The Program's POV: Strategies for Structured and Virtual Interviewing

Titania Juang, PhD

Assistant Professor Radiation Medicine & Applied Sciences

UC San Diego Health

RETHINKING MEDICAL PHYSICS



The Program's POV: Strategies for Structured and Virtual Interviewing

Goals of Interviewing

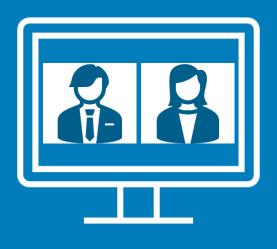
- + Gain a fuller understanding of each candidate
- + Accurately assess candidate suitability
- + Bring in the best person for the job

Structured Interviews

- What is a structured interview?
- What are advantages of structured interviewing?
- How do we develop structured interviews?







Virtual Interviews

- Recommendations
- Rationale
- Challenges & solutions

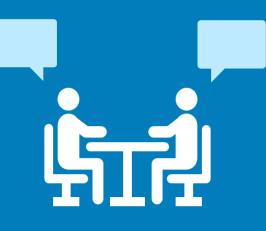
Best Practices

From start to finish!

Components of an Interview

Content

What happens during the interview







How interview performance is assessed

Evaluation

Unstructured Interviews

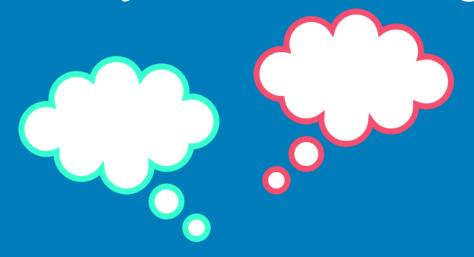
Content

Discretionary Questions



Evaluation

No System for Scoring



- Susceptible to biases (e.g., race, gender, disability)
- May not reflect job requirements

Levashina J, Hartwell CJ, Morgeson FP, Campion MA. The structured employment interview: Narrative and quantitative review of the research literature. Pers Psychol. 2014;67(1):241-293.

Structured Interviews

Content

Evaluation

Standardized Questions



Standardized Scoring Scales



- + Focuses the process on job-related factors
- + Limits the influence of information that can trigger biases

Levashina J, Hartwell CJ, Morgeson FP, Campion MA. The structured employment interview: Narrative and quantitative review of the research literature. Pers Psychol. 2014;67(1):241-293.

What are advantages of structured interviewing?

Structured interviews improve...*

+ Reliability

Consistency of candidate evaluations and the evaluation process.

+ Validity

Accuracy of job-related inferences from the interview.

+ Fairness

Applicants are evaluated on the same metrics.

^{*} Levashina J, Hartwell CJ, Morgeson FP, Campion MA. The structured employment interview: Narrative and quantitative review of the research literature. Pers Psychol. 2014;67(1):241-293.

What are advantages of structured interviewing?

Structured interviews can also...*,*

- + Assess non-cognitive attributes
 - *Examples:* teamwork, adaptability, conscientiousness, communication skills, stress tolerance, professionalism...
- + Reliably predict job performance
 - Including: patient care and clinical performance

- * Marcus-Blank B, et al. Predicting Performance of First-Year Residents: Correlations Between Structured Interview, Licensure Exam, and Competency Scores in a Multi-Institutional Study. Acad Med. 2019 Mar;94(3):378-387.
- ★ Poole A, et al. Predicting performance in Canadian dental schools: the new CDA structured interview, a new personality assessment, and the DAT. Journal of Dental Education. 2007 May;71(5):664-76.

1 Define competencies

2 Create standardized interview questions

3 Develop standardized rating scales

1 Define competencies

resident? medical physicist?

- → What makes a good... healthcare team member?
 - Identify characteristics that have led to successful performance
 - Categorize these into competency areas

Examples *,*

- Interpersonal Skills
- Communication
- Professionalism

- Integrity
- Teamwork
- Motivation & Initiative
- Dependability
 - Respect for Diversity

* Marcus-Blank B, et al. Predicting Performance of First-Year Residents: Correlations Between Structured Interview, Licensure Exam, and Competency Scores in a Multi-Institutional Study. Acad Med. 2019 Mar;94(3):378-387.

UC San Diego Health *

"Results of the 2016 Program Directors Survey," Association of American Medical Colleges, September 2016.

1 Define competencies

Align these to the mission of your program and institution

- resident? medical physicist?

