1966

The relationship between vocational orientation and interpersonal functioning.

Gerald W. Piaget

University of Massachusetts Amherst

Follow this and additional works at: https://scholarworks.umass.edu/theses

Retrieved from https://scholarworks.umass.edu/theses/1879

This thesis is brought to you for free and open access by ScholarWorks@UMass Amherst. It has been accepted for inclusion in Masters Theses 1911 - February 2014 by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact scholarworks@library.umass.edu.
THE RELATIONSHIP BETWEEN
VOCATIONAL ORIENTATION AND INTERPERSONAL FUNCTIONING

A Dissertation Presented
by
Gerald W. Piaget

Submitted to the Graduate School of the
University of Massachusetts in
partial fulfillment of the requirements for the
MASTERS DEGREE
July 1966
Major Subject: Psychology
THE RELATIONSHIP BETWEEN
VOCATIONAL ORIENTATION AND INTERPERSONAL FUNCTIONING

A Dissertation Presented
by
Gerald W. Piaget

Approved as to style and content by:

[Signatures]
(Chairman of Committee)

(Head of Department)

(Member)

(Member)

(Member)

July 1966
The Relationship Between Vocational Orientation and Interpersonal Functioning. (July 1966)

Gerald W. Piaget, B. S., Lehigh University

M. S., University of Massachusetts

Directed by: Dr. Robert R. Carkhuff

Suggested inadequacies in current psychotherapeutic practice force us to consider the following question: To what extent are training programs in psychotherapy attracting healthy and potentially able applicants? The present study deals with this problem of "natural selection" in the helping professions. Using standard interview procedures, thirty-two college undergraduates were rated on five interpersonal dimensions: empathic understanding, positive regard, congruence, personally relevant concreteness, and depth of self-exploration elicited in others. The data collected suggest that the freshman and sophomore college population as a whole functions at a somewhat lower interpersonal level than do more advanced students in the graduate and undergraduate populations and well below the level considered to be minimally facilitative. No relationship was found between performance on these indices and either choice of the "helping role" as a prospective professional orientation or the choice of psychology as a major in college. However, intra-group performance variability was found to be substantially greater for psychology majors than for non-psychology majors, suggesting that the dynamics of natural selection may be drawing an abundance of both high- and low-level applicants to the field, and further im-
plying that the process of trainee selection, as well as the process of psychotherapy itself, may be "for better or worse." On the other hand, the differences may be due primarily to differential exposure to psychological theory and technique. Results are discussed in terms of data trends and environmental and methodological considerations. In particular, it is suggested that many freshman and sophomore college students may be insufficiently mature to be differentiated on the basis of the indices employed by this study.
ACKNOWLEDGMENTS

The author is deeply indebted to Robert R. Carkhuff and Bernard G. Berenson, whose perceptive advice and assistance were critical to the successful planning and development of this thesis.

In addition, special thanks are due Mae Alexik, Stephen Carlton, Joyce Magoon and Richard Pierce for generously contributing their time and effort to serve as standard interviewees. Similar acknowledgment is due William Barnard and James Martin for their assistance as tape raters. Finally, the author wishes to thank all those students whose participation as experimental subjects made this study possible.
# TABLE OF CONTENTS

**INTRODUCTION**

Current selection procedures .................................................. 1  
Desirable trainee characteristics .............................................. 2  
The focus of trainee selection .................................................. 3  

**METHOD**

Subjects ..................................................................................... 7  
Materials ...................................................................................... 7  
Procedure .................................................................................... 9  

**RESULTS**

......................................................................................... 10  

**DISCUSSION**

......................................................................................... 21  

**SUMMARY**

......................................................................................... 26  

**REFERENCES**

......................................................................................... 28  

**APPENDIX A**

......................................................................................... 33  

**APPENDIX B**

......................................................................................... 44
The Relationship Between Vocational Orientation and Interpersonal Functioning

Introduction

Several meaningful and rigorous challenges concerning the efficacy of therapeutic practices (Astin, 1961; Bergin, 1963; Eysenck, 1952, 1960, 1965; Levitt, 1957) have been leveled at the helping professions. With certain notable exceptions, these have been pointedly ignored. In addition, there is literature which questions the worth of time-honored graduate and post-graduate training programs (Bergin and Solomon, 1963; Carkhuff, 1966; Harvey, 1964; Kelley and Fiske, 1950; Rioch, 1963; Weiss, 1963). These challenges suggest that psychotherapy as it is currently practiced, therapy training techniques, and practicum supervision are on the average of minimal worth, and at worst can have deleterious effects to client and student populations. Although the methods of some of these studies are not entirely above reproach (DeCharms, Levy, and Wertheimer, 1964; Hood-Williams, 1960; Luborsky, 1954; Rosensweig, 1954), the question has been raised and is certainly important enough to merit serious consideration.

The problem is basically two-fold: first, to intensely and critically evaluate the efficacy of current psychotherapist and trainer populations, and second to devise methods of selection and training that will insure the production of optimally facilitative therapists in the future. Regarding the latter area, several questions present themselves. "What is the nature of current selection procedures: how good are they; where are their weak points; and how might they be improved?" "What characteristics are desirable in a trainee?" or simp-
ly "What are we looking for in a potential psychotherapist?" "What are the characteristics of current trainee applicants?" Finally, consideration may be given to the many and varied specific problems involved in the process of trainee selection.

**Current Selection Procedures.**

The APA Subcommittee on Counselor Trainee Selection (1954) states: "(The problem)...is - or should be - a consideration of the selection of individuals who will first be competent psychologists and who will also be able to acquire the necessary skills in one specialty or another. Perhaps, however, because both counseling and clinical psychologists are so intensely involved in the many pressing problems of human welfare, there is a special urgency about the selection and training of these kinds of psychologists." (pp. 174-175) They go on to list, in order of popularity, the five major selection criteria currently employed by graduate training institutions around the country: 1) undergraduate grade-point average, 2) interviews of one kind or another, 3) letters of recommendation, 4) aptitude and achievement tests, and 5) practicum work (used only by fifty percent of responding institutions, and then only after entrance or acceptance has been granted, a decision which is hard to reverse). Though half the schools indicated that some form of research into selection procedures was in progress, the Subcommittee concluded that dissatisfaction in this area does exist and that not much is being done to rectify the situation.

