

SIMULATED PATIENT IMPLICIT BIAS OF MEDICAL STUDENT GENDER

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INTRODUCTION

There are few areas of literature that study patients' implicit bias towards physicians. Previous studies report no statistical difference in patient satisfaction when controlled for physician's assigned gender. However, other literature suggests female physicians, more than their male counterparts, routinely establish a more patient-centered care. This facilitates a multifaceted discussion about gender bias in patient evaluations of their physician. Despite the vital role of implicit bias in the healthcare setting, there is little research done on this subject matter. The current project strives to fill this gap in the literature by studying simulated patient feedback of medical students in the context of an Objective Structured Clinical Examination (OSCE), a common assessment tool used to prepare students in preclinical medical education.

AIMS

- Better understand how medical students' genders correlate to how their simulated patients (SPs) perceive them.
- Utilize directed content analysis to organize simulated patient feedback as "positive" or "negative" comments.
- Compare performance of medical students based on their assigned gender and their SP feedback.

HYPOTHESIS

Null Hypothesis (H0): There is no association between medical student gender and simulated patient feedback sentiment.

Alternative Hypothesis (Ha): There is a significant association between female gender and positive feedback sentiment.

METHODS

Design

Single-center, retrospective, qualitative cohort study

Participants

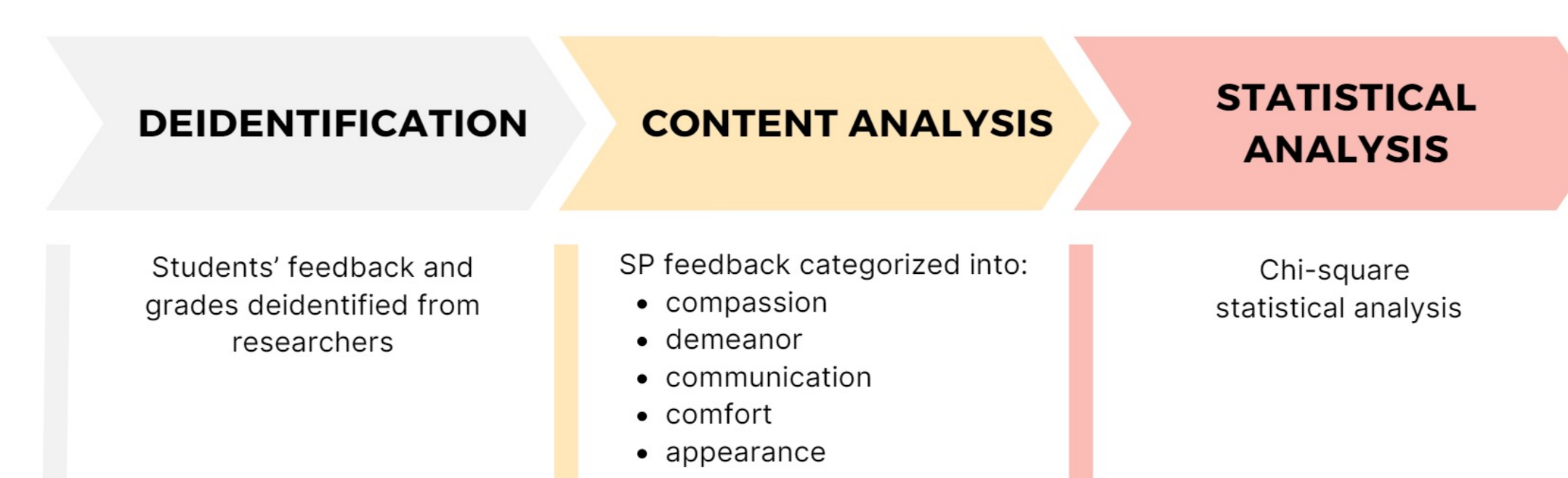
90 first year osteopathic medical students

21 simulated patients

Procedure

8 OSCEs over 1 academic year resulting in 576 comments

Figure 1. Methods Flowchart



RESULTS

Table 1. Chi-square test of independence on SP feedback and medical student gender

