

Behavioral Interviewing

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Objectives

- How do we select the best possible medical students to become residents in our residency program??
- How good is objective data?
- How good are traditional interviews?
- How good is behavioral interviewing?

Typical Criteria Considered:

- Medical school grades
 - Clerkship Honors
 - Basic Science Grades
 - Fourth year electives
- MSPE (Dean's letter)
- Letters of Recommendation
- USMLE
- Research
- Extra-curricular activities
- Personal statement
- Formal Interviews
 - Traditional interviews
 - Behavioral Interviewing
 - Situational interviewing
- AI performance, if applicable

Can Medical School Performance Predict Residency Performance?

- Johns Hopkins
- Looked at 10 years of Ob/GYN residents
 - two administrators evaluated graduated residents as top performers or bottom performers
 - High inter-rater reliability

Hindi, et al J Grad Med Educ. 2010 September; 2(3): 322–326

They looked at:

- medical school attended
- academic degrees obtained
- USMLE Step 1
- grade during 5 core MSIII clinical rotations
- AOA Medical Honor Society
- research experience
 - presentation at a national meeting in the medical field
 - publication in a peer-reviewed medical journal
- self-reported “distinctive talent,” such as being a championship athlete or musician
- leadership position(s) in medical school

Conclusion

- “In a program designed to train academic obstetrician-gynecologists, objective data from medical students' applications did not correlate with successful resident performance in our obstetrics-gynecology residency program. We need to continue our search for evaluation criteria that can accurately and reliably select the medical students that are best fit for our specialty”

Selection of obstetrics and gynecology residents on the basis USMLE scores

- OBJECTIVE: do **USMLE** scores during medical school predict resident-in-training examination scores

STUDY DESIGN: Faculty evaluated 20 graduated residents and compared to several criteria of medical school performance

RESULTS: **USMLE scores positively correlated with CREOG scores. USMLE scores, honor grades in student clinical rotations, and student interview scores did not correlate with the faculty evaluation of resident performance.**

CONCLUSION: **Standardized tests of medical student cognitive function predict the resident's performance on standardized tests.** Selection criteria that are based on other medical school achievements do not correlate with overall performance as residents in obstetrics and gynecology

Comparison of Rates of USMLE Step I Passage, Residency Match and Board Certification

	Pass Group	Fail Group
Pass USMLE Step 1 and 2 before graduation	100%	71%
Match for Residency	100%	89%
Pass USMLE Step 1 and 2 before or after graduation	n/a	82%
Medical license	91%	87%
Board certified in specialty	91%	73%

Pediatric literature

- OBJECTIVE: Does information collected during the NRMP predicts clinical performance during residency?

METHODS Faculty rated the overall quality of 69 pediatric residents and correlated with applications (NBME scores, peds and internal medicine rotations grades; AOA membership; faculty interviews scores)

RESULTS: **No correlation** between faculty ratings and USMLE I scores. There were **weak correlations** between faculty ratings and scores of faculty interviews during the intern application process and *scores on the pediatric in-service examination during PGY-1* There was **no difference** in faculty ratings of residents who were elected to AOA during medical school as compared with those who were not .

- CONCLUSIONS: **Medical school grades, performance on standardized examinations, interviews during the intern application process, and match-list ranking are not predictors of clinical performance during residency**

ED literature

- OBJECTIVES: Are there characteristics available at the time of application to an EM residency that predict future success in residency?

METHODS: EM faculty completed an assessment of graduating EM residents on performance in residency

RESULTS: n=54 The **medical school attended** was the strongest predictor of overall performance in residency in all regression models. The most robust model demonstrated that **MSPE and distinctive factors (being a championship athlete, medical school officer, etc.)** had the most impact on overall performance in an EM residency.

CONCLUSIONS: Applicants from **top-tier medical schools and those with distinctive talents** were more successful in the UCSD EM residency.

