "compared to the way I usually feel, in this situation I felt ____." The semantic differential scales, in contrast, invite responses more consistent with the individual's typical self-perception.

Pathogenesis and Reported Problems

This TAT index likewise failed to correlate significantly with effectiveness scores or with any other variable in this study (see Appendix O). Since the pathogenesis score yielded no statistically significant results, it shows little practical utility in differentiating MHPs on the basis of effectiveness. Similar results obtained in

another recent study. Amberg (1976), studying fathers who were inmates in Jackson State Penitentiary, and relying on projective measures, found no variables, including the pathogenesis measure, which reliably discriminated between abusive fathers and two control groups. However, Evans (1976), in a study of mothers receiving Aid to Dependent Children welfare funds, found many large differences between child-abusers and a control group using objective and TAT measures, and marginal ($p < .06$, two-tailed test) differences using the pathogenesis score.

In spite of the lack of statistically significant results there are some tendencies in the data that indicate interesting perceptual differences between the patients and the other raters. Correlations of pathogenesis with therapists' and MHPs' ratings of ARO are in the expected negative direction ($-.11$ and $-.21$, respectively); however, pathogenesis correlates positively with patient's ratings of ARO ($.14$). This indicates a tendency for therapists and MHPs to rate workers with high pathogenesis scores as unaccepting of others, but a perplexing trend for patients to rate high pathogenic workers as accepting of others. Furthermore, pathogenesis' highest correlation is a $< .28$ with patients' liking, barely short of statistical significance ($r = \pm .29$; $p < .05$). Thus, patients tend to like MHPs who, according to their pathogenesis scores, do not consider patient needs and feelings. Conversely, the MHPs tend to like their co-workers who score low on pathogenesis ($r = -.26$). This

pattern is consistent with the correlations of effectiveness scores with pathogenesis (Appendix M). The patients' ratings of effectiveness tend to correlate positively with pathogenesis scores, while the therapist-, peer-, and self-ratings of effectiveness tend to correlate negatively with pathogenesis scores, although none of these correlations attain statistical significance. Patients seem to view workers with high pathogenesis scores more favorably than do the therapists or peers of the MHPs.

The differing orientations of patients from MHPs and therapists also show up in the correlations of effectiveness with the reporting of problems on the Mooney Problem Check List (see data in Appendix N). Virtually only positive (26 of 27) correlations obtain between Mooney scores and patient's effectiveness ratings. In contrast, the corresponding correlations between Mooney scores and effectiveness ratings by therapists and MHP's peers are predominantly negative (35 of 54). Patients, unlike either the therapists or MHPs, link the reporting of problems with effectiveness, even though none of the effectiveness scores correlate significantly with Mooney scores.

A connection between these Mooney patterns and the pathogenesis results seems likely, in that patients, more than therapists and peers, tend to like, and view as more effective, those workers who score higher on pathogenesis and personal problems. Thus, even though no individual correlations attain statistical significance, there appears

to be a broad and consistent tendency for patients to more favorably regard those workers who report more personal problems (Mooney) and who seem to be less considerate of the feelings of dependent persons (pathogenesis).

This pattern is reminiscent of Sturman's (1973) finding that MHPs with good individual counseling skills tended to be emotionally unstable. Davids et al. (1969) also found that a certain degree of personal and social maladjustment may be desirable in working with emotionally disturbed children.

Assuming that patients see themselves as having problems, and that they have backgrounds with parents and other adult figures likely to have higher than average pathogenesis scores (a reasonable assumption, since pathogenesis has previously been found [Mitchell, 1971] to be successful in differentiating parents of the emotionally disturbed from parents of normals), it seems that patients show some tendency to view more favorably those workers who are more like themselves, or who have some characteristics similar to other significant adults in their lives.

Qualitative Aspects of Reported Problems

It is intriguing to note, from the qualitative aspects of the narrative responses to the Mooney Problem Check List, that more effective workers take more responsibility for their problems. This finding closely parallels the emphasis in the literature on personal involvement (Konopka

et al., 1961), emotional interaction with patients related to self-examination and working on one's own problems (Maier, et al., 1955), and the personal development of the MHP through insights into himself (Bettelheim, 1966; Bettelheim & Wright, 1955). This seems to be quite a promising area to pursue in further research.

Predicting Effectiveness of MHPs

Personality variables as predictors of rated effectiveness of MHPs are listed in Appendix P, according to the size of their correlation with effectiveness scores. The multiple regression analysis results in Table 12 shed even more light on the strength of personality variables as predictors of effectiveness. Several implications can be drawn from these data:

- (1) In general, correlations between effectiveness scores and personality variables are highest within rater types.
- (2) Across rater types, therapist-ratings of ARO are better predictors of RC than are SAR ratings, while peer-, therapist-, and patient-ratings of SAR are better predictors of KS and total effectiveness. Self-ratings are quite inconsistent, and are not good predictors.
- (3) For therapist-ratings of effectiveness, SAR is a better predictor than ARO. The only exceptions are that the therapist-rating of ARO is a better predictor of therapist-rated RC and total effectiveness than is the therapist-rating of SAR. For patient-ratings of effectiveness, ARO

is more important than SAR. For peer-ratings of effectiveness, both SAR and ARO are important.

(4) There is a tendency for ratings of SAR to be better predictors of the KS cluster and ratings of ARO to be better predictors of the RC cluster.

(5) The "Liked" score correlates with effectiveness within all rater groups. Across rater groups, therapist liking is important to all groups, peer liking is important only to peers and therapist, and patient liking is important only to patients. Taken as an independent variable, apart from its correlation with other variables, liking is a good predictor of effectiveness only with peer-ratings of liking for peer-rated RC and total effectiveness.

(6) The OK Questionnaire, the Mooney Problem Check List scores, and the pathogenesis score are inadequate predictors of ratings of effectiveness.

In summary, the best predictor of role commitment is therapist-rated ARO, followed by patient- and peer-rated ARO. The best predictors of knowledge and skills are peer- and patient-rated SAR, although number of months employed predicts KS about equally well. Peer-ratings of self-disclosure correlate well with effectiveness, and would be useful in the absence of SAR and ARO ratings. Therapist "liking" also correlates well with RC effectiveness.

