

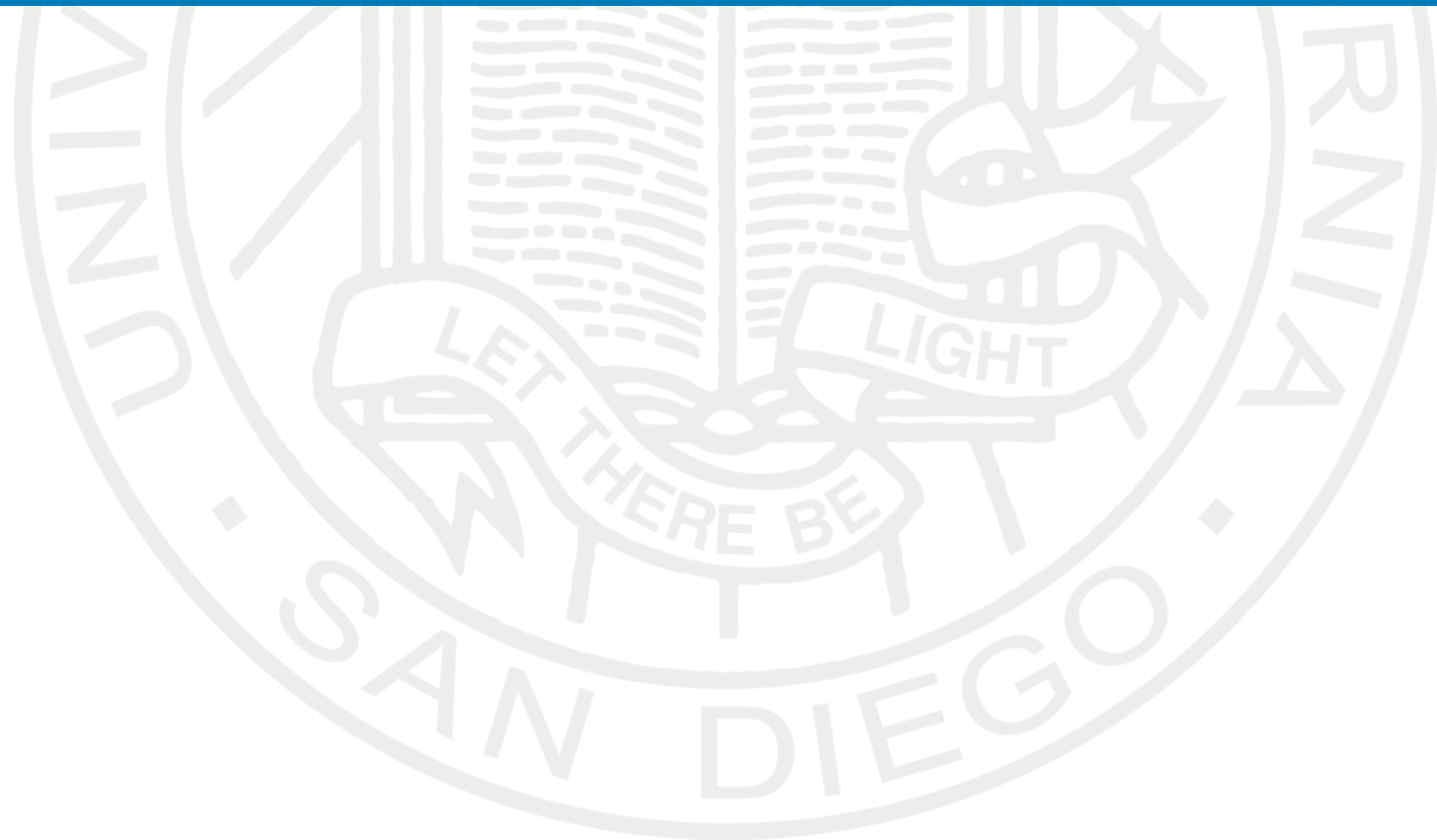
Strategies for Equity, Diversity, & Inclusion in the Medical Physics Residency Recruitment Process

Titania Juang, PhD

Assistant Professor
Radiation Medicine & Applied Sciences

UC San Diego Health

RETHINKING MEDICAL PHYSICS



Strategies for Equity, Diversity, & Inclusion in the Medical Physics Residency Recruitment Process

- + Equitable recruitment practices
- + Diversity within your applicant pool
- + Inclusive toward all candidates

Strategies

- + Adverse Impact Assessment
- + Structured Interviewing

Adverse Impact Assessment

What is **adverse impact**?



