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Personality Characteristics and Effectiveness of Paraprofessional Addiction Counselors

James H. Thrower

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PERSONALITY CHARACTERISTICS AND EFFECTIVENESS
OF PARAPROFESSIONAL ADDICTION COUNSELORS

by
James H. Thrower

Bachelor of Science, Oregon State University, 1968

A Thesis

Submitted to the Graduate Faculty

of the

University of North Dakota

in partial fulfillment of the requirements

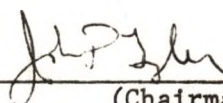
for the degree of

Master of Arts

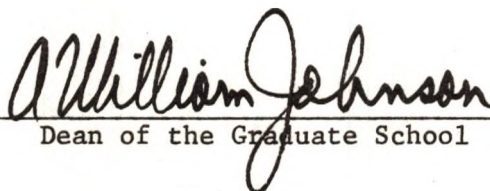
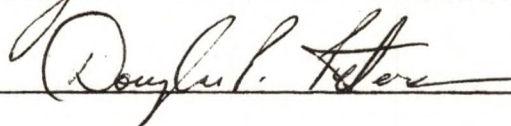
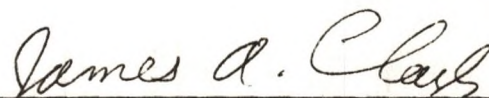
Grand Forks, North Dakota

December
1977

This Thesis submitted by James H. Thrower in partial fulfillment of the requirements for the Degree of Master of Arts from the University of North Dakota is hereby approved by the Faculty Advisory Committee under whom the work has been done.



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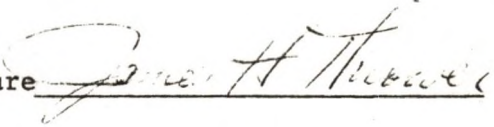
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TABLE OF CONTENTS

Acknowledgements	iv
List of Tables	vi
List of Illustrations	vii
Abstract	viii
Introduction	1
Method	14
Results	17
Discussion	31
Appendix I. Peer Rating Form	36
Appendix II. Background Information Form	38
Appendix III. Supervisor's Rating Form	40
References	42

LIST OF TABLES

Table	Page
1. Male Addiction Counselor Scores on the Edwards Personal Preference Schedule	18
2. Female Addiction Counselor Scores on the Edwards Personal Preference Schedule	19
3. <u>Z</u> Scores of Combined Male and Female Counselors	20
4. Pattern Analysis 1: <u>Z</u> Scores of 7 EPPS Scales, Supervisor, and Peer Ratings on all Qualities	22
5. Pattern Analysis 2: <u>Z</u> Scores of All EPPS Scales, Supervisor and Peer Ratings and Rankings	26
6. Pattern Analysis 3: <u>Z</u> Scores of All EPPS Scales, Supervisor Ratings and Rankings of Effectiveness	28
7. Pattern Analysis 4: <u>Z</u> Scores of All EPPS Scales, Peer Ratings and Rankings of Effectiveness	29

ABSTRACT

The purpose of this study was to examine how personality traits measured by the Edwards Personal Preference Schedule (EPPS) are related to the effectiveness of paraprofessional addiction counselors. Thirty-one counselors from three in-patient treatment centers in North Dakota and Minnesota participated in the study. Four measures of effectiveness were used: ratings by peers, rankings by peers, ratings by supervisors, and rankings by supervisors.

A method of pattern analysis, hierarchical classification by generalized distances was used to analyze the data. The results indicate that the most effective paraprofessional addiction counselors score higher on the EPPS scale of Dominance and lower on the scales of Intraception and Endurance. Their scores on Achievement, Deference, and Aggression are near those of the general population.

This study also presents evidence which strongly implies that addiction counselors constitute a distinct group of paraprofessionals, who differ from other nonprofessionals described in previous studies.

Another promising result of this study is the demonstration that pattern analysis is a particularly useful analytic method for distinguishing between groups of effective and ineffective counselors in EPPS type research.

INTRODUCTION

This paper will first review the literature on the general characteristics which have been associated with the effectiveness of paraprofessional counselors. Next, it will examine specific traits measured by a single instrument, the Edwards Personal Preference Schedule (EPPS). Finally, the characteristics of a specific group of paraprofessionals, addiction counselors, will be reviewed. The purpose of the present study is to see how the traits measured by the EPPS are related to the effectiveness of paraprofessional addiction counselors.

The increased use of nonprofessionals in mental health roles has amplified the need for identifying the characteristics of the effective paraprofessional counselor. The methods employed in their selection have varied widely, but most programs have systematically attempted to select individuals exhibiting a capacity for warmth, sensitivity in interpersonal relations, high self confidence and self-regard, and the ability to accept people with values different from their own (Brown, 1974). Other characteristics often mentioned in describing the effective paraprofessional are good work habits, need for autonomy, and dominance.

In much of the early work in this area the nonprofessionals were individuals who had little formal preparation for their job. It was usually assumed that the careful selection of individuals with certain qualities would result in effective counselors. One of the more

frequent practices was to select an individual from the ethnic or sub-cultural group from which the clients would come (D'Augelli & Danish, 1976).

The selection process is especially important for several reasons. Because of the short training period of most paraprofessional programs it is necessary to choose individuals who already possess the interpersonal skills needed in a therapeutic relationship. Secondly, professionals can maximize their impact by training and supervising individuals who already possess the basic characteristics necessary for effective counseling. There are also important fiscal reasons for evaluating the usefulness of selection devices. The time and money required to train and provide a period of trial employment for potential paraprofessionals may constitute a significant portion of an agency's budget. In the absence of effective selection devices it may take a year or more before an unsuitable worker is identified and terminated.

A very sensitive problem may arise if an unsuitable paraprofessional is indigenous to a particular target community. His termination may be politically hazardous or cause alienation of the target population.

Despite the need, little work has been done in the area of selecting nonprofessionals. Much of the literature presents inconsistent or ambiguous findings about desirable characteristics in paraprofessionals. Part of this may be due to the wide variety of settings in which the paraprofessional works. It may be futile to search for a single array of qualities that mark a good paraprofessional without

considering the type of job in which he or she works. Perhaps it would be more useful to look for characteristics that are effective in a particular role.

The primary characteristics of paraprofessionals which have received attention in the literature are work habits, empathy, openness, warmth, and education. These characteristics have been measured with a wide variety of methods, such as the Group Assessment of Interpersonal Traits (Chinsky & Rappaport, 1971) and the Truax Accurate Empathy Scale (Chinsky, 1975). In addition to these measures there have also been a number of studies which have used the Edwards Personal Preference Schedule (EPPS) in the assessment of paraprofessional qualities.

