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A VALIDATION STUDY OF THE ORAL EROTIC SCALE OF

THE BLACKY PICTURES TEST

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CHAPTER I

INTRODUCTION

The present study concerns itself with one of the more recently developed projective techniques--The Blacky Pictures Test. Specifically, it is concerned with the validity of a single dimension of this test, the Oral Erotic Scale. The test was published by Gerald S. Blum (4) in 1950 and is based directly on concepts coming from psychoanalytic theory. It is designed to provide a coherent summary of underlying psychosexual aspects of personality, i.e., oral eroticism, anal retentiveness, castration threat, etc. The test consists of twelve cartoon drawings which portray the adventures of Blacky, a dog of unspecified sex. The Oral Erotic Scale itself is supposedly reflective of feelings the individual may have experienced in the past, and which persist in the present in the way of unconscious determiners of behavior, in relation to being cared for and supported or nurtured by a mother or mother figure. Two factors make the Blacky quite amenable to research: (a) the relatively objective and quantifiable scoring system; and (b) the fact that the test is based on a theory from which can be deduced testable hypotheses.

Much of clinical practice today, both on the levels of diagnosis

and treatment, is based on concepts coming from psychoanalytic theory. In the event we can develop valid techniques which will offer a finer and more direct means of investigating the dynamics of human behavior within the framework of this theory, we should be able to better understand the behavior of people and make fewer errors in our predictions about their future actions. It is conceivable too that a test such as the Blacky could aid in making further refinements of the theory on which it is based. However, at this time the validity of the Blacky is open to question. A review of the literature reveals few attempts to investigate the validity of this test. Some studies have been reported by Blum (5, 6, 7), Merchant (25), Aronson (3), and others (10, 21, 26, 35, 36). In most instances these studies have sought validity by studying the relationship between the Blacky Test as a whole and nosological groups or global behavioral patterns. There would seem to be a need at this time for research of a more precise kind. With the Blacky Test, as with the Rorschach, personality diagnosis is based on the patterning of a number of test factors. In addition, the 14 test dimensions of the Blacky can be scored and interpreted separately. Therefore it would appear that a more critical kind of research might inquire into the validity of each of the test dimensions individually. As an approach to such validation, a single dimension of the test, the Oral Erotic Scale, has been selected for study. It would seem valuable to determine whether or not a relationship exists between scores on this scale and measures of certain behaviors which are reflective of orality as described by psychoanalytic theorists.

The most complete description of the oral character is to be

found in the writings of Fenichel (12), Fromm (13), Abraham (2), and Glover (14). They describe him as a person who is dependent upon others for support, guidance, nurturance, and love to an exaggerated degree. He is generous to a fault, as if to say, "as I shower you with gifts so shall I receive in return." His loyalties to others, to institutions, and to groups are often extreme, again because it is catastrophic for him to lose the support he so desperately needs. Deference is often another hallmark of this individual; he feels that to be polite to others guarantees satisfaction of his basic needs. Fromm has written perhaps the most descriptive evaluation of the behavior of the oral character, or as he terms it, "the receptive orientation."

> They are dependent not only on authorities for knowledge and help, but on people in general for any kind of support. They feel lost when alone because they feel that they cannot do anything without help. This helplessness is especially important with regard to acts which by their very nature can only be done alone--making decisions and taking responsibility. In personal relationships, for instance, they ask advice from the very person with regard to whom they have to make a decision (13, p. 63).

Abraham, placing heavy emphasis upon sucking pleasure, describes two types of personality development derived from the oral stage of development:

> (a) If the sucking pleasure is marked and undisturbed the whole attitude toward life is apt to be an optimistic one. If there has been abnormal indulgence on the part of the mother, then in addition to the optimistic attitude, there may be a tendency to carefree indifference and inactivity, perhaps even no attempt to gain a livelihood. The whole general attitude in the case of such individuals is one of the expectation that some kind person (a mother representative) will care for them, that "the mother's breast will flow for them eternally."
>
> (b) Failure to achieve gratification in the sucking period may result in a later asking or demanding social attitude (either modest or aggressive); a tendency to cling to others,

a dislike of being alone. Impatience is a marked characteristic of this type (17, p. 314-316).

Some experimentation on sucking pleasure and early feeding experience as related to later behavior has been reported. The best known are the studies of Levy (20), who observed that the puppies that were "short-time feeders," being fed from nipples with large holes, were far more restless than the "long-time feeders" fed from nipples with small holes. The former showed a tendency for prolonged sucking of all kinds of objects between meals.

Levy (19), in his study of human subjects, reported essentially the same results. Finger sucking in early infancy seems related to inadequate opportunity for sucking while feeding. From questioning the mothers of 122 children, he found that in cases of satisfactory experience (the infant had spontaneously withdrawn from the breast), only eight were finger suckers while 93 were non-suckers. In cases of unsatisfactory feeding experience (early or forced withdrawal), 20 were finger suckers while only one was a non-sucker.

Ribble (31) found observable behavioral differences in infants in whom sucking activity was not restricted as opposed to infants in whom this activity was restricted. In the former instance, there was more regular breathing and a feeling of well-being as evidenced by periods of quiet and relaxed sleep. Digestion, gastro-intestinal functioning, and elimination were consistently better and more regular. In those cases where sucking was restricted, the infants manifested excessive restlessness, hyper-tension, and lethargy. It is Ribble's opinion, based on these observations, that the entire organism may be affected in

important ways by the sucking activity being frustrated. She suggests that these early reactions may well be the prototype of later psychological attitudes.

While these studies suggest a strong positive relationship between early oral deprivation or satisfaction and later behaviors, the behaviors described pertain primarily to sucking per se. Two additional studies reported attempt to study the relationship between orality and later developed personality.

Stendler (34), in attempting to find possible causes for over-dependency in younger children, concluded from her study that early or difficult weaning is not found to be related to over-dependency. It was her opinion that over-dependency may result from maternal over-protection. She felt it was the mother's attitude which is crucial and not the weaning experience per se.

Goldman (15) conducted a study in two parts on Breast-feeding and Character Formation. She first obtained self-ratings from 115 males and females on 19 character traits. A factor analysis revealed a bi-polar type factor containing negative traits (e.g., pessimism, passivity, oral aggression) and positive traits (e.g., optimism, nurturance, sociability). The two types of traits represented here seem to be strikingly similar to the theoretical descriptions of orality quoted from Fromm and Abraham earlier in this chapter. In the second phase of the study, these two types were utilized in comparison with weaning information provided by the mothers of the subjects. Oral pessimism was significantly related ($r=.27$) with early weaning (four months or less), and oral optimism was significantly related ($r=.31$) with late weaning (five months or more).

It was Goldman's opinion that caution should be used in interpreting the results since the low magnitude of the correlation coefficients indicated the operation of other important unknown factors.

It was concluded from the studies reported above that actual experimentation has not as yet provided sufficient evidence to accept with a high degree of confidence that anything approaching a one-to-one relationship exists between early weaning experience per se and later character formation. However, the experimentation reported may be interpreted as supporting the more general theoretical position that the oral personality is a result of the individual's experiencing "disturbance," either through over-indulgence or severe deprivation, during the period of his development when he was almost totally dependent upon the mother, and that denied or intense oral needs are constantly striving for expression in present day behaviors. Blum claims that the Oral Erotic Scale, involving the use of a picture of a puppy nursing its mother, has value in detecting oral needs and their manner of expression. It would seem logical to expect then, providing the assumptions underlying the use of this picture are correct, that indications of "disturbance" on the Oral Erotic Scale would be found with the types of oral personalities described earlier, but such a relationship needs to be evaluated by experimental investigation.

Statement of the Problem

This study proposes to determine what degree of relationship, if any, exists between Oral Erotic scores on the Blacky Pictures Test and certain criterion measures of orality. The primary problem with a study

of this nature is to find adequate criteria against which to validate the Oral Erotic scores from the Blacky Test. The measures eventually chosen for this study were (a) a self-rating scale, and (b) a perceptual test involving recognition of tachistoscopically projected materials. The manner in which these two measures were developed is described in the following chapter.

CHAPTER II

DEVELOPMENT OF ORALITY CRITERIA

Of utmost importance in test validation research is adequate criteria against which to validate the test in question. In the case of the Blacky Pictures Test's Oral Erotic Scale, it was necessary to find valid indices of orality. Since no such indices were available in pure form, it was first necessary to develop criteria with substantial validity as orality indicators.

The self-rating scale. It was the decision of the experimenter to develop a self-rating scale based on the behavioral descriptions of the oral character as stated in the writings of Fenichel, Fromm, Abraham, and Glover. The scale was conceived as four sub-scales representative of four related aspects of the concept of orality: succorance, nurturance, deference, and affiliation. The usual limitations of paper and pencil type tests were recognized and considered. Even so, it was felt that the self-rating scale method of obtaining knowledge about an individual's behavior could be at least an important adjunct to a study such as this. For one, it has the advantage of sampling a broader range of behaviors than does the usual more highly controlled experimental situation, and also it allows for a more direct comparison of test data to be made since both tests, the self-rating scale and the Oral Erotic Scale,

were devised on the basis of molar behavior patterns deduced from psychoanalytic theory.

In the development of this scale, a provisional pool of 119 items describing behavior and feelings was initially chosen by the experimenter from case history material, psychological summaries, patients' comments during therapeutic hours, the scales of H. A. Murray (28), some situations described in the Roger's Test of Personal Adjustment (32), and the Minnesota Multiphasic Personality Inventory (16). The 119 items were individually typed on 2" x 3" index cards and given independently to four clinical psychologists who served as judges. The judges were instructed to place each of the items in one of five categories which corresponded to the four aspects of orality and a "not clear" category. This latter category was to be used in instances where, in their opinion, the item did not clearly differentiate between the kinds of behaviors represented by the four aspects or was representative of none (Complete instructions to the judges, including definitions of the four orality factors, are given in Appendix A). Only those items on which there was 100 per cent agreement that the item belonged in one of the four orality categories were retained in the construction of the final scale. Seventy-one items were thus selected to compose the final scale (See Appendix A). Beyond judges' agreement no further attempt was made to establish the validity of this scale as an adequate criterion of orality. Therefore it was considered the weaker of the two criteria used in this study and the results coming from it could not be as conclusively meaningful as could those coming from the second measure, the perceptual test.

The perceptual test. Whereas the subject's responses to the above measure may have been greatly influenced by motivation related to the more conscious aspects of ego since it called for the subject to consciously reflect upon his own behavior and then make judgments about himself, the second measure was considered to call forth a more primitive response and tap a deeper and more unconscious level of personality. It demanded that the subject make an immediate response to a far less structured situation with less conscious thought given to his response. This second measure of orality can be described as a perceptual test in which the subject was asked to identify a number of common, everyday objects which were projected tachistoscopically on a screen at varying exposure times. Half of the objects were assumed to represent "oral cues" for the subject while the remaining half were assumed to be "non-oral" in symbolic value. It was assumed that the subject's perceptual behavior in regard to these "oral" and "non-oral" cues should reflect underlying personality organization relating to oral eroticism.

Theoretical and experimental evidence for the position that the personality of the perceiver determines to a great extent what is perceived, especially when the stimulus situation is impoverished, is to be found in the recent studies of Postman (29, 30), Bruner (30), Brown (29), Lazarus (18), McGinnies (24), Blum (7), Sandford (33), Murray (27), and others (8, 11, 23, 37). Abt, writing on the relationship between perception and the perceiver, says,

> By its very nature perceptual activity has roots that extend deeply into the whole matrix of the individual's past experience, and the perceptual activities of the individual reach out to fashion his orientation to the future. (1, p. vii)

Blum, in writing on perception as related to the psychosexual development of the individual, states,

> Repressed psychosexual impulses, of which the individual is not consciously aware, are always pushing and seeking for an outlet in conscious behavior. If this theoretical formulation is correct, then everyone should, at an unconscious level, be sensitive and responsive to cues relevant to these potentially threatening (or satisfying) impulses. (7, p. 94)

The experimental evidence coming from these studies allows the assumption that with objects which relate to strong personal need, there may be a lowering of recognition thresholds. Lazarus and McCleary (18) have termed this perceptual phenomenon "vigilance," Bruner and Postman (30) have used the term "selective perception," and others have called it "subception."

