The Examiner's Attitude as a Variable in a Modified Draw a Person Technique

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THE EXAMINER'S ATTITUDE AS A VARIABLE IN A
MODIFIED DRAW A PERSON TECHNIQUE

by

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VITA

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In September 1961, she was admitted to the Department of Psychology of Loyola University, Chicago, as a graduate student and became a research assistant in 1962. She took a full-time internship in Clinical Psychology at the Neuropsychiatric Institute of the University of Illinois during 1962-1963.

In September 1964, she received a USPHS traineeship in Clinical Psychology to continue her studies in the Department of Human Development of the University of Chicago. Almost simultaneously with her admission to the Ph.D. program, she became a teaching assistant in the Department of Psychology of the University of Chicago.

Recently, she has been awarded a USPHS traineeship in Clinical Psychology at the third year level and is at the present time completing the requirements toward a Ph.D. degree.
ACKNOWLEDGEMENTS

This research was conducted under the guidance of Dr. Ronald Walker, Chairman of the Psychology Department at Loyola University, to whom the author wishes to express her great appreciation for his valuable advice in planning the research and his steady assistance in carrying out this project.

The writer is also grateful to Dr. Alvin Burstein of the Psychology Department at the University of Chicago for his encouragement and helpful suggestions during the completion of this study.

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Finally, the writer wishes to acknowledge her indebtedness to Mrs. Marta Puebla de Falicov, who so skillfully and dedicatedly drew the figures used in this experiment.
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CHAPTER I

INTRODUCTION

The criticism has often been raised that psychological test results are not as "single minded" as an X-ray revealing information only about the subject without being influenced by the person who administers the test, the method of administration or the situation in which the test was used. Such criticism has led to a series of studies which have clearly established that even the nonverbal behavior of the examiner may significantly affect certain aspects of the test results (Alden and Benton, 1951; Baughman, 1961; Gibby, 1953; Gross, 1959; Lord, 1950; Masling, 1960; Sanders and Cleveland, 1953; Simkins, 1960; Summerwell, 1958; Wickes, 1956). Thus, procedures that many clinicians hope would serve as an X-ray, appear on close examination to function also as a mirror, reflecting not only the subject's personality but also the examiner's, and their interactions in the given situation. However, most of the studies in this area have been concerned with the Rorschach test and there has been relatively little interest in testing the applicability of those findings to other projective tests. Since the Draw A Person Test (Machover, 1949) is a widely used projective instrument for clinical diagnosis, an evaluation of examiner influence on figure drawing performance seems to be needed.

According to Machover, "in the act of translating the body image or postural model in graphic terms . . . the feeling tones or central disposi-
tions... reflect faithfully the tensions of the individual who is drawing" (1949, p. 6). Without beginning to question or examine the validity of this statement, one could ask to what extent "the tensions of the individual who is drawing" may be dependent upon the emotional atmosphere of the present testing situation—as created by the attitude of E. In other words, when an individual draws a figure—or when he selects a figure on the basis of preference or of identification with the affect conveyed by it—he is communicating something to the E that may be only partly personal projection. His projection may also be, in part, an extension of the rest of the interview situation. This present writer does not believe that the emotional tone of the relationship between S and E explains most of the variations in projective productions, she is merely emphasizing it as a potentially important factor. Several studies have shown that the degree of warmth or coldness the E radiates to his S affects the nature of the data the S produces in the experiment (Gordon and Durea, 1948; Lord, 1950; Masling, 1960; Reece and Whitman, 1962; Rosenthal, 1963; Turner and Coleman, 1962).

The experimental situation in this study was not too remote from actual interaction as it occurs in a testing session, and the test materials were devised in a way that permitted a rather straightforward interpretation with an acceptable degree of consensus. A detailed explanation of the rationale underlying the experimental set-up and the choice of instrument appear in the next section of this thesis.

The specific objective involved in this study was to evaluate the effects upon S's performance of E's efforts to induce stress or to establish
rapport with each subject as he responded to ready-made human figures differing from each other only with respect to attitudinal or postural elements and presumably conveying different affective states. This primary goal, in turn, gave rise to the additional objectives of first delineating E's characteristics with regard to warmth and hostility or sternness and then relating these defined characteristics to any such response differences as they may have been found to elicit.

