

UNCLASSIFIED

AD 407 084

DEFENSE DOCUMENTATION CENTER

FOR

SCIENTIFIC AND TECHNICAL INFORMATION

CAMERON STATION, ALEXANDRIA, VIRGINIA



UNCLASSIFIED

NOTICE: When government or other drawings, specifications or other data are used for any purpose other than in connection with a definitely related government procurement operation, the U. S. Government thereby incurs no responsibility, nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use or sell any patented invention that may in any way be related thereto.

CATALOGED BY DDC

AS AD No. 407084

63-4-1 *Serial*
(3)

THE PICTURE DESCRIPTION TEST: A PRELIMINARY REPORT

by

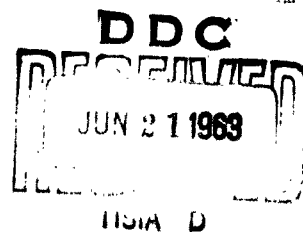
Carroll E. Izard, Don H. Randall, & Eugene S. Cherry

Vanderbilt University

Technical Report No. 16

(Contract Nonr 2149(03))

April, 1963



1151A D

The Picture Description Test: A Preliminary Report
Carroll E. Izard, Don H. Randall, & Eugene S. Cherry
Vanderbilt University

This study is a part of a program of research which has as one of its major concerns the development of methods for measuring the perceptual-affective response to persons as stimuli. The work summarized here represents our efforts toward developing a technique for measuring deviant responses to pictured persons.

This line of work has its roots in three sources. First, the writer's conviction that the perceptual-affective response obtained by way of the S's judgments of facial expressions of photographs measures a basic personality dispositional tendency of crucial importance in personality adjustment and interpersonal perception and behavior.

Secondly, the work of Frois-Whittman (1930), Woodworth (1938), Schlosberg (1941, 1957) and Levy and Schlosberg (1960) has shown that it is possible to obtain consensus in objective ratings of facial photographs. It was Woodworth who showed that judgments of facial expressions could be placed on a six-step scale and that consensus was possible if we recognized the error of judgment and measured not whether a person hits or misses but on how far he misses. Schlosberg showed that the Woodworth scale was circular and thus pointed the way to more accurate calculation of scale positions and deviations from scale position.

Thirdly, a modification of Berg's deviation hypothesis was one of the guide lines in the development of the stimulus

configuration for our measurement technique. The writer agrees with Berg's (Bass and Berg, 1959) emphasis on the importance of eliciting deviant response patterns in the study of personality and adjustment but he does not agree with Berg's contention that the stimulus content is unimportant.

The first step in the development of our technique for measuring deviations in the perceptual-affective response to pictures of people (Picture Description Test) (PDT) was to present a wide variety of pictures of people expressing varying degrees of positive and negative affect to a large number of subjects or judges with the request that they supply verbal descriptions of the pictures. These free responses obtained in written or oral form were studied for common denominators. In this way we arrived at three, four, or five terms which we felt would be very frequently chosen as descriptive of a given picture and an equal number that we felt would be very infrequently considered as descriptive. A parallel step was to present a large number of pictures to Ss and with each picture a set of eight or ten words selected by a few judges. Ss were asked to pick the most descriptive word, the second most descriptive, the third most descriptive, and then to pick the word that was not descriptive at all. From these two sources of data we were able to derive for each of 56 pictures a set of six words, three of which seemed to be rather highly descriptive of the picture and three of which seemed to be characteristically non-descriptive. In this form of the test (PDT X) the S simply looked at a picture and answered each of the six verbal items

relating to that picture as true--the word or phrase describes the picture; or false--the word or phrase does not describe the picture.

The PDT X was administered to several hundred college students. The frequency of yes-no responses was determined for each item. A response made by less than 22 percent of this "norm" sample was keyed as a deviant response. There were 67 items on the overall deviation key.

After development of the deviation key, the PDT X was administered to several groups. The data are summarized in Table 1.

