

Search for orthodontic assistant personality profile

Marianne Westbrook, PhD, and Larry W. White, DDS, MSD

Hobbs, N.M.

A study of 124 orthodontists and 476 auxiliaries was undertaken to learn whether successful chairside assistants had a special personality as shown by the Cattell 16 PF test. The successful and unsuccessful orthodontic assistants differed significantly in only one respect. The successful assistants generally displayed more conscientiousness than the unsuccessful assistants. This study suggests that most orthodontic assistants come from a group of women that differs little from the mean of the general population. (AM J ORTHOD DENTOFAC ORTHOP 1988;94:350-3.)

With the expansion of duties for orthodontic assistants and the rapidly growing budget for auxiliaries in most offices, the hiring and retention of top quality persons are high priorities.¹ Several authors have addressed the problem of hiring and retaining competent persons as dental assistants.²⁻⁸ In 1974, Green⁸ calculated that the cost of hiring and training a dental auxiliary was between \$7,000 and \$10,000. This sum has surely risen during the past 11 years. Although orthodontists privately profess much interest in the processes of hiring, training, and retention of good auxiliaries, published research regarding these subjects is meager. In 1963, Dunnette and Bass⁹ identified the interview as the most frequently used selection device in spite of its inefficiency and invalidity. Although Stone⁷ designed a useful open-ended auxiliary application form, he confessed that it was an inadequate hiring instrument.

Erridge and Green^{6,8} consider personality features as possibly important factors in the selection of dental auxiliaries but find them difficult to assess. They believe that structured training and staff evaluation can overcome personality deficits, maintain job interest, and meet the employment needs of most offices. They also suggest that the high turnover among dental assistants is caused by the low status of the job, along with a loss of interest in the work. They believe that training and evaluation can provide opportunities for achievement and success.

Guion¹⁰ also questions personality profiles as good selection devices, but Ghiselli¹¹ has described how useful personality profiles can be in selecting workers. In hopes of discovering a common personality among those rated high by their orthodontist employers, the present study was designed to evaluate personality profiles of orthodontic chairside assistants with a test designed by Cattell.¹²

METHODS AND MATERIALS

Subjects were drawn from eight randomly selected states. In each state members of the American Association of Orthodontists received a written invitation to participate in the survey study. Of the 1613 invited orthodontists, 281 expressed an interest in participating; eventually 124 orthodontists and 476 of their auxiliaries participated.

Each orthodontist received a packet containing a 19-item questionnaire, the Orthodontist Demographic Sheet. This form was designed to collect data about the assistants employed and the techniques used in hiring and training these personnel. Each assistant received a 12-item form entitled, Assistant's Biographical Information. The orthodontists were asked to complete an Employee Rating Form on the performance of each assistant and to indicate whether they would rehire the employee. The Orthodontist Demographic Sheet, the Assistant's Biographical Information Form, and the Employee Rating Form were developed by the authors. Orthodontic assistants also received the 16 PF Personality Profile Test, which is a paper and pencil instrument developed by Cattell for the evaluation of 16 personality factors (PFs).

The orthodontist used the employee rating form to evaluate his or her employees on a 6-point basis. The highest achievement level was 6; 1 was the lowest. Scores of 4, 5, and 6 were arbitrarily selected as high performance, and scores of 1, 2, and 3 signified low performance. The orthodontist also was asked to identify those employees he would rehire and those he would not rehire.

Student's *t* test for significance was used to compare 16 personality factors between high achievement groups and low achievement groups and also between those who would be rehired and those who would not be rehired. Student's *t* test also was used to evaluate the