Only two studies concerned with the influence of situational and interpersonal variables in the DAP have appeared in the literature. Sinnett and Eglash (1950) tested a group of female undergraduate students in psychology. The authors took seventeen signs from Machover's original book and compared the findings obtained by the two examiners, each working with a different group of subjects. There was only one statistically significant difference between the distributions obtained: one E obtained a bimodal distribution while the other E obtained a normal distribution of the height of figures. It was the feeling of the authors that the E who obtained the atypical distribution of heights created anxiety in the Ss. Presumably, the Ss dealt with this arousal of anxiety by expressing constriction or expansiveness in their drawings—perhaps in accord with their characteristic defense styles (Sinnett and Eglash, personal communication).

Holtzman (1952) investigated the influence of E's stature and sex on the DAP productions of forty male and forty female college students. The Es were two males, one of whom was nearly a foot taller and sixty pounds heavier than the other, and two female Es differing in "degree of feminine qualities." An intensive subjective analysis of the drawing characteristics
conducted by twelve trained judges as well as the examination of certain objective measures revealed no variations in the drawings which could be attributed to the E's personality, sex, or physical appearance. Significant differences were found, however, attributable to the sex of the S taking the test. To eliminate the possible influence of sex as a variable, the present study limited its sample to male subjects.

The current investigation differs from studies cited above in that only a single E was employed. For one group, this E deliberately assumed the role of a stern, demanding, authoritative figure who, throughout the testing, leaned away from the S and appeared unconcerned about his performance. The same E, to another group, strove to be warm, accepting, and charming. By this use of one E only, it was hoped to eliminate the influence of the multifold and subtle physical and personality variations inherent in different examiners, not easily amenable to control and which might be expected to constitute an important source of response error variance.

In labeling the experimental conditions as stress and rapport the investigator was assuming that the subjective and psychological consequences of being confronted with a warm E can be designated as rapport, whereas interaction with a cold E is more likely to be experienced as a stressful situation (or to result in a stressful experience). The stress-rapport dimension built into the design of an experiment with the DAP has been used before by Wiggenhorn (1957) but he was not concerned with the E-S interaction as an independent variable affecting performance in this test. He presented false scores related to intelligence tests to college sophomores divided into two experimental groups: the "stressed group" was
told they obtained low scores and the "reinforcement group" high scores. A comparison between test and retest drawings indicated that the "stressed group" but not the "reinforcement group" produced several changes in the redrawn human figure which corresponded to lowered self-concept, as measured by personal ranking sheets.

Although the present study did not directly attempt to investigate changes in human figure drawing as a function of changes in the self-concept, it seemed important to bear in mind that the different "treatments" given to the experimental groups might introduce temporary shifts in self-concept.

The literature of this field shows that most efforts to induce stress or rapport in an experimental set-up have taken a rather dramatic form, putting the S in situations that can be truly said to be "unrealistic" in terms of everyday testing circumstances or procedures. In an attempt to simulate more closely the actual conditions operating at the time an interview or a testing session takes place, in the present study there was nothing very unusual in the way the warm atmosphere was created. The E was considerate, direct and accepting in about the same way one would expect to find in any social situation or in a diagnostic evaluation. It was in the cool setting that something more unusual occurred--namely, the evaluative, reproaching, non-accepting nature of E's greeting to the Ss in the 'stress' group. Except for this, it is not inconceivable that some E's in a clinical setting would matter-of-factly convey the idea that there are a number of rules to be followed in answering the test or keeping appointments; some who would not offer information as to the purpose of the examination or the use of the results; and some who would, in general, remain
quite impersonal throughout the interview. The manner in which S was accused of tardiness in this experiment may have been exceptionally strong and blunt, but nevertheless this technique was felt to resemble much more closely an actual E-S interaction than many experimental means of inducing stress. (For a discussion of the similarities between clinical and experimental E-S interaction, see Appendix C, note 1.)

In sum, the present study attempted to reproduce a situation which is fairly common in reality: that of encountering a generally mild and warm examiner and that of encountering a generally hostile or cold examiner, with the assumption that they might conceivably induce different "sets," which in turn may influence the S's performance on a modified DAP technique.