More recent evidence suggests that the situation is even worse than the APA report indicates. Although undergraduate GPA is by far the most widely used and heavily weighted single criterion of trainee selection in current use, research has failed to isolate a significant positive correlation between GPA and the ability to relate to others in a
facilitative manner, either at the post-graduate level (Bergin and Solomon, 1963), or the undergraduate level (Pierce, 1966). Neither were Bergin and Solomon able to find a positive relationship between facilitative ability and practicum grades.

The problem of appropriate selection criteria has received consideration in the literature (Abel, Oppenheim and Sadi, 1956; Barthol, and Kirk, 1956; Halmos, 1959; Wilson, 1956). However, the more basic question here concerns not the selection procedures per se, but rather the training orientation of schools which stress the intellectual, and force the development of interpersonal skills to assume a secondary role. No definite relationship has been established between intellectual and therapeutic skill, yet an assumption linking the two is implicit in current psychiatric and clinical training programs (Pierce, 1966). Until such traditional biases are altered, the selection of trainees in the helping professions will continue to be based on primarily irrelevant criteria.

Desirable Trainee Characteristics

Robbs (1963) writes: "First we must discover new sources of personnel... exploit full the concept of individual differences, bringing into mental health programs people whose own life experiences, quite apart from formal education, have taught them how to work effectively with people." (p. 298) The success of various "lay therapy" training programs, in which non-professional but "healthy" individuals with a minimum of training were able to function successfully in the therapeutic role (Carkhuff and Truax, 1965, 1965a; Harvey, 1964; Rioch, et al., 1963) lends further support to this thesis. Perhaps it is the simple concept of "Psychological health" which largely defines the
extent of trainee potential, current selection practices to the contrary. It seems apparent that graduate programs and other trainee centers where initially healthy individuals are selected have a substantial advantage over institutions where traditional methods and procedures are employed alone. Such programs might be spared the tedious and time-consuming necessity of having to "therapize their students" and would be able to begin training at a level which many programs never attain at all.

Various attempts have been made to define the factors contributing to psychological health (Thorne, 1958; Mehlivan and Koplan, 1958). For example, Shultz (1958) states:

"The psychologically healthy person... is continually growing... flexibly and affectively integrates personal and social experiences in terms of a continually broadening dynamic perspective... is becoming what he is capable of becoming... is actualizing himself... actually participates in the relationships of life about him in such a way that he fosters the personal and social growth of others." (p. 114)

More recently the concept has been operationalized in terms of a comprehensive model describing and integrating certain molecular, objectively defined and well-researched psychotherapeutic process variables (Carkhuff, 1966, 1966a). Briefly, it is suggested that the same variables which have been shown to lead to constructive personality change in the therapeutic encounter are responsible for successful, healthy interpersonal relationships in everyday life, with only the relative weights, or importance, accrued to the variables changing from situation to situation. Of the several therapist variables postulated, four have been operationally defined and quantified in terms of five-point rating scales; a single client, or "second person" process variable has been similarly defined. Using outcome criteria, validation procedures (Truax and Cark-
huff, 1966) have shown interpersonal performance as measured by such scales to be significantly predictive of success or failure in psychotherapy.

The Focus of Trainee Selection.

In light of the above, careful consideration of the following question is indicated: To what extent are training programs in psychotherapy attracting healthy and potentially able applicants. In a way this issue pre-empts any consideration of institutional selection criteria, as it dictates the characteristics and extent of the population of applicants initially available for institutional selection. It is this phenomenon of "natural selection" with which the present study is directly concerned. Why are people attracted to the field of psychology? Why do some elect to serve in the helping role? Most important, how do those who so choose compare as potential helpers with individuals who enter some other vocation?

Collier and Preston (1958) surveyed a small sample of undergraduate psychology majors. They concluded that "to understand self and others" was one of the three most popular reasons for choice of major, findings in agreement with those of Such (1957) and Roe (1952, 1953), and qualified by those of Clack (1957), whose "eminent psychologists" remembered choosing their field for scientific reasons rather than because of an interest in people. Mills (1955) found that abnormal psychology courses attract students with different personality patterns of adjustment than do other undergraduate psychology courses. However, little research has been done concerning why people choose the helping professions, and characteristics which differentiate these individuals from a normal population of students has not been clearly established.
A single indicative pattern may not exist.

The purpose of this study is two-fold: First, it will yield valuable base-rate data on the freshman and sophomore college population in general, and psychology majors in particular, which will be incorporated into an extensive training research program currently in progress at the University of Massachusetts. Second, it will assess the level of interpersonal functioning of a) freshmen and sophomores in general who are planning on entrance into helping or non-helping professions, and b) freshmen psychology majors in particular, with both helping and non-helping vocational orientations.

Specifically, the following hypotheses will be tested:

I. Freshmen and sophomore university undergraduates who have chosen to enter a "helping profession" function at higher levels of those interpersonal dimensions relating to constructive personality change than undergraduates who have selected a non-helping role.

II. Undergraduate psychology majors at the introductory level function at higher levels of those interpersonal dimensions relating to constructive personality change than non-psychology majors at a similar scholastic level.

III. The effect of these conditions is cumulative:

   a. Psychology majors who have chosen a helping profession function at the highest levels, and

   b. Non-psychology majors who have not chosen a helping profession function at the lowest levels of those interpersonal dimensions relating to constructive personality change, relative to the four experimental groups considered here.

