How do Medical School Experiences Differ between Students from Low- vs. Higher SES Backgrounds? A Multicenter U.S. Survey Study.

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Introduction

- Medical school diversity efforts often focus on **visible identities** (e.g., race or gender).
- Socioeconomic status (SES) is an **invisible aspect** of diversity & rarely studied.
- Low-SES students remain significantly **underrepresented** in medicine, and little is known about their experiences.[1-3]
- Aim: Evaluate how **medical student experiences** differ between low- and higher-SES medical students.

Methods

- **March-May 2021**, students from 14 LCME-accredited US medical schools were surveyed.
- **88-item survey;** multiple choice, standardized survey tools, and open-ended questions.[4,5]
- Low-SES defined as any of 3 measures below:
  1) **AAMC Employment-Occupation SES-disadvantaged indicator** based on parental education and occupation[6]
  2) **Parental income** during childhood in the bottom two of household income quintiles[7,8]
  3) **Self-classification** into low- or low-middle class SES categories[7]
- Low-SES students' responses **compared** to higher-SES peers.
- Chi-squared tests & multivariable generalized estimating equation models adjusting for confounding covariates.
- All analyses done in R 3.6.1.

6,836 eligible students → **1,555** responses (**22.7%** response rate) → **1,280** responses with SES data (**31%** low-SES)

Results

Respondent demographics

	Low-SES, N (%)	Higher-SES, N (%)	p-value*
Age			0.44
≤ 25 years old	259 (36.8)	445 (63.2)	
> 25 years old	225 (39.1)	351 (60.9)	
Gender			0.24
Female	281 (36.0)	500 (64.0)	
Male	195 (40.6)	285 (59.4)	
Ethnicity			<0.001
Hispanic/Latino	74 (57.4)	55 (42.6)	
Not Hispanic/Latino	410 (35.6)	741 (64.4)	
Race			<0.001
Asian	102 (35.7)	184 (64.3)	
Black	54 (56.3)	42 (43.8)	
White	303 (34.3)	580 (65.7)	
Other	56 (64.4)	31 (35.6)	

* Chi-squared test

Representative quotes:

"I feel **wholly out of place** coming from a low SES background. Some of my classmates' cars cost the same as my parent's home"

"[Low-SES students] don't have **access** to the same **advice and social circles** of higher SES students. This puts them at a great disadvantage"

"Nothing specific about the school but more so about the system. The idea that we are **expected to pay** for away rotations, NBMEs, study resources [...], and travel for interviews [...] **is criminal**"
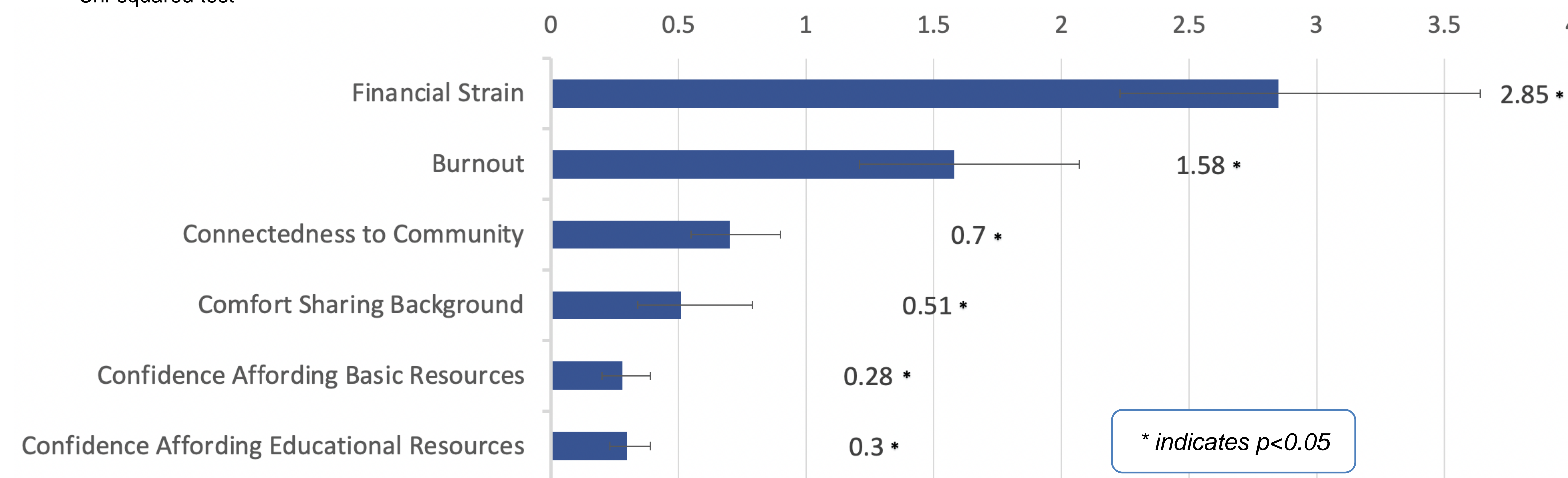