Several considerations pointed to the advisability of devising an instrument that would refer to the general idea of a human figure drawing conveying certain emotional expressions in a concrete and rather standardized or objectified manner, thereby eliminating some of the complexities inherent in the impressionistic approach to figure drawing interpretation as it is used in clinical practice. In the first place, most investigations utilizing the DAP test as a research tool have failed to obtain consistent results. Jones and Thomas (1960) after reviewing the literature of studies on human figure drawings state that "Among sixty studies examined for this review . . . obviously no general conclusions can be drawn regarding the consistency of evaluation between judges." Secondly, the topic of artistic versus projective significance cannot be dismissed in dealing with the DAP test. Whitmyre (1953) and Sherman (1958, 1958b) in separate studies presented negative results regarding the value of figure drawings as an in-
instrument differentiating between levels of maladjustment or between the psychopathological and "normals." Both authors concluded that the art quality, rather than the personality characteristics, provided the criteria upon which an inspection method of analysis was based. Woods and Cook (1954) proposed a hypothesis that proficiency in drawing rather than personality characteristics was responsible for placement of the hands in the DAP test. Evaluations by artists and by M.A. candidates in clinical psychology were made by the paired comparison method and the drawings were classified on a proficiency scale. The authors concluded that personality interpretations are limited and that variance in drawings is to be attributed to structural quality as distinct from symbolic personality characteristics. Feldman and Hunt (1958) were even more affirmative regarding the importance of drawing proficiency. They stated that body parts most difficult to draw were most often rated by clinicians as indicators of emotional disturbance. Essentially similar findings were reported in a more recent study (Levy, Lomax and Minsky, 1963). The present study represented an attempt to neutralize as much as possible variables depending on the existence or lack of innate or acquired artistic skills which are likely to affect test performance on the one hand, and which apparently influence the clinical evaluation of the figure drawing—eaven in the case of experienced clinicians—on the other hand. By presenting ready-made figures to all the Ss the range of variability usually brought about by individual drawings was also controlled. Thus, for example, problems such as subjectivity in judging the amount and type of productivity of individual drawings could not arise. Furthermore, the fact that the silhouettes devised
for this study, specifically depicted what Machover calls "contact features" could be considered as an advantage in the sense that they minimized some of the complexities frequently involved in the interpretation of the results when the study attempts to comprise many Machover signs in the intuitive analysis of human figure drawings or in the figure drawing analysis by means of rating scales.

The general hypothesis of the present investigation was that Ss in different experimental conditions will differ as a group in their rankings of the home-made figures, i.e., (1) Ss exposed to rapport conditions would be more likely to select as "best liked" or "most resemblant of self at the present moment" those figures which convey expansiveness (Fig. 2) or neutrality (Fig. 1) suggesting a relaxed muscular tone as opposed to a tense one while (2) Ss exposed to the stress situation would choose more frequently those figures which express aggression of an expansive (Figs. 4 and 5) or constricted (Fig. 3) type, i.e., figures which suggest aggression turned outwards or turned inwards--perhaps in accordance with the S's characteristic reaction patterns.
CHAPTER II

METHODOLOGY

Instrument

The experimental apparatus consisted of five 5 x 8 unlined cards. In the center of each card a silhouette drawn by an artist in black paper has been glued. The figures are simple contour drawings, front views, conserving the same proportions of parts of the body; they are rather masculine-looking but otherwise quite vague and undetailed, stripped of all accessories and facial expression that could suggest emotion, leaving posture and "contact features" as the only expressive elements of the drawings. All the figures have a definite equilibrium.

The expressions that the silhouettes are trying to convey have been drawn from the theoretical statements presented by Machover regarding the position of the legs and feet and the arms and hands ("contact features," Machover, 1949, pp. 59-60). In general, Machover feels that the direction of the arm placement and to some extent the position of the legs in a drawing of the human figure are important signs in determining the contact of the individual with the environment. She states that "in general, the direction and fluency of the arm lines relate to the degree of spontaneity of extension into the environment" (Machover, 1949, p. 59). Despite the fact that limiting the figures to expressions through contact features impoverishes the potential richness of interpretative material in the drawing of the human figure, Machover would probably support this parsimonious
choice on the basis that "not infrequently the direction and tonus of the arms and legs treatment give the flavor and mood of the figure" (Machover, 1949, p. 120). Arbitrarily, the figures have been assigned numbers:

Fig. 1 Arms falling relaxedly at each side of the body and the weight of the body resting slightly more on one foot and leg than on the other. This was thought to represent a natural, "normal" pose or stance. (There are no descriptive statements of this figure in Machover; it was devised by this investigator.)

Fig. 2 "Arms and hands extending out to the environment in a warm, accepting fashion indicate good relationship to the environment" (Machover, 1949, p. 60).

"Feet are wide apart placed with aplomb in the middle of the page . . . suggesting assertiveness" (Machover, 1949, p. 92).

