# APPLICATION OF THE MEGARGEE MMPI TYPOLOGY TO A FORENSIC PSYCHIATRIC POPULATION

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Generalizability of a previously established MMPI-based classification system that was developed using a criminal population (Megargee & Bohn, 1979) was investigated using a sample of 151 patients in a forensic psychiatry unit. Comparison of Megargee and Bohn's (1977) prisoners and the forensic sample indicated significantly different proportions occurring for three of the ten groups with significantly higher proportion of the forensic sample occurring in the five more elevated profile types. Comparison of the three most common groups revealed a significant difference on the Beck Hopelessness Scale. These findings are taken to support the applicability of the Magargee system to a hospitalized population.

The recognition that an orderly system of criminal classification might facilitate treatment decisions has led to the development of several such systems. Typical approaches have attempted to classify criminals on such variables as type of crime, level of cognitive development (Hunt & Hardt, 1965), degree of deviance (Morris, 1965), and interpersonal maturity (Warren,

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1971). Dissatisfied with the efficiency, economy, and validity of the available adult taxonomies, Megargee and his associates have attempted to develop a reliable system of classification based on the MMPI (Megargee & Bohn, 1979). Chosen for its ease of implementation as well as the notion that profiles would reflect personality changes during incarceration, the MMPI easily lends itself to computerized scoring (Megargee & Durhout, 1977).

Hierarchical analysis of profiles revealed that within a population of youthful offenders at a federal correctional institute (FCI), there existed ten profile types, arbitrarily named Able, Baker, Charlie, Delta, Easy, Foxtrot, George, How, Item, and Jupiter. In subsequent research the types were compared on 116 variables ranging from adjustment in early childhood to eventual recidivism. From the statistically significant comparisons, a consistent description of each of the ten groups was derived as well as avenues for management and treatment (Megargee & Bohn. 1977). The least elevated type, Item, was described as outgoing, friendly, and nonaggressive with offenses involving draft, drug, and liquor violations. While seemingly well adjusted in terms of interpersonal relations, type Easy lacks motivation and discipline. Baker has been described as a neurotic delinquent group whose criminal involvement seems to increase with age. Megargee and Bohn (1977, p. 186) describe Able as "clever, opportunistic, daring, and amoral." Although group George is more elevated than Baker, they have been described as fairly well adjusted and nonviolent, but experiencing situational stress. Group Delta's profile is characterized by a single spike on scale 4, suggesting hedonism and impulsivity as well as the ability to be charming and manipulative while low in anxiety and guilt. Type Jupiter, a predominantly black group, was seen as low in violence, but high in internal tension and conflict. With a background of personal and family deviance, the more psychotic type Foxtrot consists of men who are dominant, assertive, and interpersonally maladiusted. Group Charlie is characterized as an acting-out aggressive group and found highest in proportion of crimes against persons. Finally, group How, defined primarily by a high elevation, is

also highest in interpersonal problems and number of criminal and deviant behaviors.

Megaree (1977) cites Bohn's recent evaluation of a treatment application as supportive evidence for the utility of the typology. In this study, one facility revealed a 46% reduction in overall assault rate during the first three quarters under this system. Further research has indicated that these profile types exist in criminal justice settings other than the FCI, thus supporting the generalizability of Megargee's system. Successful cross-validation efforts include applications of the typology to an Alabama prison population (Edinger, 1979) as well as specialized samples in the research and mental health units of North Carolina's Butner Federal Correction Institute (Edinger, Reuterfers, & Logue, 1982).

The purpose of the present study is to determine whether the Megargee typology could be applied usefully to a population of psychiatric offenders housed in a state mental health facility. A primary objective was the determination of proportions of MMPI profile types existing in the population. Second, related variables were compared for the existing groups. Finally, the utility of the Megargee rules as opposed to the simple two-point MMPI scale classification was considered.

# **METHOD**

## **SUBJECTS**

The subjects consisted of all (151) patients who had been administered the MMPI at the Dayton Mental Health Center (DMHC) Forensic Psychiatry Unit, a maximum security facility for males. These men ranged in age from 19 to 66 years with a mean age of 32. The ratio of black to white patients was nearly equal (46.7% blacks, 52.4% whites, 1% other). The majority (48.1%) were committed as incompetent to stand trial.

### MATERIALS AND PROCEDURE

T-scores were recorded for the clinical and validity scales. After elimination of invalid protocols (F > 100T), a computer program incorporating the revised rules developed by Megargee and Durhout (1977) sorted the profiles into ten Megargee types. Ties were clinically sorted into the more applicable group. Demographic data obtained on men in the three most prominent types were analyzed for between group differences. The variables include age, race, marital status, and commitment status. Length of psychiatric hospitalization was also considered.

The three largest groups, Charlie, How, and Item, were compared based on diagnostic and psychometric data collected upon admission. These variables included Shipley Intelligence Quotient estimates (Wiens & Banola, 1960), Beck Hopelessness Scale raw scores, and scores on the Buss-Durkee Hostility Guilt Inventory (Buss & Durkee, 1957). Finally, the modal two-point code of each of the three common profile types were determined and percentage of individuals possessing these codes of those meeting the criteria for the corresponding Megargee type were calculated.