On the other hand some of these perceptual studies, particularly those of Bruner and Postman (30), Clapp (8), and Blum (7), have verified an additional complementary hypothesis concerning the perceptual process as it related to personality. In brief, it has been found that "value orientation may. . .raise thresholds for unacceptable stimulus objects" (30, p. 151-152). In this case then, recognition may be "blocked" or retarded by what has been termed "perceptual defense."

Based on the above findings and theoretical statements, the assumption was made that the oral character, motivated by heightened oral needs, is more sensitive to symbolic cues which are related to these personal needs. It is assumed here that the individual differences in handling these needs at the perceptual level is a function of ego defense mechanisms. On the one hand, where heightened needs are acceptable to the individual, cues relating to these needs can be more easily

perceived and reported consciously, a condition of "vigilance." On the other hand, where the strong need is present but unacceptable to the individual, he will "block" or find it more difficult to perceive and report stimulus cues relating to these needs, a process of "perceptual defense."

In order to use recognition thresholds as a measure of orality, the experimenter decided to obtain two sets of pictures equal in difficulty of recognition. One set would be objects having "oral cues," and a second set would be of "non-oral" objects. As a beginning, a series of 17 common objects was chosen: an ice cream cone, an apple, a roasted turkey, a baby's nursing bottle, a cut of pie, a loaf of bread, a cow, a ball, a tall building, a man's hat, a boat, a vase of flowers, a Christmas tree, a barn, a bicycle, an automobile, and a dog. Pictures of these objects were drawn by an artist with instructions to equalize the pictures as much as possible in terms of area of page used, size, complexity of design, and ratio of black to white (See Appendix B). The pictures were photographed and placed on 2" x 2" slides for use in a 35 mm. projector.

Before these particular pictures could be used in a perceptual test as a measure of personal determinants, considerable preliminary investigation had to be made of the role of other variables that might influence the subjects' performance. In addition, the perceptual test had to be validated against some outside criterion before it could be considered an adequate measure or index of orality. Specifically, the following questions had to be answered: Do these particular 17 pictures, when shown under given conditions, result in any differences in terms

of subjects' recognition thresholds? If so, are these differences in recognition thresholds more dependent upon the physical characteristics of the stimulus material itself, such as form, familiarity of pictured object, etc., or are these differences in threshold due more to factors within the individual such as strength of need, in this instance, oral need?

Preliminary Study I

The first preliminary study was designed to determine if individuals would differ in terms of their recognition thresholds when the 17 pictures were projected individually on a 30" x 40" screen. On the head of the projector was fastened a tachistoscope to control the shutter exposures for the following fractions of a second: .01, .02, .04, .10, .20, .50, and one full second. The f-stop, controlling the degree of illumination on the screen, was kept at 3.5 making for maximum brightness, and a 150 watt lamp was used in the projector. All pictures were shown clearly in focus. The distance between projector and screen was 15 feet while the distance between subject and screen was approximately 13 feet. The subjects were instructed that they would be shown a series of pictures of common, everyday objects which in the beginning would be shown at a fast rate of speed, making it difficult for them to discern the object. However, even if they were not certain, they were to "guess." The speed would be decreased until such time as they did give an accurate response.

Each subject was tested individually on each of the 17 pictures. The beginning rate of speed was .01 second, and in the event he failed

to give an accurate response after a single exposure at this rate of speed he was shown the same picture at .02 second, and so on through increasing intervals to a point where he accurately perceived the object pictured on the screen. The scores used were arbitrary weights assigned the various shutter speeds or the number of trials at one second exposure. Table 1 shows this system of scoring. It should be noted that in the first and second preliminary studies only rates of shutter speed from .01 to one second were used and given weighted scores. It was not until the third study that the extension in weighted score scale was made to include additional trials at the one second level. However, the same weighted scores have been used in all three.

Table 1

Weighted Scores Assigned each Type of Picture Exposure

Type of exposure	Weighted Score
.01 second	16
.02 "	15
.04 "	14
.10 "	13
.20 "	12
.50 "	11
1.00 "	10
2nd trial at 1.00 "	9
3rd " " 1.00 "	8
4th " " 1.00 "	7
5th " " 1.00 "	6
6th " " 1.00 "	5
7th " " 1.00 "	4
8th " " 1.00 "	3
9th " " 1.00 "	2
10th " " 1.00 "	1

In order to test the hypothesis that exposure of the pictures, under the stated conditions, would result in differences between recognition thresholds of individuals, two adult subjects were used. Their scores on the complete series of 17 pictures were combined and the mean, median, and variance of these scores were computed. The resulting mean was 15.66, the median 16, and the variance .73. These results would indicate that there was very little variation in the scores obtained from the subjects with this procedure, and that most of the time the subject was able to recognize the object accurately at .01 second and thus obtain a score of 16. Hence, the first preliminary study did not reveal differences between recognition thresholds of individuals on the 17 pictures.

Preliminary Study II

With a new group of subjects, the experimenter wished to vary the experimental procedure by decreasing the definiteness of the perceived object. The reasoning here was that when the subject is faced with a more impoverished external stimulus, his response should be to a greater degree in terms of his own personal needs, and consequently more inter-individual variability should occur in interpretation of the external stimulus.

The procedure followed with this group was the same as described before, with one single variation, the pictures were shown slightly out-of-focus. The focus knob on the projector head was calibrated so that the same setting could be used systematically with each subject. The hypothesis was the same as for study one, that there would be differences

in the subjects' recognition thresholds for the 17 pictures. The system of scoring was also the same. The sample was again small, three subjects. Two of them were adolescent patients at the Community Guidance Center in Oklahoma City, and the third was a 21-year-old secretary. But even with a sample this small, there were differences in the scores on the individual pictures. For example, the nursing bottle was recognized by one subject at .01 second while another could not recognize this object at one full second. Combining the three subjects' scores on the 17 pictures, a mean of 9.66, a median of 12, and a variance of 42.31 were obtained. The increase in variability and the decrease in central tendency of the scores indicated a difference in recognition thresholds either between pictures or between subjects due to an impoverishment of the external stimulus. Since there were differences between individuals' scores on the same picture, it was felt that the test held some promise as a means of measuring individual differences in perception, such differences possibly based on differences in oral needs, and so a third preliminary study was planned.

Preliminary Study III

The purpose of the third study was at least two-fold: One, the experimenter wished to eliminate any pictures which were consistently either too easy or too difficult for all subjects to recognize under the prescribed test conditions; secondly, it was necessary to match the two sets of pictures (oral and non-oral) in terms of ease of recognition and variability of scores.

Twenty-one adult subjects, selected because of availability,

comprised this experimental group. The experimental procedures were the same as described in the preceding study except for two additional variations which further decreased the definiteness of the stimulus material: a 30 watt lamp was used in the projector, rather than the former 150 watt, and a neutral density filter was placed over the tachistoscope lens. The scoring procedures were the same as before except that the weighted score scale was now extended, as indicated with the introduction of Table 1, so that if a subject failed to recognize the object at one second, he was given up to nine additional trials at the same time exposure, the trials being discontinued at the point where he gave a correct response. This procedure was suggested by experience during the second preliminary study when the experimenter tried this method on several occasions and found that the subject often recognized the object with additional trials.

Using the scores obtained from this third preliminary study, the experimenter was able to match the two sets of pictures (oral and non-oral) in terms of ease of identification and variability of response. The scores made by the 21 subjects on each picture were formed into a distribution for that picture and a mean, median, and variance were computed. The results are given in Table 2.

In this table the pictures are matched in pairs on the basis of comparability of means, medians, and variance. Also considered in the matching, though not given in the table, was the range of scores. Oral pictures which seemed to result in consistently high scores were matched with non-oral pictures of like tendency, etc. It will be noted in Table 2 that five of the pictures were eliminated at this point. This was

primarily on the basis of low variance scores which indicated that they were consistently recognized near the top rate of speed, .01 second. Four of these five pictures (the barn eliminated) were used in the fourth preliminary study, and later in the main experiment as "buffer" items; one was presented at the beginning of the series to acquaint the subject with the task before him, and another was used at the end of the series as a "success" item.

Table 2

Mean, Median, and Variance of Score
for each Perceptual Test Picture

Oral Pictures				Non-Oral Pictures			
Picture	Mean	Mdn	σ^2	Picture	Mean	Mdn	σ^2
Ice cream cone	11.90	15.00	26.20	Ball	13.14	15.50	22.01
Apple	9.86	13.00	45.83	Building	11.38	13.00	28.55
Roasted Turkey	12.29	12.50	21.44	Hat	14.14	16.00	15.73
Nursing bottle	6.62	6.62	38.99	Boat	3.96	0.00	27.55
Piece of pie	7.14	9.00	42.54	Flowers	12.10	14.00	22.07
Loaf of bread	13.43	15.00	21.35	Tree	13.62	15.00	13.93
*Cow	15.71	16.00	.63	*Barn	12.14	12.00	9.81
				*Bicycle	15.86	16.00	.03
				*Car	14.67	16.00	3.84
				*Dog	16.00	16.00	.63

* Eliminated from final series

After the two sets of pictures were matched in accordance with the above described procedure, a t test for related measures was run between the mean total scores made by all subjects on the oral pictures and the mean total scores made by all subjects on the non-oral pictures. The resulting value of t was .87 which was found to be not significant. It was concluded that the difference between means was not significantly different from zero. A further analysis was made to test for the

significance of the difference in standard deviations of the two sets of pictures. The obtained value of F was 1.09, less than that necessary for significance at the five per cent level, and so it was concluded that there was no significant difference between the two sets of pictures in terms of variability of scores.

Preliminary Study IV

Having determined that the experimental procedures used in the third preliminary study provided conditions under which individual differences in response to the pictures could occur, and having determined that the two sets of pictures were not significantly different in terms of difficulty of recognition, a fourth study was planned. The hypothesis was formed that the difference in recognition thresholds between a subject's total score on the oral pictures and his total score on the non-oral pictures is a function of his oral needs, the oral pictures becoming either more or less difficult to perceive in relation to the non-oral pictures as the orality loading in personality becomes stronger. It was expected that those individuals with strong oral needs who accept these needs would obtain a higher score on the "oral cue" pictures than on the non-oral pictures, while those individuals with strong oral needs who cannot accept them, and hence must resort to denial or repression of need, would obtain lower scores on the oral pictures than on the non-oral pictures. A perceptual test score (or difference score) would then be the difference between the individual's weighted total scores on oral and non-oral pictures where a plus score indicated a higher oral than non-oral total and a minus score indicated a higher non-oral than oral

total score. For example, if a subject's total score on "non-oral" pictures is 60, and his total score on "oral cue" pictures is 70, the "difference" score is plus 10. If the reverse of this were true, 70 on the "non-oral" and 60 on the "oral cue" pictures, his score is then a minus 10.

In order to test this hypothesis, eighteen adult subjects were used in the fourth study, ten males and eight females. The sample was fairly heterogeneous in that approximately half were patients at the Community Guidance Center or at the Veterans Administration Hospital in Oklahoma City, Oklahoma, while the remaining half were non-patients, mixed as to occupational grouping.