Work Habits

Good work habits and attitudes have been widely reported as characteristic of good paraprofessionals. In a study of psychiatric technicians, Bartz and Loy (1969), found that good work habits were most frequently cited by registered nurses, nursing supervisors, technician supervisors and psychiatrists as a desirable quality. Many other studies identify good work habits as a desirable quality, either explicitly or implicitly: Bartels and Tyler (1975); Cliff et al. (1959); Dorr et al. (1975); and Siskind (1967, 1970). Work habits seem to be of most concern to supervisory and administrative personnel and probably play a significant role in their rating when they evaluate the effectiveness of paraprofessionals. The degree to which work habits

relate to behavioral change in a client has apparently not been investigated.

Openness and Genuineness

Openness and genuineness are often reported as desirable qualities in nonprofessionals. Truax (1970) describes a selection and training process in which interviews conducted with actual clients are tape recorded and then rated on empathy, warmth, and genuineness. He presents a body of evidence indicating that these interpersonal skills or traits in the paraprofessional as well as the professional therapist lead to a wide variety of positive change in the client.

Chinsky and Rappaport (1971) examined the characteristics of college students who did practicum work over a 5½ month period with chronic hospitalized mental patients. Although the student qualities of understanding and warmth, as judged by experienced observers, were moderately related to some subsequent improvement indices in the patients, openness was not.

In a study of volunteer telephone counselors Tapp and Spanier (1973) found that on the Self Disclosure Inventory the volunteers indicated a greater degree of openness than a group of college student controls. As the counselors were all volunteers, there may have been some element of self-selection for the quality of openness. However, because this study gives no measure of effectiveness and is limited to telephone counseling, its applicability to other nonprofessionals is somewhat questionable.

Bartels and Tyler (1975) surveyed the directors of 86 comprehensive community mental health centers regarding their experiences with the training and selection of paraprofessionals. They found that openness was one of the interpersonal characteristics considered desirable in paraprofessionals.

Empathy

Truax (1970) has found empathy to be one of the basic ingredients for effecting change in a client. He has developed a training approach involving supervision, didactic techniques, and group therapy which increases the level of accurate empathy in the counselor.

Empathy is also often mentioned by supervisory personnel as a highly desirable characteristic in nonprofessionals. Bartels and Tyler (1975) found that it is one of the criteria used in the selection of paraprofessionals working in mental health centers.

In a study of psychiatric technician characteristics by Bartz and Loy (1969), members of ten hospital professions (ranging from nurses to psychiatrists) listed desirable qualities in the psychiatric technician. Empathy was the most often cited characteristic and was the only quality mentioned by all ten groups.

In contrast to the prevailing view that empathy is an important factor in psychotherapy, Chinsky (1975) failed to find a significant relationship. He used the Accurate Empathy Scale developed by Truax and Carkhuff as a measure of empathy in college students engaged in therapy with chronic hospitalized patients. Empathy was not significantly correlated with patient improvement.

Vander Kolk (1973) found no relationship between empathy level in psychiatric attendants and their job performance. Supervisors rated the attendants with a five point scale on dependability, interest in work, speed in work, attention to patient safety, initiative, and resourcefulness.

In summary, although it is often cited as a desirable paraprofessional characteristic, empathy has not been consistently tied to measures of effectiveness.

Warmth and Sensitivity

Characteristics related to counselor warmth and sensitivity were mentioned in four studies. Truax (1970) found that the degree of non-possessive warmth in the therapist was related to positive therapeutic change in patients. Chinsky and Rappaport (1971) used a procedure called Group Assessment of Interpersonal Traits (GAIT) to measure the degree of accepting-warmth in counselors. As measured by the GAIT, accepting-warmth was significantly related to patient improvement. Warmth is also often listed as a desirable characteristic by supervisory personnel (Bartels & Tyler, 1975; Bartz & Loy, 1969).

Intelligence and Educational Factors

Seven studies have evaluated intelligence or educational factors in the selection of paraprofessionals. Kline (1950) reported that a significantly larger proportion of "blue ribbon" psychiatric aides had completed three or more years of high school. Yerbury and Holzberg (1951) found that aides rated as "definitely poor" scored lower in

intelligence on the Revised Beta Examination. In contrast, Barron and Donohue (1951) found that the best psychiatric aides scored in the dull normal range on the Otis Quick Scoring Mental Ability Test. Love (1955) evaluated the educational background of aides and concluded that education itself was not important, but that above average aides could be distinguished by academic honors and extracurricular activities, whether in high school or college. The reason for these contradictory findings is not clear. However, Siskind and Drake (1967) suggest that employment opportunities in a particular geographic area, rather than other variables, could be the major factor in determining who becomes a psychiatric aide. Because these four studies are more than twenty years old and deal specifically with psychiatric aides they may not apply to the modern paraprofessional working in a community setting.

Rioch et al. (1963) reported a successful paraprofessional program in which the minimum educational requirement for all counselors was a college education. All of the counselors were volunteers who went through an intensive training period that was sharply focused on psychotherapy. Each trainee saw an average of seven patients once a week. The average length of treatment was ten weeks. None of the patients changed for the worse and 61% showed some degree of improvement. This is the only reported paraprofessional program in which all counselors had at minimum a college degree.

A more recent study (Vander Kolk, 1973) concluded that education was not a significant factor in the ability to learn interpersonal skills related to counseling effectiveness.

Bartels and Tyler (1975) surveyed community mental health centers in 36 states and found that those which used educational-intelligence factors as important criteria in selecting paraprofessionals were less satisfied in their paraprofessional programs. They suggest that other selection criteria should be emphasized.

There are several studies deserving of mention which obtained results not easily classified under the previously listed criteria.

Gerard (1972) surveyed 45 telephone crisis counseling services throughout the United States to assess the personality characteristics associated with "good" volunteers. The director of each service was asked to pick out the two persons he felt were most effective in handling crisis calls and the two who were least effective. These four persons filled out the Gough Adjective Checklist. The most effective volunteers tended to score higher on the scales of Self-Confidence and Dominance, and lower on the Abasement scale. The scores were all within the normal range which indicated that the most effective volunteers have a positive view of themselves, and they feel they have control and influence over what happens in their relationship with others. He concludes that these findings would tend to support the idea that crisis intervention calls for a worker capable of a directive, active approach to counseling rather than a non-directive Rogerian approach.

