Occupational Therapists: Personality and Job Performance

(competence, occupational therapy, professional)

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This study was conducted to determine the personality structure of a group of occupational therapists and to examine the relationship between specific personality variables and job performance of practicing occupational therapists. The results indicated that occupational therapists as a group are not distinguishable from people in general, in terms of personality; however, a number of personality variables were significantly related to job performance. Implications for both the field of occupational therapy and for the selection of students are discussed.

The continuing popularity of health care-related career fields, together with the increase in applications for a fixed number of openings in such educational programs, has led to renewed concern about the selection of applicants (1, 2). A critical need exists to identify accurately potential successful practitioners of occupational therapy.

In the first volume of The American Journal of Occupational Therapy, Otto reported:

When considering an applicant for training the director of an occupational therapy course is usually concerned with obtaining information on the future student's health, character, academic ability, manual dexterity, personality and interests. Information is assessed quite easily on the first four—medical examination, character references, high school records, tests of intellectual ability and tests of manual dexterity. It is when it comes to appraise the personality and interests of the applicant that we seek some means of pinning down those particular aspects which contribute to occupational therapy education. (3, p 115)

Although a number of studies have been conducted to examine the relationship of personality and occupational interest variables to success in course work, fieldwork, and internship experiences (4-6), we are aware of only one published study that examines the relationship between personality variables and job performance of occupational therapists. Hendrickson (7) examined the differences from population norms of a small sample of occupational therapists working in the specialty of psychiatry using Cattell's Sixteen Personality Factor questionnaire (8). Differences were found on 9 of the 16 personality factors, but the significance of this result is difficult to interpret because the size of the sample used in the study was not reported.

The need for the distinction between studies examining the relationship of personality variables and training success versus the relationship of personality variables and success in the profession is underscored by the work of Ghiselli (9). Ghiselli summarized the results of hundreds of validity studies covering a broad spectrum of occupations using both aptitude and personality tests for predic-

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tion of performance both in training and on the job. He found marked differences in the power of tests to predict proficiency in training and in work. In other words, some aptitude and personality characteristics may predict success in training, whereas a different set may forecast success in the actual profession. The present study examines which personality characteristics predict successful performance in the profession of occupational therapy.

When Johnson et al. (10) surveyed the admissions procedures of 39 occupational therapy programs, they identified nine different methods used in selecting students. The interview was the most frequently reported method of providing information for the selection of students, and was primarily used to assess an applicant’s motivation and personality characteristics. Seven of the 39 programs also used personality inventories to provide information upon which to base selection decisions. Given the widespread use of personality information in selecting students for occupational therapy programs, one would expect some consensus on the personality characteristics deemed appropriate for the profession. Such, however, is not the case:

The relative importance of various personality traits differed substantially among the programs. One preferred students with risk-taking attributes who could help strengthen and broaden the profession of occupational therapy. Another program preferred students who were cooperative, considerate, outgoing and, relaxed. (10, p 600)

It would seem, then, that research is necessary to examine which personality variables predict job performance of practicing occupational therapists in order to provide information to people charged with selecting students. The need for this research is underscored by the work of Muthard et al. (11). They conducted a comprehensive study of the ability of the American Occupational Therapy Association’s certification instruments, the Certification Examination for Occupational Therapists (CEOT) and the Field Work Performance Report (FWPR), to predict future job performance and satisfaction of occupational therapists. The resulting pattern of correlations failed to reveal any predictive validity for the CEOT or FWPR. One post hoc explanation offered by Muthard et al. (11) is that effective occupational therapists display traits on the job that are crucial for effective job performance, but that are not assessed by the CEOT or FWPR. Thus more weight must be given to facets of personality in estimating professional potential. The study reported here offers a direct test of this hypothesis.

The purpose of this investigation is to determine a modal or average profile of occupational therapists and to relate personality differences (between the general population and occupational therapists) to on-the-job performance. If this relationship exists, then the information could be fed back to those responsible for selecting students.

Method

Sample. Questionnaires were sent to all settings in eastern Canada in which occupational therapists had a direct supervisor who was able to supply job performance ratings. This population consisted of 87 occupational therapists. All rating supervisors had more than five years of occupational therapy supervisory experience. A total of 82 usable responses were obtained by the cutoff date, resulting in a 94 percent sample return rate.