The eighteen subjects were given the perceptual test essentially in accordance with the experimental procedures used in study three. However, beforehand evaluations were made by the experimenter as to where the individual would fall on a continuum of orality. This evaluation was later compared with his perceptual test score. To facilitate a comparison of clinical judgments and perceptual test scores, the continuum of perception test scores, running from minus 40 through zero to plus 40, was divided arbitrarily into five categories. These five categories were assigned different clinical descriptions in terms of (a) magnitude of oral need, and (b) how these were reacted to or handled by the individual. Figure 1 presents this continuum with its two definitions of orality, one represented above and one below the continuum.

Since the validating criterion for the perceptual test was a clinical evaluation of the subjects' orality, some explanation of this evaluative process seems in order. In the experimenter's experience,

the evaluative process seemed to involve looking for and taking note of certain behaviors that in the framework of psychoanalytic theory could be termed oral. For example, in his reaction to the experimenter and in his relationship with others, was the subject the kind of person who seemed to constantly be seeking guidance, support and reassurance that he was loved? Did he look for sympathy and concern from others? Insofar as was known, what seemed to be his attitude toward and relationship with his parents? Was he an individual who, under the pressure of anxiety, sought satisfaction through eating? Or, on the other hand, was he a person who denied these needs in himself and appeared to have to fight a bit too hard for independence, as if to prove to the world that he was strong and did not need anyone? In the evaluative process, it was these and similar questions which came to the experimenter's mind in making the judgment about the subject. In cases where the individual was known to another professional person, a psychologist or psychiatrist, the judgments were discussed with them before making a final evaluation.

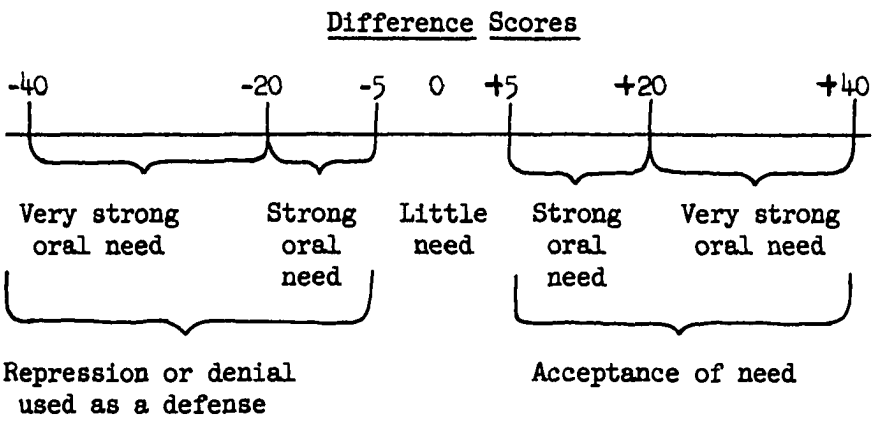

Fig. 1. Orality continuum indicating corresponding difference scores and clinical description of the strength of oral need.

To test the degree of relationship between clinical evaluation scores and the perceptual test scores for the 18 subjects, a Pearson Product-moment r was used. A correlation coefficient of +.76 was obtained. This correlation is significant beyond the .01 level of confidence and indicates a substantial agreement between perceptual test scores and intensive clinical evaluation of an individual's strength of oral needs and manner of handling them. The perceptual test thus seemed to provide an acceptable criterion of orality with which the orality scores from the Blacky Test might be compared.

CHAPTER III

THE EXPERIMENT

Having developed two independent criteria of orality, it was now possible to carry out an experiment designed to investigate the validity of the Oral Erotic Scale of the Blacky Pictures Test by correlating it with these two criteria.

Subjects

A total of 93 subjects were used in the experiment. Fifty-six were high school students enrolled in the University of Oklahoma Laboratory School during the summer of 1955. Their ages ranged from 15 to 19 with mean and median ages of 16 years. Of these, 30 were females and 26 were males. The remaining 37 subjects were college students enrolled in courses during the summer of 1955. Twenty-eight of these were Education majors while nine came from courses in Psychology and Sociology. Their age range was from 18 to 47 with a mean age of 25 and a median age of 22. Twenty-five were females and 12 were males.

Subjects from both educational levels were used so that certain comparisons between the scores of the two age groups could be made. The use of only adolescent subjects was considered, but it was decided that the adolescent's need to be on his own and to deny his dependency upon parents might possibly skew the results. By including both age levels,

statistical account could be taken of this as a possible influencing factor. Both sexes were included in order to provide a statistical control for the sex variables. Other variables such as religion, number of siblings, and age relationship to siblings were assumed to be randomly distributed in the two age groups. Intelligence, within limits, was not considered important insofar as the personality variable of orality is concerned, and so strict control for intelligence was not used.

Apparatus

The apparatus for the experiment included the Blacky Pictures Test and two criterion devices, the development of which was outlined in Chapter II, a self-rating scale and a perceptual test.

Procedure

The three tests were given to the subjects in groups with from 12 to 30 in a group. The perceptual test and the self-rating scale were administered by the experimenter, the Blacky Test was administered by a competent assistant. The tests were administered on successive days with the self-rating scales being given last in the series since they were considered to be more highly structured and less disguised as to what was being measured. In regard to the perceptual test, it was considered possible that the amount of time elapsing between intake of food and performance on the test might influence an individual's behavior on the test, particularly since many of the items on the test are not only oral but actually food items. For this reason, the test was administered to all subjects at a similar time in relation to meals, and at a time when they should be neither hungry nor satiated. Previous studies by

Sandford (33) had indicated that this may be approximately two hours after meal time.

The Blacky Pictures Test. The group administration of the Blacky Test was in accordance with unpublished standard procedures obtained from Gerald Blum, test author (See Appendix C). The pictures and inquiry items were projected on a screen by use of an opaque projector. Test time was approximately one and one-half hours.

The self-rating scale. The scale was administered in a mimeographed form which only required that the subject pencil a check mark to indicate the degree to which each statement applied to him, such as "this describes me very well," "this describes me somewhat," or "this does not describe me at all" (See Appendix A). Arbitrary Likert weights of 2, 1, and 0 respectively were assigned the alternative responses. The rationale for this system of weighting is that the latter response, "this does not describe me at all," would seemingly be indicative of a total lack of the personality variable under study, while the other two responses may represent the presence of the variable in degrees proportional to the weights. Total test time was approximately 30 minutes.

The perceptual test. The procedure used in the administration of the perceptual test, as to type of projector, degree of lighting, rates of shutter speed, etc., is the same as described in Chapter II under the section, "Preliminary Study IV." Special test booklets were mimeographed for the collection of the data for this test. There was one page for each of the 14 pictures (12 test pictures and two buffer items), and on each page there were 17 numbered lines corresponding to the rates of shutter speeds and trials at the one second level. The

seventeenth line on the test booklet was for the subject's response to the picture when the shutter was held open exposing the picture on the screen for two or three seconds. The subjects were asked to write on each line (with each exposure) the name of the object he saw projected on the screen. At the top of this form was a space for row and seat number. Seating locations were used to evaluate the need for controlling for subject's distance from the screen and angle of view. The directions given to the subjects were as follows:

> You will be shown a series of pictures of common everyday objects which will be projected on the screen. All of these objects you have seen often and are familiar with. Each picture, in the beginning, will be shown at a fast rate of speed and slightly out-of-focus so that it may be difficult for you to determine exactly what the object is. Although you may not be certain in the beginning, it is important that you guess for many times you will find that you are right. Now, this is the procedure we will follow with each picture. Before I flash the picture on the screen, I will say "ready" to warn you to focus your eyes on the screen. Then I will say "now" and a second later the picture will appear on the screen. Like this . . . "ready" . . . "now" (experimenter flashes picture of "cow"). With each picture, the speed will be steadily decreased in this manner (experimenter runs down through the various shutter speeds).
>
> On your record booklets, you will see a series of lines. There is one line for each exposure. This means that each picture will be exposed consecutively 17 times. Each time the picture appears on the screen, you should write what you think it is.

The total time for administration of the perceptual test was approximately one and one-half hours.

The data of the experiment are the scores coming from these three tests. A more detailed description of the data along with how they are treated is given in the following chapter.

CHAPTER IV

RESULTS

The Blacky Pictures Test

The group administered Blacky records were scored in accordance with the Revised Scoring System for Research Use of the Blacky Pictures Test obtained through personal correspondence with the test author (See Appendix C). With the Oral Erotic Scale, as with the other dimensions of this test, material coming from four sources make up a composite score for the dimension: (a) the spontaneous story, (b) answers to inquiry items, (c) cartoon preferences, and (d) related comments in the way of perseverations. Summing the number of plus scores gained from each of the four sources results in one of three dimensional scores: a "0" indicating "no disturbance," a score of "+" indicating "disturbance," or "++" indicating "strong disturbance." For the present research however, the decision was made to use the actual number of pluses on which the category score of "0,"+" ," or "++" is based. By using the numerical score rather than the category score, it was felt that a finer comparison could be made between the Oral Erotic Scale scores on the one hand and the scores coming from the two orality criteria on the other. Since both the category scores and the numerical scores would seem to represent a single continuum of orality, this was not considered to be any violation of the use of the Blacky.

Treating the Blacky protocols in the above described manner, scores were obtained for the 93 subjects participating in the experiment. From inspection of the data, the shape of the distribution of scores appeared to be relatively normal. The range of scores was zero to seven for the high school students, and zero to six for the college students. Although the high school students had a one point wider range of scores on the Oral Erotic Scale than did the college subjects, this was due to one subject in the high school population who obtained a score of seven on the scale. All other students in the study fell within the zero through six score range.

At the time of selection of subjects it was considered possible that the adolescent's expressed need for increased independence from parents might affect his score on the Oral Erotic Scale, a scale presumably sensitive to oral dependency needs. The data did not appear to bear out this assumption. The mean scores for the high school subjects, college subjects, and total population were 2.26, 1.65, and 2.03 respectively. To test the significance of the difference between the means of the two age groups a t test was computed resulting in a t of .37 (probability between .70 and .80). It was concluded that the two age groups are not different in terms of the variable of orality as measured by the Blacky Test.

The question next asked was whether there was a significant difference between the mean scores of female and male subjects on the Blacky Oral Erotic Scale. Was it possible that cultural factors influenced the female's response to a test such as the Oral Erotic Scale? Defined traditionally as a more passive and dependent individual, may this not allow

her to be more revealing of her oral dependency needs and hence score higher on this scale? Again the t test was applied yielding a value of .36 (probability between .70 and .80) which would fail to support the contention of differences due to sex.

The Self-rating Scale

The self-rating scale score used for each individual in the various computational analyses was a corrected total of Likert weights obtained by him on the four sub-scales. Since the four sub-scales varied in the number of items, they would have contributed unequally to the total score unless some system of weighting was used to equalize them. Weighting of sub-scale scores was accomplished through multiplying them by a constant. The constant, or correction value, was different for each sub-scale and was derived from a ratio of the actual number of scale items to the number of items each scale would have if equal in number (one-fourth of items = 17.75). Each subject's sub-scale score was multiplied by the reciprocal of the following: The actual number of items in the sub-scale divided by a fourth of the total items or 17.75. The values used in making the correction for each of the scales, computed by this method, are given in Table 3. Table 4 presents a tabular description of the corrected total scores obtained on the self-rating scale for the two age groups individually and combined.

Looking at the range of scores given in Table 4, one sees that although the range of scores for the high school subjects is about the same as that of the college group, the high school subjects' distribution has lower values. Actually this is due to one subject in the high

school group who scores at the lower extreme of the scale. The next lowest high school score was about 50. This was similarly the case with the college subjects where two individuals scored as low as 40 while the remaining scores ranged up from 50. A similar observation was made on the apparently higher scores of the college group; actually only one subject made a score above 110.