Fig. 3 "Arms pressed closely and tensely toward the figure . . . with hands gathered limply and smoothly crossed over the forearms, reflecting self-consciousness, constriction and weak contact with the outside world" (Machover, 1949, p. 59).

"A stance in which the legs are closely pressed together suggests a tense, self-conscious, awkward and apprehensive individual" (Machover, 1949, p. 144).

Fig. 4 This figure is a modification of Fig. 2 with the arms bent upwards more pronouncedly and with closed fists, the angle between the legs is also somewhat wider.

"The clenched fist when held away from the body indicates aggressive behavior which is fairly close to being acted out" (Swensen, 1957).

Fig. 5 Open legs and arms forming an angle at the sides of the body with fists placed at each side of the waistline, this represents a combination of features in a figure which conveys a willingness to defend himself and even to assume a defiant attitude--still, it may suggest some uncertainty about the degree of participation in the environment.

(See Appendix A)

Clinical Judgement of Stimulus Value

A consensus regarding the expressive meaning conveyed by the figures was reached by asking seven clinical psychologists to match independently
each of six figures with their corresponding or "best fitting" "names" or adjectives, ranked in order of suitability, i.e., from the best fit to the worst fit. Eight adjectives were typed separately on 3 x 5 unlined cards and presented to each judge in a shuffled deck simultaneously with each one of the figures to be judged or evaluated. Computation of the Kendall coefficient of concordance (Siegel, 1956) indicated a significant degree of agreement (p .001) among the judges as to the expressive and attitudinal meanings transmitted or conveyed by the silhouettes (see Appendix B). The figure for which there was not a significant degree of agreement was dropped and therefore five figures remained as the stimulus material of this experiment. (See Appendix C, note 3)

Subjects

Seventy-seven male college freshmen drawn from introductory Psychology courses, participated in the study. Their age ranged from 17 to 21; mean age: 18 years (see Appendix C, note 2). The Ss were randomly assigned to four groups of approximately equal size labeled as Stress, Rapport, Stress-Rapport and Control (no Stress-no Rapport).

Procedure

Regardless of the experimental condition to which they belonged, Ss were scheduled 15 minutes apart from each other. Each also was interviewed by the E in a small testing room furnished with a table and two chairs. On the E's side of the table the stimulus cards were stacked face down. As the S and E began to sit down, the E proceeded to give the "introduction," "pre-test" condition or "treatment." The four pre-test conditions are described
as follows:

**Stress.** The E coolly greeted the S in the following brief and somewhat blunt manner: "Your appointment was at ten o'clock sharp (or any other time) and you are late. You have disrupted all my schedule now. You must be aware that it is part of your responsibility as a student to be on time for your appointments. Let's start working, please."

(The E set her watch ten minutes fast before interviewing each subject in this group.)

**Rapport.** The E greeted the S with a warm smile and said: "I am a psychology student working on my master's thesis. I am really grateful for your volunteering to collaborate with me. The task I am going to present to you is simple and requires very little of your time. We will let you know what the purpose of the study is and what the results turn out to be at a later date. I'm sorry I can't give you more information now. Are you ready to start?"

**Stress-Rapport.** One group of Ss was submitted to the Stress condition followed by a smoother interaction created through the Rapport instructions, before proceeding with the main task of the experiment.

**Control.** This group did not receive any of the pre-test conditions described. The interaction S-E was limited to the E's enunciation of the general test instructions.

After the pre-test condition each S received three types of instructions labeled as "Preference," "Feelings" and "Self."

"Preference": Ss were asked to rank the five figures in order of preference ranging from the "most preferred" or "best liked" to the "least preferred" or "least liked." (In order to diminish the possibility of change in most spontaneous choice that might occur if the S is allowed to dwell on a figure before committing himself to a choice, the Ss were encouraged to respond as soon as they could by saying what they had in mind "here and now" in the testing situation.) The instructions were worded in the following way: "I am going to show you a series of figures. What I am asking you to do is to look at them carefully and to indicate to me as soon as you can which of these pictures you like best, which one next best and so forth until you have indicated which one you like least. Do you have any questions?"

"Feelings": Ss were asked to rank the figures from the one that best resembled their present feelings in the test situation to the one that least resembled those momentary feelings.
"Self": This instruction called for an arrangement of the figures from the one that depicted their more permanent, idiosyncratic feeling tone to the one that resembled "self" characteristics the least.