Table 1
Comparison of Groups on PDT X

Sample	N	$\bar{X}$	σ
College Freshmen	62	10.7	6.2
High School Seniors	66	10.8	5.0
Chronic Hospitalized Neuro-psychiatric Patients	46	21.6	11.2

The t 's comparing the normal groups and the patient group were highly significant ($P < .001$). Further, it is possible to establish a cut-off score that shows marked separation of the distributions of the normal and abnormal samples.

On the basis of these results it was felt that it would be worthwhile to go from slides to a booklet form of the test when some needed revision was accomplished. A number of picture-verbal

item combinations were eliminated and others added as a result of additional data. This effort resulted in Picture Description Test, Forms I, IA, and II (Forms I and IA are completely independent forms with respect to the people pictured and may be combined to make a 240 item test.) Most of the work with criterion groups has been with Form I. The format of the PDT is shown in Figure 1.

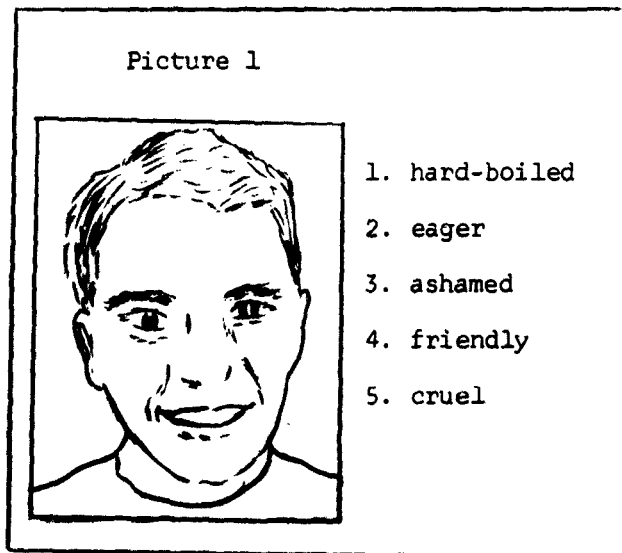


Figure 1. Format of P.D.T. showing arrangement of pictures and verbal items. Each of 5 verbal items are answered True or False for every picture. The verbal items vary from picture to picture. There are 24 pictures (12 of males, 12 of females) on each form of the PDT.

Seventy-five of the 120 items on Form I qualified for the overall deviation key; i.e., the yes-no response frequencies split 78%-22% or better. PDT I has been given to several groups. The results are summarized in Table 2.

Table 2
Comparison of Groups on PDT I

Sample	N	$\bar{X}$	σ
College Students	51	11.0	5.1
GED Examinees (seeking high school diploma by examination)	17	10.9	5.9
Acute Hospitalized Patients	58	15.6	7.3

The t tests between the normal and patient groups was again highly significant ($P < .001$). The separation was not as dramatic as that shown in Table 1, but the acute patients in the second sample are not nearly as severely maladjusted as the chronic patients of the first sample. Among the acute patients there are quite a few neurotics and acute alcoholics who were discharged immediately after staffing.

PDT I and IA are currently being given to a large representative sample of college and public school students (grades 7 - 12) in order to obtain adequate norms for the overall deviation key. In addition, work has begun on the development of keys relating to the content categories of the verbal items, sex of picture, and affective expression of the pictures.

References

- Bass, B. M. & Berg, Irwin A. Objective Approaches to Personality Assessment. Princeton: D. Van Nostrand, 1959.
- Frois-Whittman, J. The judgment of facial expression. J. exp. Psychol., 1930, 13, 113-151.
- Levy, N. & Schlosberg, H. Woodworth scale of values of the Lightfoot pictures of facial expression. J. exp. Psychol., 1960, 60, 121-125.
- Schlosberg, H. A scale for the judgment of facial expressions. J. exp. Psychol., 1941, 29, 497-510.
- Schlosberg, H. A new series of facial expressions. Amer. Psychol., 1957, 12, 264-266.
- Woodworth, R. S. Experimental Psychology. New York: Holt, 1938.