Family Practice Resident Selection: Value of the Interview

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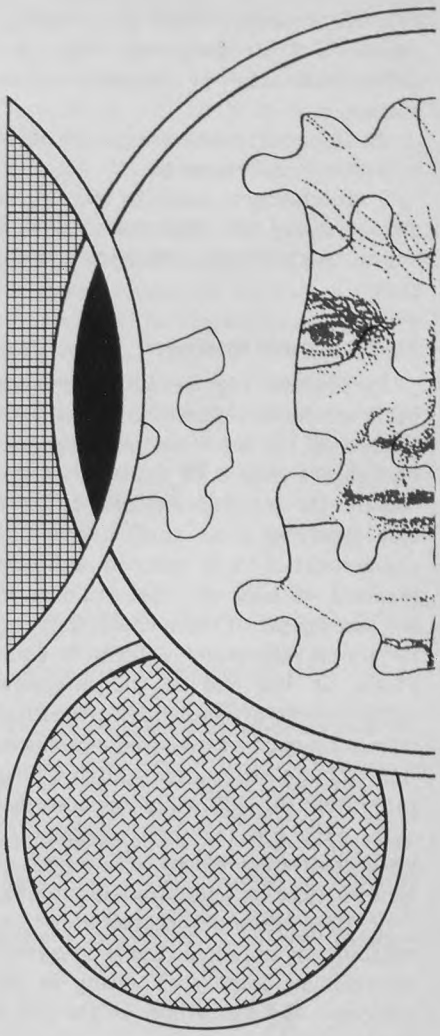

The personal interview is a notoriously unreliable device for choosing among applicants, regardless of occupation. Its use is particularly troublesome in the selection of family practice residents where the number of qualified applicants seeking interviews can exceed the positions available by 40 to one. In this study we found that the use of structured interviews and minimal training failed to increase faculty agreement regarding applicants beyond chance levels. It was further demonstrated that when faculty members rated applicants on several specific traits, the ratings were strongly biased by the observer's general impressions of the applicant.

Based on these findings, the University of Washington Family Practice Program abandoned the formal interview as a selection tool. Instead, a series of open houses was held with the intent of providing applicants with information through presentations, tours, and opportunities for informal conversations.

In recent years, as family practice residency programs have multiplied and become more diverse, there has been a concurrent increase in the number of medical students interested in family practice. Many students come from schools which offer little exposure to the specialty. As a result, it is not easy for residency programs to select students whose goals are in keeping with those of the program.

Personal interviews are widely used as one of the means for selecting residents for almost all family practice residency training programs. In 1973, the Family Practice Residency Program at the University of Washington Hospital interviewed 240 applicants for six positions. This was an immensely expensive and time-consuming task for the Family Medicine faculty. Each applicant was seen by at least one person and often by two or three. An average interview lasted 45 minutes. Thus, during the late summer and fall, approximately 350 man-hours of faculty time were devoted to interviewing. In view of the large amount of time involved, it was decided to study the reliability of interviewer impressions and the validity of the interview as a means of selecting residents.

Several investigations of the personnel selection interview are reported in the literature. Studies dated back as far as 1915[1] have shown with great consistency that two or more interviewers conducting unstructured selection interviews agree with each other on the ranking of candidates at no more than chance levels. Major reviews of research on the reliability and validity of selection interviews were published in 1949,[2] 1964,[3] and 1969.[4] These reviews, confirmed by more recent studies, have led to a number of well-supported conclusions of interest to residency program directors:

1. Interviewers tend to make up their minds early in the interview.
2. Unstructured interviews have extremely poor inter-rater reliability.
3. The content covered in unstructured interviews varies widely from applicant to applicant. The least consistency of content is found in attitudinal material.
4. Interviewers often interpret the same interview information in completely different ways.

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5. Interviewers tend to be influenced in their judgment more by unfavorable than by favorable information.

6. Rapport relationships are idiosyncratic to interviewers.

7. Interviewers tend to develop a stereotype of the ideal applicant and match interviewees with their stereotype.

The Structured Interview

In the last two decades there has been greater acceptance of structured interviews for selection purposes. Although the degree of structure varies, usually the interviewers have reached agreement on some small number of characteristics to be assessed and have received at least minimal training in the assessment of these characteristics. In almost all cases, a form is completed at the end of the interview including the assignment of numerical ratings on each characteristic assessed. Research on structured interviews has supported the following conclusions:

1. Structured interviews tend to yield greater agreement between interviewers than unstructured interviews.

2. Even when acceptable inter-rater reliability is obtained, the relationship between an employee's rating in the interview and his ratings on the job is weak.