Truax (1970) describes a selection process which draws upon past research that correlates MMPI scores with interpersonal scales such as Accurate Empathy. Specifically sought are candidates who, on the MMPI, scored less than 27 on psychasthenia, less than 20 on depression, less than 30 on masculinity-femininity, less than 21 on social introversion,

less than 30 on the Welch Anxiety Index from the MMPI, and less than 0.92 on the Welch Generalization Ratio, and who scored higher than 19 on hypomania and higher than 142 on the Constructive Personality Change Index of the MMPI. This profile is designed to select individuals who are low in anxiety, depression, and introversion, and are at the same time striving, strong, active, and autonomous. This procedure is based on studies of lay counselors working with hospitalized mental patients (Carkhuff & Truax, 1965) and graduate psychology students in training (Truax, Silber & Wargo, 1966) which indicate that counselors with this profile have higher levels of empathy and warmth and are more effective with clients.

Barron and Donohue (1951) used the MMPI as part of their study to evaluate the effectiveness of psychiatric aides at a state hospital. The psychopathic deviate scale was effective in identifying aides who were rated below average in efficiency by supervisors.

In summary, past studies are consistent in suggesting that the paraprofessional should have good work habits and be warm and sensitive. The picture is not as clear regarding openness and empathy. Although a majority of the studies reviewed support the view that these are desirable characteristics, there are others which failed to obtain a positive relationship between effectiveness and openness and empathy.

Edwards Personal Preference Schedule Traits
and Paraprofessional Effectiveness

The Edwards Personal Preference Schedule has been the most widely used tool in the assessment of paraprofessional characteristics.

Suinn (1974) used the EPPS as a selection device for paraprofessionals in a behavior modification consultation program. Scores on the EPPS were correlated with ratings of the individual's performance during training and his performance on the job. Individuals with high ratings were characterized by low scores on the EPPS scales measuring Succorance (need to receive help from others), Dominance, and Aggression.

Truax (1970) summarizes the results of much of his research by describing a comprehensive program for selecting and training both professional and paraprofessional counselors. These studies indicate that the effective counselor scores high on the EPPS scales of Dominance, Change, and Autonomy. Truax and Carkhuff (1967) indicate that these counselor characteristics are positively correlated with the empathic ability of the therapist and imply that positive client change is due to this empathy.

Pulos et al. (1962) correlated Edwards scores of psychiatric aides with ratings by nursing supervisors. Autonomy was the only scale that was significantly correlated with the global efficiency score given by the supervisors. The best predictor of performance in this study was a rating given by the chief nurse during the initial interview.

Truax, Silber, and Wargo (1966) differentiated between successful and unsuccessful paraprofessional trainees on the basis of EPPS scores. The successful trainees were profiled as lower in Deference, higher on need for Change, and higher on Autonomy.

The inconsistency noted among the various studies of paraprofessionals using the EPPS may result from different criteria used to measure success or from chance fluctuations. Siskind and Drake (1967) used

the EPPS to compare profiles of psychiatric aides at several different hospitals and found many significant differences between the groups. However, they did not elaborate which subscales were different, but instead concluded that the concept of a unitary "aide personality" was a "fantasy". This study provides no data on effectiveness, so is of limited value. However, the suggestion that demographic factors, such as employment opportunities, may be a major factor in determining who becomes a paraprofessional is worth noting.

This survey of the literature shows that different groups of paraprofessionals are being measured by the EPPS. A strong possibility exists that different characteristics are needed to be maximally effective in various counseling capacities and that the type of paraprofessional role is a critical variable to consider in doing EPPS research. Part of the variation may arise from the particular characteristics of the client population being serviced. This would be consistent with the idea that client and therapist should be matched along certain personality variables to enhance positive client change (Luborsky et al., 1971).

The current study will examine the use of the EPPS as a tool in discriminating between effective and ineffective counselors working in addiction treatment centers. The selection of a homogeneous group of counselors who service a very specific client population should control for some of the inconsistencies found in previous studies as well as providing useful information about addiction counselors.

Paraprofessional Addiction Counselors

Although the alcoholism/addiction counselor has been engaged in the treatment of clients for over twenty years, there has been little research to investigate the characteristics and traits which typify the most effective counselors. The little research that exists has typically involved the study of relatively inexperienced counselors enrolled in training programs and focuses on change in personality characteristics during training. No studies were found which report a relationship between counselor traits and post training effectiveness.

Hoffman and Miner (1973) used the EPPS to investigate the personalities of alcoholic counselor trainees who were former alcoholics. Prior to training, counselors scored significantly higher than the EPPS General Adult Male Sample (Edwards, 1959) on Intraception and significantly lower on Autonomy. After training the counselors scored significantly higher than the normative sample on need for Affiliation, Intraception, and Heterosexuality, and lower on need for Order and Autonomy. Three teaching supervisors evaluated each student's counseling ability by ranking them from the most to least qualified. Supervisor ratings were not significantly correlated with pre and post training EPPS scores.

Jansen and Hoffman (1975) studied recovering alcoholics and drug addicts who trained to become addiction counselors. Their study reported pre and post training MMPI scores but made no effort to measure the effectiveness of counselors. After training, the subjects were significantly lower on the L scale and significantly higher on the F and Ma scales.

The EPPS was selected for the present study because it has been the most widely used tool in the assessment of paraprofessional counselor traits and because previous research indicates that some of the scales are related to counselor effectiveness.

There are seven EPPS scales which are most often mentioned in the literature on paraprofessionals: Dominance, Change, Aggression, Autonomy, Deference, Intraception, and Succorance. This study investigates how these scales, as well as the other EPPS scales are related to the effectiveness of addiction counselors. It was predicted that work habits, openness and genuineness, empathy, and warmth would be associated with ratings and rankings of effectiveness. It was also predicted that the EPPS subscales of Dominance, Aggression, Change, Autonomy, Deference, Intraception, and Succorance would be related to degree of effectiveness.

METHOD

Subjects

The subjects were 21 male and 10 female paraprofessional addiction counselors from inpatient treatment centers in North Dakota and Minnesota. All were involved in direct personal contact with a chemically dependent population. The educational level of all counselors was less than a master's degree. Their ages ranged from 25 to 59 with a mean of 35.8 years and a standard deviation of 12.0. They had an average of 3.2 years (standard deviation 1.88) of experience in addiction counseling. Fifteen of the counselors were former alcoholics or addicts. Eighteen were married, 9 were single, and 4 were divorced.

Five treatment centers were contacted and asked to participate in the study. Three of these centers, each with five or more counselors agree to take part. From these three centers, 31 out of 34 paraprofessional counselors agreed to participate in the study. Subjects were selected on the basis of their willingness to participate and on their supervisor's readiness to evaluate their performance.

Measures

The instrument used in this study was the Edwards Personal Preference Schedule (1959), a 225 item personality inventory designed to measure manifest needs. For each item, subjects chose one of a pair of statements that have been equated with respect to social desirability (Edwards, 1959).

In addition to the Edwards, several performance rating scales were administered to subjects and their supervisors. Each subject rated his peers on work habits, warmth, openness and genuineness, and empathy. Each also rated his peers on three measures of effectiveness: (1) the confidence he would have if his peer were treating a member of the subject's family; (2) confidence in handling a very difficult case; and (3) overall effectiveness with clients (see Appendix I). Each subject also provided descriptive information on sex, age, marital status, years of experience and so forth (see Appendix II).

Supervisors rated each counselor on work habits, warmth, openness and genuineness, and empathy. They also rated each counselor on three measures of effectiveness: (1) how confident the supervisor would feel in referring a member of his family to the counselor; (2) how likely he would be to refer a very difficult case to this counselor; and (3) overall effectiveness with clients (see Appendix III).

Procedure

The EPPS was administered to each subject at the treatment center where he or she worked. After completing the EPPS, subjects ranked their respective peers on overall effectiveness with clients. Next, each subject completed a Peer Rating Form (see Appendix I) on each of his or her fellow counselors. Subjects were informed that all information would remain confidential and that their identities would not be disclosed.

Supervisors ranked the counselors according to how they perceived their overall effectiveness with clients and then completed a

Supervisor Rating Form (see Appendix III) on each counselor. For purposes of analysis the three ratings of effectiveness were averaged into one overall effectiveness rating.

RESULTS

Z tests comparing EPPS scores for male addiction counselors with corresponding male norms are presented in Table 1. Inspection of this table reveals that when compared to the general adult male population (Edwards, 1959), the male counselors scored lower on Order and Endurance and higher on Intraception and Heterosexuality. When the variances of this sample were compared with those of the normative sample with a χ^2 test there were no significant differences.

Comparable data for females appears in Table 2. Female counselors scored significantly lower on Deference, Order, and Endurance and significantly higher on Autonomy, Intraception, and Heterosexuality than the general adult female sample. When the variances were compared, Intraception was the only scale significantly different, $\chi^2 (9) = 24.84$, $p < .001$.

There were no significant differences between mean scores of the male and female counselors for any of the EPPS variables. When the variances of the two groups were compared, the only score that was significantly different was Change, $F (20, 9) = 3.59$, $p < .05$, two tailed.

Male and female groups were combined to compare these counselors with others described in previous studies which make no distinction between males and females. The raw scores of each counselor on each subscale were first converted to Z scores (with respect to his or her normative group). Next, these scores were analyzed to determine if they

Table 1

Male Addiction Counselor Scores on the Edwards
Personal Preference Schedule

EPPS Scale	Male Counselors (N=21)		General Adult ^a Male Sample (N=4031)		<u>z</u>	P
	Mean	SD	Mean	SD		
Achievement	16.52	4.21	14.79	4.14	1.914	
Deference	13.33	3.96	14.19	3.91	-1.008	
Order	8.90	3.06	14.69	4.87	-5.448	< .001
Exhibition	13.71	3.07	12.75	3.99	1.100	
Autonomy	13.10	3.19	14.02	4.38	-0.96	
Affiliation	16.05	3.11	14.51	4.32	1.63	
Intracception	16.67	3.66	14.18	4.42	2.58	< .01
Succorance	12.05	3.40	10.78	4.71	1.20	
Dominance	14.38	3.29	14.50	5.27	-0.10	
Abasement	13.05	4.03	14.59	5.13	-1.37	
Nurturance	15.19	3.89	15.67	4.97	-0.44	
Change	15.90	4.78	13.87	4.76	1.95	
Endurance	12.52	4.52	16.97	4.90	-4.16	< .001
Heterosexuality	16.81	5.23	11.21	7.70	3.33	< .001
Aggression	11.57	3.57	13.06	4.60	-1.48	

^aAllen Edwards (1959).

Table 2

Female Addiction Counselor Scores on the Edwards
Personal Preference Schedule

EPPS Scale	Female Counselors (N=10)		General Adult ^a Female Sample (N=4932)		<u>z</u>	p
	Mean	SD	Mean	SD		
Achievement	16.20	4.83	13.58	3.95	2.09	
Deference	10.90	2.68	14.72	3.84	-3.14	< .01
Order	7.40	3.53	15.59	4.57	-5.67	< .001
Exhibition	12.70	3.80	11.48	3.88	.99	
Autonomy	15.30	3.71	12.10	4.11	2.46	< .01
Affiliation	18.10	4.68	17.76	4.15	.25	
Intracception	19.20	6.51	15.28	4.13	3.00	< .01
Succorance	12.30	4.62	12.86	4.55	-.039	
Dominance	13.10	4.15	10.24	4.73	1.91	
Abasement	14.40	3.56	16.89	4.88	-1.61	
Nurturance	15.80	2.66	18.48	4.43	-1.91	
Change	15.70	2.45	15.99	4.73	-0.19	
Endurance	10.20	4.02	16.50	4.66	-4.28	< .001
Heterosexuality	16.10	6.03	8.12	6.59	3.82	< .001
Aggression	13.00	2.71	10.16	4.37	2.06	

^aAllen Edwards (1959).

Table 3

Z Scores of Combined Male and Female Counselors

(N = 31)

EPPS Scale	Mean	SD	<u>z</u>	p
Achievement	.498	1.056	2.78	< .01
Deference	-0.469	.968	-2.61	< .01
Order	-1.383	.713	-7.70	< .001
Exhibition	.265	.831	1.47	
Autonomy	.108	.891	.60	
Affiliation	.268	.848	1.49	
Intracception	.687	1.095	3.82	< .001
Succorance	.143	.818	.79	
Dominance	.195	.740	1.08	
Abasement	-0.368	.750	-2.04	
Nurturance	-0.261	.746	-1.45	
Change	.270	.884	1.50	
Endurance	-1.051	.900	-5.85	< .001
Heterosexuality	.833	.769	4.63	< .001
Aggression	-0.010	.841	-.05	

differed from the theoretical mean of 0. Table 3 presents the Z scores of male and female counselors when combined. As a group, the counselors were low on Order, Endurance, and Deference and high on Intracception, Heterosexuality, and Achievement.

Analysis

In order to see if the EPPS scales were related to ratings and rankings of counselor effectiveness, a method of pattern analysis (McQuitty, 1957; McQuitty & Clark, 1968), hierarchical classification by generalized distances, was next applied to the data. This analysis first plots a point in multi-dimensional space for each subject, with the number of dimensions corresponding to the number of variables being considered. Next, the analysis places subjects who are closest together into groups, so that the distance within groups is minimized. The result is a number of groups within which subjects are similar to one another on the variables being analyzed.