# RESULTS

First, 39 profiles were excluded as invalid, as having F > 100T, with 100 or 89% of the 112 valid profiles classifiable. Table 1 summarizes the results of the proportion of patients' MMPI code types in the present study compared with the Megargee and Bohn (1977) proportions. The proportion of profiles types represented in the present sample significantly differed from Megargee's sample ( $\chi^2[9, N=1264]=50.56, p < .001$ ). Z-test analysis revealed significant differences in proportion, z < -1.96 or > 1.96, p < .025, for 3 of the 10 groups, namely Able, Charlie, and How. There is a significantly lower proportion of type Able; Charlie and How were significantly higher in this sample. A significantly higher proportion of the forensic group was represented by the

| TABLE 1  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|
| Comparison of Proportion of Types Found in the           |  |  |  |  |  |  |  |
| Forensic Population with Measure and Bohn (1977) Results |  |  |  |  |  |  |  |

|         | Megargee and Bohn |            | Fo               |            |        |
|---------|-------------------|------------|------------------|------------|--------|
| Туре    | Total<br>(N=1164) | Proportion | Total<br>(N=100) | Proportion | Z      |
| Able    | 204               | . 175      | 5                | .05        | -5.10* |
| Baker   | 51                | .044       | 3                | .03        | 77     |
| Charlie | 103               | .088       | 18               | . 18       | 2.32*  |
| Delta   | 120               | . 103      | 6                | .06        | -1.69  |
| Easy    | 84                | .072       | 5                | .05        | 95*    |
| Foxtrot | 100               | .086       | 6                | .06        | -1.03  |
| George  | 85                | .073       | 5                | .05        | 99     |
| How     | 155               | . 133      | 23               | .23        | 2.24*  |
| Item    | 225               | . 193      | 26               | .26        | 1.47   |
| Jupiter | 37                | .032       | 3                | .03        | 11     |

<sup>\*</sup>p < .05 (Z crit < -1.96 or > 1.96).

five more elevated types with the majority of forensic subjects (56%) belonging to groups Delta, Jupiter, Foxtrot, Charlie, and How, while only 44.2% of Megargee's group was as markedly elevated (z = 2.28, p < .05).

Further comparisons were made for differences among the three most prominent groups, Charlie, How, and Item. Of the demographic variables, no significant differences exist for race, marital status, length of psychiatric hospitalization, or commitment status among the groups. On psychometric measures, the three groups varied significantly on the Beck Hopelessness Scale, but not on the Buss-Durkee Scales or Shipley Intelligence Quotient estimate.

The modal two-point codes for the four largest groups did not account for a large percentage of group members. Eight of the 18

TABLE 2
Comparison of Means of Megargee Group Members on Psychometric Measures

| Measure                 |          | Group |      |      | Duncan <sup>a</sup> |
|-------------------------|----------|-------|------|------|---------------------|
| Cha                     |          | ie    | How  | Item |                     |
|                         | <u>N</u> | 10    | 14   | 12   |                     |
| Beck Scale              |          | 4.7   | 8.7  | 3.0  | <u>123*</u>         |
| Buss-Durkee Scales      | <u>N</u> | 10    | 14   | 12   |                     |
| Assault                 |          | 4.8   | 3.2  | 3.0  |                     |
| Indirect Hostility      | 7        | 4.4   | 3.9  | 2.6  |                     |
| Irritability            |          | 4.8   | 4.1  | 3.5  |                     |
| Negativism              |          | 2.5   | 1.8  | 1.6  |                     |
| Resentment              |          | 3.3   | 2.8  | 2.5  |                     |
| Suspicion               |          | 4.0   | 4.6  | 3.8  |                     |
| Verbal Hostility        |          | 6.1   | 5.5  | 4.2  |                     |
| Guilt                   |          | 5.6   | 4.7  | 4.2  |                     |
| Hostility Scales Sum    |          | 29.7  | 26.0 | 21.0 |                     |
| Shipley IQ <sup>C</sup> |          | 14    | 21   | 18   |                     |
|                         |          | 92    | 90   | 94   |                     |

a. Duncan Multiple-Range test.

type Charlie members (44%) had either an 8-6 or 6-8 code type. Eight out of 23 type Hows (34%) had either 8-4 or 8-2/2-8 profiles. Of 26 type Items, 5 were 2-7 and 2-8 code types (19%), and 5 (19%) were either 6-4, 6-8, or 6-2.

b. Beck Hopelessness Scale.

c. Shipley IQ estimates (Wiens & Banola, 1960).

<sup>\*</sup>p < .05.

### DISCUSSION

All valid profiles were classifiable, supporting the generalizability of the Megargee system to an inpatient forensic psychiatry population. The differences in proportion of types represented may reflect the most disturbed nature of the sample as well as the behavioral phenomenon endemic in the forensic group. Many patients, particularly those who are committed for evaluation of competency, for instance, have a marked tendency to fake bad, resulting in elimination of their profiles. Second, a number of patients refused to take the test for various reasons.

The present study provides a tentative answer to the question of generalizability of the Megargee classification system to a forensic setting. Indeed the patients were classifiable and those types represented have some resemblance to their counterparts in prison settings. In addition, the discriminations made did seem to be different, if not ultimately more useful, than the typical two-point code classification. Although the numbers of profiles falling into groups limited the power of statistical test, the significant difference on the Beck Hopelessness Scale further supports the usefulness of the Megargee groups.

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