16 PF TEST PROFILE

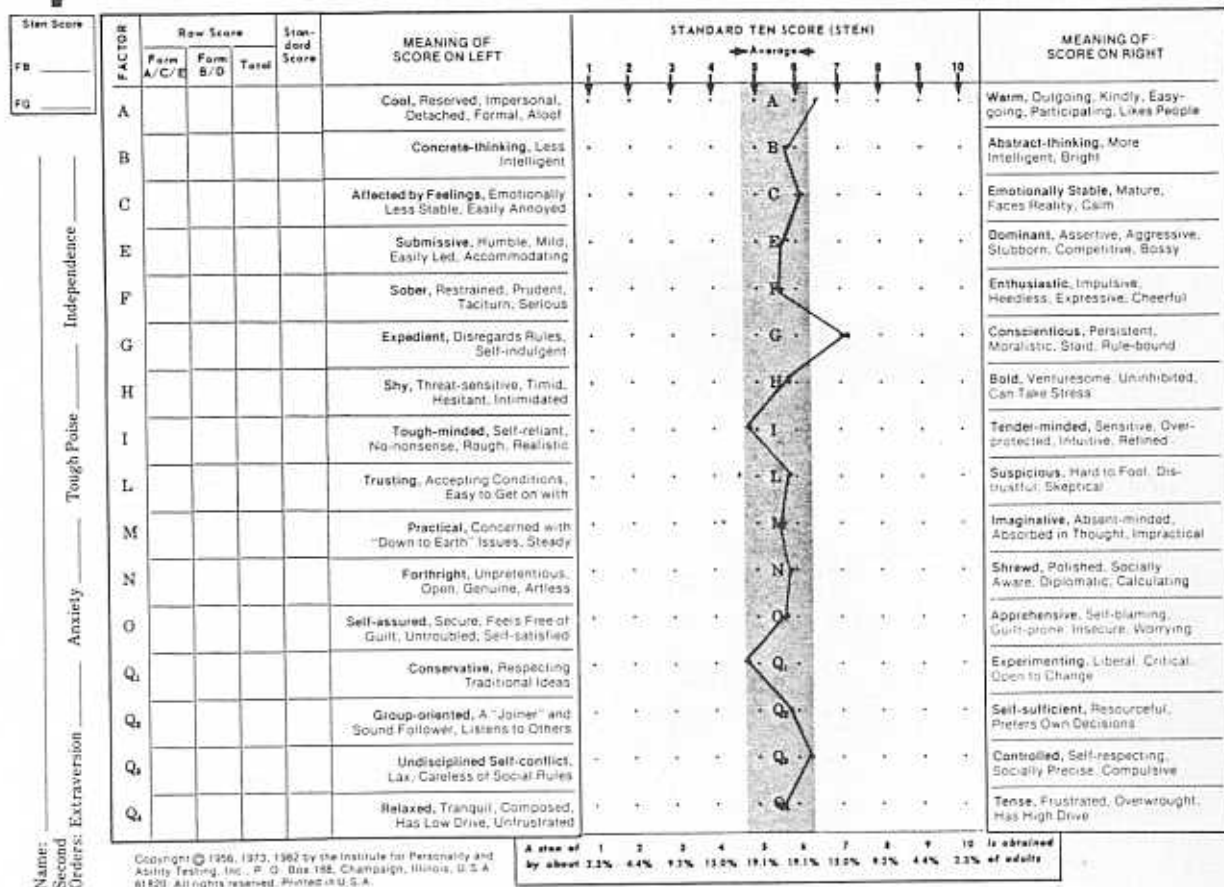


Fig. 1. Mean of entire sample.

significance between information gathered from the Assistant's Biographical Information Form and the 16 PF test.

RESULTS

The mean scores for the entire sample of auxiliaries fell within the range of 4 to 7 standard score points. Fig. 1 displays the 16 PF mean scores for the entire sample; Fig. 2 compares the mean scores of those who would be rehired with the scores of those auxiliaries who would not be rehired.

Student's *t* test comparing part-time and full-time employees showed that part-time employees were significantly older ($t = -2.64$; significance = 0.01) and more imaginative on factor M ($t = -2.15$; significance = 0.03). Employees who received more job orientation were given higher performance ratings ($t = -1.98$; significance = 0.05). Auxiliaries who received higher performance ratings had been employed significantly longer ($t = -2.66$; significance = 0.01) and scored significantly higher on conscientiousness,

factor G, than did those auxiliaries who would not be rehired ($t = -2.61$; significance = 0.01). Comparing high performance employees with those who would not be rehired, the study shows that significantly more orientation had been received by those who would be rehired ($t = -2.23$; significance = 0.03). Those who would not be rehired were found to be significantly younger ($t = 11.91$; significance = 0.0001) and less conscientious ($t = 2.24$; significance = 0.03).

Employees who had formal course work related to their jobs stayed significantly longer than those receiving on the job training ($t = 3.06$; significance = 0.003). Some interesting differences were found regarding the educational achievement of the auxiliaries. The high-school-educated assistants were significantly more rule bound, factor G ($t = 2.36$; significance = 0.02), more suspicious, factor L ($t = 2.38$; significance = 0.02), and more apprehensive and guilt prone, factor O ($t = 1.98$; significance = 0.05), than were the college-educated auxiliaries.