In a hiring situation, ratings by previous supervisors and/or peers and/or patients of the applicant might be quite helpful in obtaining information about SAR and ARO, although

it might be difficult to devise a suitable context for these ratings because they were made here in the context of similar rating of co-workers. Ratings by other of self-disclosure might also be helpful. The present data indicates that therapist-ratings are most valid, followed closely by peer-ratings, and trailed more distantly by patient-ratings. In the absence of these, or in addition to them, the characteristics, SAR, ARO, self-disclosure, and liking, could be kept in mind during an interview process.

The qualitative focus on the Mooney Problem Check List, indicating that workers rated as effective tend to take more responsibility for their own problems, offers further suggestions, especially if the initial impression presented here is substantiated by further research. The feelings and attitudes of potential MHPs could be elicited by written responses or by interview.

With regard to MHPs already hired, it would be beneficial to keep in mind the variables of SAR and ARO when developing training programs.

Suggestions for Further Research

1. Attempt to further validate the MHP effectiveness rating by using a behavioral measure of the MHP in some kind of actual interaction with the patient(s). For example, the MHP could be observed in a group meeting, and his effectiveness directly rated by observers.

2. Do a longitudinal study, getting personality data

at the onset of employment, and periodically thereafter, collecting both personality and effectiveness data. In this way, better information could be obtained on the predictability of initial personality measures for future job effectiveness. Also, information could be obtained on the stability over time of both the personality variable scores and effectiveness measures.

3. Further investigate the qualitative aspects of responsibility taken for personal problems, as presently reflected in the written addition to items on the Mooney Problem Check List.

4. Although previous studies found that the broad interpersonal dimensions of SAR and ARO are relatively independent, there was a considerable overlap between the measures of them used in this study. Thus, these SAR and ARO measures intercorrelated .64 for therapists, .76 among patients, .75 among co-workers, and .51 among self-ratings. The overlap between these measures could probably be markedly reduced by further development of these measures.

5. Also deserving further investigation was the clear tendency for patients, unlike either the therapists or MHPs, to rate more favorably the MHPs who showed greater evidence of emotional problems in interpersonal behaviors.

SUMMARY AND CONCLUSIONS

The effectiveness of Mental Health Paraprofessionals (MHPs) in a residential treatment center was rated by their supervisors, patients, co-worker peers, and by self. These effectiveness ratings yield two moderately independent components, a Knowledge and Skills (KS) element and a Role Commitment (RC) element. Both of these, plus the total effectiveness score, were examined for linkages to several selected personality variables and for consistency across rater classes.

MHPs rated as being effective were also rated as being accepting of themselves (SAR) and accepting of others (ARO). SAR tends to link with the KS component of effectiveness, while ARO tends to link with the RC component.

Self-disclosure is correlated with effectiveness only when measured by others, not by self. Self-rated self-disclosure does not correlate with peer-rated self-disclosure.

This study strongly supports the generality of the concepts, SAR, ARO, and self-disclosure, extending their applicability to the MHP population.

Therapist-ratings generally carried more predictive value, followed by peer-ratings, and then by patient-ratings. Self-ratings were generally not useful in differentiating

MHPs on the basis of effectiveness as rated by others.

The KS component of effectiveness improves with the training and experience attained during length of employment, but the RC component shows no such relationship. In a longitudinal study, this RC component may emerge as an early predictor of effectiveness.

Patients, more than other raters, tended to see more favorably those MHPs who were not considerate of the feelings of dependent persons, and who reported more personal problems. Scores for pathogenesis and for the number of personal problems reported did not differentiate workers on the basis of effectiveness as rated by others.

A promising area for further research is presented; this involves focusing on the amount of responsibility a person assumes for his own problems.

REFERENCES

REFERENCES

- Adams, H. B. "Mental illness" or interpersonal behavior? American Psychologist, 1964, 19, 191-197.
- Allen, J. G. Existential position and adjustment in a college population. Transactional Analysis Journal, 1973, 3, 202-204.
- Amberg, E. C. Fathers who abuse their children. Unpublished doctoral dissertation, Michigan State University, 1976.
- Bettelheim, B. Training the child care worker in a residential center. American Journal of Orthopsychiatry, 1966, 36, 694-705.
- Bettelheim, B., & Wright, B. Staff development in a treatment institution. American Journal of Orthopsychiatry, 1955, 25, 705-709.
- Bierman, R. Dimensions of interpersonal facilitation in psychotherapy and child development. Psychological Bulletin, 1969, 72, 338-352.
- Culbert, S. A. Trainer self-disclosure and member growth in two T-groups. Journal of Applied Behavioral Science, 1968, 4, 47-73.
- Davids, A., Laffey, J. J., & Cardin, P. J. Intellectual and personality factors in effective child care workers. American Journal of Orthopsychiatry, 1969, 39, 68-76.
- Diggles, M. W. The child care counselor: New therapist in children's institutions. Child Welfare, 1970, 49, 509-513.
- Evans, A. Child-abusing mothers. Unpublished doctoral dissertation, Michigan State University, 1976.
- Harris, T. A. I'm OK - You're OK. New York: Harper and Row, 1967.

- Henry, J. The culture of interpersonal relations in a therapeutic institution for disturbed children. American Journal of Orthopsychiatry, 1957, 27, 725-734.
- Holmes, M. J. Influences of the new hospital psychiatry on nursing. Chapter 6 in The New Hospital Psychiatry, Abrams, G. M., & Greenfield, N. S., ed. New York: Academic Press, Inc., 1971.
- Hurley, J. R. Helpful behaviors in groups of mental health professionals and undergraduates. International Journal of Group Psychotherapy, 1976a, 26, 173-189.
- Hurley, J. R. Only two major interpersonal dimensions relevant to psychotherapy? Presented at the 33rd Annual Conference of the American Group Psychotherapy Association, 1976b.
- Hurley, J. R. Two prepotent interpersonal dimensions and the effects of trainers on T-groups. Small Group Behavior, 1976c, 7, 77-98.
- Hurley, J. R., & Force, E. J. A multi-observer - multi-method study of interpersonal competence and T-groups. Unpublished manuscript, Michigan State University, 1971.
- Hurley, J. R., & Hurley, S. J. Toward authenticity in measuring self-disclosure. Journal of Counseling Psychology, 1969, 16, 271-274.
- Hurley, S. J. Self-disclosure in counseling groups as influenced by structured confrontation and interpersonal process recall. Unpublished doctoral dissertation, Michigan State University, 1967.
- Kim, J-O., & Kohout, F. J. Multiple regression analysis: subroutine regression. In Nie, N. H., Hull, G. H., Jenkins, J. G., Steinbrenner, K., & Bent, D. H. Statistical Package for the Social Sciences (2nd ed.). New York: McGraw-Hill, 1975.
- Konopka, G., Kamps, F. X., Wallinga, J. V., & Hovda, P. Implications of a changing residential treatment program. American Journal of Orthopsychiatry, 1961, 31, 17-39.
- Lorr, M., Bishop, P. F., & McNair, D. M. Interpersonal types among psychiatric patients. Journal of Abnormal Psychology, 1965, 70, 468-477.

