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CAN A PERSONALITY PROFILE BE USED FOR PREDICTION OF PERFORMANCE IN ANESTHESIOLOGY RESIDENCY TRAINING?

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INTRODUCTION. Performance in anesthesiology is the result of interaction of several important factors such as, technical skill, self-discipline, interpersonal skills, knowledge base, judgment, self-control, sympathy, and other personality attributes. Past studies to predict performance in medicine has identified the personality factors as salient and even foreshadowing aptitude and academic talents.¹ In an attempt to develop a predictive profile which could be used to screen resident applicants regarding their "fit" for the speciality of anesthesiology, five medical school anesthesiology programs tested a total of 95 men and women before they began their clinical work.

METHODS. The test consisted of the California Psychological Inventory² (CPI) which consisted of 480 questions to assess 20 positive, ego-enhancing facets of personality. At the end of the first year of residency training, each resident was ranked on a seven-step scale of excellence on ten components of performance by three or more faculty. At the end of the second year, an overall rating scale by four faculty members was used.

RESULTS. It was found that four of the 20 of the aforementioned facets of personality correlated ($p < .05$) with the performance criteria. These were Empathy, Socialization, Achievement via Conformance, and Achievement via Independence.

Fig. 1 shows the resident with the most favorable and least favorable profiles from one center. The descriptive of the most and least favorable was:

| Descriptive Factor | Most Favorable | Least Favorable |
|------------------------------|-----------------|-----------------|
| (1) technical skills | average | below average |
| (2) academic performance | average | average |
| (3) popularity | above average | below average |
| (4) overall performance | above average | below average |
| (5) post program performance | non-problematic | problematic |

Fig. 2 shows a similar profile at another institution again with the most favorable and least favorable profiles. The descriptive of the most and least favorable was:

| Descriptive Factor | Most Favorable | Least Favorable |
|------------------------------|-----------------|-----------------|
| (1) technical skills | above average | below average |
| (2) academic performance | above average | average |
| (3) popularity | above average | below average |
| (4) overall performance | above average | below average |
| (5) post program performance | non-problematic | problematic |

DISCUSSION. In two of the five institutions picked at random, the CPI identified the two weakest residents in training at the time of the study. This finding, plus the indication that residency performance itself can be predicted from the CPI, suggests this may be a worthwhile screening tool for residency selection.

REFERENCES

1. Res Higher Educ 3:301-314, 1975.
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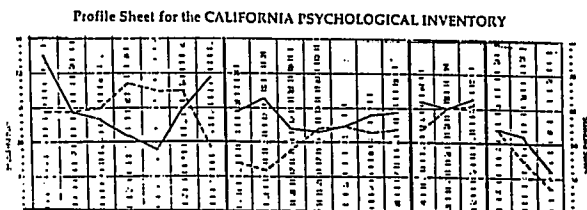


Fig. 1. Most favorable (—); Least favorable (---)

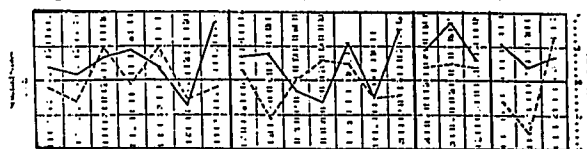


Fig. 2. Most favorable (—); Least favorable (---)

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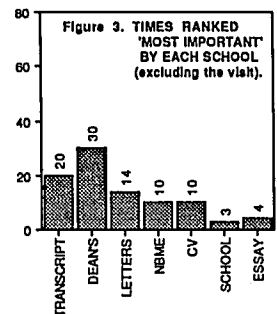
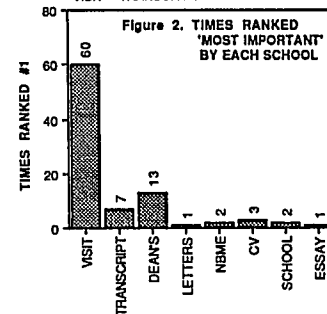
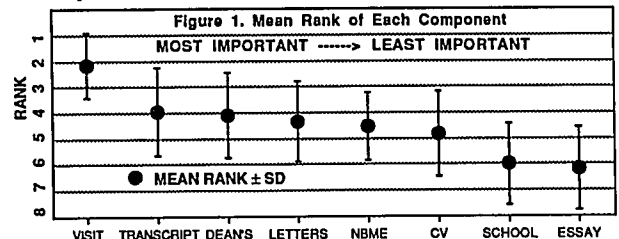
Title: RELATIVE IMPORTANCE OF THE FACTORS USED TO SELECT RESIDENTS: A NATIONAL SURVEY.

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INTRODUCTION: In the process of serving on our resident selection committee, we discovered great diversity concerning the relative importance of each component of an applicants file to the final selection decision. We wondered what, if any, was the national attitude towards the commonly used determinants of resident selection.

METHODS: A letter was sent to the chairman of 114 residency programs (Society of Academic Anesthesia Chairman) asking them to distribute a questionnaire to those responsible for resident selection. Individuals were asked to rank, in order of importance to their ultimate selection decision (1=most, 8=least), the standard components of the applicants file: Essay, CV, Medical School, Board Scores (NBME), Transcripts, Dean's Letter, Letters of Recommendation (Letters), and Visit. After two mailings we received 323 usable (out of 328 received) responses from 91 programs. As there were no significant differences in our results whether they were expressed as a function of the responding individuals or institutions, for the purpose of clarity, multiple individual rankings from the same institution were averaged and reported as a single institutional ranking.

RESULTS: The mean rank for each component of the resident file is presented in Fig. 1. The Visit was considered most important, while the Medical School and Essay were least important. The number of times each category was ranked 1 is presented in Fig. 2; again clearly demonstrating the importance of the Visit. To determine which components are important in the decision to invite an applicant for a Visit, the number of times each component was ranked 1 after excluding the Visit is presented in Fig. 3; with the Dean's Letter, Transcripts, and Letters most frequently ranked first.



DISCUSSION: There are two limitations to this study. First, while we received responses from 80% of the institutions, we have no way of knowing what percentage of individuals responsible for resident selection responded. Second, individuals were asked to rank what we considered to be the standard components of a resident file. These components may not be reflective of the selection process at every institution.

Despite these limitations, we can conclude that the Visit was clearly considered the most important factor in resident selection (Fig 2). This finding indicates that it is reasonable that faculty be trained in interview techniques. If the Visit is removed from consideration, the opinion of others (Dean's Letter and Letters) is highly regarded. The Medical School was given low priority, and we wonder if this reflects a feeling that schools are well standardized, or conversely, that knowledge of the relative strength of graduates from various medical schools is not available. It is noteworthy that the purely subjective (Essay) and objective (Board Scores) components were not highly ranked.

Although our study reveals the national emphasis on the Visit when selecting a resident, great diversity is still present. This diversity is expected, and perhaps should even be encouraged, considering the wide variety of faculty, applicants, and selection procedures. However, it is also possible that this diversity might occur because the standard components of the resident application, other than the Visit, fail to consistently provide the information needed in order to make a confident selection decision.