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LIMITATIONS OF PERSONALITY INVENTORIES FOR ASSESSMENT OF DEAF CHILDREN AND ADULTS AS ILLUSTRATED BY RESEARCH WITH THE MINNESOTA MULTIPHASIC PERSONALITY INVENTORY

ALBERT ROSEN

Personality assessment of the deaf by methods requiring spoken language is difficult or impossible in most cases. Structured personality inventories, which do not require mutual oral interaction, have therefore appeared attractive. The Minnesota Multiphasic Personality Inventory (MMPI), since its introduction over twenty-five years ago, has become widely used and the subject of over 2000 research reports. Myklebust, in the only previous report on the application of the MMPI to the deaf, has asserted that it is useful for this group. It seemed especially appropriate, therefore, to study this instrument with the deaf. This article will summarize recent analyses of the responses of deaf college preparatory students to MMPI items, and present conclusions regarding the limited validity of this and other inventories used in the past.¹

First, what is meant by a structured personality inventory?

(1) It is typically a series of statements or questions relating to self-concept, aspirations, avocations, health, symptoms, interpersonal rela-

¹ Available from the writer on request, the following paper presents the technical details of the analyses: Rosen, A. MMPI Responses of Deaf College Preparatory Students: Limitations of Personality Inventories in a Language-Deficient Minority Culture. Washington, D.C.: Gallaudet College, 1967. Unpublished manuscript.

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tions, vocational interests, sex, religion, motives, fears, energy level, mood, ego strength, perception of reality, and a variety of traits, such as self-sufficiency, responsibility, dominance, etc.

(2) These items are to be answered True or False, or Yes or No, with an opportunity not to respond to some items, but with an exhortation to answer as many as possible.

(3) These responses are scored objectively on predetermined scales such as Depression, Social Introversion, Conformity, Affiliation, etc., depending on the notions of the inventory constructors about the dimensions of personality worth, and feasible measuring.

(4) The pattern or profile of scales may then be interpreted clinically (subjectively) or statistically (objectively, mechanically) in describing or in making judgments about an individual, such as his suitability for a specific educational or vocational program, the bases for his problems with peers or parents or other authority figures, his need for psychological treatment, and methods for carrying it out.

These tests are referred to as "structured" because the response is limited to a few specified alternatives rather than being more or less open or unspecified as in a so-called projective test.

The MMPI items have been estimated to require about a sixth-grade reading level for their comprehension. From previous research with hearing persons much is known about the meaning of the MMPI scales for description and decision-making with a variety of people and problems. The inventory consists of 566 items answered True or False or Cannot Say on a machine-scorable form, and is scored on at least 14 basic scales. These are ten clinical scales, labelled Hypochondriasis, Depression, Hysteria, Psychopathic Deviate, Masculinity-Femininity, Paranoia, Psychasthenia, Schizophrenia, Hypomania, and Social Introversion. Each scale (with a few exceptions) is comprised of those items which were answered in a significantly different way from "normals" by a diagnostic group (e.g., psychotically depressed patients) in a mental hospital. Research and experience in other settings, however, have indicated that the usefulness of the scales is not limited to psychiatric diagnosis. There are also four "validity scales" designed to indicate whether the respondent has answered in a manner suggesting that the results are suspect. For example, one score is a count of unanswered items. Another scale score (F scale) is based on items rarely answered in the scored direction; a high score generally suggests difficulty in comprehension or random answering. Two other scales (L and K) provide information on defensiveness in responding.

METHOD AND RESULTS

In the fall of 1963, virtually the entire entering preparatory class² of Gallaudet College was administered the MMPI in groups of 25 to 70, and almost all completed the test. The most striking feature of the average profiles of these 96 males and 83 females was the suggestion of extreme psychopathology. The deaf students had scores and profiles which were similar to those of hospitalized schizophrenic patients. Compared to large samples of MMPI scores from hearing college students, the deaf students appeared markedly aberrant. Inspection of the profile sheet for each of the 179 deaf students indicated that the great majority of the profiles were of psychotic type. Likewise, the use of objective statistical procedures classified a large majority of the profiles as psychotic.

These results obviously did not coincide with clinical impressions concerning the psychological status of the deaf students. A series of analyses was conducted in order to determine the bases of their MMPI responses. Their standardized reading test scores were analyzed, special tests were constructed and administered to measure comprehension of idioms and of specific MMPI items, selected item responses were studied, and the Schizophrenia scale (the clinical scale most deviant in 1963) was administered to the entering preparatory class in the fall of 1964 with the request that the students circle the numbers of those items they didn't understand. The results will be summarized according to type of analysis.