- Lourie, N. V., & Schulman, R. The role of the residential staff in residential treatment. American Journal of Orthopsychiatry, 1952, 22, 798-808.
- Maier, H. W. The child care worker. From 1971 Encyclopedia of Social Work, New York.
- Maier, H. W., Hilgeman, L. M., Shugart, G., & Loomis, Jr., E. A. Supervision of child care workers in a residential treatment service. American Journal of Orthopsychiatry, 1955, 25, 699-704.
- McQuitty, L. L. Elementary linkage analysis for isolating orthogonal and oblique types and typal relevancies. Educational and Psychological Measurement, 1957, 17, 207-229.
- Melnick, B., & Hurley, J. R. Distinctive personality attributes of child-abusing mothers. Journal of Consulting and Clinical Psychology, 1969, 33, 746-749.
- Meyer, R. G., & Karon, B. P. The schizophrenogenic mother concept and the TAT. Psychiatry, 1967, 30, 173-179.
- Mitchell, K. M. An analysis of the schizophrenogenic mother concept by means of the TAT. Journal of Abnormal Psychology, 1968, 73, 571-574.
- Mitchell, K. M. Social class and the schizophrenogenic mother concept. Psychological Reports, 1969, 24, 463-469.
- Mitchell, K. M. The concept of "pathogenesis" among parents of schizophrenic, delinquent, and normal children. Unpublished manuscript, University of Georgia, 1971.
- Portnoy, S. M. Power of child care worker and therapist figures and their effectiveness as models for emotionally disturbed children in residential treatment. Journal of Consulting and Clinical Psychology, 1973, 40, 15-19.
- Portnoy, S. M., Biller, H. B., & Davids, A. The influence of the child care worker in residential treatment. American Journal of Orthopsychiatry, 1972, 42,
- Powell, Jr., W. J. Differential effectiveness of interviewer interventions in an experimental interview. Journal of Consulting and Clinical Psychology, 1968, 32, 210-215.

- Schaefer, E. S. A circumplex model for maternal behavior. Journal of Abnormal and Social Psychology, 1959, 59, 226-235.
- Schwartz, W. The practice of child care in residential treatment. Presented at the Bellefaire Centennial Symposium, Cleveland, Ohio, May 24, 1968.
- Sturman, M. E. Personality factors which determine job success of mental health workers. The Oaks Magazine, 1973, 2, 3-4.
- Trieschman, A. E., Whittaker, J. K., & Brendtro, L. K. The Other 23 Hours. Chicago: Aldine Publishing Company, 1969.
- Truax, C. B., & Carkhuff, R. R. Client and therapist transparency in the psychotherapeutic encounter. Journal of Counseling Psychology, 1965, 12, 3-9.
- Vandenbos, G. R., & Karon, B. P. Pathogenesis: a new therapist personality dimension related to therapeutic effectiveness. Journal of Personality Assessment, 1971, 35, 252-260.
- Veldman, D. J. Simple structure and the number of factors problem. Multivariate Behavioral Research, 1974, 9, no. 2.
- Whittaker, J. K., & Trieschman, A. E. Children Away from Home. Chicago: Aldine-Atherton, 1972.

APPENDICES

Appendix A

Self-Disclosure Measure

Overtly Self-Concealing:

1. Makes an obvious effort to project some desired self-image. Seems to continually express opinions, rationalize, or make defensive statements which are often predictable. Personality structure seems very rigid. Person seems not to hear or accepts ideas or feelings of others.
2. The effort to project a desired self-image is less obvious than type 1. Rigidity of thinking is partially concealed by a pleasant facade. Seems to hear and accept opinions of others momentarily, but quickly re-establishes a new defensive position with other rationalizations.

Covertly Self-Concealing:

3. Seems quiet and withdrawn from group interaction and uses passivity as a defense against involvement with others. Resists efforts to elicit social participation. Hostility or indifference is often conveyed by non-verbal expressions of boredom, sulkiness or anger.
4. Seems quiet and withdrawn from group interaction and uses passivity as a defense against the exposure of anxiety and fear. Conveys by expression or other non-verbal behavior an attitude of wanting to communicate with others but of not knowing how or of being afraid to try.

Involved Conventional:

5. Plays the role of a conventionally friendly person but rarely reveals self. May be outgoing and congenial but is limited by conformity to a social code restricting conversation largely to ideas and safe topics rather than feelings of intimate topics. Seems more inhibited than defensive in emotional expression.
6. Often participates in group interaction and seems genuinely involved and concerned for others' feelings and problems but rarely reveals own personal feelings. The person who frequently plays helper but hardly ever plays helpee epitomizes this type.

Self-Disclosing:

7. Seems in good contact with own feelings and reveals them from time to time. Seems genuinely motivated toward self-honesty which can be shared with others, but sometimes appears uncomfortable with this goal. Expresses more about self than reactions to others.

8. Is actively involved in sharing thoughts and feelings about self and others in group interactions. Although not always transparent the person seems to be highly motivated toward being self-disclosing and seldom appears uncomfortable with this goal.

Rate each of your team members, including yourself, by assigning a number to each name below:

Appendix B

THE "OK" QUESTIONNAIRE - INSTRUCTIONS

This is a measure of "existential position," an important concept in the theory of "transactional Analysis" (e.g., Eric Berne, Games People Play; Harris, I'm OK, You're OK). To answer accurately, you will need to understand the concept of existential position and think about how it applies to you.

All of us have some general feelings and attitudes about how "good," "worthwhile," and "OK" we are (or how "bad," "worthless," and "not-OK" we are). We also have some general feelings about how good, worthwhile, and OK (or bad, worthless, and not-OK) other people are. There are four existential positions, based on the combination of our feelings about ourselves ("I") and our feelings about other people ("Other"):

I'm OK - Others are OK: "We're all winners."

I'm fine, good, worthwhile, and "OK," and so are other people. I like myself and other people.

I'm OK - Others are not-OK: "I'm better than others."

I'm fine, good, worthwhile, and "OK," but other people are not so hot. I like myself but not other people.