Measures. The Personality Research Form E (PRF-E) (12) was designed to yield a set of scores for personality traits broadly relevant to the functioning of individuals in a wide variety of situations. The starting point for the PRF-E design was the work of Henry Murray (13) and his colleagues at the Harvard Psychological Clinic. They developed a set of variables to describe personality comprehensively, if not exhaustively. These variables were modified by Jackson (12) in the light of much research evidence. The PRF-E contains 22 scales bearing on characteristics judged to be most important or most relevant to a wide variety of areas of human functioning (12). Of these 22 scales, 20 are content scales: Abasement, Achievement, Affiliation, Aggression, Autonomy, Change, Cognitive Structure, Defendence, Dominance, Endurance, Exhibition, Harmavoidance, Impulsivity, Nurturance, Order, Play, Sentience, Social Recognition, Succorance, and Understanding. Two of the scales are stylistic or validity scales: Desirability and Infrequency. (Readers may receive a copy of PRF-E scale definitions by writing to the senior author.) The internal consistency reliability of the PRF-E scales ranges from .50 to .91 with a mean of .72. The predictive validity of this instrument, as measured by peer ratings, is .53 (12). For reviews of this instrument see works by Buros (14) and Wiggins (15).

Job performance and overall effectiveness of the occupational therapist sample was measured by...
their supervisors using a seven-point graphic rating scale. This rating scale was developed by two occupational therapists in the field to tap global, overall performance with three descriptive anchor points. Whereas the scale consists of only one item, reliability estimates could not be computed.

Procedure. A cover letter explaining the nature and purpose of this study was sent along with the measures to the supervisors of the participating occupational therapists. The occupational therapists were instructed to complete and return the questionnaire. Their supervisors were asked to rate these subjects on the rating scale provided. Confidentiality was ensured by coding the questionnaires and ratings.

Results
The first step in the analysis was to develop the modal personality profile for the occupational therapist sample. This was accomplished by scoring each completed PRF and finding the mean value of each of the 22 scales. This modal profile is presented in Figure 1, shown in deviation form. The center horizontal line of Figure 1 represents the mean profile of the norm group. The lines above and below the center line represent the standard deviation above and below the mean of the norm group, respectively. Typical practice (12) interprets differences of a criterion group from the norm group when scale values fall outside of the range of plus or minus one standard deviation. Examination of Figure 1 reveals that none of the 22 PRF-E scale values falls outside of plus or minus one standard deviation. In other words, occupational therapists cannot be distinguished from people in general in terms of personality, as measured by the PRF-E.

The second stage in the analysis consisted of examining the contribution or importance of personality variables to job performance. To accomplish this, the 22 PRF-E scales were regressed on the su-
pervisory ratings of job performance. On the seven-point rating scale, the mean performance level was 5.24 with a standard deviation of .97. With a possible range of scores from one to seven, the mean and standard deviation reflect a distribution that is positively skewed. The results of this multiple regression analysis may be examined in Table 1.

Variables were entered into the regression equation in a stepwise fashion. That is, the variables that contributed the most variance to predicting job performance were evaluated first. Examination of Table 1 shows six PRF-E variables that predict statistically significant variance of job performance. The \( p < .05 \) criterion \((16)\) was chosen to evaluate the significance level of the relationship between the personality characteristics and the rating of job performance. The multiple correlation of these six PRF-E variables with job performance is .40, accounting for 16.1 percent of the observed variance.

The following is a composite profile of personality factors that have been shown to relate to job performance in this occupational therapy sample. The PRF-E scale that had the largest effect on the job performance rating was Desirability. This scale taps a need for social approval and acceptance, and the belief that this can be attained by means of culturally acceptable and appropriate behaviors. The low scores on the Understanding scale reflect a lack of desire to understand many areas of knowledge or logical thought. The high Nurturance score indicates a need to give sympathy and comfort, interest in caring for children, the disabled, or the infirm. The Change score indicates the need for new and different experiences, the dislike of routine and ready adaptation to changes in environment. The Achievement score reflects the need to accomplish difficult tasks, maintaining high standards and willingness to work toward difficult goals. The low scores on the Exhibition scale describe individuals who desire not to attract attention to themselves or be the center of attention, who do not enjoy an audience. For a full description of all the PRF scales see Jackson \((12)\).

### Discussion

The results of this investigation suggest that practicing occupational therapists are not demonstrably discriminable as a group from people in general. However, a number of personality characteristics are significantly related to successful job performance.

The inability to uncover a modal personality profile for occupational therapy was surprising. Given that most career development theorists believe that occupational choice reflects an individual's desire to implement his or her self-concept \((17, 18)\), occupational therapy is attracting people from a wide variety of personality structures. This finding has both positive and negative connotations. On the positive side, such a diversity of individual need structures can create a healthy, heterogeneous profession. On the negative side, however, it suggests that people who enter professional education may not have a clear idea of what occupational therapy involves. If this is the case, then there is a need for more aggressive promotion on the part of occupational therapy educational programs to increase public and student awareness of the field.