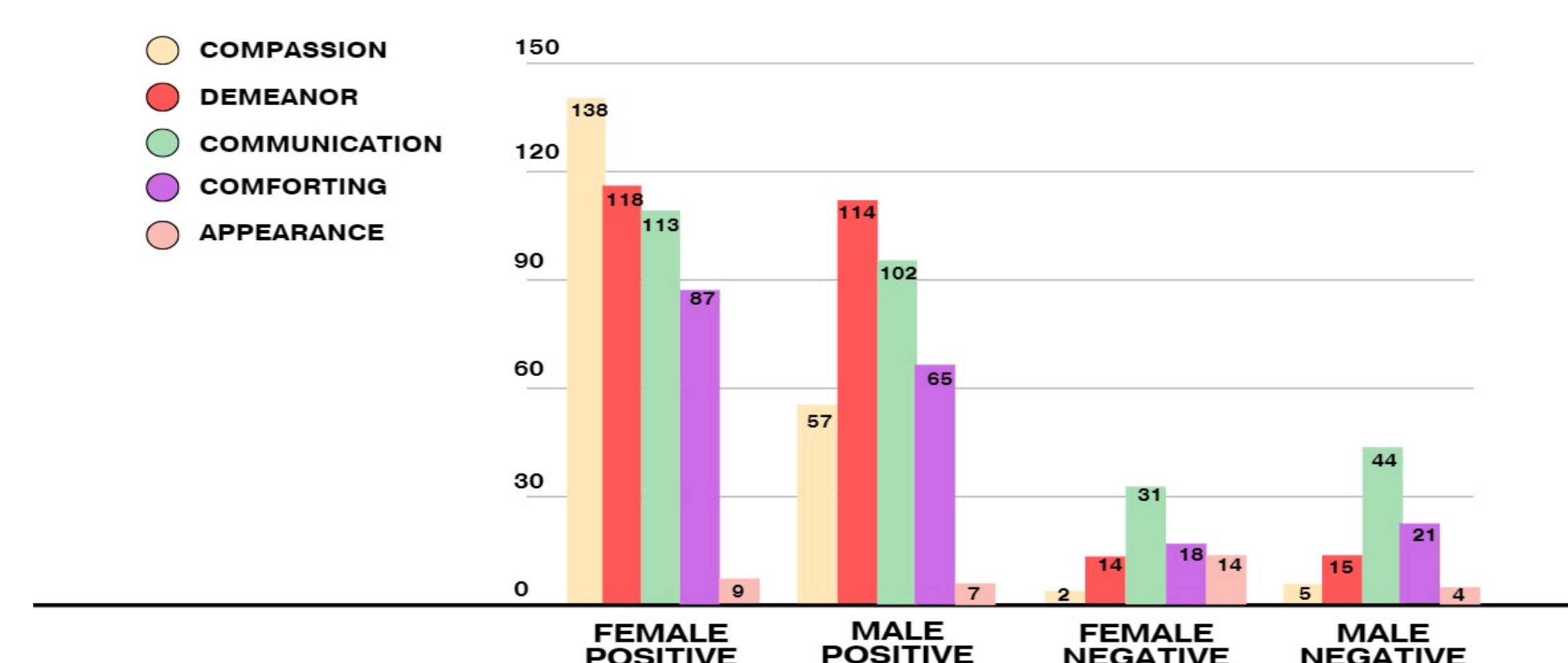
	FEMALE POSITIVE X ²	MALE POSITIVE X ²	FEMALE NEGATIVE X ²	MALE NEGATIVE X ²	X ²	P-VALUE
COMPASSION	0.06	0.14	1.68	3.78	5.66	0.017391
DEMEANOR	0.0038	0.0039	0.0303	0.0310	0.0690	0.792836
COMMUNICATION	0.36	0.36	1.05	1.03	2.80	0.09412
COMFORTING	0.142	0.173	0.552	0.674	1.54	0.214593
APPEARANCE	0.31	0.64	2.79	0.57	4.31	0.037983

Figure 2. Examples of feedback given to female medical students

"Compassionate" Feedback
 "I felt valued as she explained her procedures and her next steps, as it seemed to include me in the care. I appreciated her obvious effort at warming her hands, which demonstrated compassion."
 "Excellent bedside manner. Was attentive to all I said, demonstrated genuine concern, spoke very compassionately. Was compassionate also in her assessment as she helped with positioning."

"Appearance" Feedback
 "Shirt was a little low. I could see her cleavage when she did the exam."
 "Shirt was wrinkled and hair was messy."
 "She had long hair with it pulled back with some hair strands hanging by face. She would at times brush the hair out of her eyes."
 "Forgot she was wearing her backpack until halfway through, then took it off. Humorously compared herself to Dora the Explorer."

Figure 3. Bar graph depicting positive vs. negative feedback sentiment amongst female and male medical students



DISCUSSION

This project investigated the role of gender bias on SP experience and student doctor assessment in the realm of medical education. The data revealed a statistically significant association between medical student assigned gender and feedback sentiment from SPs, on the topics of compassion and appearance. Consistent with cited studies, SPs gave female medical students more positive "compassionate" feedback than male medical students. Interestingly, SPs also gave female medical students more negative feedback regarding "appearance" in comparison to their male counterparts. How can these findings be explained? Female physicians tend to be more emotionally expressive, as seen by this project and by societal norms. Unfortunately, this stereotype is often discounted as expected female behavior and not acknowledged for being effortful patient-centered care. At the same time, female physicians are often criticized, likely due to universal beauty standards, for their appearance in the clinic setting, while male physicians are seldom ostracized in this way. It's possible that cultural norms, patient population, and other social determinants of health congruently influence these implicit biases based on assigned gender. This project aims to challenge these biases and ultimately diminish their detrimental effects on physicians, enhancing the quality of care they're able to provide to patients.

LIMITATIONS & FUTURE DIRECTIONS

All studied medical students identify as their assigned gender. As a result, this research is not representative of the general population and does not account for a potentially flawed perception of their medical student's gender. Future research can explore the relationships between SP gender, medical student gender, and feedback sentiment to assess same/differing gender patient-physician relationships.

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