Physical Medicine and Rehab Residency

- A U of Washington study investigated predictors of performance for 205 students in a physical medicine and rehabilitation residency
- Results:
 - **clinical residency performance was predicted by clerkship honors grades**
 - probation predicted by failing a basic science course
 - written board performance related to status with a medical fraternity
 - written board failure predicted by failing a basic science course

A Quantitative Composite Scoring Tool for Orthopedic Residency Screening and Selection

- In 64 orthopaedic residents, four predictors were analyzed:
 - USMLE Part I scores, AOA status, junior year clinical clerkship honors grades, Composite scoring tool
- analyzed with respect to four residency outcomes assessments: in-training examination scores, written and oral examinations, and an internal outcomes assessment, attainment of satisfactory chief resident associate (CRA) status
- **Honors grades during junior years clinical clerkships was most strongly associated with satisfactory CRA status ($p < 0.001$)**

Success in **orthopaedic training**: resident selection and predictors of quality performance

- Looked at performance during orthopaedic rotations, USMLE Step 1 score, AOA membership, medical school class rank, interview performance, and letters of recommendation.
- High **USMLE Step 1 scores** have been shown to correlate with high Orthopaedic In-Training Examination scores and improved surgical skill ratings during residency
- Higher numbers of **medical school clinical honors grades** have been correlated to higher overall resident performance, higher residency interpersonal skills grading, higher resident knowledge grading, and higher surgical skills evaluations

Can Admissions Interviews Predict Performance in Residency? Letter of Recommendation?

- Conclusions:
- *[traditional] application interviews do not have sufficient power to predict performance during residency.*
- *Letters of reference may be useful to the extent that they reflect personal experience with the applicant, but differences in ratings of these letters are not great enough to base admission decisions on them*

Summary? Possibly useful.....

- Third year honors grades
- Significant “distinction” that required years of perseverance
 - High level musical performance, swimming team, etc
- Medical school tier attended

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Anything different we can do to improve our chances of selecting a high quality candidate who will be a successful resident in our program?

Behavioral Interviewing Definition

- *“A thorough, planned, systematic way to gather and evaluate information about what candidates have done in the past to show how they would handle future situations.”*

Herbert G. Henneman

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Traditional Interviewing

- Tell me about yourself
- What are your strengths and weaknesses?
- Why are you interested in working for us?
- What would you do if you were having difficulties with another employee on your project?
- What would you do if someone asked you to overlook a problem with your project?
- Where do you see yourself in the next 5 years?

Disadvantages of Traditional Interviewing

- Difficult to score between candidates and **often scored based on the interviewer's personal bias**
- Pretty easy to give the “right” answer
 - Easy to figure out what the interviewer wants to hear
- Hard for inexperienced interviewers to do this correctly
- Variability in interviewers and interviews
- Difficult to score “tell me about yourself”

Behavioral Interviewing Definition

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Basic Assumption:

- The particular behavior we have used in the past to address a situation will be repeated in the future when confronted with a similar set of problems
 - Although we gain experience and abilities over time....
 - Much harder to “tell the interviewer what they want to hear” with behavioural interviewing
 - Less ability of a candidate to sway the interview to what they want you to hear
- Developed over 25 years ago.....
 - Extensively used by many different companies
- Used by many GME programs across the country
- Intrinsically fair interview technique – asks the same questions of every candidate
- Uncovers both positive and negative characteristics
- Results can be easily quantified

How is this Interviewing Different?

Behavioral Questions:

- Describe a time that you had to make an important decision. What was it and how did you handle the situation?
- Sometimes working with others can be challenging. Describe a time when you had to work with a person that you conflicted with and how you resolved the situation.