The degree of interaction in the data will determine the extent to which this cumulative effect is additive or multiplicative in nature.
Method

Subjects

The subjects were sixteen male and sixteen female undergraduates enrolled in an introductory course in psychology at the University of Massachusetts. Half had expressed an interest in entering a "helping profession" such as medicine, clinical psychology, counseling psychology, or nursing; the rest were interested in entering "non-helping professions" such as engineering, natural science, the law, or business. Half were psychology majors, half were not. These criteria defined the four experimental groups: Psychology-Helping (PH), Psychology-Non-helping (PN), Non-psychology-Helping (NH), and Non-psychology-Non-helping (NN). Each group was composed of four male and four female Ss.

Two male and two female graduate students majoring in Counseling Psychology were used as standard interviewees.

Materials

The equipment consisted of tape recorders and small, quiet interview rooms. In addition, vocational preference questionnaires were constructed to differentiate between "helping" and "non-helping" orientations (Appendix B). Rating scales were used to measure the subjects' level of functioning in terms of the following interpersonal variables: accurate empathy, positive regard, concreteness, congruence, and the ability of the interviewer to elicit depth of self-exploration in others.

These research scales were derived in part from scales (Truax, 1961, 1961a, 1962, 1962a, 1963; Truax and Carkhuff, 1963, 1964) supported by extensive process and outcome research on counseling, psychotherapy, and other related interpersonal learning processes (Aspy, 1965;
Bergin and Solomon, 1963; Carkhuff and Truax, 1965, 1965a; Rogers, 1962; Truax and Carkhuff, 1963, 1964, 1964a, 1965). In addition, similar measures of similar constructs have received extensive support in the research literature of counseling, therapy and education (Barrett-Lennard, 1962; Blau, 1953; Braaten, 1961; Christenson, 1961; Demos, 1964; Halkides, 1958; Peres, 1947; Seeman, 1949; Steele, 1948; Wolfson, 1949). The present scales were written primarily to apply to all interpersonal processes while reducing ambiguity and increasing the reliability of the scales.

The scale "Empathic understanding in interpersonal processes" (Berenson, Carkhuff and Southworth, 1964) is a five-point scale, ranging from the lowest stage where the interviewer gives the appearance of being completely unaware or ignorant of even the most conspicuous surface feelings of the other person to the highest level where the interviewer comprehensively and accurately communicates his understanding of the other person's deepest feelings. Similarly, the scale "Respect or positive regard in interpersonal processes" (Carkhuff, Southworth and Berenson, 1964) is a five-point scale ranging from a low where clear negative regard is evident in the interviewer who sees himself as responsible for the second person to the highest level where he communicates a deep caring for the second person. The scale, "Genuineness in interpersonal processes" (Carkhuff, 1964) ranges from the lowest level where there is a wide discrepancy between the interviewers' experiencing and verbalization to the highest level where the interviewer is freely and deeply himself in a facilitative, non-exploitative relationship. The scale "Concreteness or specificity of expression in interpersonal processes" (Carkhuff, 1964a) extends from the lowest level
where the interviewer allows discussion to center around vague and abstract concepts to the highest level where the interviewer is always helpful in guiding the discussion so that the client shares directly and completely his specific feelings and experiences. The scale "Self-exploration in interpersonal processes" (Carkhuff, 1964b) is also a five-point scale ranging from the lowest level where the interviewee does not explore himself at all to the highest level where he is searching to discover new feelings concerning himself and his world. For copies of these scales, see Appendix A.

Procedure.

Questionnaires were distributed to and completed by 150 freshman and sophomore Psychology majors and 350 non-psychology majors enrolled in an introductory course in psychology. These were divided into two groups on the basis of vocational preference. Those individuals whose first and second choices were clearly oriented toward the helping role comprised one group, and those which clearly stated a preference for non-helping professions comprised the second. The remaining questionnaires, which could not be clearly differentiated on a helping-non-helping continuum, were discarded. The groups were then subdivided on the basis of major (psychology versus non-psychology) and sex.

Four individuals were chosen at random from each subgroup and asked to participate in the experiment.

The four standard interviewees were each interviewed by one male and one female subject from each of the four experimental groups. In each case the interviewee was already seated in front of a small table when the S was brought to the interview; each session was recorded and lasted about half an hour.
Instructions were given to both the interviewees and the Ss in private beforehand. The interviewees were simply told: "Respond to your interviewers as deeply and as sincerely as their manner allows. Share as much or as little with them as you feel you are able."

Each subject was given the following instructions: "In the room there is another student. You are to interview him. Be as helpful as you can in making it possible for him (her) to share some experience with you. You do not have to find out anything in particular; we are simply after a sample of student interpersonal behavior."

Two three-minute periods were randomly selected as excerpts from the middle and final portions of the resulting taped interviews. The excerpts were then rated, using the scales mentioned earlier as criteria, by a pair of graduate students experienced in the use of the scales. Analysis of variance procedures were employed to test for significant differences in the performance of the experimental groups.

Results

To assess the quality of the ratings, both intra-rater and inter-rater reliabilities were computed in the form of Pearson Product-Moment Correlations. Intra-rater scores were derived in the following manner: each rater assessed fifteen taped excerpts from a previous study which were randomly presented and which represented a variety of levels of interpersonal functioning. Two weeks later the same excerpts were newly randomized and presented to the same raters for reassessment. A comparison of the resulting sets of ratings yielded intra-rater correlations ranging from +.79 to +.99 (see Table I). Inter-rater reliabilities were obtained by comparing rater evaluations of 15 ran-
domly-selected tape excerpts from the present study; correlations were found to range from +.73 to +.91 (See Table 2).

Means and standard deviations for group and overall performances on all indices are presented in Table 3. The interpersonal indices considered in this study are theoretically independent of one another and consequently must be subjected to separate statistical analysis. In practice, however, they are often highly correlated with one another, and for descriptive purposes group scores may be pooled over indices to obtain a single gross measure of interpersonal function. Treated in this manner, the present data yield the following comparisons: The grand mean for all subjects over all indices was 1.51. Psychology majors obtained an overall rating of 1.59, while non-psychology majors were assessed at an average level of 1.45. Helpers obtained an overall rating of 1.55, non-helpers an average rating of 1.47. Group PH maintained an average scale rating of 1.51, Group PN an average rating of 1.62, Group NH an average rating of 1.42, and Group NM an average scale rating of 1.43.