Some evidence of this problem was recorded by Maxwell and

<table>
<thead>
<tr>
<th>Variable</th>
<th>Simple Correlation(r)</th>
<th>Multiple Correlation(R)</th>
<th>Cumulative Variance Accounted for(R^2)</th>
<th>Significance of the Change in (R^2)(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desirability</td>
<td>.280</td>
<td>.280</td>
<td>.079</td>
<td>.011</td>
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<tr>
<td>Understanding</td>
<td>-.123</td>
<td>.329</td>
<td>.109</td>
<td>.011</td>
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<td>Nurturance</td>
<td>.120</td>
<td>.382</td>
<td>.146</td>
<td>.006</td>
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<tr>
<td>Change</td>
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<td>.391</td>
<td>.153</td>
<td>.011</td>
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<tr>
<td>Achievement</td>
<td>.063</td>
<td>.388</td>
<td>.157</td>
<td>.021</td>
</tr>
<tr>
<td>Exhibition</td>
<td>.031</td>
<td>.402</td>
<td>.161</td>
<td>.035</td>
</tr>
<tr>
<td>Sentence</td>
<td>-.105</td>
<td>.406</td>
<td>.165</td>
<td>.056</td>
</tr>
<tr>
<td>Aggression</td>
<td>-.007</td>
<td>.410</td>
<td>.170</td>
<td>.083</td>
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<tr>
<td>Endurance</td>
<td>.172</td>
<td>.413</td>
<td>.171</td>
<td>.119</td>
</tr>
<tr>
<td>Succorance</td>
<td>-.006</td>
<td>.416</td>
<td>.173</td>
<td>.164</td>
</tr>
<tr>
<td>Play</td>
<td>-.026</td>
<td>.417</td>
<td>.174</td>
<td>.221</td>
</tr>
<tr>
<td>Harmavoidance</td>
<td>-.038</td>
<td>.419</td>
<td>.175</td>
<td>.287</td>
</tr>
<tr>
<td>Impulsivity</td>
<td>-.056</td>
<td>.420</td>
<td>.176</td>
<td>.359</td>
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<tr>
<td>Cognitive Structure</td>
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<td>.420</td>
<td>.177</td>
<td>.438</td>
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<tr>
<td>Affiliation</td>
<td>.080</td>
<td>.421</td>
<td>.177</td>
<td>.517</td>
</tr>
<tr>
<td>Abasement</td>
<td>.040</td>
<td>.422</td>
<td>.178</td>
<td>.596</td>
</tr>
<tr>
<td>Defendence</td>
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<td>.178</td>
<td>.670</td>
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<td>.179</td>
<td>.736</td>
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<tr>
<td>Order</td>
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<td>.794</td>
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<tr>
<td>Infrequency</td>
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<td>.423</td>
<td>.179</td>
<td>.843</td>
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<tr>
<td>Social Recognition</td>
<td>.003</td>
<td>.423</td>
<td>.179</td>
<td>.884</td>
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</table>
Maxwell (19). In a study of occupational therapists they found that subjects ranked the lack of a clearly defined area of competence and the lack of understanding other professions have of occupational therapy as the two most significant problems facing the profession.

The six personality characteristics found to be significantly related to job performance (Table 1) accounted for 16.1 percent of the observed variance in job performance. This is probably a conservative estimate, given the positive skew in the performance ratings and subsequent restricted criterion variance. From an absolute standpoint, this is not a large percentage of variance. Although there are no directly comparable studies in the health care field, Lefkowitz (20) found that 30 percent of the performance variance of police officers could be attributed to personality variables. Given the typical selection ratio in occupational therapy programs, in conjunction with aptitude, achievement, and background predictors, the use of personality variables as predictors would lead to a substantial increase in selection efficiency.

Further research is needed to ascertain the relationship of personality profiles predictive of success in educational programs with profiles predictive of on-the-job performance. Following the lead by Muthard et al. (11), this comparison could be accomplished by conducting a longitudinal study relating personality characteristics initially with academic success and fieldwork evaluation, and later with job performance using the same sample of individuals. If these relationships are similar, then the identified personality variables could be used in selection of students for occupational therapy education programs. If they are dissimilar, however, the decision maker's task becomes problematic. In this latter situation one must decide whether to select students based on characteristics of success in training, practice, or a judicious combination of the two.

Future research should also attempt to use measures of clinical success and job performance in conjunction with supervisory ratings. Peer ratings or job performance tests might yield additional criterion information.

**Summary**

We conducted this study to examine the personality structure of occupational therapists and to determine if personality variables were related to job performance. Although not distinguishable as a group from people in general, six personality variables were shown to be significantly related to performance in the profession. This finding has implications for the selection of students for occupational therapy educational programs.

**REFERENCES**