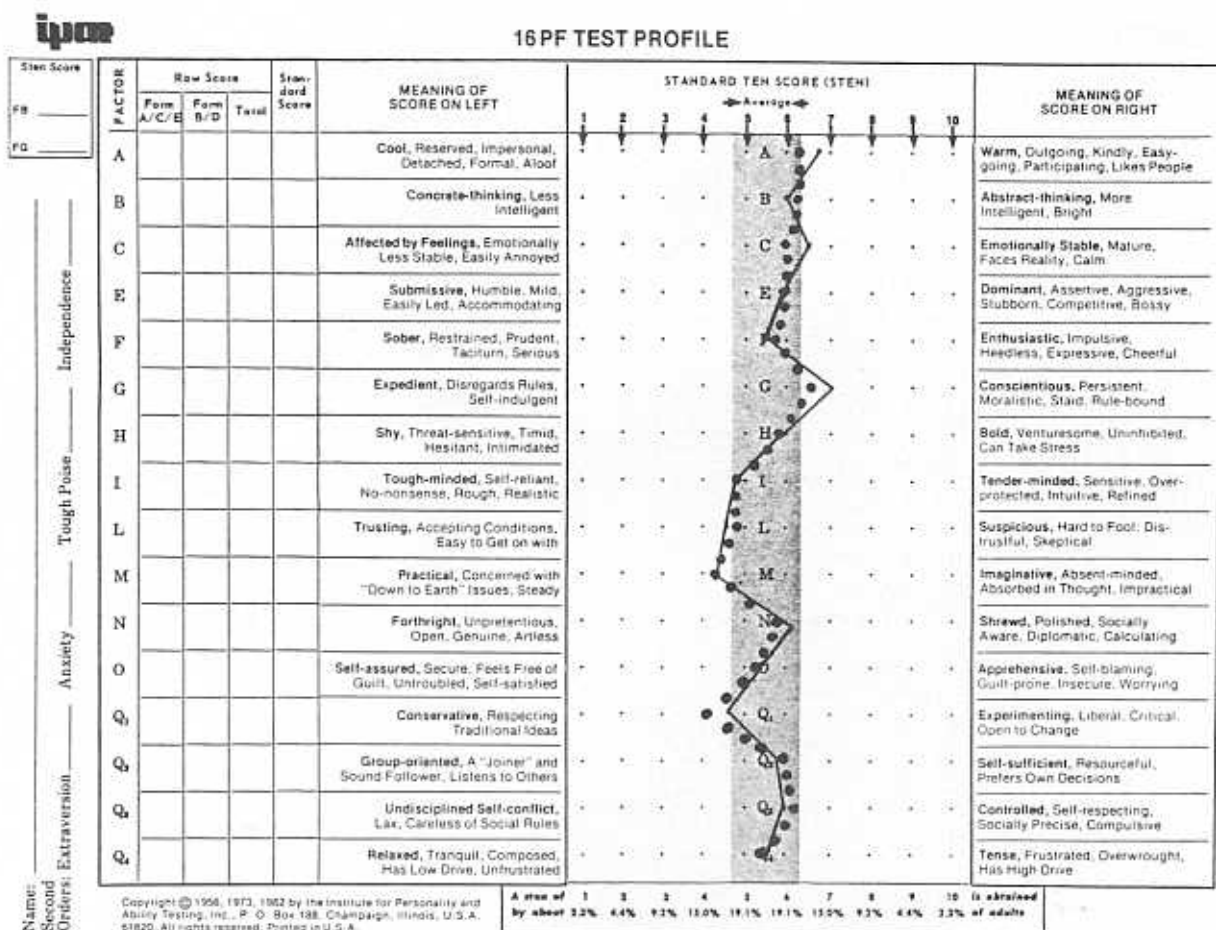


Fig. 2. Mean of those who would not be hired again (●●●) and mean of those who would be hired again (—).

DISCUSSION

The 16 PF score of the average orthodontic assistant does not differ greatly from the 16 PF mean score of the general population. These data suggest that the ordinary orthodontic assistant comes from this large, undifferentiated population group. This is quite different from specialized groups, such as physicians, airline pilots, dentists, artists, and neurotics, who characteristically display personality profiles greatly different from the mean scores of the general population.^{13,14}

Although there seem to be few outstanding characteristics to help the orthodontist distinguish potentially competent personnel from incompetent, we were able to glean some valuable information regarding personality traits that are absent in ordinary, successful orthodontic assistants.