I'm not-OK - Others are OK: "Others are better than I am."

Other people are fine, good, worthwhile, and "OK," but I'm not so hot. I like other people but not myself.

I'm not OK - Others are not OK: "We're all losers."

I'm not much good, and neither is anybody else. I don't like myself or other people.

If each of us could "fit" into one position, this questionnaire would be simple: you'd just indicate which position fits you best. However, most of us change positions, depending on two things: the situation we are in, and the trait we have in mind.

The situation: You may feel OK in some situations (or with some people) and not others. For example, you may feel OK when you are with friends and not-OK when you are with strangers. Similarly, you may like other people when you are at a party ("Others are OK") and dislike other people in the classroom ("Others are not-OK").

The trait: In any particular situation, you may feel OK in some ways and not-OK in others. For example, on a date you may feel "I'm OK-intelligent" and "I'm not-OK-shy." Similarly, you could feel that your date is attractive ("Others are OK-good-looking") but not too bright (Others are not-OK-dumb).

A final complication is that "OK-ness" can be a matter of degree; instead of feeling OK-rich vs. not-OK-poor, you may feel very rich, somewhat rich, somewhat poor, or flat broke. Where you place yourself (or someone else) on this scale of OK-ness will depend on the situation you are in and the trait you have in mind.

This questionnaire takes all of these complications into account. You will be asked to indicate your existential position for 3 traits in 20 different situations. For each position, you will also be asked to rate the degree to which you feel OK (or not-OK) and the degree to which you feel the other people are OK (or not-OK).

Instructions:

These instructions may sound complicated. You may want to refer to the examples on the following page as you read them.

Each item is based on one situation, and your answers will probably be most accurate if you think of some personally meaningful situation rather than answering in general terms. For each item, try to recall a specific situation that you have been in. The first concrete situation that comes to mind will be fine. The situation may be recent or past, frequent to infrequent, or whatever, as long as it is one you can remember specifically. Make a brief note (a word or phrase) of that specific situation in the space marked "Situation: _____". With that specific situation in mind, think of the existential position you were in at that time.

To rate degree of OK-ness, use 6-point scales (6 = very positive, 1 = very negative). For example, if the situation were "On a date" and you were rating the trait of attractiveness, you might choose the "I'm OK - Others are OK" position and rate yourself very attractive (6) and your date slightly attractive (4), or vice versa. For the "I'm not-OK - Others are OK" position, you might rate yourself slightly unattractive (3) and your date moderately attractive (5).

Take a look at the following examples.

Rating Scales: 1 = very negative (very not-OK)
 2 = moderately negative (moderately not-OK)
 3 = slightly negative (slightly not-OK)
 4 = slightly positive (slightly OK)
 5 = moderately positive (moderately OK)
 6 = very positive (very OK)

A. On a date. Situation: with Bill last Friday

<u>Traits</u>	<u>"I"</u>	<u>"Other"</u>
a) attractive vs. unattractive	<u>5</u>	<u>3</u>
b) interesting vs. dull	<u>1</u>	<u>4</u>
c) sincere vs. insincere	<u>6</u>	<u>5</u>

These answers mean that the person rated herself moderately OK-attractive, very not-OK dull, and very OK-sincere. She rated her date slightly not-OK-unattractive, slightly OK-interesting, and moderately OK-sincere.

B. With my parents. Situation: over last vacation

<u>Traits</u>	<u>"I"</u>	<u>"Other"</u>
a) friendly vs. unfriendly	<u>2</u>	<u>4</u>
b) adjusted vs. maladjusted	<u>6</u>	<u>5</u>
c) openminded vs. closedminded	<u>3</u>	<u>2</u>

Go over this one until you understand it.

Final Notes:

1. There are no "correct" answers. Each item was chosen so that someone could be in any one of the four positions for any trait in that kind of situation.
2. Please answer all items; if you can't think of a specific situation, or you are not sure of your positions in a particular situation, make your best guess.
3. For some items, a definite other person may not be involved (e.g., "when I get up in the morning"). For these items, base your answers on how you felt about other people in general when you were in that situation.
4. Keep the above rating scales in front of you as a reminder while you complete the following questionnaire.

THE "OK" QUESTIONNAIRE

1. Borrowing something from someone. Situation: _____
(Note: Answer according to how you felt in that situation.)

<u>Traits</u>	<u>"I"</u>	<u>"Other"</u>
a) friendly vs. unfriendly	_____	_____
b) honest vs. dishonest	_____	_____
c) sincere vs. insincere	_____	_____

2. Talking to a teacher. Situation: _____

<u>Traits</u>	<u>"I"</u>	<u>"Other"</u>
a) openminded vs. closedminded	_____	_____
b) concerned vs. apathetic	_____	_____
c) intelligent vs. unintelligent	_____	_____

3. With people I don't know. Situation: _____

<u>Traits</u>	<u>"I"</u>	<u>"Other"</u>
a) outgoing vs. shy	_____	_____
b) interesting vs. dull	_____	_____
c) attractive vs. unattractive	_____	_____

4. When someone doesn't like me. Situation: _____

<u>Traits</u>	<u>"I"</u>	<u>"Other"</u>
a) openminded vs. closedminded	_____	_____
b) concerned vs. apathetic	_____	_____
c) kind vs. cruel	_____	_____

5. In high school. Situation: _____
 (Note: "Other" may mean "people in general" here.)

<u>Traits</u>	<u>"I"</u>	<u>"Other"</u>
a) friendly vs. unfriendly	_____	_____
b) adjusted vs. maladjusted	_____	_____
c) attractive vs. unattractive	_____	_____

6. In a competitive situation. Situation: _____

<u>Traits</u>	<u>"I"</u>	<u>"Other"</u>
a) openminded vs. closedminded	_____	_____
b) honest vs. dishonest	_____	_____
c) intelligent vs. unintelligent	_____	_____

7. Asking someone for help. Situation: _____

<u>Traits</u>	<u>"I"</u>	<u>"Other"</u>
a) friendly vs. unfriendly	_____	_____
b) concerned vs. apathetic	_____	_____
c) sincere vs. insincere	_____	_____

8. In an unfamiliar situation. Situation: _____

<u>Traits</u>	<u>"I"</u>	<u>"Other"</u>
a) friendly vs. unfriendly	_____	_____
b) adjusted vs. maladjusted	_____	_____
c) openminded vs. closedminded	_____	_____

9. After an argument. Situation: _____

<u>Traits</u>	<u>"I"</u>	<u>"Other"</u>
a) openminded vs. closedminded	_____	_____
b) kind vs. cruel	_____	_____
c) sincere vs. insincere	_____	_____

10. When I was a young child. Situation: _____

<u>Traits</u>	<u>"I"</u>	<u>"Other"</u>
a) friendly vs. unfriendly	_____	_____
b) kind vs. cruel	_____	_____
c) outgoing vs. shy	_____	_____

Note: You are halfway done. If you are getting tired of this, try daydreaming for a few minutes before you continue. You are asked to rate a lot of situations because a smaller number might give a biased picture.