The rankings were recorded by the E on a scale ranging from 1 as "best liked" to 5 representing "least liked" and the same procedure was repeated for the "Feelings" and "Self" instructions.

Half the Ss received the "Preference" instructions in the first place followed by a ranking in terms of "Feelings" and the other half of the Ss received the "Feelings" instructions first, followed by the "Preference" instructions. All the Ss received "Self" instructions in the third place. The presentation of the figures was randomized for each S, i.e., the cards were shuffled before each presentation. The average time to run each S was about eight minutes. After completing the task the E kindly asked S not to comment about the test with other students until after the experiment was over.

There was some variation in the order in which Ss were tested in each condition to meet any special occasion that arose, e.g., a S being early for an appointment who was originally assigned to the Stress or to the Stress-Rapport condition; but essentially the same routine was followed throughout.
CHAPTER III

RESULTS

Since the raw data were arranged in an ordinal scale, the Friedman two-way analysis of variance by ranks was used in each experimental condition for testing the null hypothesis that the responses to each figure had been drawn from the same population. The results of this statistical test appear in Table 1.

It is evident that the null hypothesis can be rejected at the .001 level of significance, indicating that the Ss in all conditions did not rank the figures at random or by chance. On the contrary, for each separate condition, certain figures consistently received lower ranks and others consistently received higher ranks. These findings definitely point to the presence of a trend in the Ss choices or rankings which presumably is not independent of the stimulus value of each figure. The results of this statistical test are reported for the "Feelings" data, because these instructions seemed the most relevant to the hypothesis of this study, but similar findings apply to the "Preference" and "Self" instructions.

In order to test the null hypothesis that the Ss in the different experimental conditions had been drawn from the same populations, a one-way analysis of variance was calculated for each of the five figures under each of the three instructions. That is, the experimental conditions, namely, Stress, Rapport, Stress-Rapport, Control, represent the independent variable and the mean ranking or mean score assigned to each figure by the Ss
TABLE 1

STATISTICAL SIGNIFICANCE OF THE RANKINGS OF FIVE HUMAN FIGURE DRAWINGS BY 77 Ss UNDER FOUR EXPERIMENTAL CONDITIONS

("Feelings" Instructions)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Number of Ss</th>
<th>Xr^2*</th>
<th>p</th>
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<tr>
<td>Stress</td>
<td>18</td>
<td>41</td>
<td>.001</td>
</tr>
<tr>
<td>Rapport</td>
<td>21</td>
<td>42</td>
<td>.001</td>
</tr>
<tr>
<td>Control</td>
<td>21</td>
<td>53</td>
<td>.001</td>
</tr>
<tr>
<td>Stress-Rapport</td>
<td>17</td>
<td>27</td>
<td>.001</td>
</tr>
</tbody>
</table>

*Xr^2 is the denotation used by Friedman (Siegel, 1956).
in each group is the dependent variable. A summary of the findings appears in Tables 2a, 2b, and 2c.

Since none of the variance ratios was significant, the null hypothesis cannot be rejected. In other words, rankings of the figures in terms of "Preference," "Feelings," and "Self" were not significantly affected by the E's relative warmth or coldness.
TABLE 2a

ANALYSIS OF VARIANCE FOR MEAN RANKINGS OF DRAWN FIGURES UNDER PRE-TEST CONDITIONS OF STRESS, RAPPORT, STRESS-RAPPORT AND CONTROL

("Preference" Instructions)

<table>
<thead>
<tr>
<th>Figure</th>
<th>df</th>
<th>F*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>2.39</td>
</tr>
<tr>
<td>2</td>
<td>76</td>
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<td>4</td>
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<tr>
<td>5</td>
<td>76</td>
<td>.19</td>
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</table>

*None of the variance ratios reached significance.
**TABLE 2b**

**SUMMARY OF ANALYSIS OF VARIANCE**

("Feelings" Instructions)

<table>
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<tbody>
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</tr>
<tr>
<td>5</td>
<td>76</td>
<td>.04</td>
</tr>
</tbody>
</table>

*None of the variance ratios reached significance.*
### TABLE 2c

**SUMMARY OF ANALYSIS OF VARIANCE**

("Self" Instructions)

<table>
<thead>
<tr>
<th>Figure</th>
<th>df</th>
<th>F*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>1.25</td>
</tr>
<tr>
<td>2</td>
<td>76</td>
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<tr>
<td>3</td>
<td>76</td>
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<td>0.30</td>
</tr>
<tr>
<td>5</td>
<td>76</td>
<td>0.53</td>
</tr>
</tbody>
</table>