Table 3

Values Used in Making Corrections in Sub-scale Scores

Sub-scale	No. items	Correction Value	
		Ratio	Reciprocal
Deference	11	11/17.75 = .620	1.613
Nurturance	20	20/17.75 = 1.127	.887
Succorance	25	25/17.75 = 1.408	.710
Affiliation	15	15/17.75 = .845	1.183

Table 4

Measures of Central Tendency and Variability of Self-rating Scale Total Scores

Subjects	N	Range	Mean	Median	Sigma
High school	56	29 - 109	78.44	78	16.07
College	37	40 - 120	76.10	74	18.05
Total	93	29 - 120	77.51	76	16.94

The question was raised as to whether age may be an influencing factor in subjects' responses to the self-rating scale items. To test the significance of the difference between the means of the two age

groups a t test was computed. The t of .02 failed to be significant at the .90 level and hence was not considered significant. Graphs of each of the age groups appeared reasonably normal in distribution of scores. As with the Blacky Test, it was considered that the self-rating scale might be influenced by a sex factor. That is, since in our culture there is some value placed upon men being more independent, self-reliant, and less demonstrative in regard to their need for succorance, this might serve to bring about a general lowering of scores made by the male subjects on the self-rating scale, a scale saturated with items having openly to do with dependency. The question was investigated statistically by use of a t test for unrelated means; the value of t was 1.2 (probability between .20 and .30). It was concluded that the two sex groups were not different in terms of orality as expressed on the self-rating scale.

Having thus statistically determined that the two sex groups actually represented a fairly homogeneous population, insofar as their scores both on the Blacky Test and the self-rating scale were concerned, and that the means of the two age groups did not differ significantly, the major question of the experiment could be dealt with. That is, what degree of relationship, if any, existed between subjects' responses to the Oral Erotic Scale, and subjects' responses to this first criterion of orality, the self-rating scale.

As a means of testing this hypothesized relationship, the Pearson Product-moment method of correlation was used. The scores upon which the correlations were made in all instances appeared to be relatively normal and homoscedastic in distribution. In making this

statistical analysis, a correlation coefficient was computed between (a) Oral Erotic Scale scores and the self-rating scale corrected total scores, and (b) Oral Erotic Scale scores and each of the corrected sub-scale scores individually. The latter correlations were made to ascertain which, if any, of the four aspects of orality, as defined and presumably measured by each of the sub-scales, seemed to be correlated more highly with the oral dimension of the Blacky Test. These correlations were obtained for the high school and college students separately, and for the total of these subjects. Here, as with all other correlations made on the data coming from the experiment, a correlation of the magnitude of .50 was arbitrarily set as necessary for making any positive and conclusive statements concerning the validity of the Oral Erotic Scale of the Blacky Pictures Test. Correlations of less magnitude, although acceptable in the investigation of theoretical problems, would not seem adequate for the purpose of validating a test, such a test being used to make important predictions concerning human behavior.

In Table 5 are given the correlations between Oral Erotic Scale scores and scores made on the self-rating scale. Upon inspection of the results given in this table, it will be noted that the relationships throughout are low and not significant, except in one case. The negative correlation of -.41 found between Oral Erotic Scale scores and Deference sub-scale scores for the high school subjects is the only correlation with statistical significance.

From an inspection of the data, the question arose as to whether the relationship between the Blacky Test scores and the criterion scores might not be higher when the scores of male and female were considered

and analyzed separately. To answer this question, r's were computed for the males and females separately. Only the total corrected score of the self-rating scale was of concern here and not the individual sub-scales; since in general the correlations were so low, the total was taken as representative of the scales value. Table 6 gives the results of this analysis. Comparing the results given in this table with those given in Table 5, results are essentially the same except for the college female population which has a significant negative correlation between its Oral Erotic Scale scores and the criterion of orality.

Table 5

Correlations Between Oral Erotic Scale Scores and Self-rating Scale Scores

Subjects	Scale				
	Nurturance	Succorance	Deference	Affiliation	Total
High school (N=56)	+.05	+.01	-.41**	-.10	+.13
College (N=37)	-.16	+.05	-.15	-.18	-.13
Total (N=93)	-.15	+.05	-.11	-.11	+.02

** P<.01

From the correlations in Tables 5 and 6, it is apparent that if there is a relationship between the two tests, the Oral Erotic Scale and the self-rating scale, it is a low one, and in those instances where a significant relationship appears, it is a negative one involving only a certain age or sex group.

Table 6

Correlations Between Oral Erotic Scale Scores and Self-Rating Scale Total Score for Male and Female Subjects

Subjects	N	r
Male		
High school	26	+.11
College	12	-.05
Total	38	+.01
Female		
High school	30	+.12
College	25	-.69**
Total	55	-.15

** P<.01

The Perceptual Test

Since it was possible that when the perceptual test was administered to groups the individuals' angles of view and distances from the screen might have affected their perception of the projected object on the screen, statistical control was planned for these variables. An analysis of variance was calculated using the subjects' total scores on the oral and non-oral pictures combined in relation to their seating positions in the testing room. The arbitrary division of the room into nine seating locations is given in Figure 2. Subjects seated in these nine locations comprised the nine groups for the analysis of variance. The purpose of the analysis of variance procedure was to ascertain if a correction was needed for differences in scores attributable to the subject's distance and angle of view. The plan was to use Linquist's (22) suggested method of adding to or subtracting from each individual score in each column of the analysis of variance table, the deviation of the mean of that column from the general mean.

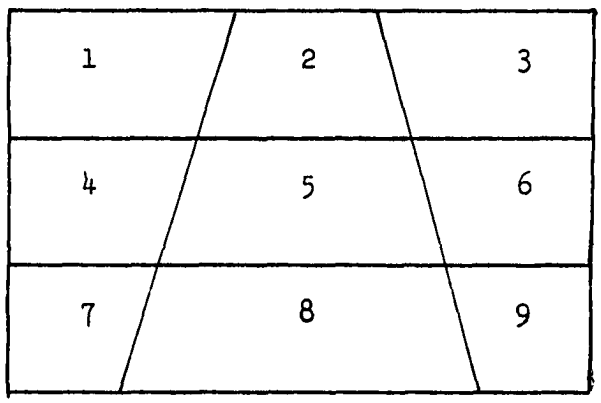

Fig. 2. The arbitrary division of the classroom into nine seating locations.

Before calculating this analysis of variance, account had to be taken of the fact that three different rooms were used in the administration of the perceptual test to subjects. The measurements of each of these three rooms were made and recorded. Special note was made of the distance from the screen to the first row, number of rows in the room, and number of seats in each row. Standard for all rooms was the distance between rows, and the distance from screen to first row. Using the measurements of the three individual rooms, a composite room was drawn up built on the specifications of the three rooms. In the final analysis of variance, the seating locations used to form the nine groups were those taken from this composite, hypothetical room.

However, before pooling the results coming from the three separate rooms, it was deemed necessary to determine beforehand if the three sets of scores were equal in terms of normality of distribution and homogeniety of variance. This latter was tested by use of Bartlett's test (9) which resulted in an F ratio of 4.54 (probability between .10 and .20)

which would not be considered significant. It was concluded that the three rooms represented a homogeneous population insofar as variability of scores was concerned.

Bartlett's test was also applied to test the homogeniety of variance of the nine location groups. The F ratio was found to be 10.55 (probability between .20 and .30), again not significant. It was concluded that since the variability of scores coming from the three rooms and from the nine locations were not significantly different, it was possible to combine these scores into a composite room and calculate the analysis of variance for perceptual scores from nine locations in the room.

When the comparison was made between the variances for groups and within groups, the resulting F ratio was 1.16. An F ratio of the magnitude of 2.05 is needed for significance at the five per cent level, so the obtained F was not considered statistically significant. It was concluded that the subject's distance from the screen and his angle of view did not affect in any important way his score on the perceptual test and hence no correction was necessary.

The means and measures of variability of perceptual test scores are given in Table 7. It will be noted that the range of scores here follows fairly well the numerical values designated on the Orality continuum (Fig. 1) used in the preliminary study. The range extends somewhat higher, to 55, but actually very few scored this high. By far the majority of scores were in the range of 1 - 40.

Considering the fact that the perceptual test was designed as a measure of orality in personality, several questions were raised in

relation to the scores on this test, just as they were raised with the Blacky Test and the self-rating scales concerning the expression of oral needs in relation to age. In the event the perceptual test was measuring basic character structure, particularly basic needs, and in addition defensive modes of reacting to these needs, could not certain personality characteristics of the adolescent period operate to influence the high school students' scores on this test as opposed to the college students' scores?

Table 7

Measures of Central Tendency and Variability of Perceptual Test Difference Scores

Type of score	Subjects	N	Range	Mean	Sigma
Perceptual test minus scores	High school	39	1 - 41	16.18	14.85
	College	25	1 - 55	20.00	12.99
	Total	64	1 - 55	19.23	12.09
Perceptual test plus scores	High school	17	1 - 21	11.24	6.02
	College	12	1 - 31	9.66	9.09
	Total	29	1 - 31	10.58	7.50
Perceptual test scores, irrespective of sign	High school	56	0 - 41	16.45	10.67
	College	37	1 - 55	16.64	12.82
	Total	93	0 - 55	16.62	11.57

In order to investigate this assumption, a t test for unrelated measures was used to test the significance of the difference between the

mean scores of the high school and college subjects. In making this comparison three different types or kinds of perceptual scores were dealt with separately: perceptual test minus scores, perceptual test plus scores, and perceptual test scores irrespective of sign.

A minus score on this test, it will be recalled, means that the subject recognized the "oral cue" objects in the series of pictures at a somewhat longer exposure time than the "non-oral" objects. In line with some theoretical assumptions made earlier concerning adolescents, it could be expected that the high school group as a whole would have a tendency to yield higher minus scores on the perceptual test. That is, out of their greater need to deny their dependency and strive toward increased independence they would "block" or deny perception of those objects relating to orality needs. From the data presented in Table 7 there is seen to be a difference of about four points between the mean minus scores of the high school and of the college subjects. However, when the t test is applied, the value of t is found to be 1.11 with a probability between .20 and .30. It can be concluded therefore that these two age groups, the high school and college subjects, are not different in terms of their behavior on the perceptual test as far as tendency to deny orality is concerned.

Considering now the perceptual test plus scores, the same question as stated above was raised. Here one might expect the inverse to be true, that the high school subjects, due to their adolescent status, might yield lower plus scores. By inspection there is seen to be slightly more than a two point discrepancy, but when the means of the two age groups' plus scores are compared, the value of t of .44

(probability between .60 and .70) would indicate that the difference in means is not significant.

Thirdly investigated was the difference between the means of the high school and college groups, considering only the magnitude of the perceptual test difference score, irrespective of sign. If it can be assumed that the perceptual test is measuring the degree of orality in character structure, irrespective of how these needs may be reacted to by the individual, then the expectancy would be for no significant difference between the means of these two age groupings. In psychoanalytic thinking, orality in character formation is laid down much earlier than the youngest age group tested here and so, although it might be assumed that the adolescent and adult may differ in regard to their reaction to oral needs, differences in the amount of basic oral fixation between the two age samples would be expected to occur only due to chance.

The t test was applied to test the difference in the means of the two age groups' perceptual test scores, irrespective of sign. The value of t was .007 with a probability beyond the .90 level which would indicate that the difference between the means of scores made by the high school and college groups was not a significant one.