11. In the classroom. Situation: _____

<u>Traits</u>	<u>"I"</u>	<u>"Other"</u>
a) openminded vs. closedminded	_____	_____
b) concerned vs. apathetic	_____	_____
c) interesting vs. dull	_____	_____

12. When I get up in the morning. Situation: _____
(Note: "Other" = "people in general" or the person(s) you were in bed with.)

<u>Traits</u>	<u>"I"</u>	<u>"Other"</u>
a) kind vs. cruel	_____	_____
b) outgoing vs. shy	_____	_____
c) attractive vs. unattractive	_____	_____

13. In a discussion of politics. Situation: _____

<u>Traits</u>	<u>"I"</u>	<u>"Other"</u>
a) openminded vs. closedminded	___	___
b) concerned vs. apathetic	___	___
c) intelligent vs. unintelligent	___	___

14. Being interviewed for a job. Situation: _____

<u>Traits</u>	<u>"I"</u>	<u>"Other"</u>
a) interesting vs. dull	___	___
b) attractive vs. unattractive	___	___
c) intelligent vs. unintelligent	___	___

15. Giving advice to someone. Situation: _____

<u>Traits</u>	<u>"I"</u>	<u>"Other"</u>
a) concerned vs. apathetic	___	___
b) honest vs. dishonest	___	___
c) sincere vs. insincere	___	___

16. With people in authority. Situation: _____

<u>Traits</u>	<u>"I"</u>	<u>"Other"</u>
a) adjusted vs. maladjusted	___	___
b) openminded vs. closedminded	___	___
c) intelligent vs. unintelligent	___	___

17. When I am all alone. Situation: _____
 (Note: "Other" = "people in general")

<u>Traits</u>	<u>"I"</u>	<u>"Other"</u>
a) adjusted vs. maladjusted	_____	_____
b) concerned vs. apathetic	_____	_____
c) honest vs. dishonest	_____	_____

18. At work. Situation: _____

<u>Traits</u>	<u>"I"</u>	<u>"Other"</u>
a) friendly vs. unfriendly	_____	_____
b) interesting vs. dull	_____	_____
c) intelligent vs. unintelligent	_____	_____

19. Lying in bed at night. Situation: _____

<u>Traits</u>	<u>"I"</u>	<u>"Other"</u>
a) adjusted vs. maladjusted	_____	_____
b) honest vs. dishonest	_____	_____
c) sincere vs. insincere	_____	_____

20. Studying for an exam. Situation: _____
 (Note: "Other" = classmates and/or teacher)

<u>Traits</u>	<u>"I"</u>	<u>"Other"</u>
a) adjusted vs. maladjusted	_____	_____
b) honest vs. dishonest	_____	_____
c) intelligent vs. unintelligent	_____	_____

How accurate were your answers? very__ fairly__ slightly__
 not at all__

Appendix C

Letter of Introduction and Background Sheets for MHPs

Dear MHW,

Thank you for taking part in this research. Your participation will not only help me personally in completing requirements for a PH.D. in Clinical Psychology from Michigan State University; also, it will hopefully be beneficial to The Oaks and to other residential treatment centers in future hiring and training of Mental Health Workers.

All of the information you give will be completely confidential; it will not affect your job, you will not be identified personally in the final results, and it will not be included in your personnel file. In fact, no one at The Oaks will have access to the information other than myself.

Please begin by completing the background information below; then complete the other materials in the order they are presented. Again, I want to thank you for your participation.

Donna Jabury

BACKGROUND INFORMATION

Name _____ Age _____ Sex _____

Marital Status _____ Number of Children _____

Education completed _____

Are you presently enrolled in college? _____ Major _____

Length of time at The Oaks _____

Length of time on current residence at The Oaks _____

Appendix D

Mean Effectiveness and Semantic Differential Scores of Subjects and of MHPs Who Did Not Complete Data-Gathering Process

	Subjects (<u>n</u> = 43)	Non-subjects (<u>n</u> = 7)
Therapist-ratings:		
Total eff	72.7	65.3
RC	19.4	18.1
KS	17.3	15.3
SAR	23.5	20.7
ARO	27.6	26.6
Like	7.1	5.3
Patient-Ratings:		
Total eff	72.4	67.5
RC	19.4	17.1
KS	18.1	16.7
SAR	23.5	23.5
ARO	28.1	27.5
Like	7.1	6.7
Peer-ratings:		
Total eff	72.0	63.3
RC	19.0	16.4
KS	17.8	14.6
SAR	22.7	19.0
ARO	26.6	24.6
Like	7.1	6.3