Analyses of variance found no significant differences between groups due to either college major or to the "helping" orientation of professional goals on any of the five indices used (See Tables 4-8). A trend in the data suggests that Psychology Majors may offer higher levels of empathic understanding than Non-psychology Majors. (F = 2.55). At 1 and 23 df an F
<table>
<thead>
<tr>
<th>Raters</th>
<th>I</th>
<th>II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empathy</td>
<td>.99</td>
<td>.66</td>
</tr>
<tr>
<td>Positive Regard</td>
<td>.84</td>
<td>.99</td>
</tr>
<tr>
<td>Genuineness</td>
<td>.91</td>
<td>.93</td>
</tr>
<tr>
<td>Concreteness</td>
<td>.32</td>
<td>.99</td>
</tr>
<tr>
<td>Self-exploration</td>
<td>.92</td>
<td>.99</td>
</tr>
</tbody>
</table>
Table 2
Inter-rater Reliability for Counseling Process Variables

<table>
<thead>
<tr>
<th></th>
<th>Raters I and II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empathy</td>
<td>.30</td>
</tr>
<tr>
<td>Positive Regard</td>
<td>.73</td>
</tr>
<tr>
<td>Genuineness</td>
<td>.85</td>
</tr>
<tr>
<td>Concreteness</td>
<td>.91</td>
</tr>
<tr>
<td>Self-exploration</td>
<td>.73</td>
</tr>
<tr>
<td></td>
<td>Psychology-Helping</td>
</tr>
<tr>
<td>------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td></td>
<td>M</td>
</tr>
<tr>
<td>Empathy</td>
<td>1.2</td>
</tr>
<tr>
<td>Positive Regard</td>
<td>1.9</td>
</tr>
<tr>
<td>Genuineness</td>
<td>1.9</td>
</tr>
<tr>
<td>Concreteness</td>
<td>1.2</td>
</tr>
<tr>
<td>Self-exploration</td>
<td>1.4</td>
</tr>
<tr>
<td>Overall</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Table 3
Base Rate Data:
Means and Standard Deviations of Group Performances on Indices of Interpersonal Functioning.
Table 4
Analysis of Variance for Accurate Empathy

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>31</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>Major</td>
<td>1</td>
<td>.194</td>
<td>2.55</td>
</tr>
<tr>
<td>Role</td>
<td>1</td>
<td>.111</td>
<td>1.46</td>
</tr>
<tr>
<td>Maj x Role</td>
<td>1</td>
<td>.080</td>
<td>1.05</td>
</tr>
<tr>
<td>Error</td>
<td>23</td>
<td>.076</td>
<td>----</td>
</tr>
</tbody>
</table>
## Table 5

Analysis of Variance for Positive Regard

<table>
<thead>
<tr>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>31</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>Major</td>
<td>1</td>
<td>0.036</td>
<td>0.220</td>
</tr>
<tr>
<td>Role</td>
<td>1</td>
<td>0.020</td>
<td>0.130</td>
</tr>
<tr>
<td>Maj x Role</td>
<td>1</td>
<td>0.006</td>
<td>0.004</td>
</tr>
<tr>
<td>Error</td>
<td>23</td>
<td>0.151</td>
<td>----</td>
</tr>
</tbody>
</table>
Table 6
Analysis of Variance for Facilitative Genuineness

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>31</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>Major</td>
<td>1</td>
<td>.013</td>
<td>.160</td>
</tr>
<tr>
<td>Role</td>
<td>1</td>
<td>.003</td>
<td>.007</td>
</tr>
<tr>
<td>Maj x Role</td>
<td>1</td>
<td>.008</td>
<td>.007</td>
</tr>
<tr>
<td>Error</td>
<td>23</td>
<td>.109</td>
<td>----</td>
</tr>
</tbody>
</table>
Table 7

Analysis of Variance for Concreteness

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major</td>
<td>1</td>
<td>.090</td>
<td>.603</td>
</tr>
<tr>
<td>Role</td>
<td>1</td>
<td>.137</td>
<td>.925</td>
</tr>
<tr>
<td>Maj x Role</td>
<td>1</td>
<td>.003</td>
<td>.002</td>
</tr>
<tr>
<td>Error</td>
<td>23</td>
<td>.148</td>
<td></td>
</tr>
<tr>
<td></td>
<td>df</td>
<td>MS</td>
<td>F</td>
</tr>
<tr>
<td>------</td>
<td>----</td>
<td>-----</td>
<td>------</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>Major</td>
<td>1</td>
<td>.405</td>
<td>1.350</td>
</tr>
<tr>
<td>Role</td>
<td>1</td>
<td>.045</td>
<td>.150</td>
</tr>
<tr>
<td>Maj x Role</td>
<td>1</td>
<td>.011</td>
<td>.037</td>
</tr>
<tr>
<td>Error</td>
<td>28</td>
<td>.299</td>
<td>----</td>
</tr>
</tbody>
</table>
Table 9

\[ \text{Hartley Test for Heterogeneity of Variance} \]

<table>
<thead>
<tr>
<th>Interpersonal Dimension</th>
<th>F_{max}</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empathy</td>
<td>4.00</td>
<td>( p &lt; .10 )</td>
</tr>
<tr>
<td>Positive Regard</td>
<td>4.00</td>
<td>( p &lt; .10 )</td>
</tr>
<tr>
<td>Genuineness</td>
<td>6.25</td>
<td>( p &lt; .05 )</td>
</tr>
<tr>
<td>Concreteness</td>
<td>4.00</td>
<td>( p &lt; .10 )</td>
</tr>
<tr>
<td>Depth of Self-exploration</td>
<td>16.00</td>
<td>( p &lt; .01 )</td>
</tr>
</tbody>
</table>
ratio of 4.2 is required for significance at the .05 level.