Reading level. Nationally standardized reading tests classified these students at a mean level slightly higher than the seventh grade, with no significant sex difference. Unfortunately, these results are somewhat in doubt. The forms of tests used, designed for students in the tenth, eleventh, and twelfth grades, were far too difficult for the deaf students. What the mean reading level might have been with different tests, if any really appropriate ones could be found, is hard to postdict. If the seventh-grade level is approximately correct, then a high percentage of the preparatory students were perilously close to their ceiling of comprehension on a personality inventory designed for at least sixth-grade readers.

Comprehension of idioms. Standardized reading tests are not measuring adequately the kinds of difficulty deaf students experience in

² Since few deaf students are able to obtain a complete high school curriculum in special educational facilities for the deaf, such as residential schools and special schools and classes, a preparatory year is provided at Gallaudet College for approximately 85 percent of new students.

reading in general and especially on the MMPI. A specially constructed test of elementary idioms indicated that these preps were, on the average, far below normally hearing pupils in nearby public schools with mean reading level of grade 6.6. It was estimated that the deaf students fell at approximately the fifth-grade level on comprehension of idioms. The standardized reading tests contained few idioms whereas one-fifth of the MMPI items included idioms. Moreover, the inventory items are generally brief, so that contextual clues to meaning, so common in reading test paragraphs, are unavailable.

MMPI item comprehension test. A specially devised test of understanding of individual items, with norms from a nearby college for hearing students, suggested a serious comprehension difficulty in a large percentage of the deaf students, and a tendency for individuals not understanding the items to answer in a deviant direction.

Circling of troublesome items. Those items designated as most difficult to comprehend by the 1964 group (by their circling of the item numbers) contained words, phrases, and idioms which were apparently at an elementary level.

Analysis of individual MMPI items. The large percentage of deaf students responding in the deviant direction to selected items reflecting extreme psychopathology, such as delusions and hallucinations, suggested the following conclusion: Even if these items are understood, the deaf must be interpreting them in a different way than do the hearing. The deaf in many ways fit the definition of a minority culture whose values and test-taking attitudes are sufficiently different to produce unusual test responses.

DISCUSSION AND CONCLUSIONS

Galludet College is the world's only college for the deaf. Since few deaf persons can survive academically in a college for the hearing, practically all deaf college students attend Gallaudet. These students are the elite, intellectually, of the deaf world.³ If, through language deficiency and membership in a minority culture, the preps respond to a personality inventory in an extremely deviant way, it can be reasonably assumed that other deaf individuals of lesser intellectual and linguistic caliber will do likewise. With respect to the cultural difference, there is considerable evidence that the MMPI, which has been translated into several foreign languages, cannot be interpreted on the

³ The preparatory class does not include approximately 15 percent of entering students each year who are advanced to the freshman class because of relatively superior language ability.

basis of norms from the United States, even in other English-speaking countries.

On the basis of these findings, it seems justifiable to conclude that the MMPI should be administered to the deaf only for research on its uses and limitations, or for studies of item revision and construction based on suitable criterion data. There is a strong temptation when one is attempting to assess the personality of a deaf person to use an inventory requiring no mutual oral interaction, especially if one is not conversant with the language of signs. Since frequently the evaluation of a deaf person is made because he is suspected of being deviant, it is an easy matter to accept as valid and to rationalize the almost invariable aberrant results. It is best to do without the test than to try to interpret the profile on the basis of research and clinical experience with hearing persons. The only appropriate clinical use of the inventory is with older adolescents and adults whose deafness is of fairly recent onset.

It seems highly likely that the responses of deaf children and adults in previous research with structured personality inventories other than the MMPI have been markedly affected by these same comprehension problems and differences from the hearing in test-taking attitudes and item interpretations. For example, approximately 90 percent of deaf persons are below the fifth-grade reading level. Thus, the results of these studies (using inventories developed by Bernreuter, Brown, Brunschwig, Rogers, and Thurstone), which have reported considerable psychopathology among the deaf, should be seriously questioned.

Where does this leave us with respect to meaningful ways of assessing the personality of deaf individuals? The validity of other assessment procedures dependent upon language (e.g., projective techniques such as the Rorschach) has not been established. Only with much laborious research can we determine whether any generally useful comprehensive inventory or other assessment procedure dependent upon language responses of deaf subjects can be constructed. The development and validation of nonverbal procedures may prove rewarding. At present we must rely on crude information from interviews, observations, and informants concerning individuals in a culture which has been inadequately studied.

SUMMARY

Previous research with the deaf based on their responses to structured personality inventories should be treated with great skepticism.

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Research with the Minnesota Multiphasic Personality Inventory has led to the conclusion that procedures dependent upon language responses have not been suitable for personality assessment of the deaf. Even in cases where language development may not be severely deficient, membership in the "deaf culture" apparently produces unusual test-taking behavior. Several other inventories used in research with the deaf in the past have probably presented misleading results for the same reasons. If their responses are interpreted in terms of norms for the hearing, the great majority of deaf persons are incorrectly diagnosed as suffering from extreme psychopathology. Further research with modifications of existing devices or development and validation of new ones is needed.