*None of the variance ratios reached significance.*
Regardless of the experimental condition to which the Ss belonged an overall analysis of their responses revealed no special positive preference insofar as the home-made figures were concerned. However, there was a marked and almost unanimous dislike for—as well as a rejection of temporary or permanent identification with—Fig. 3. Presumably the despondent, constricted emotional tone conveyed by this figure could explain this generalized rejection or reaction. Although no structural analysis was made to discover the particular attributes of the figures, determining their position or rank, several Ss did spontaneously comment upon the figures in ways that seem enlightening. The following associations appear as representative of the reactions to Fig. 3: "He looks beaten," "It shows dejection," "This one is very introverted." One comment suggests that the intensity of the affect portrayed in this figure may also have been operating as a factor influencing its refusal: "One may feel so badly at times but not very often, I hope."

It is a well-known finding of Social Psychology (Asch, 1952) that if certain signs or features arouse a "stereotype" in the perception of the viewer, it is likely that several features of personality will be subsumed under that stereotype. In the case of Fig. 3 the "contact features" utilized were probably overstructured and they may have acted as "secondary
expressive cues" (Asch, 1952), i.e., as a source for rating a socially desirable or undesirable attitude. (This behavior would imply that Fig. 3 prompted or elicited more psychological distancing from, than identification with, the human figure portrayed.)

Stereotypes certainly exist with respect to emotions, i.e., there are certain enduring cognitive organizations with respect to emotional expression which are widespread in a society and which are internally consistent in the sense that they are based on a set of "perceived" facts. To the extent that the figures utilized in this study represented stereotypes, the importance of these stereotypes may have overridden the hypothetical influence of the positive or negative interaction with the E in determining the Ss response. Actually, the most salient feature of the present findings is the similar trend revealed by the Ss rankings in all groups.

More specifically, the failure to obtain significant results in the directions hypothesized might be regarded as an indication of insensitivity of the instrument to the changes in E-S interaction of the type involved in this experiment. A legitimate question arises: Can the one variable of interpersonal climate drown out the many others present in the stimulus material? It seems to be very difficult to answer this question in an unambiguous way. Although on first impression one is tempted to extend the explanation advanced in relation to Fig. 3 to justify the relatively small discrepancies in the Ss rankings of all the figures, there are several spontaneous verbalizations of the Ss suggesting the possibility that the Ss differed from each other in the way they interpreted the figures.
It seems possible that the figures (with the exception of Fig. 3) had indeed projective value for the Ss, but that the nature of the criterion measure prevented the quantitative detection of the true effect of the independent variable, i.e., the influence of the E's attitude on the Ss "subjective" perception of the meaning of the figures. This hypothesis is based in the following empirical observations: the first choice under the "Feelings" instruction of a "stressed" S was Fig. 2 which elicited this comment from him: "Seems like he has given up . . . after all these classes," whereas the first "Feeling" choice of a S in the "Rapport" condition was also Fig. 2 but accompanied by the following remark: "He is outgoing." In relation to the same figure, a S in the "Stress-Rapport" condition, under the "Self" instructions, said: "Being sorry for myself, why this has to happen to me." Two other Ss under the same circumstances, but responding to the "Feelings" instructions, commented respectively: "He needs help," and "He is resigned." In contrast to these, one can observe other associations to Fig. 2 by a S in the Control group: "He has confidence," and by a S in the Rapport group: "He is confident."

Similarly, negatively toned associations appearing more frequently under stress situations versus positively toned associations appearing more frequently under rapport or control conditions when responding to the same figures were observed in relation to Figs. 1, 4, and 5.

Given these observations, it seems appropriate to comment on the results of an experiment conducted by Luft (1953). He varied the interaction between E and S by acting warm and friendly to some Ss and cold and blunt to others. When the Ss were asked which of ten home-made inkblots they
liked and which they disliked, the group treated in the warm fashion indicated that they liked a mean of 7.6 blots while the Ss treated in the cold manner liked only a mean of 3.1 blots, a difference significant at the .001 level. If the Ss in the present study had been asked what the general or specific emotional, or for that matter esthetic, appeal they felt toward the figures, it seems plausible that the attitudes reflected in their responses or choices as a result of the interaction with the E would have been more clearly delineated.