Other indicated trends, that Non-helper offer higher levels of empathic understanding than Helpers and that Psychology Majors elicit deeper levels of self-exploration than Non-psychology Majors, were found to be quite non-significant (F = 1.46 and 1.35 respectively).

Finally, variability of performance within the four experimental groups was considered. In general, psychology majors exhibit a higher within-cell variability across all interpersonal indices, and this effect appears to be independent of 'helping' or 'non-helping' preferences in vocational choice. The Hartley Test for heterogeneity of variance yielded significant differences in variability across experimental groups on the interpersonal dimensions of Depth of Self Exploration (Fmax = 16.0; p < .01) and Genuineness (Fmax = 6.25; p < .05). For the dimensions of empathy, positive regard, and Concreteness substantial though non-significant trends were found in the same direction (Fmax = 4.0; p < .10) (see Table 9).

Discussion

The present study failed to support any of the hypotheses presented earlier in this paper, indicating that no consistent relationship exists between an individual's level of performance on the interpersonal dimensions employed and the nature of his vocational choice on helping-nonhelping and psychology-nonpsychology continua. These data suggest that at the scholastic and maturational level pre-
sently under investigation, the various processes of "natural selection" which may exist neither augment nor depreciate the quality of the trainee population available for institutional selection. In other words, whether or not an individual chooses to adopt the helping role either within or outside the field of psychology does not seem to depend upon the extent of his ability to function in that area.

The present study assessed the facilitative ability of the college undergraduate population at a somewhat lower level than did previous research in which similar base-rate data were collected. For instance, untrained dormitory counselors have been rated at an overall level of about 1.9 (Berenson, Carroll, and Myrus, 1965) and the functional level of senior clinical psychology majors has been found to be about 1.9 (Pierce, 1966). The overall mean for the present group was about 1.5. In terms of the assessment devices used here, minimally facilitative interpersonal functioning would be rated at about level 3.

These results should not have been entirely unexpected. The majority of subjects employed here were eighteen or nineteen years of age; many were experiencing their first year away from home. Such persons are emerging from an adolescent period of development where the primary personal orientation is inward, not outward, and low levels of interpersonal function should be considered natural, even healthy, for them. Their functioning would be expected to improve as they enter the adult world, a prediction which is supported by the trends reported above. These and other results describe a level of
facilitative potential which increases with age, time at college, and intuitively, experience in working with and studying about people. However, maturational improvement seems to reach an asymptote at about level 2, well short of minimally facilitative performance.

The fact that individual differences in quality of interpersonal functioning do exist in the adult population implies that the ability of some individuals increases substantially with maturation while that of others remains relatively static at low levels. The present study failed to establish which of these groups is the predominant contributor to our trainee applicant populations, possibly due to the developmental level of the subjects used. However, it should be noted that while no overall differences exist, the performance variability of psychology majors was found to be substantially greater than that of non-psychology majors. These results closely parallel those found by Truax and Carkhuff (1963), who assessed the quality of psychotherapy with schizophrenics using control group procedures. While finding no overall differences in outcome between treated and untreated patients, they did find a greater variability of outcome within the treated group. In other words, treated patients showed more inclination to change, whether positively or negatively, than did untreated patients. The authors concluded that psychotherapy does indeed have an effect, but that such effect can be "for better or for worse" depending upon the interpersonal skill of the therapist. These results have since been replicated (Summarized in Bergin, 1965; Carkhuff, 1966b).

With regard to the present data, two possible explanations may
be posited. First, differences in performance variability may simply arise from a greater or more intense exposure of psychology majors to theories and techniques of psychotherapy. This increased exposure may, for various reasons, have more effect on the ability of some psychology majors than others. On the other hand, at the introductory level, this effect might be expected to be minimal. Alternatively, this effect may be a function of the "natural selection" phenomenon mentioned earlier - a function of the differential motivations of individuals for choosing psychology as a major. Some undoubtedly choose the field because of congruent interests and abilities, and have learned earlier in life to function well in interpersonal situations. However it is conceivable that a person might choose to study behavior, behavioral change, and psychotherapy because he finds it difficult to understand and control his own interpersonal behavior, because he himself needs this kind of help. Such an individual might be considered a much less promising therapy trainee than his healthier colleague. Summarily, psychology may be attracting an abundance of both high-level and low-level individuals to its ranks.

Both explanations probably account for part of the variability differences evident in the present data; even so, implications are profound. These data suggest that, due to the function of natural processes, the selection of therapy trainees may also be "for better or for worse," depending on the nature, quality, and appropriateness of institutional selection criteria. Further research along these lines is indicated (Bergin, 1965).

Additional concern should be given to the problem of isolating the various environmental factors which contribute to the differential
development of interpersonal ability, for the purpose of orienting current therapy selection methods and training programs accordingly. It may be found that extensive reorganization of both is required, such as is indicated in a suggestion by Clark, et al. (1964) proposing the establishment of a special doctoral degree in psychotherapy. The various programs which have proven successful in training such "lay" populations as housewives (Ricch, et al., 1963), happily married people (Harvey, 1964), and hospital attendants (Carkhuff and Truax, 1965a), indicate the tremendous advances in the productivity of training programs that are possible given adequate selection and/or methodology. For instance, in just six weeks Bersonson, Carkhuff and Myrus (1965) were able to demonstrate a significant increase in the facilitative manner of sophomore and junior dormitory counselors relative to a group of their peers who received traditional training. Additional research is currently in progress at the University of Massachusetts which casts housemothers, patients and other lay personnel in the helping role.