Table 4 presents the means and standard deviations for pattern analysis 1. Figure 1 illustrates this data when plotted in graph form. When the EPPS scales of Deference, Autonomy, Intraception, Succorance, Dominance, Change and Aggression were included with supervisor and peer ratings of overall effectiveness, work habits, openness, warmth, empathy, and with supervisor and peer ranking of effectiveness, four groups emerged.

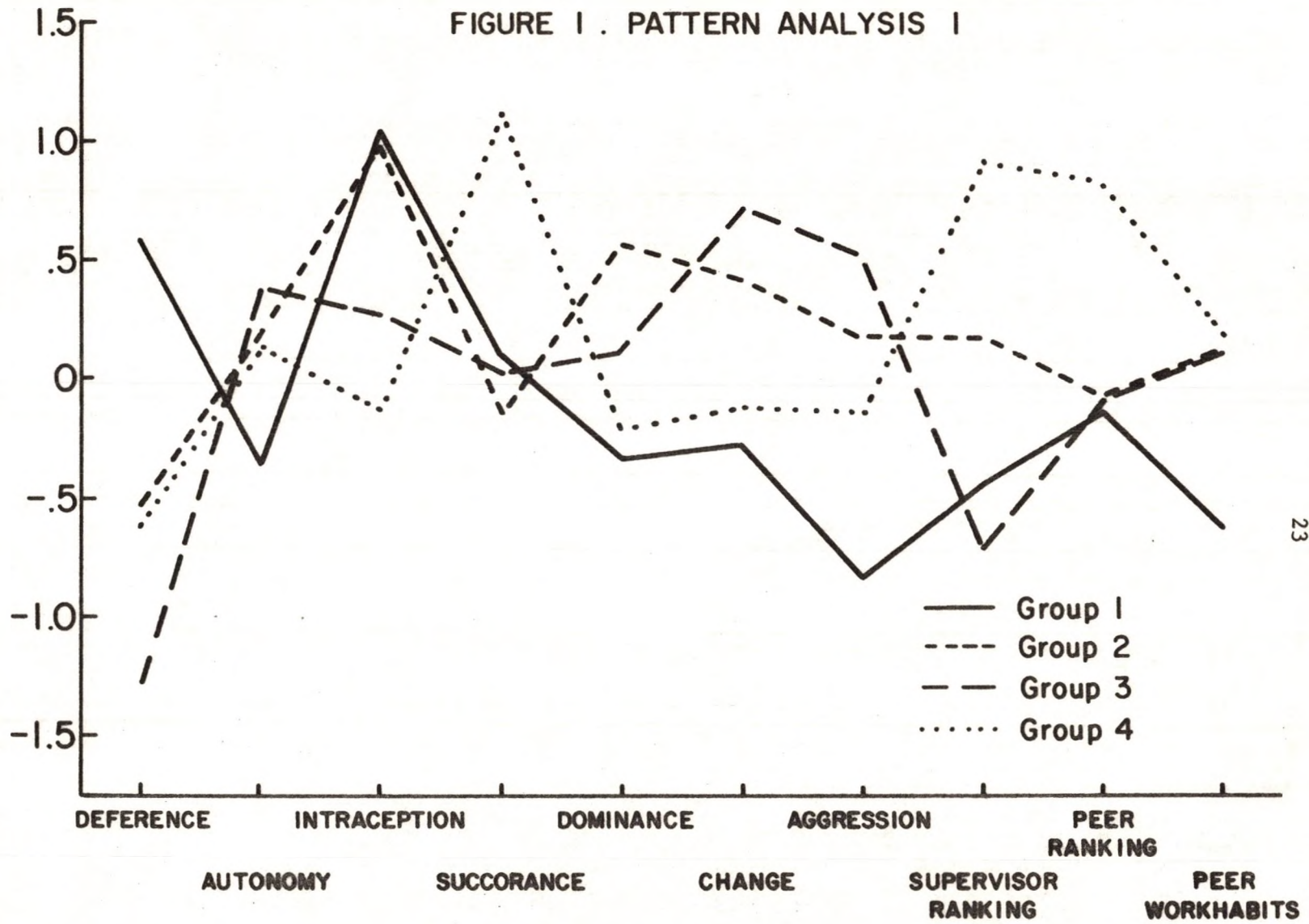
Group 1 was rated low in overall effectiveness by both peers and supervisors and ranked low by supervisors. Their high scores on the Deference scale of the EPPS distinguished them from the other groups. They were also rated low on the qualities of openness, warmth, and empathy by both peers and supervisors. However, they could not be distinguished from other groups on ratings of work habits. The mean age of