Having determined, in the manner described above, that there were no significant differences between the two age groups, either in terms of an amount of orality in personality as measured by the perceptual test or in terms of defense modes of handling these orality needs, the major concern of the study was next ready for investigation. In general, it was hypothesized that there would be a significant relationship between subjects' scores on the perceptual test (a criterion of orality)

and subjects' scores on the Oral Erotic Scale of the Blacky Pictures Test. However, the nature of the relationship predicted for the particular measures used was dependent on the meaning and determinants of each measure. The possible effect of the subjects' defensive modes of reaction upon their responses to the stimulus picture of the Blacky Test depicting oral eroticism had to be taken into account. That is, given a person in whom strong oral needs are operant, might not an active denial or repression of these needs cause him to avoid expressions of orality resulting in a lowering of his score on the Oral Erotic Scale and in this way give a spurious picture of him on this test? In this event, one would expect the perceptual test minus scores to be negatively correlated with scores on the Oral Erotic Scale. On the other hand, scores on the Oral Erotic Scale would be expected to correlate positively with plus scores on the perceptual test since the latter scores and higher scores on the Oral Erotic Scale are both reflective presumably of acceptance of oral need. Considering the perceptual test scores irrespective of sign, it would be impossible to predict the magnitude of the Blacky score since these perceptual test scores incorporate both plus scores (indicating acceptance of need) and minus scores (indicating denial of need).

However, if it is assumed that the Oral Erotic Scale of the Blacky Test measures only basic need and that the individual's defenses do not interfere with his productivity or influence in any other negative way his responses to this test, the expectancies in regard to correlations between this test and the criterion measure would then be that scores on the Oral Erotic Scale would correlate positively with all

three types of perceptual test scores, plus, minus and irrespective of sign.

To find if there was a relationship between the scores obtained from these two tests, the Pearson Product-moment method of correlation was used. The assumptions underlying this statistical method seemed to be met in that the correlational plots revealed that the scores were relatively homoscedastic and normal in distribution.

Table 8 gives the correlations between the Oral Erotic Scale scores and all three types of perceptual test scores, plus, minus, and irrespective of sign. The correlations throughout are low. In no instance do they approach the .50 level considered at the outset as necessary for validity of the test under study. Only one of the correlations is significant between the .05 and .01 level of confidence. This occurs with the high school subjects when the validating criterion is the perceptual test score, irrespective of sign.

Table 8

Correlations Between Oral Erotic Scale Scores and Perceptual Test Scores: Plus, Minus, and Irrespective of Sign

	Types of Perceptual Test Scores					
	Plus		Minus		Irrespective of sign	
Subjects	N	r	N	r	N	r
High school	17	+.39	39	+.28	56	+.28*
College	12	+.03	25	-.31	37	-.12
Total	29	+.22	64	+.01	93	+.10

* $P < .05$

It was questioned whether or not the degree of relationship between the Oral Erotic Scale Scores and criterion scores might not be affected by the sex factor. Was it not possible that there were some effects attributable to sexual differences which influenced the individual's behavior on one or both of the tests to make for spuriously low coefficients when the sexes were considered together? In order to investigate this question, correlations were computed for the males and females separately. The results of these computations are given in Table 9.

Table 9

Correlations Between Oral Erotic Scale Scores and Perceptual Test Scores, Plus, Minus, and Irrespective of Sign, for Male and Female Subjects Individually

	Types of Perceptual Test Scores					
	Plus		Minus		Irrespective of sign	
Subjects	N	r	N	r	N	r
Male						
High School	5	+.71	20	+.15	25	+.20
College	5	+.82	7	+.61	12	+.71**
Total	10	+.55	27	+.27	37	+.33*
Female						
High School	12	+.36	19	+.44	31	+.62**
College	7	-.27	18	-.47	25	-.32
Total	19	+.06	37	-.14	56	-.06

** P<.01
* P<.05

Upon inspection of Table 9, it does appear that the relationship between scores is considerable higher when the two sexes are analyzed

separately. This does not seem to be consistent from age group to age group, however. With the male population, it is the college subjects with a higher and more significant correlation while the female population shows the reverse of this with the high school subjects yielding the higher and more significant correlation.

As a final step, it seemed important to ascertain the degree of relationship between the two criterion tests used, the self-rating scales and the perceptual test. Both were considered measures of a single variable, orality, but at two different levels of awareness. The self-rating scales, being more highly structured, were thought to tap a more conscious level of personality reflecting how the individual wished to perceive himself. The perceptual test, on the other hand, was thought to be measuring needs at a more unconscious level.

In the event these assumptions concerning the characteristics of the two criterion tests were valid ones, one would expect a high and significant correlation between subjects' scores on the self-rating scales and the plus scores on the perceptual test. This would mean, of course, that they had strong and heightened oral needs, were accepting of these needs, and hence could express them consciously on a self-rating scale.

On the other hand, a negative correlation would be expected between the self-rating scale scores and the perceptual test minus scores. The rationale here is that individuals with strong oral needs who deny these needs would be apt to deny in themselves the oral behaviors represented by the self-rating scale items. As for the kind of relationship which might exist between the self-rating scale scores and the perceptual test scores irrespective of sign, this would be difficult to predict

since these latter scores contain both plus and minus values.

Table 10 reveals the correlations between the perceptual test scores and the self-rating scale total scores. Correlations were not computed for each of the four individual sub-scales since, as can be observed by reference back to Table 5, none of the four sub-scales seem to correlate more highly with the Blacky Test than another. In the present analysis, correlations were computed separately between the rating scale score and each of the three types of perceptual test scores, plus, minus, and irrespective of sign.

Table 10

Correlations Between Self-rating Scale Total Scores and Perceptual Test Scores: Plus, Minus, and Irrespective of Sign

	Types of Perceptual Test Scores					
	Plus		Minus		Irrespective of sign	
Subjects	N	r	N	r	N	r
High school	17	+.01	39	-.18	56	-.09
College	12	+.29	25	+.16	37	+.12
Total	29	+.15	64	-.13	93	+.01

Although inspection of Table 10 reveals that there is a negative correlation for this sample between total self-rating scale scores and minus perceptual test scores, and a positive correlation between total self-rating scores and plus perceptual test scores, as was predicted, none of the correlations is significant.

CHAPTER V

DISCUSSION OF THE RESULTS

The major hypothesis of the experiment was that the Blacky Test was a valid predictor of the degree of orality. In order to test this hypothesis an experiment was conducted which consisted of the administration of a series of three tests to the same subjects--the Blacky Pictures Test, a self-rating scale, and a perceptual test. Correlations were computed between subjects' scores on the Oral Erotic Scale of the Blacky Test and each of the two criteria tests separately and between the two criteria. These correlations were computed separately and combined for each of the two age groups and sexes involved. Differences between the mean scores of the age groups and sexes were also tested for statistical significance for each of the three tests involved.

An inspection of scores revealed that each of the two age groups' scores appeared normally distributed on each of the three tests. The relative normality of distributions would suggest that the three tests were each measuring some behavior or personality variable which is normally distributed in the population. Whether or not this behavior is directly related to orality is a question which will be taken up later in the discussion.

At the outset, an assumption was made in respect to the

adolescent sample. It will be remembered that at the time of the selection of subjects, it was questioned whether the adolescents' needs for increased independence might not affect their scores on all the orality measures. The statistical analysis revealed that there were no significant differences in the means of scores made by the two age groups on any of the tests, and from this several pertinent conclusions might be drawn.

First of all, it could be maintained that the tests were measuring basic oral needs which are experienced in and contribute to character formation during a stage much earlier than the adolescent period, and so one would not expect differences in the degree of orality when comparisons are made between groups of high school and college subjects. In line with theory, and substantiated by the findings here, when comparisons are made between older adolescents and adults one group would seem to be as oral as the other.

And certainly from a psychoanalytic point of view it would seem to be an over-simplification to interpret the adolescents' reactions on a simple dependence-independence continuum. The observed conflict with authority and an apparent striving for independence would seem to be only the more overt manifestations of the more basic and underlying conflicts brought about by the biological intensification of psychosexual impulses and the reoccurence of earlier oedipal conflicts, to mention a few of the more important aspects of this period.

Although no difference in the degree or strength of oral needs in the adolescent group as compared with a chronologically older group was posited, it was questioned whether or not the defensive reactions

of the adolescent would not tend to lower his scores generally on the orality measures. The apparent lack of difference in means of scores made on all three tests has certain implications for psychoanalytic personality theory as was alluded to above as well as something about the measures selected for use in this experiment. As was stated, the equivalence in the two age groups' means would tend to suggest that the three tests were tapping basic needs and that the subjects' defensive reactions to them do not in any way affect their scores. This would seem to be the most parsimonious explanation. Another interpretation seems possible and, in light of the correlational data, perhaps the more feasible. This explanation is that defenses which may affect the scores made on the tests are not simply typical of one age as opposed to another, but may well be related to other factors such as sex and perhaps total personality organization.

Considering now the correlations between the Oral Erotic Scale scores and the criteria scores, noted first of all is that in general the relationship between the Blacky Scale scores and the self-rating scale scores is quite low. In no instance, either when the self-rating scale is considered as a whole or when the sub-scales are considered individually, does the obtained r reach a positive .50 level which was designated beforehand as necessary as a validity indicator.

In two cases the correlations are statistically significant; both are seen to be negative relationships. When the criterion is the Deference sub-scale, the obtained r is found to be -.41 for the high school group, which is significant beyond the .01 level. This degree of relationship does not exist for the college subjects. This finding

may be understandable when it is considered that the items on this scale have primarily to do with conformity to the demands of authority, politeness and deference to one's elders, etc. It is possible that the adolescent, particularly the more orally dependent one, may react in a more negative manner to such statements. His stronger affiliations are certainly with his own age group, and so it might be that his needs to be liked and accepted by adults is somewhat lessened at this point.

A considerably higher negative correlation of -.69 occurred when the measured relationship was between the Oral Erotic Scale scores and the self-rating scale total scores. It is interesting to note that an r of this magnitude was found only with the college females and not with the college males or with the male and female high school subjects. Before making any kind of conclusive statements about these diverse findings, it may be important to digress for a moment and talk about the composition of the experimental groups.

The high school sample can be considered a far more heterogeneous group from the standpoint of their occupational choice and interests. In the event the high school classes were typical of the average, it can be surmised that a variety of occupational interests were represented. With the college population this was not the case. All of the college female subjects were in Education courses and were presumably planning to become teachers. The majority of the college male subjects were also in Education. A few were in the field of Psychology, another social service field. At least one previous study (36) has indicated that one's choice of occupation may be related to certain personal needs. In line with this, it may well be that the college group represents a biased

sample and that such a bias may relate to the personality variable under study, orality.

To speculate for a moment upon the kinds of persons who enter the teaching field, could it be that the women are those who tend to deny their own needs for dependency and act out these needs through working with children in a helping, giving manner? Or, not considering the specific occupational choice of an Education major, simply by virtue of the fact that they are preparing themselves for a career and personal independence, it may be suggestive of a denial of their dependency needs. As was stated, these represent only speculations and cannot be supported by the data, but it would seem advisable to search for an understanding of the discrepancies between the magnitude of the obtained correlations in the characteristics of the experimental population.

It later occurred to the experimenter that the over-all lack of relationship might be explainable in terms of some features of the Blacky scoring system. An analysis was made of the scoring system, and it was noted that Blum had very carefully considered and had incorporated into his scoring system two ways of reacting to and expressing oral need. One, a person can achieve a score of plus if he denies conscious expression of his orality by, for example, "avoiding the feeding reference." Or two, a score of plus is given if the person openly expresses orality by "emphasis on Blacky's indulgence." It occurred to the experimenter at this point that these same concepts of "defense" and "vigilance," or "denial" and "awareness" may be utilized in viewing the scores of the self-rating scale. Thinking in these terms, was it not conceivable that those individuals who had made extremely low scores on

this scale were as oral as those making extremely high scores, and that these two extremes in scores represented only two different ways of reacting to and handling their oral needs? In order to answer this question, a distribution of the self-rating scale total scores was made, the median was chosen as the mid-point, and the scores were assigned plus and minus values as they spread out from the median. Thus, a score of 29 had a value of minus 47, and a score of 120 had a value of plus 44, both perhaps indicative of orality, but representing different psychological mechanisms. These values, irrespective of their sign, were placed along with the Blacky scores on a scatter diagram in order to determine if a higher degree of relationship might be obtained if the self-rating scale scores were considered in this manner. From inspection of this graph, it was readily apparent that little or no relationship existed between the two measures when they were treated in this way.