3. Training of interviewers tends to increase inter-rater reliability.

4. The only characteristic which is typically rated reliably by minimally trained interviewers is intelligence.

Unfortunately, none of the conclusions reported above was based on the selection of medical residents. Although some data are available on selection of medical students,[5,6] most are based on commercial, civil service, and military studies. To our knowledge, no previous systematic investigation of the interview as a resident selection tool has been reported.

Methods

Based on research findings, it was decided to develop a structured interview approach for the assessment of medical students applying for the Family Practice Residency Program. The interview focused on subjective characteristics not attainable from other sources: (a) motivation, (b) attitude toward patients, (c) interpersonal functioning, and (d) understanding of family practice. A fifth category, exposure to family practice, was later added.

More extensive definitions of these characteristics and a list of questions which might probe each of these areas were developed for the use of interviewers. An interview assessment form was devised including a four-point rating scale and space for comments on each of the characteristics.

Interviews were carried out by the full-time faculty and residents in the Department of Family Medicine. All

Table 1. Pearson Product Moment Correlations Between Ratings on the Same Variable by Two Independent Interviewers

Applicant Characteristics	n	Correlation	Significance
Motivation	45	.10	$p > .20$
Attitude toward patients	33	.14	$p > .20$
Interpersonal functioning	38	.01	$p > .20$
Understanding family practice	39	.11	$p > .20$
Exposure to family practice	10	.02	$p > .20$

Table 2. Correlations Among Ratings by the Same Interviewer*

Interview Selection Variable	n	(Motivation) 1	(Attitude) 2	(Interpersonal) 3	(Understanding) 4	(Exposure) 5
Motivation	184	1.00	.57	.53	.62	.59
Attitude toward patients	182		1.00	.62	.61	.35
Interpersonal functioning	181			1.00	.53	.55
Understanding family practice	184				1.00	.57
Exposure to family practice	181					1.00

*Correlations averaged across interviewers using Fisher r to Z transformation. All correlations are significant at $p < .005$ or better.

six of the full-time MD faculty participated, as well as three residents. Interviewers completed a brief form, rating applicants on each of the five characteristics. These data were analyzed to investigate the reliability of the interviewers and validity of the ratings in the five characteristics.

Results

Agreement among interviewers

Fifty-three applicants were reported on by two or more interviewers, although in some cases interviewers did not feel that they could rate applicants on all five characteristics. Correlations between the ratings of interviewers on the same applicant were calculated to determine the extent of inter-rater agreement. These results are reported in Table 1, which indicates that agreement among interviewers was essentially nil, even for the relatively objective variable of "exposure to family practice."

Halo Effect

A persistent problem of rating scales is the so-called "halo effect," in which raters are influenced on ratings of specific traits by a general impression of the applicant. For example, applicants rated high on one characteristic tend to be rated high in the others, and applicants rated low on one characteristic tend to be rated low in the others. Halo effects are detected by high inter-correlations among the characteristics rated. The correlations presented in Table 2 are tightly clustered and rather high, suggesting a strong halo effect. While there is nothing inherently wrong with general impressions as the basis for interview rating, it was disappointing to find that there was no agreement among interviewers in their impressions, especially following substantial efforts to improve reliability.

Conclusion

The Resident Selection Interview is a multi-purpose tool. While its primary aim is to assess residency candidates, it is also an opportunity for information exchange and, in addition, it serves a public relations or recruiting function. The fact that it performs its primary function of assessment so unreliably, however, raises the question of changing resident selection techniques. Given the limited faculty and financial resources available, non-productive activities of family practice training programs must be curtailed. Based on our experience, the faculty of the Department of Family Medicine at the University of Washington decided to abandon the formal interview as a method of selecting residents in 1974. Students who visited the program were seen in groups and given an introduction to the program as well as ample opportunity to discuss the residency with faculty, residents, and staff. By omitting the formal interview, we attempted to give applicants a better opportunity to learn about us, and we were not misled into believing that we had learned about them.

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