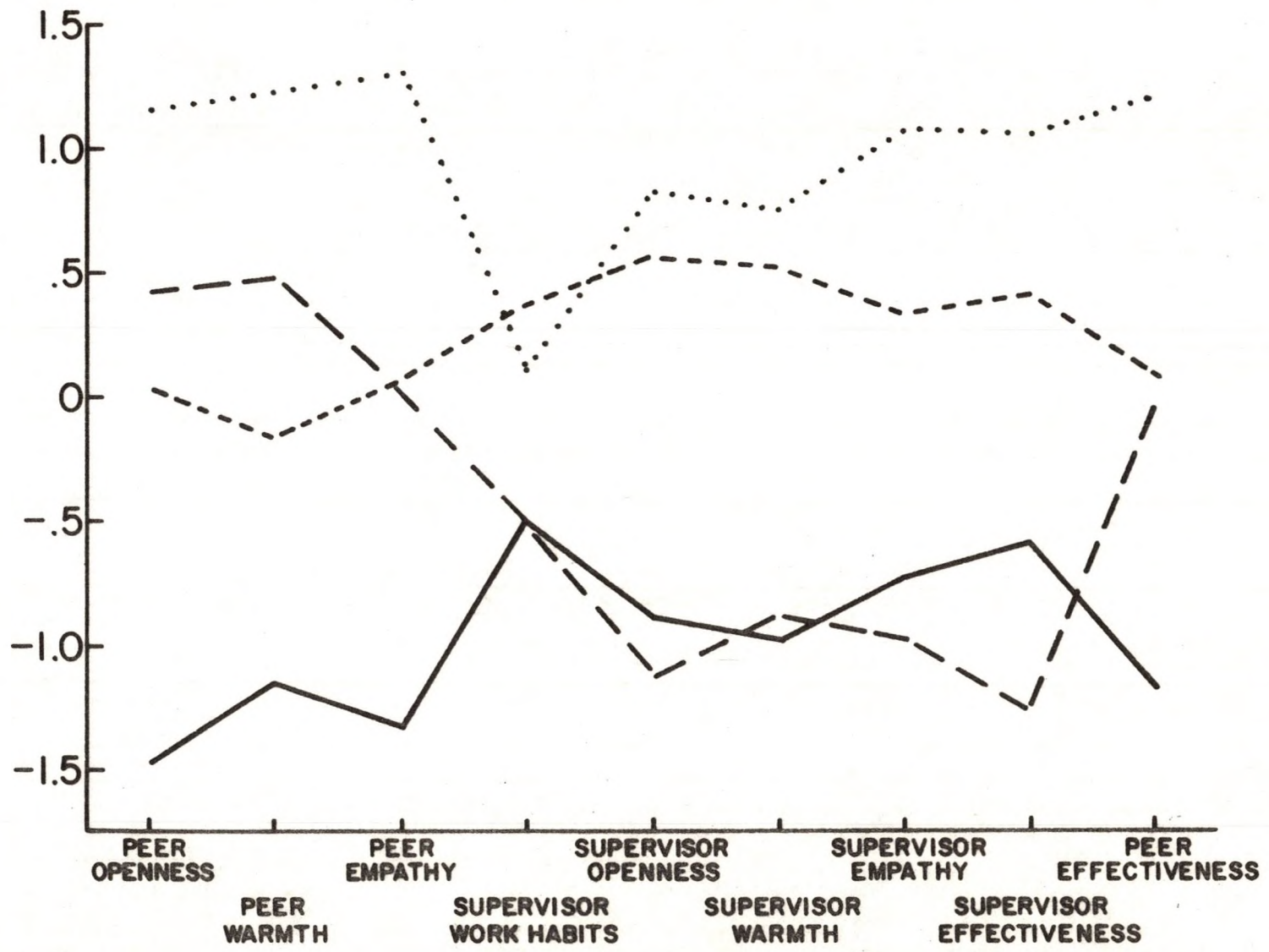
Table 4

Pattern Analysis 1: Z Scores of 7 EPPS Scales, Supervisor,
and Peer Ratings on all Qualities

Item	Group 1		Group 2		Group 3		Group 4	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Deference	.591	.764	-.535	.851	-1.253	.727	-.618	.577
Autonomy	-0.347	.452	.166	.922	.399	1.026	.143	.821
Intracception	1.053	.379	.991	1.237	.284	.927	-0.119	.821
Succorance	.117	.732	-.151	.749	.038	.630	1.121	.493
Dominance	-0.285	.548	.580	.639	.108	.417	-0.204	.909
Change	-0.253	.724	.436	.874	.721	.481	-0.110	1.004
Aggression	-0.883	.676	.193	.662	.507	.559	-0.148	.931
Supervisor Ranking	-0.477	.657	.183	.820	-0.727	.634	.932	.696
Peer Ranking	-0.143	.167	-.073	.438	-0.158	.349	.837	.571
Peer Rankings:								
Work Habits	-0.607	1.286	.136	.734	.124	.428	.199	.849
Openness & Genuineness	-1.485	.708	.041	.949	.427	.268	1.155	.441
Warmth	-1.152	.551	-.161	.572	.496	.482	1.238	.769
Empathy	-1.297	.656	.077	.674	.027	.764	1.308	.504
Overall Effectiveness	-1.154	.643	.077	.529	-0.040	.514	1.218	.761
Supervisor Ratings:								
Work Habits	-0.500	1.088	.386	.872	-0.500	.511	.120	1.052
Openness & Genuineness	-0.879	.770	.562	.461	-1.131	.698	.836	.247
Warmth	-0.970	.669	.515	.468	-0.869	1.034	.765	.453
Empathy	-0.739	.737	.341	.639	-0.961	.832	1.085	.327
Overall Effectiveness	-0.596	.473	.418	.671	-1.268	.258	1.066	.640

FIGURE I . PATTERN ANALYSIS I





this group was 48.8 and they had an average of 4.3 years of experience as addiction counselors.

Group 2 was seen as average in effectiveness by both peers and supervisors. None of the EPPS scales used in this analysis differentiated them clearly from the other groups. They were rated as slightly above average in warmth, empathy, and openness by both peers and supervisors. This group had an average of 2.6 years of experience and a mean age of 33.

Group 3 was rated and ranked lowest in effectiveness by supervisors, but was seen as average in effectiveness by peers. On the qualities of warmth and empathy they were rated above average by peers and below average by supervisors. They averaged 34 years of age with 2.8 years of experience.

Group 4 was the "blue ribbon" group, rated highest on effectiveness by both peers and supervisors. They scored higher in Succorance than any of the other groups, and were rated highest on openness, warmth, and empathy by both supervisors and peers. These counselors had an average of 2.8 years of experience and a mean age of 29.8.

Pattern analysis 2 utilized all EPPS scales and ratings and rankings of effectiveness by supervisors and peers. It differed from cluster analysis 1 in that ratings of work habits, empathy, openness, and warmth were excluded and all EPPS scales were included. Five groups emerged from this analysis (see Table 5).

Group 1 is an isolate group composed of three individuals who were rated high by supervisors, but low by their peers. Their EPPS profile shows a combination of higher scores on Intraception and Endurance

Table 5

Pattern Analysis 2: Z Scores of All EPPS Scales, Supervisor
and Peer Ratings and Rankings

Item	Group 1		Group 2		Group 3		Group 4		Group 5	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Achievement	-0.276	.804	-.010	.742	1.113	1.299	.490	1.042	.801	.889
Deference	.334	.104	.463	.788	-1.100	.972	-0.147	.107	-1.197	.444
Order	-1.182	.151	-.886	.598	-1.811	.592	-1.777	1.006	-1.461	.551
Exhibition	-0.594	.410	.157	.587	.420	.853	-0.050	.532	.622	.866
Autonomy	-0.640	.450	-.318	.570	1.133	.541	-0.409	.541	.345	.889
Affiliation	-0.612	.228	.692	.810	-0.606	.716	.521	.829	.503	.532
Intraception	1.517	.812	.638	.884	1.856	.646	.167	.757	.155	1.021
Succorance	-0.254	.632	.445	.812	-0.618	.743	.533	.797	.235	.616 ^N
Dominance	.124	.192	-.403	.314	1.056	.280	.502	.486	.147	.841
Abasement	.716	.672	.007	.696	-0.899	.641	.158	.577	-0.497	.650
Nurturance	-1.167	.130	.519	.399	-0.912	.510	-0.543	.285	-0.185	.626
Change	1.419	1.155	.106	.720	.133	.594	.703	.759	-0.020	.744
Endurance	-0.100	.250	-.734	.816	-2.115	.486	-1.201	.410	-1.002	.875
Heterosexuality	1.463	.502	.168	.619	1.332	.843	1.031	.371	.988	.610
Aggression	-0.076	.727	-.720	.759	.787	.543	-0.445	.788	.322	.491
Supervisor Ranking	.413	.952	-.776	.712	.136	.521	1.140	.544	-0.025	.747
Peer Ranking	-0.452	.226	-.192	.187	.081	.382	1.031	.380	-0.026	.440
Supervisor Rating of Effectiveness	.614	.922	-.777	.490	.098	.724	.816	1.246	.057	.852
Peer Rating of Effectiveness	-1.050	.451	-.681	.851	.551	.382	1.439	.622	.008	.639

which distinguishes them from other groups. This group averages 35.6 years of age and 3.3 years of experience.