Nonetheless, it is still necessary to find some explanation for the relative lack of variability in the responses of Ss tested under different pre-test conditions seen, for instance, in a fairly definite clustering of the mean "positive" rankings around Figs. 4 and 5 for the "Preference" instructions. It is interesting to note that the interviewer was herself a student and only slightly older than the Ss. One can only speculate as to the reactions of these Ss to an E who was more clearly an authority figure rather than a peer. Would a student in the Stress group have felt the accusation of tardiness as having more consequences for his self-esteem in the presence of a staff member than in relation to a graduate student? Or, could it be that, regardless of the experimental condition, the interaction of a male student with a female student only slightly older, would incline most Ss to "like" and even to identify with figures that conveyed adequacy or socially desirable emotional tones? In short, it is important in psychological experimentation to consider other characteristics of the E besides his warmth or coldness and the interaction of these traits with the Ss characteristics.
As a further instance of this line of reasoning, a more introspective observation seems legitimate. Despite her interest in carrying out the experiment, the E found it very difficult to "pretend" a coldness and bluntness that do not come naturally to her. She sensed many times a feeling of relief when the "fake" stress situation was over and at those times she had to control her tendency to relapse into a permissive attentiveness to the S that is fairly typical of the manner in which she relates to Ss in a clinical situation. That the Ss in the stress situation of this experiment may have sensed the "truth" behind the imposed appearance of the E is certainly possible. This impression is reinforced when one considers that these Ss protests at being mistakenly or unjustly accused of tardiness by the E were sometimes concerned, sometimes nonchalant, but always open and untinged by fear or guilt. Consequently, it appears possible that the failure to obtain significant results may be at least in part due to the fact that the Ss were essentially reacting to the same person regardless of the experimental condition in which they were originally allocated at random. Studies involving the behavior of animals under stress set a precedent for this type of observation with respect to the subjectivity of the E. Maier (1956) relates the following anecdote:

A further point of interest and possible importance is mentioned here in the hope that it may encourage other experimenters to report similar observations. This is the role of the E in influencing the behavior of animals, particularly under stress. Some years ago two research assistants were working in adjacent rooms on related problems each with three groups of twelve or more rats from the same colony, over a period of a semester. One of them obtained the usual number of fixated position responses (over 50 per cent) in each of the successive groups with which he worked; the other was unable to obtain a single fixation. Although they compared procedures on preliminary training, methods of testing and other
general routines, they were unable to determine the reason for the differences. Motivational consideration also failed to throw light on the matter. The researcher who was unable to obtain fixations required them for his doctoral dissertation, so that his results did not correspond with his motives. However, it was discovered that he felt sorry for the rats, and this may have caused him to pet the rats between trials somewhat more than other researchers. This possible influence might be analogous to feeding after shock, which reduced the number of fixated rats in Farber's experiment. (Pp. 375-376)

A further complication in this type of experiment is pointed out in a warning by Joel (1949); "even if it were possible for the \( E \) always actually to feel the way he pretends he does, we should not forget that the \( S \) reacts not only to the \( E \)'s real attitude, but also to what he thinks the \( E \)'s real attitude is."
CHAPTER V

SUMMARY

The objective of this study was to evaluate the effects of "warm" versus "cold" E's attitude upon the S's performance on a modified figure drawing technique. Seventy-seven male college freshmen were randomly assigned to pre-test conditions of Stress, Rapport, Stress-Rapport, and Control. After undergoing the pre-test condition each S ranked ready-made human figures—conveying different affective states—in terms of Preference (most liked to least liked), Feelings (most to least resemblant of S's present affective state) and Self (most to least representative of S's idiosyncratic feeling tone). A one-way analysis of variance for each figure under the four experimental conditions, indicated that the Ss responses were not significantly affected by the E's relative warmth or coldness. The failure to obtain results in the direction hypothesized was regarded as an indication of insensitivity of the instrument to changes in the E-S relationship of the type involved in this experiment.
BIBLIOGRAPHY


Howe, E. S. Quantitative motivational differences between volunteers and non-volunteers for a psychological experiment. J. appl. Psychol., 1960, 44, 115-120.