It appears that the best orthodontic auxiliary is not apt to have any extreme scores. For instance, an auxiliary who is too imaginative or not too rule bound will not find it easy to follow repetitive procedures that dominate the orthodontic office. Obviously a certain

level of intelligence is necessary to learn orthodontic assisting skills, but someone with an unusually high level of intelligence may find this job boring or unchallenging.

There were, incidentally, very few persons in this study who scored high on the intelligence scale (factor B). Those who demonstrate unusual submissiveness usually have a great deal of resentment and find it difficult to happily learn from others. Certainly those who are quite tense would be uncomfortable with the exactness required in orthodontics and the pressures of working intimately with others.

A high score on ego strength often can be questioned with the 16 PF test because it is the factor most easily "faked good."^{15,16} An extremely conscientious person might be highly desirable and a high score on this factor should not preclude a person from being selected since greater conscientiousness was the only significant difference between those who would be rehired and those who would not.

It is clear that no single, well-defined, unusual per-

sonality exists for the successful orthodontic assistant. Apparently there is room for many personalities within this professional calling. But these data should alert orthodontists to be sensitive regarding extreme scores, particularly with those factors that could be disruptive in an orthodontic office environment.

Overall, formal job orientation and formal course work seem to be important factors in the selection and retention of auxiliaries. The lack of differences between satisfactory and unsatisfactory personalities was unexpected and somewhat disappointing. It could have been caused by the paucity of poorly rated assistants. But it might have been caused by other unmeasured, meaningful differences. Certainly more research is warranted.

CONCLUSION

This study needs to be replicated with a larger number of poorly rated respondents. This will permit greater discrimination between the two groups. Erridge⁶ discusses the importance of a good match between the personalities of dentist and assistant. This may in fact be the most important factor in the successful selection and retention of orthodontic staff and suggests such a study for the future. Nevertheless it should be encouraging to orthodontists to know that highly satisfactory employees can be found within the large mean population and that a scarce, special personality is not necessary to perform well as a chairside assistant.

REFERENCES

1. Nash KD. Analysis of wages among dental assistants and dental hygienists. Bureau of Economic and Behavioral Research. J Am Dent Assoc 1982;105:677-80.

2. Dentist as employer: how to find the right person. Dent Stud 1977;55:44-5.
3. Henry JL. Increasing recruitment and retention of minority students in health programs—dentistry. J Dent Educ 1980;44:191-4.
4. How to find your super assistant. Dent Stud 1980;58:73-6.
5. Huggins DB, McBride LJ. Selecting a dental surgery assistant/receptionist. Dent Update 1974;10:517-26.
6. Erridge PL. Personnel selection in dentistry. Dent Update 1978;3:153-61.
7. Stone P. If the shoe fits . . . hire her. Dent Econ 1979;69:55-61.
8. Green EJ. Selection: hiring and training of dental auxiliaries. Dent Clin North Am 1974;18:771-88.
9. Dunnette M, Bass B. Behavioral scientists and personnel management. Industrial Relations 1963;2:115-30.
10. Guion R. Personnel testing. New York: McGraw-Hill, 1965.
11. Ghiselli E. Explorations in managerial talent. Pacific Palisades, California: Goodyear Publishing, 1971.
12. Cattell RB, Eber HW, Tatsuoka MM. Handbook for the sixteen personality factor questionnaire. Champaign, Illinois: Institute for Personality and Ability Testing, 1970.
13. Suddick RP, Herbert RJ, DeMarais DM. Personality traits of dental students as determined by the clinical analysis questionnaire. Las Vegas, Nevada: Paper presented at the IADR meeting, March 1985.
14. Cattell RB. Personality pinned down. Psychology Today 1973;7:41-6.
15. Karson S, O'Dell JW. Clinical use of the 16PF. Champaign, Illinois: Institute for Personality and Ability Testing, 1976.
16. Krug SE. Interpreting 16PF profile patterns. Champaign, Illinois: Institute for Personality and Ability Testing, 1981.

Reprint requests to:

Dr. Marianne Westbrook
111 West Clinton
Hobbs, NM 88240