Potential Benefits of Behavioral Interviewing:

- Allow you to hear the candidate recall real actions and results they have experienced and describe them in detail
- Past behavior can predict future job performance
- Answers can establish a pattern of behavior
- Easier to ask for inexperienced interviewers – less likely to influence personal bias
- difficult for the candidate to make up stories that are not based on real situations
- Top notch candidates expect behavioral interviewing “evidence based selection techniques”
 - Organized, “cutting edge”

Behavioral Interviewing Involves

- **Step One:**
- Identifying what we think are the Knowledge, Skills & Abilities, behaviors, and competencies critical for an outstanding resident in your program/setting, given the unique priorities of your program
 - Allows any organization to create interviewing questions based on qualities that are important to them (not to the interviewee, etc)

Validity

- the interview needs to measure a person's skills for residency or predict job performance
- Improve validity:
 - If the interview process is based on the knowledge, skills, attitudes, behaviors and competencies that we have pre-defined and the interview contains questions that provide evidence about important job skills

Example Characteristics:

- Persistence
- Adaptability
- Team Playing and support
- Communication
- Self and Stress Management
- Action Orientation
- Learning Style
- Decision Making Ability
- Problem-solving Ability
- Self-Awareness

Behavioral Interviewing Involves

- **Step Two:**
- Develop interview questions based on these critical characteristics
- There are many examples in the literatures
 - Mainehealth has already done this
- “Tell me about a hard decision you had to make and how you went about making that decision. Doesn’t need to be clinical”

Behavioral Interviewing – Step 3

- During the entire interview process: ask each candidate the same set of questions
- Alert your interviewers about ‘positive answers’ and ‘red flags’
- “Tell me about a hard decision you had to make and how you went about making that decision”
 - Positive Answers:
 - Uses reason to generate solutions
 - Makes decisions without undue anxiety
 - Solicits appropriate feedback from stakeholders
 - Red Flags
 - Makes unilateral decisions out of scope of authority
 - Postpones decisions
 - Doesn’t look at underlying issues and doesn’t look creatively for solutions

Scoring after the Interview

- Analyze your observations and place each desired behavioral characteristic into one of the following categories:
 - communicated strong evidence of desired behavior/attitude
 - communicated some evidence of desired behavior/attitude
 - did not communicate evidence of desired behavior/attitude
 - communicated evidence that the desired behavior/attitude might be or is clearly lacking

Reliability

- Interviews must generate consistent information for decision making
 - even though there may be many different interviewers
- Structured interview scoring rubric is very helpful – all interviewers ask preplanned questions based on the job requirements, not on “gut feeling”

Can a structured, behavior-based interview predict future resident success?

- **OBJECTIVE:** To determine whether a structured, behavior-based applicant interview predicts future success in an Ob/Gyn residency program
- **STUDY DESIGN:** comparison of behavior-based interview scores of our residency applicants to a postmatch evaluation completed by the applicant's current residency program director. Applicants were evaluated on the following areas: academic record, professionalism, leadership, trainability/suitability for the specialty, and fit for the program.
- **RESULTS:** The overall interview score did not correlate with overall resident performance. Applicant leadership sub-score was predictive of leadership performance as a resident ($P = .042$).
- **CONCLUSION:** Behavioral interviewing can provide predictive information regarding success in an obstetrics and gynecology training program.

The Predictive Utility of Behavior-Based Interviewing Compared with Traditional Interviewing in the Selection of Radiology Residents

- **RATIONALE AND OBJECTIVES.** This study compares the predictive use of measures based on traditional faculty and resident interviews of residency applicants with measures obtained through behavior-based interviewing. A special emphasis was placed on predicting residents' non-cognitive abilities.
- **METHODS.** 151 resident applicants were interviewed using standard interviews by faculty and residents. These residents also were interviewed with an experimental behavior-based accomplishment interview. Four years later evaluations of performance were compared to interview results
- **RESULTS.** Results indicated that scores based on responses given during the accomplishment interviews added considerable predictive utility to the low prediction demonstrated by traditional interviews.
- **CONCLUSIONS.** These findings imply that improving unstructured interviews to obtain, in a more rigorous manner, desired information about non-cognitive abilities may be a key to successful resident selection

- AWESOME opportunity to publish/present your experience!