Appendix E

Effectiveness Scores of Individual MHPs

MHP	Therapist			Patient			MHP-Peer			MHP-Self		
	Total	RC	KS	Total	RC	KS	Total	RC	KS	Total	RC	KS
1	880	220	210	807	206	202	916	232	232	850	200	240
2	650	170	150	610	180	131	624	202	168	800	200	200
3	800	200	200	786	188	201	839	230	224	840	220	220
4	620	160	140	689	186	154	802	204	198	820	240	180
5	540	140	140	747	198	184	820	214	206	700	170	180
6	520	150	110	661	184	158	746	210	188	780	240	190
7	700	240	110	547	151	121	663	188	148	780	200	190
8	760	240	150	656	185	155	707	197	159	650	190	180
9	810	230	190	729	205	192	758	201	187	750	200	180
10	680	200	150	713	185	181	752	183	188	860	230	210
11	820	210	240	650	168	181	897	229	236	830	220	220
12	800	200	220	609	188	165	815	207	212	910	230	230
13	820	230	150	611	164	121	710	195	157	650	180	150
14	480	150	100	655	179	166	368	100	92	490	130	120
15	730	180	190	626	170	158	716	180	182	790	220	210
16	800	210	210	870	224	223	768	208	202	630	170	180
17	830	200	210	900	231	238	710	178	172	890	240	220
18	730	190	180	854	234	220	654	160	162	760	220	170
19	660	170	160	735	191	191	624	176	148	700	220	170
20	870	230	200	890	231	219	794	191	209	810	220	190
21	790	190	180	759	202	183	775	198	183	800	200	200
22	890	210	220	916	234	227	856	191	240	860	190	230
23	600	160	130	640	177	136	654	193	128	680	190	120
24	590	180	120	724	208	177	641	196	133	680	230	120
25	630	160	150	747	191	186	584	164	136	580	180	120
26	630	140	160	885	224	226	731	171	196	780	200	190
27	540	130	140	713	181	191	587	163	144	680	200	150
28	840	200	220	810	217	206	762	199	190	650	140	180
29	820	210	230	843	226	226	720	166	218	890	240	240
30	900	230	210	818	213	216	850	204	218	730	170	190
31	860	240	180	621	163	151	746	202	182	850	230	200
32	700	190	170	551	149	111	796	212	188	810	210	210
33	670	210	150	572	177	139	700	210	152	700	190	180
34	400	100	90	421	118	101	488	142	116	620	190	130
35	860	240	200	688	209	172	648	194	152	920	240	200
36	690	170	200	830	210	210	745	190	205	610	150	160
37	700	190	140	675	190	175	590	140	140	740	200	180
38	510	160	90	650	175	170	615	180	140	680	190	150
39	840	230	210	715	194	179	636	167	149	720	200	170
40	580	160	130	685	186	175	705	184	185	500	140	120
41	900	230	240	864	221	224	830	207	218	830	230	210
42	910	240	240	833	215	211	718	193	188	770	200	190
43	850	230	210	825	210	219	753	201	193	890	240	220

Note: Scores given are mean scores, times ten; possible range for Total Effectiveness is 160 to 960; possible range for RC and KS is 40 to 240.

Appendix F

Semantic Differential Scores of Individual MHPs

MHP	Therapist			Patient			MHP-Peer			MHP-Self		
	SAR	ARO	L1	SAR	ARO	L1	SAR	ARO	L1	SAR	ARO	L1
1	320	350	80	225	303	65	302	340	86	330	330	90
2	220	300	70	158	223	60	226	284	76	240	330	90
3	310	330	80	215	325	73	298	346	88	210	300	90
4	270	330	70	148	263	70	266	272	78	260	320	90
5	190	260	60	203	273	60	240	310	76	260	290	70
6	230	270	70	160	205	60	222	260	72	280	320	70
7	230	270	90	170	227	70	215	262	69	320	300	90
8	280	330	80	204	237	74	249	305	84	250	280	70
9	290	320	90	227	280	77	229	280	79	220	270	60
10	160	300	60	187	254	67	197	247	67	270	310	90
11	240	230	90	180	264	74	279	270	84	260	290	90
12	210	270	80	134	214	57	265	275	74	260	300	90
13	330	300	90	214	260	77	250	265	70	190	220	70
14	170	200	40	173	273	83	110	150	18	140	190	50
15	240	210	60	320	288	63	248	254	72	330	270	90
16	280	270	90	265	318	78	194	266	76	200	230	80
17	290	320	90	280	358	88	270	306	78	280	300	70
18	160	300	70	245	340	88	164	208	64	280	320	80
19	220	250	60	230	313	73	248	256	62	200	290	80
20	310	340	90	298	358	88	215	288	78	290	330	50
21	230	320	80	258	335	83	218	285	80	230	290	70
22	310	280	70	313	350	88	298	230	65	310	260	80
23	230	290	90	218	275	68	218	273	73	250	310	90
24	200	280	80	253	335	78	190	243	75	210	300	70
25	230	270	70	245	308	88	155	230	63	140	210	70
26	210	230	60	335	345	88	265	288	83	270	300	90
27	210	230	50	210	205	55	178	210	55	240	270	80
28	270	310	80	290	285	63	273	300	75	220	260	80
29	310	290	90	343	308	78	235	213	65	350	330	90
30	310	310	90	308	358	90	268	298	76	270	250	80
31	330	330	80	235	230	45	258	284	76	290	210	50
32	250	270	70	198	203	45	236	272	72	250	280	90
33	120	220	50	148	165	53	120	230	76	220	260	90
34	70	100	30	133	175	58	152	176	46	200	290	80
35	200	280	60	253	195	30	208	228	68	260	270	90
36	220	190	70	280	350	90	170	260	45	220	290	70
37	310	230	70	265	315	70	200	225	65	250	230	70
38	150	240	60	225	260	60	185	245	60	260	290	70
39	220	300	60	245	295	78	225	288	78	270	340	80
40	80	230	30	220	263	65	188	278	65	210	300	90
41	220	320	80	300	323	85	298	335	83	320	340	80
42	250	310	70	288	318	80	260	278	73	260	280	80
43	210	290	50	283	328	88	280	315	78	240	340	90

Note: Scores given are mean scores, times ten; possible range for SAR and ARO is 0 to 360; possible range for Like is 0 to 90.