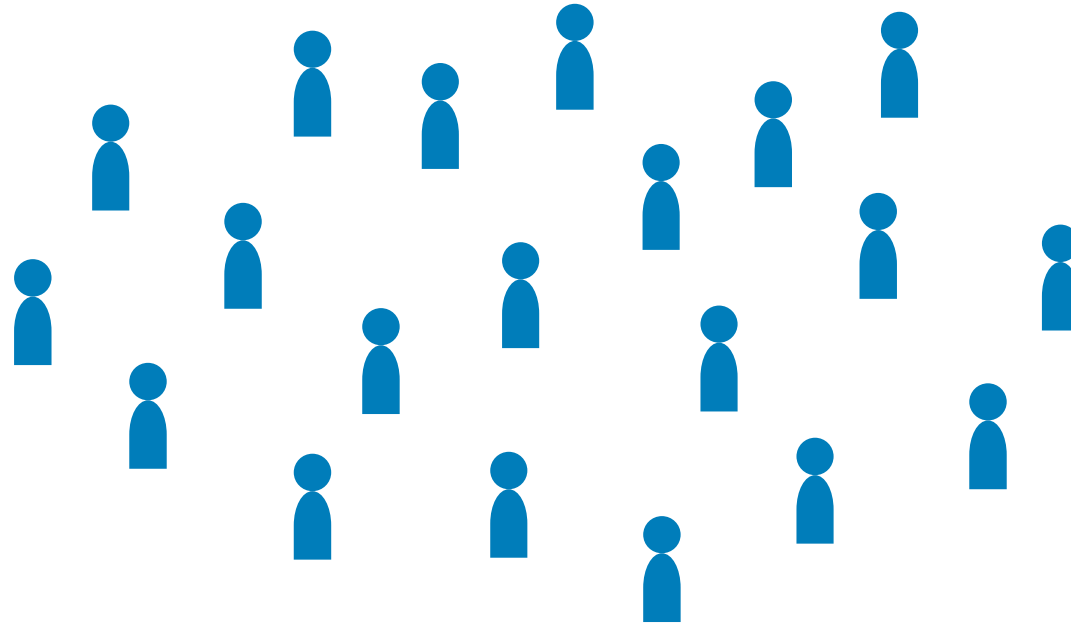
**U.S. Equal Employment
Opportunity Commission**

29 CFR 1607 - UNIFORM GUIDELINES ON EMPLOYEE SELECTION PROCEDURES (1978)

Adverse impact is a **substantially different rate of selection** in **hiring, promotion, or other employment decision** which works to the **disadvantage** of members of a **race, sex, or ethnic group**.*

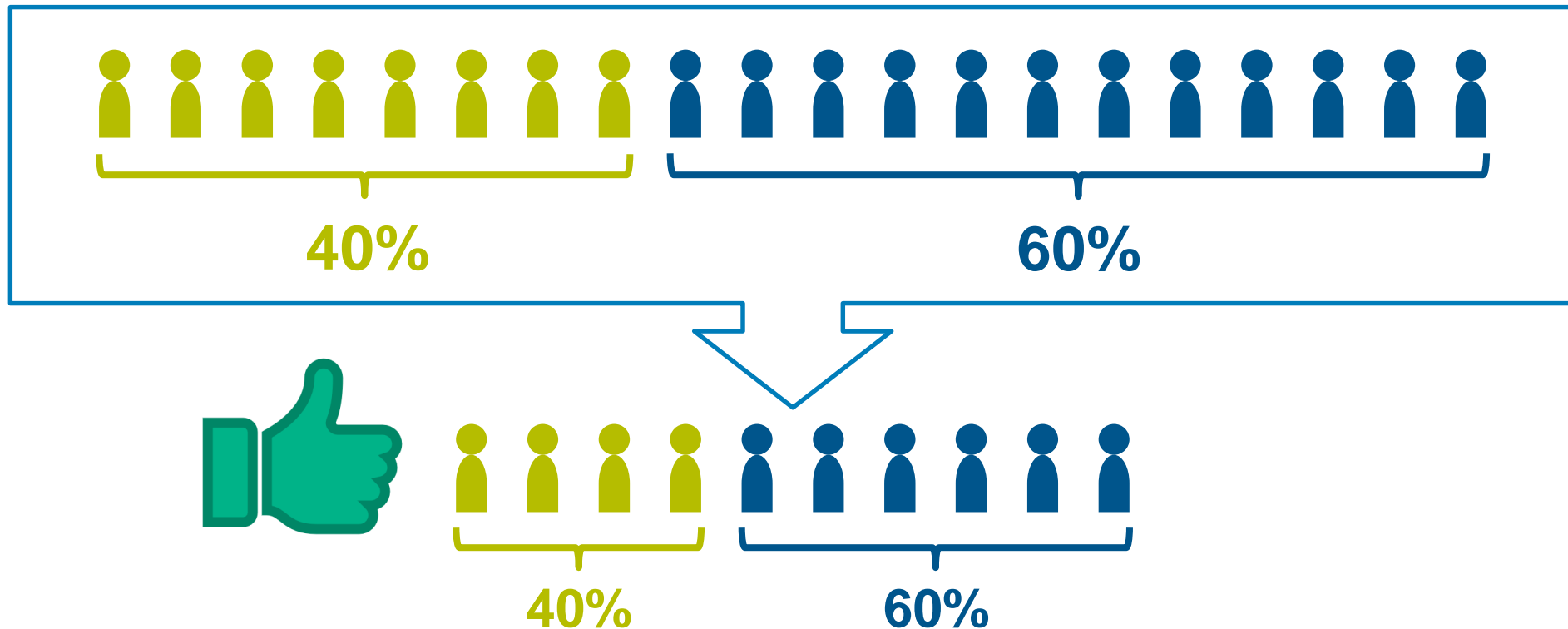
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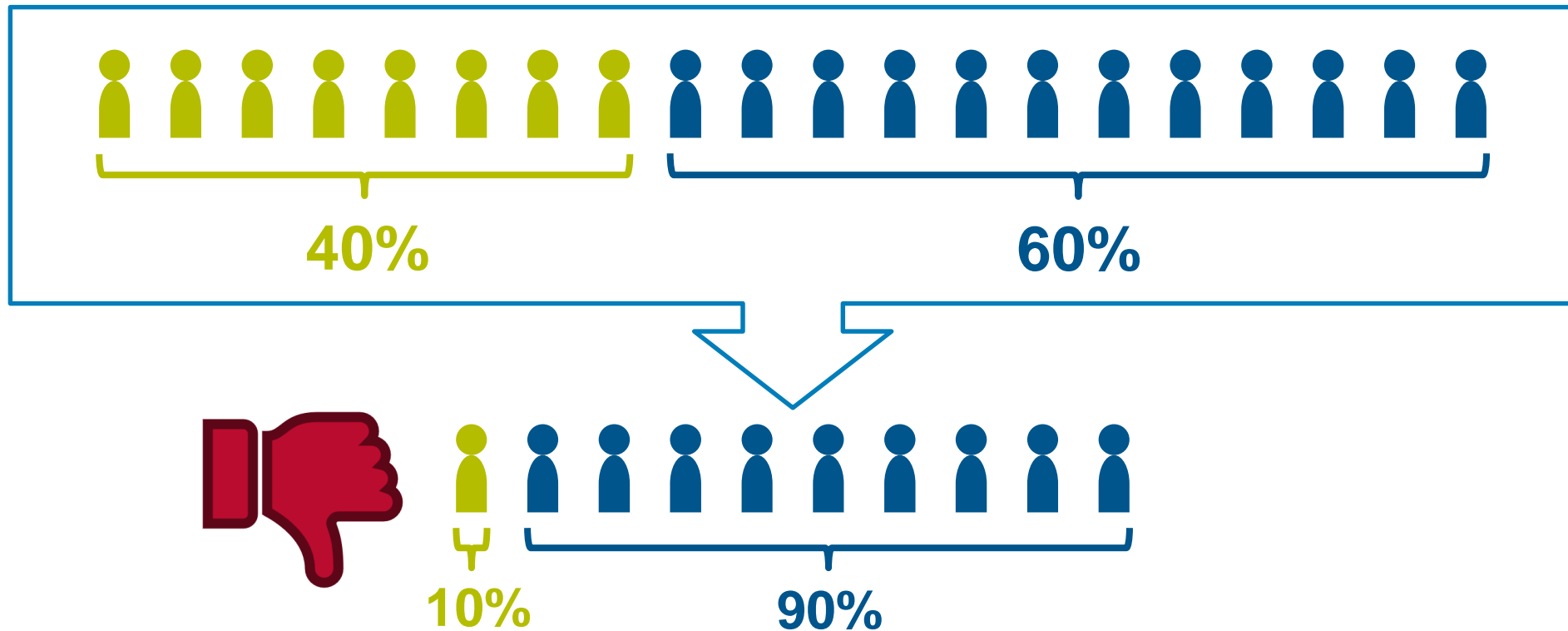
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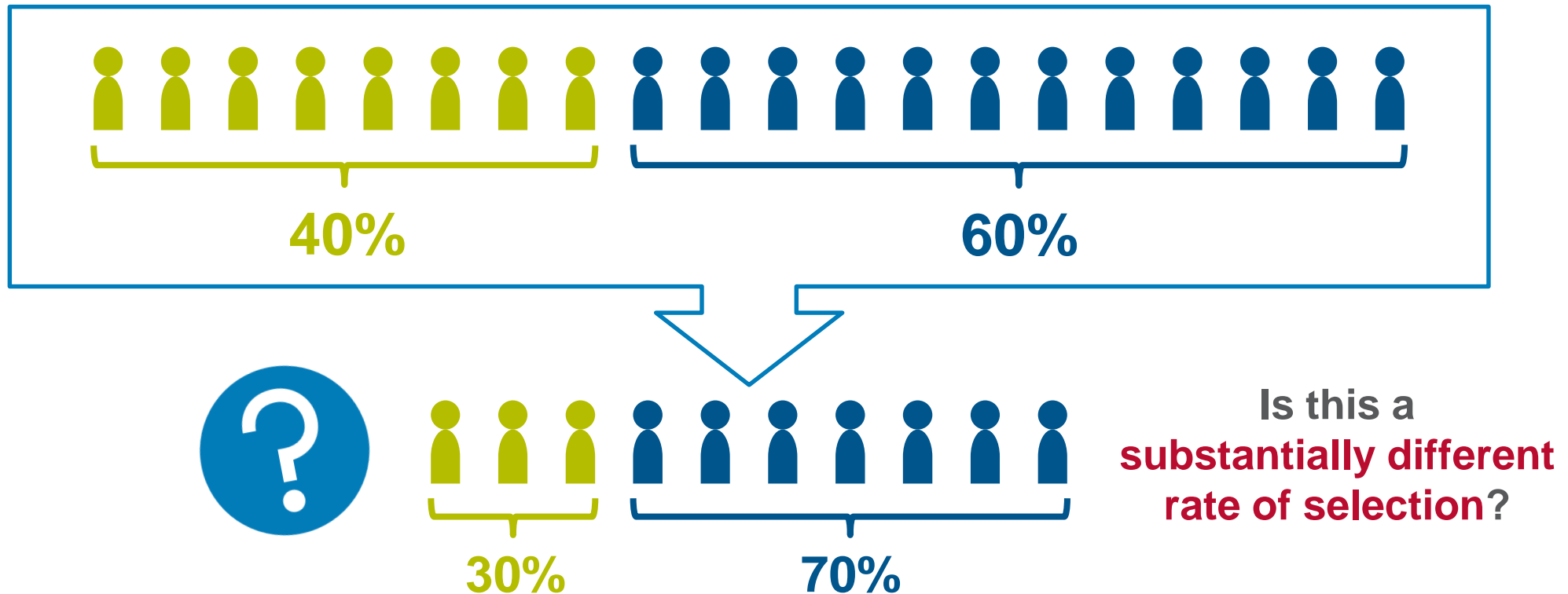
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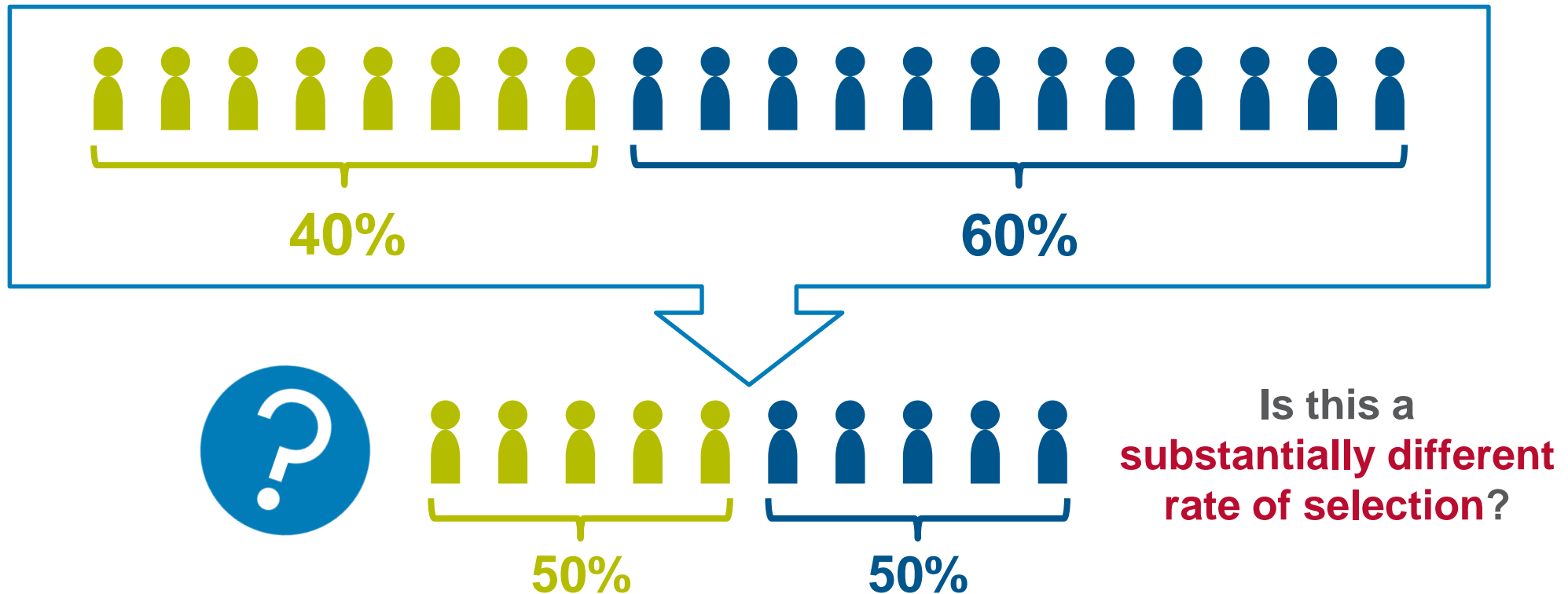
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How do you determine a **substantially different rate of selection**?

Adverse Impact Assessment

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The Four-Fifths Rule

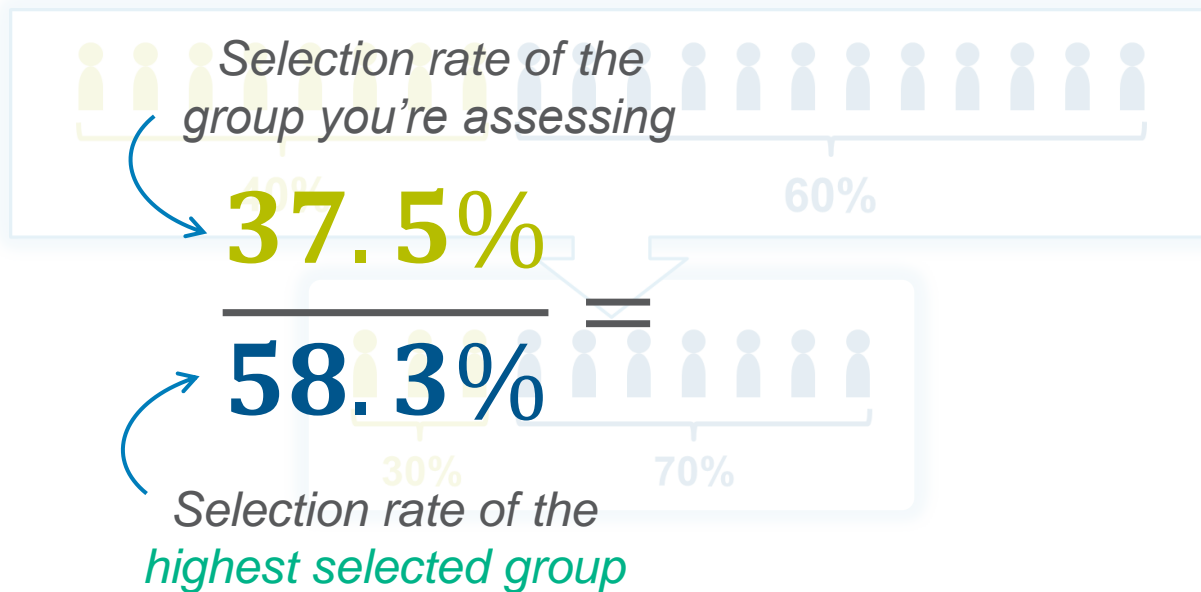
A **selection rate** for any race, sex, or ethnic group which is **less than four-fifths (or 80%)** of the **rate for the highest selected group** will generally be regarded as evidence of **adverse impact**.

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Impact Ratio Calculation



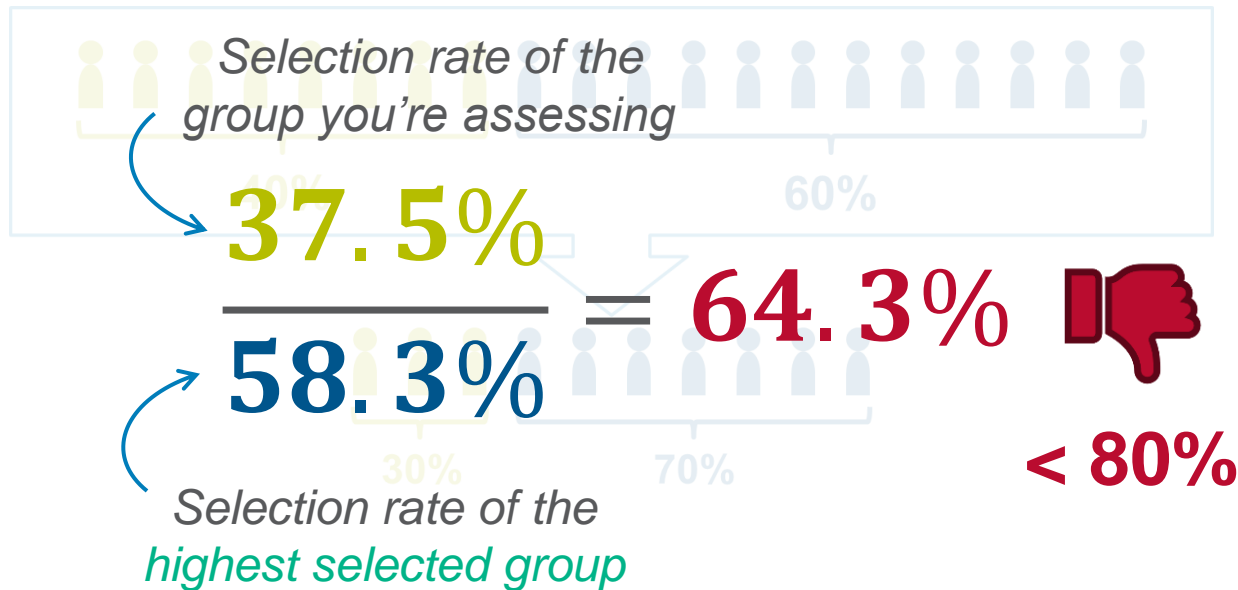
Applicant Pool	Post-Screening	Selection Rate
8	3	37.5%
12	7	58.3%

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Real-Life Example

2021 Residency Application Cycle

Selection rate of the group you're assessing

57.7%

58.3% =

Selection rate of the highest selected group

F 
M 

Prelim Interview	Full Interview	Selection Rate
12	7	58.3%
26	15	57.7%

Adverse Impact Assessment

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Real-Life Example

2021 Residency Application Cycle

Selection rate of the group you're assessing

$$\frac{57.7\%}{58.3\%} = 98.9\% > 80\%$$

Selection rate of the highest selected group



F 
M 

Prelim Interview	Full Interview	Selection Rate
12	7	58.3%
26	15	57.7%

Adverse Impact Assessment

A few notes on the Four-Fifths (80%) Rule *

- Not intended as a legal definition
- Evaluates practical significance
- Groups assessed must be >2% of applicants

Adverse Impact Assessment

What if **adverse impact** is indicated?

- Review and analyze your selection process.

Remember that **discrimination...***

- Can result from neutral employment policies and practices which are applied evenhandedly to all applicants, but which have the *effect* of disproportionately excluding groups of applicants.
- Can occur without discriminatory motives.

Strategies

- + Adverse Impact Assessment
- + Structured Interviewing
 - Content
 - Evaluation

Structured Interviewing

	Unstructured Interviews (Unstandardized)	Structured Interviews (Standardized)
Content	<i>For example</i> <ul style="list-style-type: none">• Different applicants may be asked different questions at the interviewers' discretion.	<i>For example</i> <ul style="list-style-type: none">• The same questions are asked of all applicants.
Evaluation	<i>For example</i> <ul style="list-style-type: none">• No system for scoring responses to questions.	<i>For example</i> <ul style="list-style-type: none">• Question-specific rating scales.

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

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

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.

Structured Interviewing

Tips for creating a structured interview

- 1 Call in the experts!
- 2 Define competencies
- 3 Create behavioral and situational questions
- 4 Develop a rating scale
- 5 Iterate and improve

Structured Interviewing

- 1 Call in the experts!
...and others working on EDI and recruitment
 - ➡ Consider reaching out to...
 - Your HR department
 - Your physician counterparts
 - Colleagues in other departments

Structured Interviewing

2 Define competencies

➔ What makes a good resident?

- 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 program?
- Define *work/job-related characteristics* (attitudes, knowledge, skills) and incorporate them into your competency areas

Structured Interviewing

3 Create behavioral and situational 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?

Structured Interviewing

4 Develop a rating scale

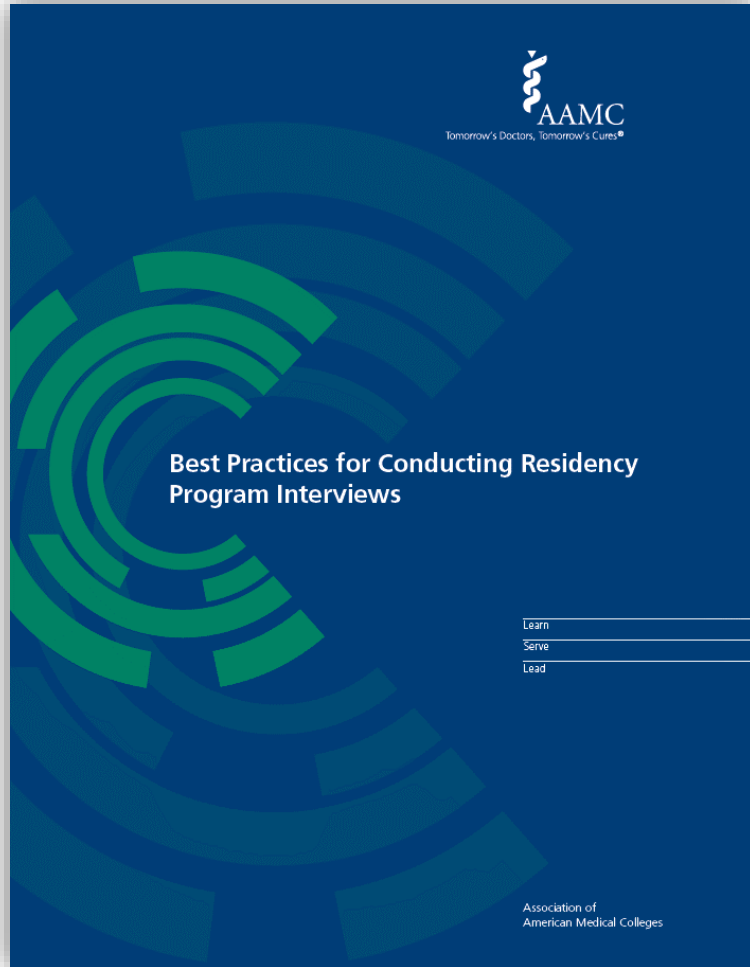
- ➔ Rating scales can evaluate responses for individual questions, competencies, or overall suitability
- ➔ Consider anchoring your rating scales with written examples for each score value
 - Reduces bias
 - Improves validity
 - Improves reliability in ratings between interviewers

Structured Interviewing

5 Iterate and improve

- ➔ After interviews, evaluate your process
 - Did responses to your questions provide relevant information on the competencies you identified?
 - Did the rating scale(s) work as intended?
 - Do your scores show any sign of systematic bias?
- ➔ Adjust your process based on what you've learned
 - Content, evaluations, interviewer training

Structured Interviewing



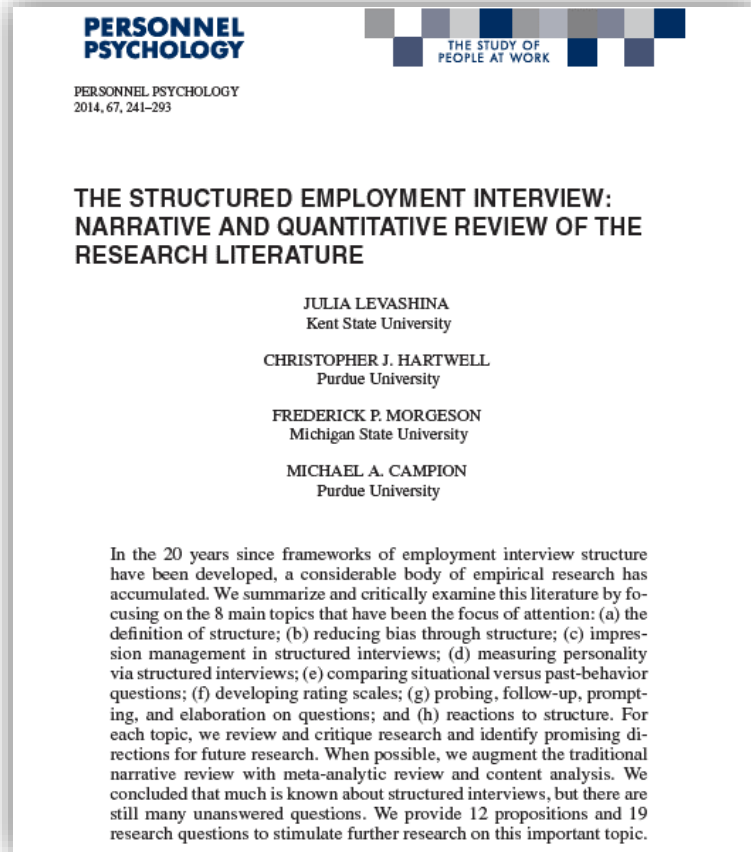
Resource

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>

Structured Interviewing



Resource

The structured employment interview: Narrative and quantitative review of the research literature.

Levashina J, Hartwell CJ, Morgeson FP, Campion MA. Personnel Psychology. 2014;67(1):241-293.
<https://onlinelibrary.wiley.com/doi/abs/10.1111/peps.12052>

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Final Thoughts

- Developing an equitable recruitment process is iterative
- Training is critical
 - Standardized interview processes
 - Implicit/unconscious bias
- Consider how you can ensure your interviewing process and environment is inclusive toward all applicants

UC San Diego Health

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tjuang@health.ucsd.edu



@TitaniumO_2

Acknowledgements

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