Returning to the original finding that the correlations as a whole are inordinately low when the orality criterion is the self-rating scale, two interpretations seem possible. It could be maintained that the validity of the Oral Erotic Scale of the Blacky Test is questionable. However, since the self-rating scale itself had questionable validity to begin with, any such unequivocal statements concerning the adequacy of the Blacky Test would seem unwarranted. It would seem more feasible to conclude that the low relationship between the two measures here may be more a function of some characteristics of the criterion, the self-rating scale.

For one, the items on this scale, as on most paper and pencil tests, relate to specific situations. It is conceivable that the subject

taking the test may well have experienced the feelings represented in the situation but not actually have found himself in the situation as described in the item. Or, in reading the item, he may tend to defensively qualify his answer by saying, "well, sometimes I feel that way, but not all of the time, and so it is difficult for me to say just how well this one does describe me." This kind of reaction was actually verbalized by some of the high school subjects who seemed more free in expressing their feelings about the scale. Also observed in the subjects' behavior, both high school and college, was the bringing into play of defense mechanisms, wanting to see themselves in the best possible light, a usual fault of scales of this sort. Numerous subjects made the statement after the testing session, "I found it difficult to be honest with myself. . . I would find myself thinking, 'this describes me very well, but I don't like to see myself that way.'" Thus, it is possible that a low relationship between self-rating scale scores and Oral Erotic Scale scores was inevitable due to these and other weaknesses in the self-rating scale as a criterion of orality.

Considering now the results coming from the second orality criterion, the perceptual test, there was an over-all tendency for the correlations between scores on this test and scores on the Oral Erotic Scale to be slightly higher. Some of the r's were statistically significant, and two were high enough to be considered as validity coefficients. Rather wide discrepancies in the values of the correlation coefficients were found to occur when age and sex were factored out as possible influencing factors. Because of these variations in the correlational values, it may be well to make a closer inspection of the

individual r's before drawing any conclusions as to their value as validity indicators.

From reference back to Table 8, it will be noted that there are considerable differences in the value of r when the high school and college subjects' scores are analysed separately. For the high school group, the correlation between scores on the Oral Erotic Scale and scores on the perceptual test (irrespective of sign) is +.28, which is statistically significant between the .05 and .01 level. However, this is not of sufficient magnitude for validity purposes. The corresponding correlation for the college group is minus and non-significant. Thus, it would appear that the age factor is confounding the measured relationships between the Blacky and perceptual tests.

Several inferences may be drawn from this. For one, the two tests may vary in their tendency to bring into conscious awareness the need being studied. That is, with the Blacky Test we are dealing with what may be considered a more highly structured test in terms of stimulus material. With the perceptual test we have a less structured and more ambiguous test. Is it not possible that with the Blacky, as perhaps with other similar projective tests, only the more conscious and acceptable needs are verbalized by the subject while the less conscious, repressed and denied, but perhaps more important needs in terms of motivational determinants of behavior, fail to be revealed in the test records? Following this argument, if this were consistently the case, then we may expect low or even negative relationships between projective test data and perceptual test data. True, Blum has partly taken account of this repressive phenomenon when he allows a score of plus for the complete

avoidance of the feeding reference in the Oral Erotic cartoon, but there are other possible manifestations of repression or denial of need not scored for. An extremely short story is not scored at all, and neither does an overly humorous story gain a score, to mention two other of the numerous ways an individual may attempt to avoid the feelings evoked by the stimulus picture. This line of argument regarding projective tests is a feasible and generally accepted one, but to add a note of caution, Eriksen (11) has pointed out that from the mere absence of the expression of need in the projective test records we cannot determine whether the need is strong but repressed in the individual or not. The absence of expression may also be interpreted to mean that the need under study is too weak and insignificant to be reacted to by the individual. These considerations would point to the need for further research on defense mechanisms in relation to projective tests.

In regard to this matter of defense systems in relation to expression of need, the results of the experiment would raise some question as to whether the older and more sophisticated college student may not have been more defensive in his reactions to the Blacky Pictures Test and whether this factor might not explain the observed differences in the correlational values. Certainly the college group, composed as it was of Education majors and Psychology students who had some acquaintance with psychological tests, could be considered more sophisticated and enlightened in terms of the possible interpretative significance of their responses to the Blacky Test. At least one college subject verbalized this by saying, "I have never had a course in Psychology, but just from reading and talking with friends I knew what you were getting

at with that test. . . that picture with the knife in it was castration fears, for example." This difference in degree of sophistication then may have caused the relatively naive high school student to be more revealing of himself on the Blacky which may in turn partly account for the positive correlation here.

From reference back to Table 9, there would seem to be yet another factor influencing the measured relationship between the Oral Erotic Scale of the Blacky Test and the perceptual test. Vast differences in the obtained values of r are observed when the male and female subjects are considered separately. When the perceptual test plus scores and minus scores are the criteria against which the Oral Erotic Scale is validated, though some of the correlations are extremely high none are statistically significant. The interpretative significance of this finding will be discussed later. When the criterion against which the Oral Erotic Scale is validated is the perceptual test, irrespective of sign, the high school males obtain a correlation of +.20 while the same correlation for the college males is +.71, the latter value significant and exceeding the accepted validity minimum of .50. With the female population, it is the high school females with the significantly high correlation of +.62 while the value for the college females is a -.32. Such diverse findings would seem best explainable in terms of some characteristics of the experimental groups.

To reiterate, the college female, a quasi professional woman, denying to some extent her own needs for dependency, may have denied such needs on the Blacky Test which is a more structured test. These same needs may have been revealed more accurately on the perceptual test,

which is not so much influenced by conscious factors, thus accounting for the inverse kind of relationship seen here. The potential teachers among the college males, at least those teaching below the college level, can be thought of as entering a profession traditionally thought of as feminine, if the role of the teacher working with children can be considered a maternal, giving, supporting role. It is possible that, by virtue of the fact that we find him in this role, this could be interpreted to mean that he has more or less accepted the more passive and dependent needs in himself and is not so defensive and denying of them.

Going now to the high school subjects, one could speculate that the high school males might be more concerned with what may be called masculine behaviors and attitudes, and that to lean on or depend upon others is for "sissies." The female high school subject, on the other hand, in adopting a more feminine and receptive role may find it more acceptable to be dependent and to express such needs on a projective type test. Again, these are only speculations, but the extreme differences in the size of the correlations may be accountable for in terms of these differences in the experimental groups used.

We may return now to the observation that it is only the perceptual test scores irrespective of sign which yield correlations that are statistically significant. When the perceptual test plus scores and minus scores are dealt with separately, although some of the correlations are high, none are statistically significant. This observation may be due to one of two factors. One, from reference back to Table 9, it can be noted that some of these sub-groups have extremely small N's, some have as few as five and seven. This, of course, means that the

value of r has to be very high in order to gain significance.

A second reason for the finding of significant r's occurring between Oral Erotic Scale scores and criterion scores only when the latter are considered irrespective of their plus or minus quality may be explainable in terms of the before-mentioned characteristics of the Blacky Test scoring system. Since the scoring system, as does the perceptual test score irrespective of sign, takes account of both denial and open expression of oral need, it may not be surprising then for these correlations to be higher and more significant than are the correlations between the Blacky scores and either plus or minus perceptual test scores.

Another characteristic of the scoring standards, and one that may have some relevance to the observed correlations, is that they favor more heavily the overt expression of orality as opposed to denial. Six of the types of statements given in the scoring system (statements numbered 3, 4, 5, 7, 8, and 11) have to do with the open expression of orality, while five (statements numbered 1, 2, 6, 9, and 10) seem reflective of denial of orality. In addition, five of the inquiry items scored plus can be interpreted as reflecting a more conscious awareness of oral need while only one item (item 1, c) has to do with avoidance or denial of need. And all of the "related comments" seem more representative of some awareness of oral need than of denial of need. Accordingly, the individual given to denial of need would, due to the kind of weighting described here, have less opportunity to gain plus scores on the Oral Erotic Scale than would the individual who is more conscious of and expressive of such needs. From reference back to Tables 8 and 9 one does find a general tendency for the correlations to be higher with

the perceptual test plus scores as the criterion as compared with the perceptual test minus scores. This may, although it cannot be verified by the data, be a function of these characteristics of the scoring system.

To digress for a moment from the results of the main experiment, it was noted that there was an over-all tendency for the correlations in general to be somewhat lower than the validity coefficient resulting from the preliminary study made of the perceptual test as an orality measure. It will be remembered that there the obtained r was +.76. There would seem to be several possible explanations for the discrepancy between this r and the majority of r's coming from the main experiment.

First of all, a different criterion for orality was used. In the preliminary study, the correlation was between scores made on the perceptual test and ratings based on clinical judgment. This difference in criteria could account for the difference in the obtained r's since the clinical judgment about an individual's behavior is likely more valid in assessing orality in personality than is a projective test validated on clinical judgment.

Secondly, the experimental procedure here differed from the preliminary study where the individual was tested separately in a room that was relatively quiet. Under the individual test conditions there is little doubt that a higher degree of attention and concentration was possible for the subject. In the main experiment, the subjects were tested in groups of twenty to thirty. It is highly possible that distractions in the group setting interfered with such functions as attention and concentration, and hence may have affected the subjects' scores in unpredictable ways.

The results of the experiment revealed no significant relationship between subjects' scores on the two criteria, the self-rating scale and the perceptual test. This could have been due to the fact that these two tests were measuring orality at two different levels of consciousness and that no necessary correlation would be expected. Or it could be maintained that the lack of relationship here was a function of the questionable validity of the self-rating scale. A third explanation was sought in the structure of the two tests themselves. The perceptual test scores irrespective of their sign are based on both "denial" and "awareness" of orality while the self-rating scores used in the correlations reported in the Results chapter are considered to be reflective of only the individual's "awareness" and admission of orality in themselves. In order to make a comparison between two more comparable measures, the self-rating scale total scores were again, as before in analyzing the r between Blacky scores and self-rating scores, transposed into plus and minus values representative of high (awareness) and low (denial) scores on this scale. These values, along with the perceptual test scores irrespective of sign, were plotted on a scatter diagram. The diagram showed little or no correlation between the two sets of scores, and so r's were not computed. It was concluded that this was most probably due to the questionable sensitivity of the self-rating scale.

Considering now the important question of the validity of the Oral Erotic Scale of the Blacky Test as a measure of orality, the findings would seem to be somewhat equivocal. On the basis of the results it could at best be maintained that the Oral Erotic Scale would seem to

be a valid test for some groups of individuals. That is, the kind and strength of defenses used in relation to the Blacky Test would seem to differ in terms of age, sex, and other not so well defined characteristics of the persons being tested. In this manner, the findings would indicate that caution should be used in making predictions concerning human behavior from this single dimension without taking account of other personality factors.

An important factor relates to the adequacy of the scoring procedure. The scoring system, although it may have been proposed as an aid in objectifying the test data for research purposes, has in it certain inherent shortcomings. For one, it is possible that not enough weight is given to the role defense mechanisms may play in influencing an individual's response to this test. And two, the scoring system may too narrowly define the number of ways in which orality may be expressed. For example, in scoring the spontaneous story an individual's responses must contain one of the eleven examples given in order to gain a score. It is conceivable that oral needs may be expressed in many other terms, such as, "Blacky is happiest when he is with his mother," or as one subject said, "Blacky looks like a big dog, but he's still nursing." The point made here is that the scoring system may be too rigidly defined to give a valid picture of the individual. Even Blum himself has stated, it is not "the most fruitful way to interpret clinical protocols" (4), and in saying this he has questioned the validity of the objective scoring system as a means of yielding a true picture of the individual taking the test.