Appendix G

Personality Variable Scores of Individual MHPs

Self Disc OK Quest					Mooney Problem Check List										Path	# mo
MHP	Pe	Se	Sel	Oth	He	ES	SI	Py	HF	Ct	Sx	Rl	Oc			
1	78	70	286	264	4	0	10	7	0	7	2	0	0	55	24	
2	64	70	306	272	1	4	6	12	6	0	3	0	0	33	7	
3	76	70	298	291	2	4	1	4	1	0	0	1	0	75	13	
4	64	70	272	276	7	6	18	14	11	2	1	4	0	67	6	
5	58	80	285	291	10	11	20	17	9	3	2	0	6	58	15	
6	60	70	260	271	4	4	2	3	6	1	8	0	0	58	3	
7	57	70	300	255	0	2	3	3	0	0	2	0	0	100	5	
8	69	50	247	209	9	6	16	20	7	7	1	6	2	44	3	
9	65	70	227	211	3	3	11	17	2	5	2	3	0	33	5	
10	52	70	248	240	4	18	26	37	12	5	7	0	5	80	15	
11	75	70	281	253	0	3	7	17	0	3	11	0	3	72	48	
12	69	70	204	243	10	10	15	41	7	11	1	2	2	46	13	
13	52	70	228	228	5	2	3	17	1	1	1	1	2	53	48	
14	32	60	256	239	1	1	9	8	0	0	0	1	0	71	2	
15	60	80	294	271	4	2	10	10	11	1	0	0	2	12	14	
16	64	70	245	285	1	0	8	13	2	3	3	0	1	22	42	
17	70	70	303	273	9	12	29	32	6	4	4	4	4	18	9	
18	62	70	294	260	1	8	7	15	2	2	1	0	1	82	23	
19	64	60	252	268	11	10	11	28	3	6	0	1	2	50	30	
20	73	70	249	227	9	8	27	38	5	7	7	10	2	81	13	
21	65	60	239	275	2	7	24	19	0	5	1	0	6	9	14	
22	43	80	266	230	5	6	5	0	2	2	0	0	5	73	25	
23	70	80	278	264	3	7	10	34	11	9	3	1	2	87	9	
24	48	70	258	269	3	10	12	23	13	2	0	3	5	45	6	
25	53	50	201	203	12	8	13	28	4	6	3	1	12	92	6	
26	73	70	251	215	3	4	5	12	0	3	4	0	1	69	21	
27	55	80	271	268	4	14	25	37	15	9	1	8	9	50	10	
28	63	80	273	260	0	7	3	5	2	0	0	0	0	50	42	
29	50	80	281	241	3	15	19	15	16	7	2	0	6	78	48	
30	74	80	273	280	3	10	11	25	0	6	1	2	3	72	19	
31	64	70	293	292	5	3	4	12	0	1	3	1	6	30	12	
32	64	70	286	243	3	4	4	1	1	0	0	0	1	27	16	
33	38	60	258	239	6	12	8	12	5	3	3	3	1	55	4	
34	26	80	308	299	7	9	10	1	5	4	3	0	2	54	3	
35	64	60	270	258	6	8	16	16	5	5	2	2	0	46	3	
36	45	60	279	254	4	7	17	8	1	4	0	1	6	91	18	
37	55	60	298	294	1	2	10	5	1	2	0	0	1	69	4	
38	45	70	291	283	8	9	26	23	9	18	3	0	6	62	9	
39	65	60	305	288	7	2	9	4	4	0	0	0	0	30	42	
40	50	60	242	234	2	5	22	21	8	4	6	3	8	44	5	
41	75	80	241	291	8	13	23	31	14	5	7	6	4	69	42	
42	60	50	252	243	5	13	21	23	13	6	2	1	1	33	14	
43	70	60	288	266	1	4	2	10	7	0	1	1	1	46	9	

Appendix H

Intercorrelations Among MHW Rating Sheet Items, for Therapist Ratings

Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1		30	26	43	17	37	29	27	29	15	13	30	29	36	40	35
2	30		56	39	59	58	39	57	40	48	60	61	51	49	54	66
3	26	56		66	52	64	56	35	39	62	50	44	48	69	47	66
4	43	39	66		68	65	52	50	45	61	44	59	64	61	54	67
5	17	59	52	68		49	40	53	51	57	45	63	64	41	53	65
6	37	58	64	65	49		71	50	51	64	52	67	55	76	60	81
7	29	39	56	52	40	71		54	74	73	46	54	31	64	52	75
8	27	57	35	50	53	50	54		43	41	60	68	53	58	56	66
9	29	40	39	45	51	51	74	43		74	38	44	25	43	48	57
10	15	48	62	61	57	64	73	40	74		44	46	39	63	37	64
11	13	60	50	44	45	52	46	60	38	44		62	47	65	61	75
12	30	61	44	59	63	67	54	68	44	46	62		83	69	71	83
13	29	51	48	64	64	55	31	53	25	39	47	83		65	62	63
14	36	49	69	61	41	76	64	58	43	63	65	69	65		59	78
15	40	54	47	54	53	60	52	56	48	37	61	71	62	59		74
16	35	66	66	67	65	81	75	66	57	64	75	83	63	78	74	

Appendix I

Intercorrelations Among MHW Rating Sheet Items, for Patient Ratings

Item	1	2	3	4	5	6	7	8	9	1	11	12	13	14	15	16
1		53	48	52	28	38	45	58	41	51	24	46	32	43	37	52
2	53		67	67	55	74	66	67	68	74	52	58	64	71	53	71
3	48	67		89	52	64	62	55	67	73	59	61	64	66	48	73
4	52	67	89		59	60	63	59	68	70	47	53	65	69	58	76
5	28	55	52	59		49	47	50	63	64	45	55	60	46	26	81
6	38	74	64	60	49		75	62	66	77	52	61	61	69	46	63
7	45	66	62	63	47	75		85	88	84	55	77	79	81	45	73
8	58	67	55	59	50	62	85		76	76	47	61	72	72	50	69
9	41	68	67	68	63	66	88	76		84	60	78	84	75	47	84
10	51	74	73	70	64	77	84	76	84		63	78	77	77	47	84
11	24	52	59	47	45	52	55	47	60	63		57	56	49	37	57
12	46	58	61	53	55	61	77	61	78	78	57		75	74	33	66
13	32	64	64	65	60	61	79	72	84	77	56	75		78	42	74
14	43	71	66	69	46	69	81	71	75	77	49	74	78		54	62
15	37	53	48	58	26	46	45	50	47	47	37	33	42	54		39
16	52	71	73	76	81	63	73	69	84	84	57	66	74	62	39	

Appendix J

Intercorrelations Among MHW Rating Sheet Items, for MHP-Peer Ratings

Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1		49	47	40	41	43	59	58	47	43	23	59	52	36	63	59
2	49		50	62	50	67	60	46	62	69	58	41	58	62	64	75
3	47	50		65	56	73	71	75	80	80	65	50	58	75	59	76
4	40	62	65		67	55	51	66	60	63	57	63	70	65	74	79
5	41	50	56	67		46	48	62	64	64	47	36	47	40	38	66
6	43	67	73	55	46		73	60	79	76	61	40	47	81	58	81
7	59	60	71	51	48	73		72	89	84	59	50	52	66	60	85
8	58	46	75	66	62	60	72		80	73	63	67	72	64	69	78
9	47	62	80	60	64	79	89	80		93	69	48	53	78	55	89
10	43	69	80	63	64	76	84	73	93		76	48	55	79	56	89
11	23	58	65	57	47	61	59	63	69	76		48	56	75	56	71
12	59	41	50	63	36	40	50	67	48	48	48		75	47	79	63
13	52	58	58	70	47	47	52	72	53	55	56	75		49	86	67
14	36	62	75	65	40	81	66	64	78	79	75	47	49		59	80
15	63	64	59	74	38	58	60	69	55	56	56	79	86	59		75
16	59	75	76	79	66	51	85	78	89	89	71	63	67	80	75	