In passing, a word of caution is necessary regarding the interpretation of these scale values in their present context. While there is substantial outcome research indicating that the scales are accurate indicators of the facilitative ability of individuals with experience in the helping professions, it has not been established that they are accurate assessors of such potential in the case of inexperienced personnel. Though the variables being measured are certainly important components of all interpersonal relationships, it must be remembered that while experienced therapists, teachers, coaches and so forth are
used to and can work naturally in the helping role or structured interpersonal setting, to college students it is a unique and often uncomfortable situation in which to be thrust. As such, the interview situation might easily interfere with the natural expression of a subject's true "facilitative character." Second, the scales may not be equally sensitive to qualitative differences in the expression of the variables under consideration. For example, empathy can be expressed in many ways. Finally, due to the low range-to-variance ratio which they present for analysis, the scales may be statistically insensitive to quantitative differences which are, in actuality, significant.

Any replication of this study should employ a much larger and diversified sample in order to elucidate the precise nature of the trends reported here and to facilitate the accurate generalization of results. In addition, objectivity may be enhanced by the use of more specific instructions to both Ss and standard interviewees, and by use of a second method of assessment, such as a questionnaire to be filled out by the interviewee and/or a trained observer subsequent to each interview. The use of a concomitant measure, such as a personality test, might also be of value in assessing and contrasting the facilitative potential of future therapy trainees.

**Summary**

The purpose of this study was two-fold. First, base-rate data applicable to a current program of developmental research was collected, involving an assessment of the level of interpersonal functioning of a first- and second-year undergraduate population as defined by five selected therapeutic process variables. Second, within this popula-
tion the following comparisons were made: a) level of functioning of freshmen and sophomores who adopt the "helping role" as a vocational preference relative to individuals who do not, and b) freshmen and sophomores psychology majors relative to individuals at a similar academic level but with diverse vocational orientations. Excerpts from taped standard interviews employing sixteen male and sixteen female undergraduate subjects, half of whom were psychology majors and all of whom were enrolled in an introductory course in psychology, were rated in terms of the following variables: empathic understanding, respect or positive regard, facilitative genuineness, concreteness or specificity of expression, and the ability to elicit depth of self-exploration in others. No significant differences were found with regard to either choice of psychology or orientations toward the helping role, and the few trends present were difficult to interpret in terms of the hypotheses presented. However, intra-group performance variability was found to be substantially greater for psychology majors than for non-psychology majors, suggesting that the dynamics of natural selection may be drawing an abundance of both high- and low-level applicants to the field. The study was discussed in terms of its limitations and implications for therapy training and trainee selection procedures.
References


Carkhuff, R. R. Personally relevant concreteness or specificity of expression in interpersonal processes: A scale for measurement. Mimeographed research scale, University of Massachusetts, 1964.

Carkhuff, R. R. Self-exploration in interpersonal processes: A scale for measurement. Mimeographed research scale, University of Massachusetts, 1964.


Carkhuff, R. R., Southworth, A. J., and Berenson, B. G. Respect or positive regard in interpersonal processes: A scale for measurement. Mimeographed research scale, University of Massachusetts, 1964.


Harvey, L. V. The use of non-professional auxiliary counselors in staffing a counseling service. Journal of Counseling Psychology, 1964, 11, 343-357.


Mills, E. S. Abnormal psychology as a selective factor in the college curriculum. Journal of Educational Psychology, 1955, 46, 101-111.


Truax, C. B. A scale for the measurement of depth of interpersonal exploration (OX), *Discussion Papers, Wisconsin Psychiatric Institute, University of Wisconsin*, 1962, 35, (a).


Empathic Understanding in Interpersonal Processes

A Scale for Measurement

Bernard G. Berenson, Robert R. Carkhuff, J. Alfred Southworth

Level 1
The first person appears completely unaware or ignorant of even the most conspicuous surface feelings of the other person(s).
Example: The first person may be bored or disinterested or simply operating from a preconceived frame of reference which totally excludes that of the other person(s).
In summary, the first person does everything but listen, understand or be sensitive to even the surface feelings of the other person(s).

Level 2
The first person responds to the surface feelings of the other person(s) only infrequently. The first person continues to ignore the deeper feelings of the other person(s).
Example: The first person may respond to some surface feelings but tends to assume feelings which are not there. He may have his own ideas of what may be going on in the other person(s) but these do not appear to correspond with those of the other person(s).
In summary, the first person tends to respond to things other than what the other person(s) appear to be expressing or indicating.

Level 3
The first person almost always responds with minimal understanding to the surface feelings of the other person(s) but, although making an effort to understand the other person's deeper feelings almost always misses their import.
Example: The first person has some understanding of the surface aspects of the messages of the other person(s) but often misinterprets the deeper feelings.
In summary, the first person is responding but not aware of who that other person really is or of what that other person is really like underneath. Level 3 constitutes the minimal level of facilitative interpersonal functioning.

Level 4
The facilitator almost always responds with understanding to the surface feelings of the other person(s) and sometimes but not usually responds with empathic understanding to the deeper feelings.
Example: The facilitator makes some tentative efforts to understand the deeper feelings of the other person(s).
In summary, the facilitator is responding, however infrequently, with some degree of empathic understanding of the deeper feelings of the other person(s).

Level 5
The facilitator almost always responds with accurate empathic understanding to all of the other person's deeper feelings as well as surface feelings.
Example: The facilitator is "together" with the other person(s) or "tuned in" on the other person's wavelength. The facilitator and the other person(s) might proceed together to explore previously unexplored areas of human living and human relationships. The facilitator is responding with full awareness of the other person(s) and a comprehensive and accurate empathic understanding of his most deep feelings.

1. The present scale "Empathic understanding in interpersonal processes" has been derived in part from "A scale for the measurement of accurate empathy (Truax, 1961)" which has been validated in extensive process and outcome research on counseling and psycholotherapy (Bergin and Solomon, 1963; Carkhuff and Truax, 1965, 1965a, 1965b; Rogers, 1962; Truax, 1963; Truax and Carkhuff, 1963, 1964, 1965). In addition, similar measures of similar constructs have received extensive support in the literature of counseling and therapy (Barrett-Le-uard, 1962; Demos, 1964; Halkides, 1958; Truax, 1961) and education (Aspy, 1965). The present scales were written to apply to all interpersonal processes and have already received research support (Carkhuff, 1965, 1965a; Eyrenson Carkhuff and Myrus, 1965).