Returning to the results of the study, they would seem to have

some implications for further research on the Blacky, research of the type presented here involving a single dimension of the Blacky Test and seeking relations between perceptual measures and other measures of need systems. Again, it seems we must consider the question of what needs are overtly expressed and verbalized on a projective test. Is it the more acceptable ones, ones the individual has well integrated and hence perhaps does not find so disturbing? Or, are they the needs that are denied and act as unconscious motivational determinants for behavior? Unless we know the answer to important questions such as these, what kinds of results can we predict from studies which attempt to find relationships between projective test scores and perceptual test scores? In what manner can the results be interpreted? The need would seem to be not only for finding out more about how basic needs may be expressed on a projective type test, but also how ego defense systems may interfere with or even distort such expressions.

CHAPTER VI

SUMMARY AND CONCLUSIONS

The purpose of this experiment was to investigate the validity of a single dimension of the Blacky Pictures Test, the Oral Erotic Scale. The design involved a correlational study of the relationship between subjects' scores on the Oral Erotic Scale and scores on two separate criteria of orality developed preliminary to the main experiment.

The first criterion was a self-rating scale which contained four sub-scales, each based on an aspect of orality as set forth by psychoanalytic theorists. Other than judges' agreement that an item belonged in one of the four sub-scale categories of orality, no further validity was determined for this criterion.

The second criterion, the perceptual test, was composed of a series of 12 pictures of everyday objects. The 12 pictures were divided into two sets of pictures with six in each set. One set was designed to represent "oral cues" while the second was assumed to be "non-oral" in symbolic value to the subject. In the administration of the test, the pictures were exposed tachistoscopically on a screen at rates of speed varying from .01 second to one full second. The test was based on the theoretical position that the individual's reaction time to visually perceived stimuli is, in part, a function of the strength of need tension

--in this instance, oral need. Studies in the field of perception had suggested that an increased awareness might be manifested by either quicker recognition time, "vigilance," or slower recognition time, "defense." With these theoretical considerations in mind, the selected pictures had to undergo considerable study and experimentation before they were used as a validating criterion.

A series of four preliminary studies were made on the perceptual test wherein the experimental procedures were refined to a point where individuals were observed to differ in terms of their reaction times to the pictures; this entailed mainly decreasing the definiteness of the stimulus object so that individual needs and differences might play an increased role in the perceptual process. Secondly, the two sets of pictures, oral and non-oral, were matched by pairs in terms of equal difficulty and variability of scores. It was hypothesized that differences in individuals' recognition times in response to "oral cue" objects as opposed to "non-oral" objects was a function of differences in the degree of strength of oral needs. As a corollary to this hypothesis, it was postulated that persons with strong oral needs who are accepting of these needs would obtain relatively higher scores (shorter recognition time) on the "oral cue" pictures as opposed to the "non-oral" pictures, while those persons with strong oral needs who deny these needs would obtain lower scores (longer recognition time) on the "oral" pictures as opposed to the "non-oral" pictures. With persons manifesting little in the way of oral need, only small differences would be found between their scores on the two sets of pictures. As a test of these hypotheses, eighteen subjects were individually given the perceptual

test in accordance with the experimental procedures as outlined. Beforehand, on the basis of clinical judgment, predictions were made as to where on a continuum of orality the individuals' scores would actually fall. Their actual scores were found later to be correlated +.76 with these predictions, a value significant beyond the .01 level of confidence. This correlation was deemed sufficiently high to warrant considering the perceptual test a criterion of orality with substantial validity.

The following results were obtained on the main experiment. No relationship was found between scores on the Oral Erotic Scale and scores on the first criterion, the self-rating scale. It was concluded that the low magnitude of the r's here could have been a function of the questionable validity of the self-rating scale, and that no definitive statements based on these results could be made concerning the validity of the Oral Erotic Scale of the Blacky Pictures Test. Such factors as subjects' test sophistication and defensive reactions to highly structured pencil and paper tests were viewed as shortcomings of this criterion measure.

The main experiment yielded equivocal results insofar as the correlations between the Oral Erotic Scale scores and the perceptual test scores were concerned. In general, the correlations were considerably lower than +.50 which was established beforehand as necessary for a validity indicator. However, when the total experimental population was broken down into separate age and sex groups, vast differences in the magnitudes of the r's were found to occur. With the college males the measured relationship between the Oral Erotic Scale scores and the

perceptual test scores irrespective of sign was +.71, significant beyond the .01 level, while the same r for the high school males was +.20, not significant. This same correlation for the college female population was -.32, not significant, while a value of +.62, significant beyond the .01 level, was obtained for the high school group. The correlations were significant only when the perceptual test scores were considered irrespective of their sign, and not when separated according to their plus and minus values. This was deemed understandable in light of the fact that the Blacky scoring system incorporated also both "denial" and "awareness" as response modes.

Such results led to the following conclusions: That the Oral Erotic Scale of the Blacky Pictures Test would at best seem a valid test of orality only for some groups of individuals, and that such factors as age, sex, test sophistication, and perhaps personality factors unknown from the data at hand may make for certain defensive reactions which may influence, in not entirely predictable ways, the subjects' responses to the test.

These findings lead to a consideration of the problem of defensive mechanisms and how they may influence an individual's responses on a projective type test, particularly the more highly structured ones. The problem is seen as one of discerning which needs may be revealed most on such a test. Are they those which are more acceptable, capable of being verbalized and hence less a "problem" to the individual, or are they those which are denied consciousness and consequently more important as unconscious motivators of behavior? Research along these lines may be useful in re-defining the interpretive significance of

projective test data. The experiment also raised some question as to the adequacy of the scoring system used in evaluating responses to the Blacky Test Oral Erotic Scale. It was suggested that the scoring system too narrowly defined the number of ways in which orality may be expressed, and it seemed possible that not enough score weight was given to defensive denial of the need in question.

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APPENDIX A. THE SELF-RATING SCALE

1. Instructions to the Judges
2. The Self-rating Scale

DIRECTIONS TO JUDGES

You are being asked to sort a series of items having to do with "orality" or the "oral character" as conceptualized by psychoanalytic theorists. In brief, the oral character is described as one who hopes and believes that there will always be a kind person, a mother-substitute, who will care for him and satisfy all his needs. Characteristically, they are very giving people to the point of being "pathological givers," the dynamics being, "as I shower you with gifts so shall I receive in return." Socially, they are quite positive, enjoying and needing to be with others, and are usually capable of strong loyalties. In relation to authority, they are most generally polite, conforming, doing what others expect of them, the feeling being here, "if I do as I am told, then they will love me."

The broader concept of orality has, for purposes of research, been broken down into four separate aspects: succorance, nurturance, deference, and affiliation. A definition of these terms as they are used here is as follows:

Succorance: A tendency to plead or ask for love, protection, guidance, and support, an intensified need to be consoled, cared for, and sympathized with.

Nurturance: To care for another as a mother would a child, to be overly sympathetic toward the young, helpless, the sick, lonely, and the weak. To go out of one's way to give "freely" of one's time, money, and objects.

Deference: To conform to custom, to be polite and compliant toward authority, and to willingly do what superiors and peers expect.

Affiliation: To draw near to persons and institutions, enjoy being with others, remaining loyal to friends, a readiness to trust and confide in others, an essentially socially positive view of others.

On the typed index cards you will find a series of 119 items which may in some measure describe or serve as behavioral examples of these four aspects of orality. You are asked to sort these into the four categories: succorance, nurturance, deference, and affiliation. In some instances, you may feel either that the behavioral item does not clearly differentiate itself from the other three categories or that it is representative of none of the four. In this case you should sort it under the heading of "Not Clear."

As with most tasks of this sort, it is best not to spend too much time on any one item, but rather to act on your first judgment.

SELF-RATING SCALE

DIRECTIONS:

On the following pages, you are going to find a series of statements having to do with the manner in which people behave and feel in different situations. You are to read each statement over carefully and make up your mind as to how well the statement describes you. Then, make a check on the proper line according to the following system:

Line #1 -- This describes me very well.

Line #2 -- This describes me somewhat.

Line #3 -- This does not describe me at all.

Below are some examples of the kind of questions you will have. Please work these, putting a check mark (✓) on the line which is most appropriate for you.

Example 1: When I see a beggar or cripple on the street, I feel sad.

1.____ 2.____ 3.____

Example 2: Criticism or scolding hurts me very much.

1.____ 2.____ 3.____

Note: You will not be timed but, in filling out this scale, it is best to work as rapidly as possible. Your first impressions are usually the best and most accurate. Do not leave any questions unanswered.

1. I would hesitate to marry a person my family disapproved of.

1._____ 2._____ 3._____

2. When two people are fighting or quarreling, my first impulse is to protect the weaker one.

1._____ 2._____ 3._____

3. I will take a good deal of trouble to help a younger student--to help him with his schedule, to intercede for him or in some way to further his interests.