Figure 1. Multivariable Logistic Regression Results for Low-SES vs. Higher-SES Medical Students' Responses to Questions about Medical School Experiences. Only Odds Ratios (ORs) for SES Status Shown for Each Question.
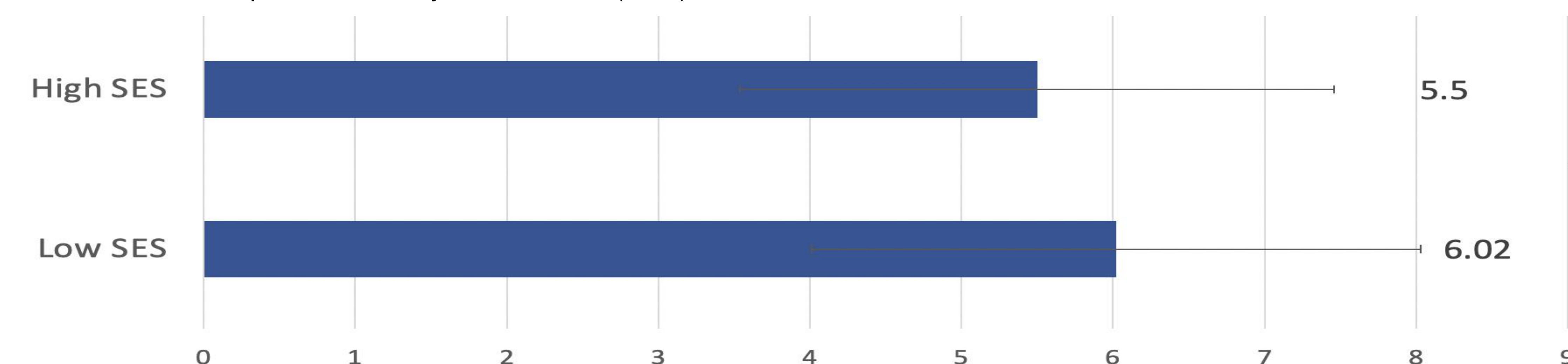
- Financial Strain: 2.85 *
- Burnout: 1.58 *
- Connectedness to Community: 0.7 *
- Comfort Sharing Background: 0.51 *
- Confidence Affording Basic Resources: 0.28 *
- Confidence Affording Educational Resources: 0.3 *

* indicates p<0.05

- High SES: 5.5
- Low SES: 6.02

Figure 2. Multivariable Linear Regression Results for Low-SES vs. Higher-SES Medical Students' Responses to the Standardized Loneliness Questionnaire.

Conclusions

- Low-SES students are **academically, financially, and socially** disadvantaged compared to higher-SES peers.
- Low-SES students have **higher burnout & loneliness rates**.
- Underscores importance of data-driven recommendations to provide low-SES students needed support & promote diverse physician workforce.
- **Limitations**: no uniform qualifier to define low-SES, distribution during COVID-19 pandemic could result in bias, relatively low response rate.

Recommendations to address SES diversity

Financial Support	Provide financial support targeted to low-SES students for not only room and board, but also **resources and experiences** that are needed in medical school.
Academic Resources	Make **exam preparation resources** (e.g., Step 1, shelf) available so that students who cannot afford them are not at a disadvantage.
Social Support	Create & raise **awareness** of identity groups for low-SES students, organize **events** targeted towards low-SES students.
Mentorship & Networking	Connect students to **faculty** from similar backgrounds so students feel less intimidated interacting with faculty & networking.
Connectedness & Belonging	Foster a sense of **community** & provide training to address **microaggressions** low-SES students may experience due to lack of awareness from peers.

Acknowledgments

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