 → What makes a good... healthcare team member?
 - Identify characteristics that have led to successful performance
 - Categorize these into competency areas
- Define "fit " → compatibility with the job and your organization
 - What does a "good fit "mean for your workplace?
 - Define work/job-related characteristics (attitudes, knowledge, skills) and incorporate them into your competency areas

2 Create standardized interview questions ...that can assess the competencies you've identified

Behavioral questions

Can you tell me about a situation when...

...How did you handle it?

- Past behavior predicts future behavior
- What have you done in a past job-related situations?
- Situational questions

Imagine that you are...

...What would you do?

- Intentions predict future behavior
- What would you do in a hypothetical job-related situation?

- 3 Develop standardized rating scales
 - Rating scales can evaluate responses for individual questions, competencies, or overall suitability
 - Consider anchoring your rating scales with written examples for each score value

Example: Structured interview question & rating



RESEARCH REPORTS

Predicting Performance of First-Year Residents: Correlations Between Structured Interview, Licensure Exam, and Competency Scores in a Multi-Institutional Study

Marcus-Blank, Brittany PhD; Dahlke, Jeffrey A. MA; Braman, Jonathan P. MD; Borman-Shoap, Emily MD; Tiryaki, Ezgi MD; Chipman, Jeffrey MD; Andrews, John S. MD; Sackett, Paul R. PhD; Cullen, Michael J. PhD

Author Information ⊗

Academic Medicine: March 2019 - Volume 94 - Issue 3 - p 378-387

doi: 10.1097/ACM.0000000000002429

Example: 1 Define Competency

Competency * **Teamwork – Cooperation**

Behavioral Descriptors *

- + Identifies and utilizes team member strengths to achieve results
- Develops constructive working relationships with others
- + Looks for ways to help people, and pitches in to help others
- Works as part of a team, contributing to the group's effort to achieve goals

Excerpted from Marcus-Blank, B, et al. Predicting Performance of First-Year Residents: Correlations Between Structured Interview, Licensure Exam, and Competency Scores in a Multi-Institutional Study. Acad Med. 2019 Mar;94(3):378-387.

Example: 2 Standardized interview question

BEHAVIORAL QUESTION*

Can you tell me about a situation when you effectively cooperated with team members to accomplish a difficult task?

COMPETENCY
Teamwork –
Cooperation

What challenges did you face?
What strategies did you use to work together?
What was the outcome?

EXAMPLE FOLLOW-UPS

Adapted from work described in Marcus-Blank, B, et al. Predicting Performance of First-Year Residents: Correlations Between Structured Interview, Licensure Exam, and Competency Scores in a Multi-Institutional Study. Acad Med. 2019 Mar;94(3):378-387.

Example: 3 Anchored rating scale

BEHAVIORAL QUESTION *

Can you tell me about a situation when you effectively cooperated with team members to accomplish a difficult task?

Situation Complexity * Behavioral Competency * **Task/Team Difficulty** Teamwork/Cooperation **☐** Extremely Difficult □ Extremely Effective (Task not valued, team uncooperative) (Built rapport, facilitated cooperation, task completed effectively) **Moderately Difficult Moderately Effective** (Built some rapport, task completed (Task not highly valued, team not motivated to cooperate) adequately) **Not Difficult Not Effective** (Task valued, team cooperative) (Unable to build rapport or cooperation, task completed suboptimally)

Adapted from work described in Marcus-Blank, B, et al. Predicting Performance of First-Year Residents: Correlations Between Structured Interview, Licensure Exam, and Competency Scores in a Multi-Institutional Study. Acad Med. 2019 Mar;94(3):378-387.

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Virtual Interviews

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Best Practices

From start to finish!