1._____ 2._____ 3._____

4. My feelings are easily hurt.

1._____ 2._____ 3._____

5. I enjoy cooperating with others more than working by myself.

1._____ 2._____ 3._____

6. I often pray for additional strength and guidance.

1._____ 2._____ 3._____

7. I am liked by most of the people who know me.

1._____ 2._____ 3._____

8. I would like to be a nurse or doctor; taking care of those who are sick or need help would be enjoyable work.

1._____ 2._____ 3._____

9. I am especially considerate of people who are less fortunate than I.

1._____ 2._____ 3._____

10. I often go out of my way to feed, pet or otherwise care for an animal.

1._____ 2._____ 3._____

11. Sometimes I believe no one really cares much what happens to me.

1._____ 2._____ 3._____

12. When I get upset or anxious, I eat.

1._____ 2._____ 3._____

13. I prefer to study with one or two others rather than alone.

1._____ 2._____ 3._____

14. I am desperately unhappy if I am separated from the person I love.

1._____ 2._____ 3._____

15. I give praise freely when the occasion offers.

1._____ 2._____ 3._____

16. I like to hang around with a group of congenial people and talk about anything that comes up.

1._____ 2._____ 3._____

17. I am drawn to people who are sick, unfortunate or unhappy.

1._____ 2._____ 3._____

18. People often come to me for advice.

1._____ 2._____ 3._____

19. I find myself sometimes doing things simply because others expect me to.

1._____ 2._____ 3._____

20. I want sympathy, affection and understanding more than anything else.

1._____ 2._____ 3._____

21. I sometimes feel it would be fun to be a baby or at least younger than I am.

1._____ 2._____ 3._____

22. I enjoy myself immensely at parties or other social gatherings.

1._____ 2._____ 3._____

23. I am always ready to give or lend things to others.

1._____ 2._____ 3._____

24. I sympathize with people more often than I blame them.

1._____ 2._____ 3._____

25. I go out of my way just to be with friends.

1._____ 2._____ 3._____

26. I often find myself imitating or agreeing with somebody I consider superior.

1._____ 2._____ 3._____

27. I feel it is important to say "yes sir" or "no sir" to older persons--particularly authorities.

1._____ 2._____ 3._____

28. I go out of my way to comfort people when they are in misery.

1._____ 2._____ 3._____

29. I feel my lot in life has been a hard one.

1._____ 2._____ 3._____

30. I prefer to have some friends with me when I receive bad news.

1._____ 2._____ 3._____

31. If a friend of mine leaves town, I usually write to him or in some way keep up with what he is doing.

1._____ 2._____ 3._____

32. I enjoy putting my own affairs aside to do someone a favor.

1._____ 2._____ 3._____

33. I am naturally drawn to persons who are sympathetic and understanding.

1._____ 2._____ 3._____

34. I "feel out" the opinions of others before making a decision.

1._____ 2._____ 3._____

35. I praise or otherwise encourage people who are depressed.

1._____ 2._____ 3._____

36. Being a forest ranger or some other job which would take me away from people would not appeal to me.

1._____ 2._____ 3._____

37. I feel that friendship is more important than anything else.

1._____ 2._____ 3._____

38. I feel lost and helpless when I am left by someone I love.

1._____ 2._____ 3._____

39. I believe that being taken care of is the best part of being married.

1._____ 2._____ 3._____

40. I oftentimes agree with others even though I know they are wrong.

1._____ 2._____ 3._____

41. I like it when people ask me about my health or state of mind.

1._____ 2._____ 3._____

42. I have often felt I wished my parents loved me more.

1._____ 2._____ 3._____

43. I feel the needs and interests of others almost as if they were my own.

1._____ 2._____ 3._____

44. I accept social invitations rather than stay home alone.

1._____ 2._____ 3._____

45. I think of myself as neglected or unloved by others.

1._____ 2._____ 3._____

46. I enjoy feeding and taking care of babies.

1._____ 2._____ 3._____

47. I make a point of keeping in close touch with the doings and interests of my friends.

1._____ 2._____ 3._____

48. I make friends rather quickly and feel at ease in a few minutes.

1._____ 2._____ 3._____

49. I have been disappointed in love.

1._____ 2._____ 3._____

50. I am rather easily discouraged when things go wrong.

1._____ 2._____ 3._____

51. I enjoy the comforting realization that I know one or two older people whose vision and sympathy I can rely upon.

1._____ 2._____ 3._____

52. I very freely lend my books, clothes or anything I have.

1._____ 2._____ 3._____

53. I give freely of my time and energy to those who ask for it.

1._____ 2._____ 3._____

54. I find it difficult to refuse a favor to someone even when I may be busy at the time.

1._____ 2._____ 3._____

55. I feel great sympathy for an ill-used or defeated "under-dog" and am apt to do what I can for him.

1._____ 2._____ 3._____

56. When I am out with a group of friends I usually do what they want rather than insisting on having my way.

1._____ 2._____ 3._____

57. I think that most people are rather self-centered and heartless.

1._____ 2._____ 3._____

58. I feel to "rat" on a friend is one of the worst things a person can do.

1._____ 2._____ 3._____

59. I am in my element when I am with a group of people who enjoy life.

1._____ 2._____ 3._____

60. My mother will always be the most important person in my life.

1._____ 2._____ 3._____

61. I have trouble saying "no" to salesmen, and get mad at myself later.

1._____ 2._____ 3._____

62. I feel it is more blessed to give than to receive.

1._____ 2._____ 3._____

63. I like sympathy when I am sick or depressed.

1._____ 2._____ 3._____

64. I experience a vague feeling of insecurity when I must act on my own responsibility.

1._____ 2._____ 3._____

65. I usually follow instructions and do what is expected of me.

1._____ 2._____ 3._____

66. I see the good points rather than the bad points of the people who are above me.

1._____ 2._____ 3._____

67. I feel closer to my mother than to any other person.

1._____ 2._____ 3._____

68. I feel it is more satisfying to be loved than to love.

1._____ 2._____ 3._____

69. My favorite kind of fiction is love stories.

1._____ 2._____ 3._____

70. I become bound by strong loyalties to friends and institutions; it may be a school, a club, or a neighborhood gang.

1._____ 2._____ 3._____

71. I am considered polite and considerate by my friends.

1._____ 2._____ 3._____

APPENDIX B. THE PERCEPTUAL TEST PICTURES











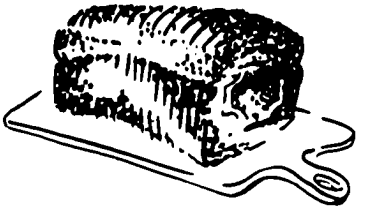



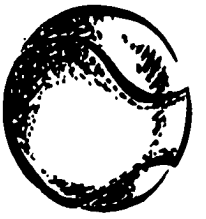











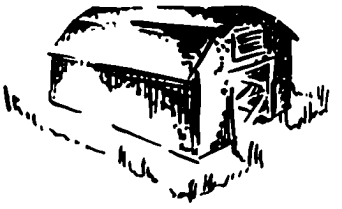

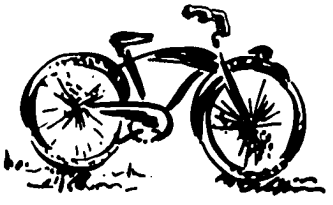



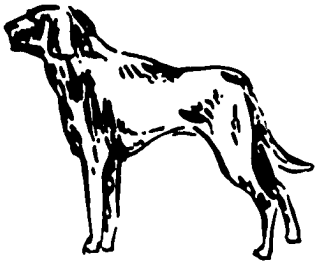

APPENDIX C. THE BLACKY PICTURES TEST

1. Directions for Group Administration of the Blacky Test

2. Revised Scoring System for Research Use of the Blacky Pictures Test (The Oral Erotic Scale only)

INSTRUCTIONS FOR GROUP ADMINISTRATION OF BLACKY PICTURES

Introductory Comments

What we have here is a bunch of cartoons, like you see in the funny papers, except that there are no words. We'll show them to you one cartoon at a time, and the idea is for you to make up a little story about each one--just tell what is happening in the picture, why it's happening, and so on. Since this is sort of a test of how good your imagination can be, try to write vividly about how the characters feel. You will have two minutes for each story, which means about one or two paragraphs on each cartoon. It is desirable to write as much as possible within the time limit.

At the end of each cartoon there will be some questions about them, which are to be answered below the stories. There are no right or wrong answers to these questions--just what you imagine the answer to be. For each question pick the one answer which seems to fit best.

Don't bother about such things as grammar or spelling--we're only interested in the content of your stories.

(Illustrate method of recording responses on blackboard.)

Before we start, here are the characters you'll see in the cartoons. (Figure 1 is shown for about 20 seconds.) There's Papa, Mama, Tippy, and the son (daughter) Blacky, who is the main figure in the stories. Now for Cartoon I . . .

I. Here is Blacky with Mama . . . (After the story is written, proceed with inquiry items. Flash each item only long

enough to have it answered by first impression i.e., don't allow time for lengthy deliberation.)

II. Here is Blacky with Mama's collar . . .

III. Here Blacky is relieving himself (herself) . . .

IV. Here is Blacky watching Mama and Papa . . .

V. Here is Blacky discovering sex . . .

VI. Here Blacky is watching Tippy . . .

VII. Here is Blacky with a toy dog . . .

VIII. Here is Blacky watching the rest of the family . . .

IX. Here Blacky is very upset . . .

X. Here Blacky is having a dream . . .

XI. Here Blacky is having another dream . . .

Draw a line beneath what you have just finished and write down the numbers one through 11. We will show each cartoon again for only a few seconds and you are to record opposite its number whether you like or dislike the cartoon. Use "L" for Like and "D" for Dislike. (Go through whole series as quickly as possible.) Now, from the ones you like, pick the single one which you like best and record its number opposite the word "Best." Then write down your reasons for selecting that particular cartoon as best . . . If you want to have another look at all the cartoons together, they have been placed in order along the blackboard. If anyone can't see from where he is sitting, he may move up front . . . Now, from the ones you dislike, pick the single one which you dislike the most and record its number opposite the word "Worst." Again you may refer to the cartoons along the blackboard. Then write down your reasons for selecting the one which you picked as

worst.

Background

1. Parents living or not (approximate date of death in latter case).
2. Siblings listed in chronological order, including sex, age, and approximate date of death if not alive.

Revised Scoring System for Research Use of the Blacky Pictures

1951

by
Gerald S. Blum, Ph.D.
University of Michigan

This scoring system is a revision of the original procedures presented in the appendix of Genetic Psychology Monographs, 1949, 39, 3-99. The revision is based upon detailed analysis of responses obtained from 224 normal males, 30 paranoid schizophrenics, and 30 non-paranoid, unclassified schizophrenics. The primary criterion was internal consistency of source scores (spontaneous story, inquiry, related comments and preferences) within a particular dimension. It should be remembered that "+" scores always indicate disturbance, whereas "0" scores are in the neutral direction. The system is applicable to both individual and group administered records intended for research analysis. The objective approach to scoring is not recommended as the most fruitful way to interpret clinical protocols (see Blacky Pictures Manual published by Psychological Corporation for clinical analysis).

Cartoon I: Oral Eroticism

A. Spontaneous Story* (++ or 0)

A story is scored "++" or "strong" if it contains any one of the following (all others scored "0"):

1. Complete evasion of feeding references - "B is nudging M to wake her up"
2. Evasive details - "house" - "farm" - "clouds" - "raining" - "sand" - "country" - (more than mention of figures in background, "nice day" - "fair" - "sunny")
3. B has intense desire for food - "really hungry" - "eager" - "greedy" - "starved" - "always hungry" - "won't be denied" - "stealing milk" - (more than hungry)
4. Emphasis on B's indulgence - "belly full" - "contented because fed so long" - "all that milk to himself" - "spoiled" - "will never be weaned" - (more than "satisfied," "peaceful," "getting enough")
5. Physical description indicating B's involvement in feeding - "dug in and got a good hold" - "on all fours" - "looks fat" - "tail wagging" - "crouched to get all he can" - "unnatural eating position"
6. Unwillingness to describe B's emotions - "can't tell how B feels" - "B sleeping"
7. B is orphan or adopted child

8. M rejecting or strongly disinterested - "disgusted" - "tired out" - "petered out" - "reluctant to feed B" - "wants to get away" - "all played out" - (more than "not paying attention," "only doing duty")
9. M asleep, with no mention of her being contented, peaceful or the scene happy - (addition of "resting" does not disqualify a " " score)
10. Detailed physical description of M - "ribbon" - "long ears" - "spotted" - "lipstick" - (More than simple mention of "collar")
11. Oral reference involving figures other than B and M - "T not nursing, weak and scrawny" - "other dog drinking water" - "others don't eat as much as B" - "T looking for M to eat" - (more than "hunting," "looking for a bone," "chewing on something")

(* An extremely short story (one or two phrases) is generally not scorable and should be given a "?" The final dimensional score should be pro-rated in such cases.)

B. Inquiry

1. Raw Scores

Item alternatives on Cartoon I are scored strong as follows:

1. c = +
3. b = +
5. b = +
   c = +
6. a = +
   c = +

2. Converted Scores

Raw no. of +'s		Converted Score
0-1	=	0
2	=	+
3-4	=	+ +

C. Related Comments

1. Raw Scores

The following rules apply here:

a. No comments are scored on Cartoons I and II (all other responses throughout the record are eligible)
b. In order to be scored, the comment must contain a specific oral reference such as "meat," "food," "eating," "nourishment," "hungry," "stomach,"

"nipple," "breast," "milk," "eating place," "bowl of food," "drinking water," etc.

c. "Bone" per se is not scored
d. In a sequence (as in a paragraph of a story) score each separate idea in which a related comment appears

2. Converted Scores

Raw no. of RC		Converted Score
0-1	=	0
2	=	+
3 or more	=	++

D. Preferences

If Cartoon I is chosen as the "Best" or the "Worst," a score of "+" is given. "Like" or "Dislike" is not scored here.

E. Over-all Dimensional Score (++ = very strong, + = fairly strong, 0 = weak or absent)

Converted scores from each of the four sources (SS, Inq, RC, and B-W) are combined in the following way to form an over-all Dimensional Score for Oral Eroticism:

Combined Source Score (no. of +'s)		Over-all Dimensional Score
0-1-2	=	0
3	=	+
4-7	=	++