The present scale represents a systematic attempt to reduce the ambiguity and increase the reliability of the scale. To facilitate these purposes, Level 1 of the present scale is approximately equal to Stage 1 of the earlier scale. The remaining levels are approximately correspondent: Level 2 and Stages 2 and 3 of the earlier version; Level 3 and Stages 4 and 5; Level 4 and Stages 6 and 7; Level 5 and Stages 8 and 9.
Respect or Positive Regard in Interpersonal Processes
A Scale for Measurement

Robert R. Carkhuff  J. Alfred Southworth  Bernard G. Berenson

Level 1
The first person is communicating clear negative regard for the second person.
Example: The first person may be actively offering advice or telling the second person what would be "best" for him.

In summary, in many ways the first person acts in such a way as to make himself the focus of evaluation and sees himself as responsible for the second person.

Level 2
The first person responds to the second person in such a way as to communicate little positive regard.
Example: The first person responds mechanically or passively or ignores the feelings of the second person.
In summary, in many ways the first person displays a lack of concern or interest for the second person.

Level 3
The first person communicates a positive caring for the second person but there is a conditionality to the caring.
Example: The first person communicates that certain kinds of actions on the part of the second person will reward or hurt the first person.
In summary, the first person communicates that what the second person does or does not do matters to the first person. Level 3 constitutes the minimal level of facilitative interpersonal functioning.

Level 4
The facilitator clearly communicates a very deep interest and concern for the welfare of the second person.
Example: The facilitator enables the second person to feel free to be himself and to be valued as an individual except on occasion in areas of deep personal concern to the facilitator.
In summary, the facilitator sees himself responsible to the second person.

Level 5
The facilitator communicates a very deep respect for the second person's worth as a person and his rights as a free individual.
Example: The facilitator cares very deeply for the human potentials of the other person.
In summary, the facilitator is committed to the value of the other person as a human being.
I. The present scale, "Respect or Positive Regard in Interpersonal Processes has been derived in part from "A Tentative Scale for the Measurement of Unconditional Positive Regard" (Truax, 1962) which has been validated in extensive process and outcome research on counseling and psychotherapy (Carkhuff and Truax, 1965, 1965a; Rogers, 1962; Truax, 1963; Truax and Carkhuff, 1963, 1964, 1965). In addition, similar measures of similar constructs have received extensive support in the literature of counseling and therapy (Barrett-Lennard, 1962; Demos, 1964; Halkides, 1958; Scotts, 1962) and education (Christianson, 1961; Truax and Tatum, 1962). The present scales were written to apply to all interpersonal processes and have already received research support (Carkhuff, 1965, 1965a; Berenson, Carkhuff and Hyrus, 1965).

The present scale represents a systematic attempt to reduce the ambiguity and increase the reliability of the scale. In the process many important delineations and additions have been made. For comparative purposes, the levels of the present scale are approximately equal to the stages of the earlier scale, although the systematic emphasis upon the positive regard rather than upon unconditionality represents a pronounced divergence of emphasis.
Facilitative Genuineness in Interpersonal Processes
A Scale for Measurement

Robert R. Carkhuff

Level 1

The first person's verbalizations are clearly unrelated to what he is feeling at the moment, or his only genuine responses are negative in regard to the second person (s) and appear to have a totally destructive effect upon the second person.
Example: The first person may be defensive in his interaction with the second person(s) and this defensiveness may be demonstrated in the content of his words or his voice quality and where he is defensive does not employ his reaction as a basis for potentially valuable inquiry into the relationship.
In summary, there is evidence of a considerable discrepancy between the first person's inner experiencing and his current verbalizations or where there is no discrepancy the first person's reactions are employed solely in a destructive fashion.

Level 2

The first person's verbalizations are slightly unrelated to what he is feeling at the moment or when his responses are genuine they are negative in regard to the second person and the first person does not appear to know how to employ his negative reactions constructively as a basis for inquiry into the relationship.
Example: The first person may respond to the second person(s) in a "professional" manner that has a rehearsed quality or a quality concerning the way a helper "should" respond in that situation.
In summary, the first person in usually responding according to his prescribed "role" rather than to express what he personally feels or means and when he is genuine his responses are negative and he is unable to employ them as a basis for further inquiry.

Level 3

The first person provides no "negative" cues between what he says and what he feels, but he provides no positive cues to indicate a really genuine response to the second person(s).
Example: The first person may listen and follow the second person(s) but commits nothing more of himself.
In summary, the first person appears to make appropriate responses which do not seem insincere but which do not reflect any real involvement either. Level 3 constitutes the minimal level of facilitative interpersonal functioning.

Level 4

The facilitator presents some positive cues indicating a genuine response (whether positive or negative) in a non-destructive manner to the second person(s).
Example: The facilitator's expressions are congruent with his feelings although he may be somewhat hesitant about expressing them fully.
In summary, the facilitator responds with many of his own feelings and and there is no doubt as to whether he really means what he says and he is able to employ his responses whatever their emotional content, as a basis for further inquiry into the relationship.
Level 2

The facilitator is freely and deeply himself in a non-exploitative relationship with the second person(s).
Example: The facilitator is completely spontaneous in his interaction and open to experiences of all types, both pleasant and hurtful, and in the event of hurtful responses the facilitator's comments are employed constructively to open further area of inquiry for both the facilitator and the second person.

In summary, the facilitator is clearly being himself and yet employing his own genuine responses constructively.