APPENDIX A

Photocopies of Five Human Figure Drawings

Used in This Experiment
APPENDIX B

TABLE 3

CUMULATIVE RANKS ASSIGNED TO FIVE FIGURES BY SEVEN JUDGES*

<table>
<thead>
<tr>
<th>Fig.</th>
<th>Ranking</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>$X^2$</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Neu Cons With Int Exp Ext Ang Def</td>
<td>11</td>
<td>25</td>
<td>26</td>
<td>26</td>
<td>37</td>
<td>40</td>
<td>42</td>
<td>45</td>
<td>22.54</td>
<td>.01</td>
</tr>
<tr>
<td>2</td>
<td>Exp Neu Ext Int Def Ang With Con</td>
<td>9</td>
<td>27</td>
<td>27</td>
<td>28</td>
<td>32</td>
<td>37</td>
<td>40</td>
<td>48</td>
<td>21.56</td>
<td>.01</td>
</tr>
<tr>
<td>3</td>
<td>Int With Con Neu Ang Exp Ext Def</td>
<td>17</td>
<td>15</td>
<td>16</td>
<td>27</td>
<td>41</td>
<td>42</td>
<td>44</td>
<td>45</td>
<td>34.30</td>
<td>p .001</td>
</tr>
<tr>
<td>4</td>
<td>Ang Def Ext Exp Int Con Neu With</td>
<td>12</td>
<td>17</td>
<td>22</td>
<td>28</td>
<td>37</td>
<td>42</td>
<td>43</td>
<td>51</td>
<td>31.81</td>
<td>p .001</td>
</tr>
<tr>
<td>5</td>
<td>Def Ang Ext Exp Neu Con Int With</td>
<td>7</td>
<td>17</td>
<td>25</td>
<td>31</td>
<td>39</td>
<td>40</td>
<td>46</td>
<td>47</td>
<td>31.5</td>
<td>p .001</td>
</tr>
</tbody>
</table>

APPENDIX C

Note 1. Rosenthal (1963) writes an interesting paragraph on this topic:

"While the clinical interaction of E with patient (Pt) certainly differs in many ways from the experimental interaction of E with S, these interactions nevertheless have a great deal of communality. Both involve dyadic human relationships, both are status-ordered with one participant more or less in control of the dyad. In both situations the "one-in-charge" has in some way arranged for the meeting to occur, has certain general goals to guide him and certain specific goals. It is his responsibility to structure the interaction and its origination, and to set the task(s) to be performed. In both the clinical and experimental interaction the "other" (Pt or S) requires structuring, instruction and motivation. Furthermore, the "other" is often if not always concerned with what it is the E wants from him really and what sanctions may be imposed if he does not comply. Both E and Pt (or S) are trying to learn something about each other (Riecken, in press). Perhaps E's wish to learn about Pt (or S), to be a data-collector, and his socially derived right to these activities are the chief communalities between the clinical and the experimental interaction."

Note 2. Several studies (Martin and Marcuse, 1958; Riggs and Kaess, 1955; Howe, 1960; Schubert, 1965) have suggested that volunteer Ss for psychological experiments share certain traits or characteristics that makes of them a special population. Some of those characteristics such as "seeking adventure and excitement," "to be at ease with peers, and outgoing socially," "to have feelings of hostility and fluctuations in mood" seemed especially relevant for this study since they refer to ways in which the individual deals with or relates to his environment and that is precisely what Machover "contact features" purport to reveal. Consequently, the use of volunteers might have introduced a bias in the general responsivity of the Ss to the test material utilized in this experiment and since an alternative method of recruiting Ss was available, the E opted for the second
method. This consisted in automatically giving credit to each student for each experiment in which he participated, all students being required to collect a certain number of "lab" credits.

Note 3. Although this type of validation of the instrument through judges' agreement is open to criticism, Woodworth (1956) suggests giving to the judges a list of labels to apply to different emotional expressions as the only way of improving the otherwise very difficult situation that arises when the judges are free to apply their own names for different emotions. Now, clinical psychologists are familiar with Machover hypotheses regarding the meaning of "contact features" and it is also possible that had they been free to use their own words and knowing the rationale underlying the figures, they probably would have used adjectives similar to the ones provided by this K. Allport (in Woodworth, 1956, p. 116) has shown that improvement in judging emotional expression occurs through instruction and training.
The thesis submitted by Celia H. Jaes Falicov has been read and approved by the director of the thesis. Furthermore, the final copies have been examined by the director of the thesis and the signature which appears below verifies the fact that any necessary changes have been incorporated, and that the thesis is now given final approval with reference to content, form, and mechanical accuracy.

The thesis is therefore accepted in partial fulfillment of the requirements for the Degree of Master of Arts.

Feb 9 1967

Date

Ronald E. Walkey

Signature of Adviser