Virtual Interviews



AAMC Recommendations for 2022-2023 *

- Virtual interviews for all applicants
- Hybrid interviewing strongly discouraged
- + Share interviewing plans clearly and early on

^{*} https://www.aamc.org/about-us/mission-areas/medical-education/aamc-interview-guidance-2022-2023-residency-cycle

Virtual Interviews: Rationale

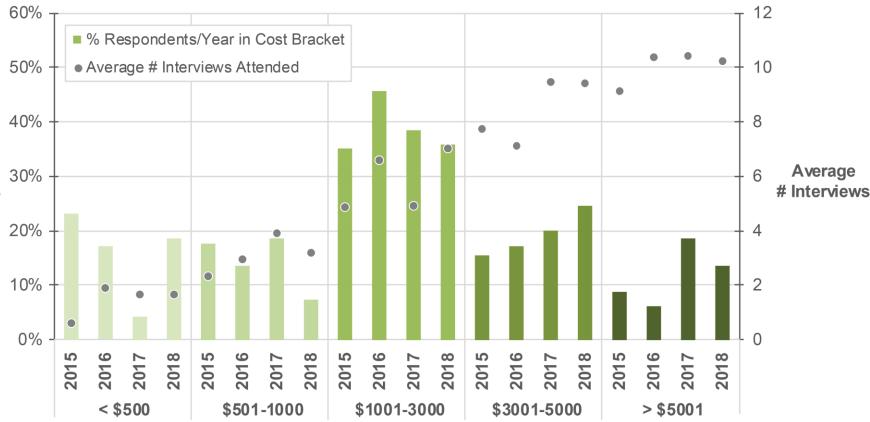


+ Reduction in interviewing costs

Total cost of interviewing categorized by range

76 Respondents

Hendrickson KRG, Juang T, Rodrigues AE, Burmeister JW. The MedPhys match survey: Search criteria and advice for programs and applicants. J Appl Clin Med Phys. 2021 May;22(5):150-167. doi: 10.1002/acm2.13235. Epub 2021 Mar 30. PMID: 33786983; PMCID: PMC8130228.



Virtual Interviews: Rationale

100%

50%

0%

100%

50%

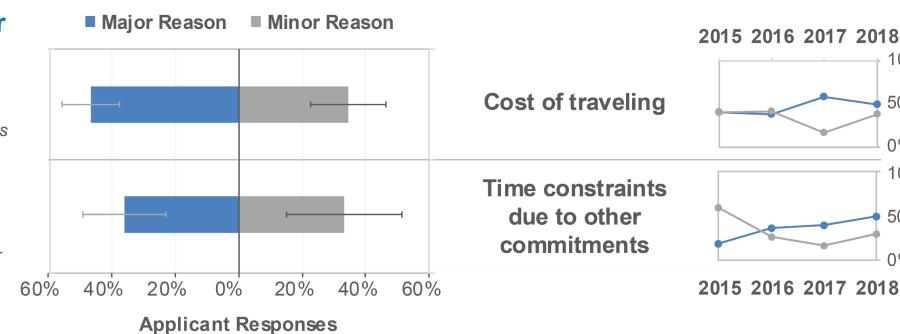
0%

- + Reduction in interviewing costs
- + Reduction in time away from other commitments

(Averaged Percentage, 2015-2018)

Applicants' reasons for declining interview invitations (excerpt)

→ Hendrickson KRG, Juang T, Rodrigues AE, Burmeister JW. The MedPhys match survey: Search criteria and advice for programs and applicants. J Appl Clin Med Phys. 2021 May;22(5):150-167. doi: 10.1002/acm2.13235. Epub 2021 Mar 30. PMID: 33786983; PMCID: PMC8130228.



Virtual Interviews: Rationale *

SI B

- + Reduction in interviewing costs
- + Reduction in time away from other commitments
- + Potential for wider range of applicants

^{*} Huppert LA, et al. Virtual Interviews at Graduate Medical Education Training Programs: Determining Evidence-Based Best Practices, Acad Med. 2020 Dec 8, doi: 10.1097/ACM.000000000003868.



- Limitations in communication/interactions
- Inability to see workplace/city in person
- Potential introduction of bias
 - Increased cognitive load
 - Interviewing environment

^{*} Huppert LA, et al. Virtual Interviews at Graduate Medical Education Training Programs: Determining Evidence-Based Best Practices. Acad Med. 2020 Dec 8. doi: 10.1097/ACM.000000000003868.

Chaisson NF, Ashton RW. Virtual Interviews and Their Effect on Cognitive Load for Graduate Medical Education Applicants and Programs. ATS Sch. 2021 Apr 15;2(3):309-316.



Challenges

Prolonged Monotony ("Zoom Fatigue")

Unable to see workplace/city in person

Solutions

- Schedule breaks
- Keep it short
- Prerecord program/clinic information & send out ahead of time

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Challenges

Technical Issues

(e.g., internet connectivity)

Solutions

- Back-up contacts
- Provide virtual platform instructions
- Paste questions into chat

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Challenges

Eye Contact Nonverbal Cues

Solutions

- Camera at eye level
- Video placement directly under camera
- Face/shoulders/mid-torso visible

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Challenge

Backgrounds

- Distractions
 (virtual or physical)
- Bias introduced due to home/interview space

Solutions

- Keep the focus on you: avoid complex or messy backgrounds
- Test ahead of time

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Best Practices

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Before Interviews

- + Interview dates ► SDAMPP Calendar
- + Inform applicants of...
 - Decision timeline
 - Interviewing plans (virtual/on-site)
- + Send candidates program information



Before Interviews

- + Develop structured interview
- + Train participants
 - Unconscious bias
 - Interview conduct (do's/don'ts)
 - Interview questions
 - Use of rating scales

2021 SDAMPP December Webinar

MedPhys Match Rules and Ethics: Training Modules for Program Directors



www.sdampp.org/2021DecemberWebinar.php

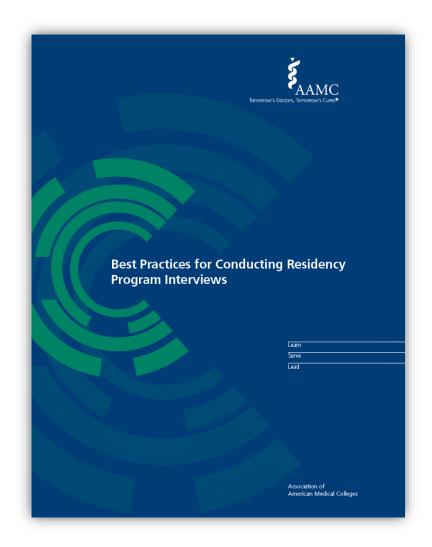
During Interviews

- + Give overview of interview process at start
- Use standardized questions & evaluations
- + Avoid potentially discriminatory topics
- + Schedule in breaks, interaction opportunities

After Interviews

- + Finalize evaluations & ranking in a timely manner
- + Review and evaluate, adjust and improve!
 - Did questions yield relevant information on competencies?
 Differentiate candidates?
 - Did the rating scale(s) work as intended?
 - Do your scores show any sign of systematic bias?

Resources



AAMC Resource

Best Practices for Conducting Residency Program Interviews

The AAMC guide for residency programs as they prepare to interview candidates.

https://www.aamc.org/media/44746/download

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tjuang@health.ucsd.edu



@TitaniumO_2

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- Predicting performance in Canadian dental schools: the new CDA structured interview, a new personality assessment, and the DAT.
 Poole A, Catano, Cunningham DP. Journal of Dental Education. 2007 May;71(5):664-76.
- Enhancing the residency interview process with the inclusion of standardised questions.
 - Black C, Budner H, Motta AL. *Postgrad Medical Journal*. 2018 Apr;94(1110):244-246.

Virtual Interviews

- AAMC Interview Guidance for the 2022-2023 Residency Cycle https://www.aamc.org/about-us/mission-areas/medical-education/aamc-interview-guidance-2022-2023-residency-cycle
- Virtual Interviews at Graduate Medical Education Training Programs:
 Determining Evidence-Based Best Practices.

 Huppert LA, Hsiao EC, Cho KC, Marquez C, Chaudhry RI, Frank J, Goglin SE, Hsu G, Kathpalia P, Khanna R, Kompala T, Rao MN, Bower BA, Trafas V, Santhosh L, Schwartz BS, Babik JM. Acad Med. Academic Medicine. 2021 Aug;96(8):1137-1145.
- Virtual Interviews and Their Effect on Cognitive Load for Graduate Medical Education Applicants and Programs.
 Chaisson NF, Ashton RW. ATS Scholar. 2021 Apr 15;2(3):309-316.

MedPhys Match

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- MedPhys Match Rules and Ethics: Training Modules for Program Directors
 - https://www.sdampp.org/2021DecemberWebinar.php
- Ethical violations and discriminatory behavior in the MedPhys Match. Hendrickson KR, Juang T, Rodrigues A, Burmeister JW. J Appl Clin Med Phys. 2017;18:336–350.

AAMC

- Results of the 2016 Program Directors Survey
 https://store.aamc.org/results-of-the-2016-program-directors-survey.html
- Best Practices for Conducting Residency Program Interviews https://www.aamc.org/media/44746/download