1 The present scale, "Facilitative genuineness in interpersonal processes" has been derived in part from "A tentative scale for the measurement of therapist genuineness or self-congruence" (Truax, 1962) which has been validated in extensive process and outcome research on counseling and psychotherapy (Barret-Lennard, 1962; Dickenson, 1965; Halkides, 1958; Jourard, 1962; Truax, 1961), and education (Aspy, 1965). The present scale represents a systematic attempt to reduce the ambiguity and increase the reliability of the scale. In the process, many important delineations and additions have been made. For comparative purposes, the levels of the present scale are approximately equal to the stages of the earlier scale, although the systematic emphasis upon the constructive employment of negative reactions represents a pronounced divergence of emphasis.
Level 1
The first person leads or allows all discussion with the second person(s) to deal only with vague and anonymous generalities.
Example: The first person and the second person discuss everything on strictly an abstract and highly intellectual level.

In summary, the first person makes no attempt to lead the discussion into the realm of personally relevant specific situations and feelings.

Level 2
The first person frequently leads or allows even discussions of material personally relevant to the second person(s) to be dealt with on a vague and abstract level.
Example: The first person and the second person may discuss "real" feelings but they do so at an abstract, intellectualized level.

In summary, the first person does not elicit discussion of most personally relevant feelings and experiences in specific and concrete terms.

Level 3
The first person at times enables the second person(s) to discuss personally relevant material in specific and concrete terminology.
Example: The first person will help to make it possible for the discussion with the second person(s) to center directly around most things which are personally important to the second person(s) although there will continue to areas not dealt with concretely and areas which the second person does not develop fully in specificity.

In summary, the first person sometimes guides discussions into consideration of personally relevant specific and concrete instances, but these are not always fully developed. Level 3 constitutes the minimal level of facilitative functioning.

Level 4
The facilitator is frequently helpful in enabling the second person(s) to fully develop in concrete and specific terms almost all instances of concern.
Example: The facilitator is able on many occasions to guide the discussion to specific feelings and experiences of personally meaningful material.

In summary, the facilitator is very helpful in enabling the discussion to center around specific and concrete instances of most important and personally relevant feelings and experiences.
Level 5

The facilitator is always helpful in guiding the discussion so that the second person(s) may discuss fluently, directly and completely specific feelings and experiences.

Example: The first person involves the second person in discussion of specific feelings, situations and events, regardless of their emotional content.

In summary, the facilitator facilitates a direct expression of all personally relevant feelings and experiences in concrete and specific terms.

1 The present scale "personally Relevant Concreteness or Specificity of Expression" has been derived from earlier work (Truax, 1961; Truax and Carkhuff, 1963, 1964). Similar measures of similar constructs have been researched only minimally (Pope and Siegman, 1962). The present scale has received support in research on the training of counselors (Berenson, Carkhuff and Myrus, 1965). The systematic emphasis upon the personally meaningful relevance of concrete and specific expressions represents a pronounced divergence of emphasis.
Self-Exploration in Interpersonal Processes
A Scale for Measurement
Robert R. Carkhuff

Level 1
The second person does not discuss personally relevant material, either because he has had no opportunity to do such or because he is actively evading the discussion even when it is introduced by the first person.

Example: The second person avoids any self-descriptions or self-exploration or direct expression of feelings that would lead him to reveal himself to the first person.

In summary: for a variety of possible reasons, the second person does not give any evidence of self-exploration.

Level 2
The second person responds with discussion to the introduction of personally relevant material by the first person but does so in a mechanical manner and without the demonstration of emotional feeling.

Example: The second person simply discusses the material without exploring the significance or the meaning of the material or attempting further exploration of that feeling in our effort to uncover related feelings or material.

In summary, the second person responds mechanically and remotely to the introduction of personally relevant material by the first person.

Level 3
The second person voluntarily introduces discussions of personally relevant material but does so in a mechanical manner and without the demonstration of emotional feeling.

Example: The emotional remoteness and mechanical manner of the discussion give the discussion a quality of being rehearsed.

In summary, the second person introduces personally relevant material but does so without spontaneity or emotional proximity and without an inward probing to newly discover feelings and experiences.

Level 4
The second person voluntarily introduces discussions of personally relevant material with both spontaneity and emotional proximity.

Example: the voice quality and other characteristics of the second person are very much "with" the feelings and other personal materials which are being verbalized.

In summary, the second person introduces personally relevant discussions with spontaneity and emotional proximity but without a distinct tendency toward inward probing to newly discover feelings and experiences.
Level 5

The second person actively and spontaneously engages in an inward probing to newly discover feelings or experiences about himself and his world.

Example: The second person is searching to discover new feelings concerning himself and his world even though at the moment he may be doing so perhaps fearfully and tentatively.

In summary, the second person is fully and actively focusing upon himself and exploring himself and his world.

1 The present scale "Self exploration in interpersonal processes" has been derived in part from "The measurement of depth of intrapersonal exploration (Truax, 1963) which has been validated in extensive process and outcome research on counseling and psychotherapy (Carkhuff and Truax, 1965, 1965a, 1965b; Rogers, 1962; Truax, 1963; Truax and Carkhuff, 1962, 1964, 1965). In addition, similar measures of similar constructs have received extensive support in the literature of counseling and therapy (Clau, 1953; Braaten, 1953; Peres, 1947; Seeman, 1949; Steele, 1949; Wolfson, 1949).

The present represents a systematic attempt to reduce the ambiguity and increase the reliability of the scale. In the process many important eliminations and additions have been made. For comparative purposes, Level 1 of the present scale is approximately equal to Stage 1 of the early scale. The remaining levels are approximately correspondent: Level 2 and Stages 2 and 3; Level 3 and Stages 4 and 5; Level 4 and Stage 6; Level 5 and Stages 7, 8, and 9.
Please indicate below what you plan to do subsequent to graduation. Do you plan to continue your education? If so, what area of study might interest you? If not, what vocation will you choose? Please be specific and explain as fully as you can. Give first and second choices.

First Choice:

Second Choice:

Additional Comments:

I wish to participate in a psychological experiment sometime during the next couple of weeks. (for one-hour credit)

During that time I will be free the following:

Evenings:

Afternoons: