The Utility Of The Standardized Letter Of Recommendation Form In Assessing Integrated Plastic Surgery Residency Applicants

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No disclosures
Background

- Plastic surgery among the most competitive specialties\(^1\)-\(^4\)
  - High Step 1 scores, high research productivity\(^17\)-\(^19\)

- Recommendations have important role in matching\(^5\)-\(^7\)
  - Standardized Letters of Recommendation (SLOR) used since 2012\(^9\)

- SLORs reduce vs increase bias, easier to complete/review\(^12\)-\(^14\)

- Do SLOR questions correlate with Match Outcomes
Methods

- Single-Institution study; all 2021 applicants, 100 from 2020
- Inclusion Criteria: First-time applicants, US medical graduates
- Identified Match outcomes using publicly available data sources
- Demographics, Step 1 scores, publications, and SLOR data were recorded
Methods

• 10 “Domain” Questions (Overall, professionalism, etc.)
  • Score from 0-100

• Q6 – Where would you rank this applicant?
  • Converted to bins of 1, 2, … 5

• SLOR ratings were averaged for each applicant

• Unpaired t-tests of 2021 male/female, white/non-white SLOR scores

• Logistic regression modeling of 2021 data to predict Match Outcomes
Results

- Full data available for 215 applicants from 2021
- Avg. SLOR Q6 score, Step 1 score, and no. of pubs were predictive of matching
- Regression Model - Sensitivity: 90.9%, Specificity: 62.9%
- Prediction results of 2020: 96% accuracy in predicting matched applicants
Additional Findings

- None of the 10 domain questions were predictive
  - Subject to score inflation

Avg. applicant SLOR responses from the 2019-20 and 2020-21 application cycles. Error bars 95% confidence interval. * p<0.05 and ** p<0.01.

School of Medicine
Additional Findings

• Females were scored higher in 2 domains, no differences based on race

Avg. applicant SLOR responses from 2020-21 based on applicant sex (Left) and self-identified race (Right). Error bars 95% confidence interval. * p<0.05
Conclusions & Discussion

- Just one question on the Plastic Surgery SLOR is highly predictive of matching
  - Reflective of the actual Match process – answered before the Match

- The utility of the remaining questions on the SLOR are limited by score inflation

- No significant demographic bias observed
Limitations & Next Steps

- Study does not quantify interview performance, applicant rank list structure, etc.
- Other underrepresented groups not included (first-generation, LGBTQ+)
- Does not include evaluations from Narrative LORs (NLOR)
- Step 1 is now P/F

- Time to reframe Letters of Recommendation as “Letters of Evaluation”
- Identify ways to reduce SLOR score inflation
Thank you

Scan to review the references and to read the full manuscript on this work.