Group 2 was rated low in effectiveness by both supervisors and peers. Group 3 was rated high in effectiveness by peers, but was seen as near average by supervisors. Group 4 received the highest ratings and rankings by peers and supervisors, while Group 5 was seen as average in effectiveness by both.

The EPPS profile of the group rated least effective by both supervisors and peers shows lower scores on Dominance and Heterosexuality, and higher scores on Nurturance. Members of the group have an average of 3.3 years of experience and a mean age of 35.6, while the most effective group has a mean age of 27.8 and an average of 2.3 years of experience.

Pattern analysis 3 consisted of the full EPPS and only supervisor ratings and rankings and was conducted to determine how the groups clustered without the influence of peer ratings (see Table 6). Four groups emerged, with Groups 1 and 4 rating high and Groups 2 and 3 low.

Group 2 is easily distinguishable by extremely high scores on Achievement and lower scores on Deference. Group 4 is distinguished by much lower Intraception scores. The two groups of counselors rated most effective by supervisors have an average of 2.8 years of experience and a mean age of 30. Those rated less effective have an average of 2.9 years of experience and a mean age of 42.

Pattern analysis 4, which added only peer ratings and rankings of effectiveness to the full EPPS resulted in four groups (see Table 7). Three groups are rated above average in effectiveness, and one is rated

Table 6
 Pattern Analysis 3: Z Scores of All EPPS Scales, Supervisor
 Ratings and Rankings of Effectiveness

Item	Group 1		Group 2		Group 3		Group 4	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Achievement	.321	.821	2.431	.438	.029	.647	.357	.873
Deference	-0.729	.740	-1.860	.204	.323	.718	-0.586	.648
Order	-1.699	.598	-1.504	.509	-.832	.384	-1.772	.805
Exhibition	.409	.977	.228	.928	.085	.580	.350	.773
Autonomy	.098	.830	.948	.983	-.554	.459	.667	.601
Affiliation	.032	.681	-0.290	1.110	.219	.714	.966	.584
Intracception	1.527	.775	.959	.765	.885	.558	-0.858	.561
Succorance	-0.374	.672	-0.291	.401	.298	.767	.811	.655
Dominance	.852	.523	.332	.634	-.112	.557	-0.245	.672
Abasement	-0.792	.439	-0.951	.701	-.080	.843	.055	.336
Nurturance	-0.446	.636	-0.975	.036	-.007	.778	-0.012	.703
Change	-0.128	.509	.805	.237	.715	1.064	-0.224	.630
Endurance	-1.098	.808	-1.124	1.140	-.736	.818	-1.443	.797
Heterosexuality	1.268	.847	.616	.391	.421	.672	1.267	.433
Aggression	.326	.440	.770	.587	-.784	.690	.330	.625
Supervisor's Ranking	.463	.607	-0.682	.584	-.368	.906	.373	.942
Supervisor's Rating of Effectiveness	.686	.544	-0.918	.477	-.530	.827	.476	.973

Table 7

Pattern Analysis 4: Z Scores of All EPPS Scales, Peer Ratings
and Rankings of Effectiveness

Item	Group 1		Group 2		Group 3		Group 4	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Achievement	.260	.731	.481	.637	1.315	1.051	.324	.811
Deference	.479	.672	.207	.362	-1.281	.772	-0.826	.469
Order	-0.840	.399	-1.086	.604	-1.811	.550	-1.575	.768
Exhibition	-0.215	.625	.263	.511	.475	.906	.484	.806
Autonomy	-0.500	.473	-0.416	.668	.568	.970	.468	.679
Affiliation	-0.159	.395	.854	1.060	-0.135	.786	.830	.489
Intraception	1.166	.627	.321	1.008	1.323	.808	-0.357	.944
Succorance	-0.066	.744	.344	.609	-0.310	.635	.791	.745
Dominance	-0.108	.515	.133	.605	.780	.660	-0.194	.643
Abasement	-0.316	.926	.158	.517	-0.886	.491	-0.102	.522
Nurturance	-0.216	.783	.429	.641	-0.727	.549	-0.153	.574
Change	.234	1.244	1.036	.449	.330	.558	-0.248	.572
Endurance	-0.289	.460	-1.014	.483	-1.293	.966	-1.534	.852
Heterosexuality	.726	.835	.232	.465	.946	.835	1.369	.245
Aggression	-0.418	.596	-1.031	.809	.563	.488	.310	.610
Peer Effectiveness Ranking	-0.219	.214	.202	.486	.114	.373	.192	.777
Peer Effectiveness Rating	-1.210	.561	.496	.686	.455	.388	.331	.984

far below average. The only clearly distinguishing feature of the least effective group is a tendency for members to score higher on Endurance, although they are still below average compared to the general population. The least effective counselors, as seen by peers, average 45 years of age with 3.2 years of experience, while the 3 groups rated above average in effectiveness have a mean age of 32.6 and 2.7 years of experience.

DISCUSSION

A limitation of this study is the relatively small number of subjects used for a pattern analysis. Therefore, the results must be viewed with caution until confirmed with a larger sample. Another limitation may be in the procedure used. Counselors were first ranked in order of effectiveness, and later rated on work habits, warmth, openness and genuineness, empathy, and on three measures of effectiveness. This procedure may have caused a halo effect which resulted in artificially high or low ratings. Therefore, pattern analysis 1, which included all supervisor and peer ratings, may have yielded spurious results.

The other pattern analyses which included all of the EPPS scales but no ratings of work habits, warmth, openness and genuineness, and empathy should be relatively free of this bias. A summary of the pattern analysis results which utilize all of the EPPS scales indicates that the most effective addiction counselors are younger and have between two and three years of experience in the field. Their EPPS profiles have higher scores in Dominance and lower scores in Intraception and Endurance. Their scores on Achievement, Deference, and Aggression are near those of the general population.

This suggests that addiction counselors perceived by their peers and supervisors as effective are more directive in their counseling approach and manifest less need to analyze motives, feelings, and behavior of others. The lower Endurance score indicates that the effective

counselor has less need to complete all tasks that are undertaken or, perhaps, is not as persistent on cases he sees as futile and directs his efforts to those with more chance of success.