Appendix K

Intercorrelations Among MHW Rating Sheet Items, for MHP-Self Ratings

Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1		57	34	34	47	40	47	49	31	22	25	33	50	53	51	40
2	57		54	52	45	69	65	43	3k	4k	59	34	45	7k	58	63
3	34	54		54	38	58	61	21	51	52	36	09	27	45	52	68
4	34	52	54		50	43	54	39	41	35	56	42	59	42	54	61
5	47	45	38	50		28	55	51	38	31	34	36	31	40	46	51
6	40	69	58	43	28		73	36	46	64	48	25	40	65	50	68
7	47	65	61	54	55	73		50	68	66	35	46	51	69	59	84
8	49	43	21	39	51	36	50		23	29	31	77	63	52	50	40
9	31	31	51	41	38	46	68	23		63	24	28	43	33	23	60
10	22	41	52	35	31	64	66	29	63		47	26	30	55	30	55
11	25	59	36	56	34	48	35	31	24	47		27	37	41	34	46
12	33	34	09	42	36	25	46	77	28	26	27		74	38	24	41
13	50	45	27	59	31	40	51	63	43	30	37	74		33	30	45
14	53	71	45	42	40	65	69	52	33	55	41	38	33		65	72
15	51	58	52	54	46	50	59	50	23	30	34	24	30	65		64
16	40	63	68	61	51	68	84	40	60	55	46	41	45	72	64	

Frequency of MHW Rating Sheet Scores

Note: For therapist-ratings, $\bar{n} = 43$; for patient-ratings, $\bar{n} = 159$; for peer-ratings, $\bar{n} = 198$; for self-ratings, $\bar{n} = 43$.

Appendix M

Product-Moment Correlations of Effectiveness Scores

with OK Questionnaire and Pathogenesis Scores

Effectiveness Scores	OK Questionnaire		Pathogenesis
	SAR	ARO	
Therapist:			
Total	-08	-08	-18
RC	-09	-16	-12
KS	-07	-04	-18
Patient:			
Total	-14	-10	11
RC	-20	-15	05
KS	-13	-05	09
MHP-Peer:			
Total	-05	02	-05
RC	-06	08	-16
KS	-06	-03	02
MHP-Self:			
Total	21	14	-11
RC	14	18	-11
KS	17	07	-18

Appendix N

Product-Moment Correlations of Effectiveness Scores with MHP's Mooney Scores

		Mooney Problem Check List Scores									
Effectiveness Scores		Health		Economic Security	Self-Improvement	Personality	Home & Family	Courtship	Sex	Religion	Occup
Therapist:	Total	-05	-06	-04	05	-19	-07	-03	09	-19	
	RC	-08	-11	-09	02	-17	-10	-01	13	-28	
	KS	-04	07	03	08	-06	-05	03	05	-10	
Patient:	Total	00	18	25	19	03	05	01	18	13	
	RC	01	22	26	22	08	08	-03	20	04	
	KS	00	24	29	23	06	14	06	17	18	
MHP-Peer:	Total	-05	-03	-05	01	-10	-04	24	02	-08	
	RC	-01	-07	-14	02	-04	-01	23	03	-14	
	KS	-08	02	01	-03	-06	-03	26	00	-01	
MHP-Self:	Total	02	15	02	06	09	-01	14	-02	-24	
	RC	19	24	08	20	33*	03	22	14	-14	
	KS	-06	03	-05	-11	-06	09	11	-11	-26	

*p < .05, two-tailed test

Appendix O

Product-Moment Correlations of OK Questionnaire, Self-Disclosure, and Pathogenesis Scores with Other Variables

Variables	OK Questionnaire		Self- Disclosure		Path
	Self	Other	MHP	Self	
Therapist Ratings:					
Semantic Diff - SAR	00	-04	52**	12	-05
Semantic Diff - ARO	-14	-08	68**	-04	-11
Semantic Diff - Like	-11	-07	57**	20	-08
Patient Ratings:					
Semantic Diff - SAR	00	-07	25	11	-04
Semantic Diff - ARO	-05	00	31*	-02	14
Semantic Diff - Like	-20	-23	12	-12	28
MHP-Peer Ratings:					
Semantic Diff - SAR	08	11	71**	28	-16
Semantic Diff - ARO	01	14	79**	04	-21
Semantic Diff - Like	-02	06	77**	08	-26
Self Disclosure	-02	08	100	05	-15
MHP-Self Ratings:					
Semantic Diff - SAR	37*	17	37*	43**	04
Semantic Diff - ARO	27	17	37*	18	07
Semantic Diff - Like	19	06	20	17	05
Self Disclosure	30*	35*	05	100	11
OK Questionnaire: Self	100	62**	-02	30*	-02
OK Questionnaire: Other	62**	100	08	35*	-21
Mooney:					
Health	-32*	-10	-02	-16	-02
Economic Security	-17	-02	-17	15	16
Self-Improvement	-21	-02	-04	-06	-06
Personality	-50**	-18	24	01	06
Home & Family	-07	07	-11	20	-04
Courtship	-28	-10	02	02	12
Sex	-15	-09	18	09	18
Religion	-29	-20	19	-02	02
Occupation	-27	-12	-27	00	13
Pathogenesis	-02	-21	-15	11	100

* $p < .05$, two-tailed test

** $p < .01$, two-tailed test

Appendix P

Personality Variables as Predictors of Effectiveness of MHPs, Listed in Order of Their Correlations with Effectiveness

For Therapist-Ratings of Effectiveness

1. Therapist SAR and ARO
2. Peer SAR
3. Therapist Like (better predictor of RC than of KS)
4. Peer Self-Disclosure (better predictor of KS than of RC)
5. Patient SAR
6. Peer ARO and Like
7. Patient ARO (for KS and Total Eff only)
8. Self SAR

For Patient-Ratings of Effectiveness

1. Patient ARO
2. Patient SAR
3. Patient Like
4. Therapist ARO
5. Peer Self-Disclosure
6. Therapist SAR
7. Peer SAR and ARO
8. Therapist Like

For Peer-Ratings of Effectiveness

1. Peer SAR (better predictor of KS than of RC)
2. Peer ARO and Like (better predictor of RC than of KS)
3. Peer Self-Disclosure
4. Therapist ARO
5. Therapist Like
6. Therapist and Self SAR
7. Self ARO and Like
8. Patient SAR and ARO (predicts KS only)