The finding in this study that high Dominance scores are characteristic of effective counselors supports the research of Truax (1970). This suggests that higher levels of Dominance, as measured by the EPPS, is a desirable trait in several paraprofessional counseling roles. None of the previous EPPS literature on paraprofessional counselors notes a relationship between Intraception or Endurance and counselor effectiveness.

The scores of the male counselors in this study appear to be similar to the post-training scores of counselors described by Hoffman and Miner (1973). Both groups scored higher on Intraception and Heterosexuality, and lower on Order than the normative sample. It is not clear how they compare on the Endurance scale because Hoffman and Miner report a mean score of 12.0 and, at the same time, state that it was significantly higher than the normative sample whose mean score is 16.97. The male counselors in the current study have a mean score of 12.52 which is significantly lower than the general adult male population.

Hoffman and Miner (1973) also reported that their counselors scored higher on Affiliation and lower on Autonomy than the normative sample, a finding that is not replicated in the present study. One reason for this may be that Hoffman's subjects were all recovering alcoholics, whereas this study included some counselors who were alcoholics and some who were not.

The female counselors in this study also share some similarities with a group of female counselors described by Hoffman and Bonyng (unpublished manuscript). Both groups scored higher on Heterosexuality and lower on Order. Some confusion exists in regard to how Hoffman's counselors scored on Intraception because he reported a mean of 19.0, while stating it was lower than the general population (which has a mean of 15.28). In the current study the female counselors, with a mean score of 19.2 on Intraception, scored significantly higher than women in the general population.

The females in the current study also differed from Hoffman and Bonyng's in that the subjects were lower on Endurance and Deference, and higher on Autonomy than the normative sample. Again, these differences may be because all of Hoffman's subjects were alcoholics or because of random fluctuations associated with a small sample size.

Both male and female counselors in this study are also similar to counselors in Hoffman and Miner's (1973) study in that none of them met the EPPS cutting points for counselor selection suggested by Truax (1970). This may indicate that addiction counselors are different from counselors described by Truax (1970), Truax and Carkhuff (1967), and Truax, Silber, and Wargo (1966).

One finding of this study that is particularly striking is the absence of Autonomy as an indicator of counselling effectiveness. Previous studies (Truax, 1970; Truax, Silber, and Wargo, 1966; Pulos et al., 1962) have been relatively consistent in reporting high scores on Autonomy as characteristic of the effective paraprofessional.

The results of the present study clearly indicate that different personality characteristics are necessary to be effective in different paraprofessional roles. There are three findings in this report which indicate that the effective paraprofessional addiction counselor differs from other paraprofessionals described in the literature: (1) the relationship of lower Intraception and Endurance scores to effectiveness, (2) the absence of Autonomy as an indicator of effectiveness, and (3) the finding that none of the counselors meet the EPPS cutting points suggested by Truax (1970). This strongly implies that addiction counselors constitute a distinct group, separate from other paraprofessionals. The concept of a separate personality that is most effective in dealing with a particular client population is consistent with the idea that therapeutic effectiveness can be maximized if clients and therapists are matched along certain personality variables (Luborsky et al., 1971).

The occurrence in this study of groups of counselors who were rated high by supervisors but low by peers (or vice versa) may have some implications for selecting addiction counselors. The use of peer evaluations at some point when selecting counselors would add another dimension to the selection process. This may have an impact upon both the effectiveness of a program and on the harmony among co-workers.

One of the promising results of this study is the apparent ability of the pattern analysis method to distinguish between groups of effective and ineffective counselors in EPPS research. The pattern analysis acts as a hypothesis testing device. If there is no relationship between effectiveness and personality characteristics one would

expect that the groups would not be distinguishable by measures of effectiveness. However, because the groups separate so clearly on the effectiveness variables, this supports the hypothesis that there is a relationship between the effectiveness measures and the personality characteristics being studied.

The results of this study, and of similar studies on counselor effectiveness, clearly indicate that it is time to abandon the concept that there is a single paraprofessional personality best suited for all counseling roles. Instead, further research is needed to examine which counselor personality is most effective in the various paraprofessional roles.

APPENDIX I

PEER RATING FORM

PEER RATING FORM

Counselor's Name _____

Please indicate your rating by circling the appropriate number.

1. Rate this counselor on the following characteristics:

Work Habits

Very Poor 1 2 3 4 5 6 7 8 9 10 Excellent

Openness and Genuineness

High 10 9 8 7 6 5 4 3 2 1 Low

Warmth and Sensitivity

Low 1 2 3 4 5 6 7 8 9 10 High

Empathy (Ability to perceive experiences of others as if they were part of his own life)

High 10 9 8 7 6 5 4 3 2 1 Low

2. If a member of your family needed treatment how confident would you be in referring him to this counselor?

Not at all 1 2 3 4 5 6 7 8 9 10 Very Confident

3. If your own caseload were full, how likely would you be to refer a very difficult case to this counselor?

Very Probably 10 9 8 7 6 5 4 3 2 1 Unlikely

4. Compared to other counselors you have worked with, how would you rate this individual in terms of his overall effectiveness with clients?

Lowest 10% 1 2 3 4 5 6 7 8 9 10 Highest 10%

APPENDIX II

BACKGROUND INFORMATION FORM

BACKGROUND INFORMATION

Name _____

Age _____

Sex _____

Marital Status _____

Number of Children _____

Job Title _____

Hospital or Agency _____

State _____

Number of years of experience as an addiction counselor _____

Are you a certified addiction counselor? Yes _____ No _____. If yes,
what level? _____

Are you a recovered alcoholic or drug addict? Yes _____ No _____.

APPENDIX III

SUPERVISOR'S RATING FORM

SUPERVISOR'S RATING FORM

1. Counselor's Name _____
2. Supervisor's professional affiliation, if any _____.

Please indicate your rating by circling the appropriate number.

3. Rate this counselor on the following characteristics:

Work Habits
Very Poor 1 2 3 4 5 6 7 8 9 10 Excellent

Openness and Genuineness
High 10 9 8 7 6 5 4 3 2 1 Low

Warmth and Sensitivity
Low 1 2 3 4 5 6 7 8 9 10 High

Empathy (Ability to perceive experiences of others as if they were
part of his own life)
High 10 9 8 7 6 5 4 3 2 1 Low

4. If a member of your family needed treatment, how confident would you be in referring him to this counselor?
Not at All 1 2 3 4 5 6 7 8 9 10 Very Confident
5. If all of your counselors had equally balanced caseloads, how likely would you be to assign a very difficult case to this counselor?
Very Probably 10 9 8 7 6 5 4 3 2 1 Unlikely
6. Compared to other counselors you have supervised, how would you rate this individual in terms of his overall effectiveness with clients?
Lowest 10% 1 2 3 4 5 6 7 8 9 10 Highest 10%

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