The Influence of Emergency Physician Gender on Quantitative and Qualitative Patient Experience Surveys

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Introduction

- Patient experience surveys (PES) may be used to evaluate emergency department (ED) physician performance
- PES quantitative scores may be subject to gender bias
- Few studies have evaluated PES free-text comments

Objectives

1. Quantify the association between ED physician gender and quantitative scores
2. Quantify the association between ED physician gender and communal versus agentic descriptors used in free-text comments

Methods

- Retrospective study in UC Davis ED from 2019-2021
- ED encounters with completed physician sub-scores or free-text responses regarding ED physicians.
- Primary outcomes: Mean quantitative physician score
- Secondary outcomes: Use of positive communal and positive agentic descriptors
- Data analyzed with descriptive statistics followed by multivariable regression models including patient factors, physician factors, and operational factors

Sample Coding Guide

Communal Positive**:** caring, empathetic, friendly
Communal Negative: condescending, disrespectful, insensitive, judgmental
Agentic Positive: competent, experienced
Agentic Negative: inexperienced, not knowledgeable

Results

Table 1: Patient and Physician Characteristics

Characteristic	Quantitative Cohort n=3776 Number, %	Qualitative Cohort n=849 Number, %
Patient Demographics		
Sex		
Female	2,109 (56%)	489 (58%)
Male	1,662 (44%)	359 (42%)
Unknown	5 (<1%)	1 (<1%)
Race/Ethnicity		
American Indian or Alaska Native	11 (<1%)	3 (<1%)
Asian	311 (8%)	60 (7%)
Black or African American	363 (10%)	84 (10%)
Latinx/Hispanic	692 (18%)	153 (18%)
Multiple	268 (7%)	63 (7%)
Native Hawaiian/Other Pacific Islander	37 (1%)	6 (1%)
Other	273 (8%)	58 (7%)
Unknown/Declined	54 (1%)	17 (2%)
White/Caucasian	1762 (47%)	405 (48%)
Age	50 (27-65)*	50, 23-64*
ED LOS, hours	4.7 (3.2-6.9)*	4.8 (3.3, 7.1)*
Numeric Score	4.4, 0.9**	4.3, 1.2**
Attending Physician Demographics		
Gender		
Man	2,104 (56%)	489 (58%)
Woman	1,672 (44%)	360 (42%)
Race/Ethnicity		
Asian	540 (14.3%)	127 (15%)
Black	127 (3%)	19 (2%)
Multiple	102 (3%)	24 (3%)
Non-Hispanic White	3,007 (80%)	679 (80%)
Years in Practice	15, 10-23*	15, 10-23*

*Median (25th, 75th percentile)
**Mean, standard deviation

Results

Figure 1: Chart of Included Encounters

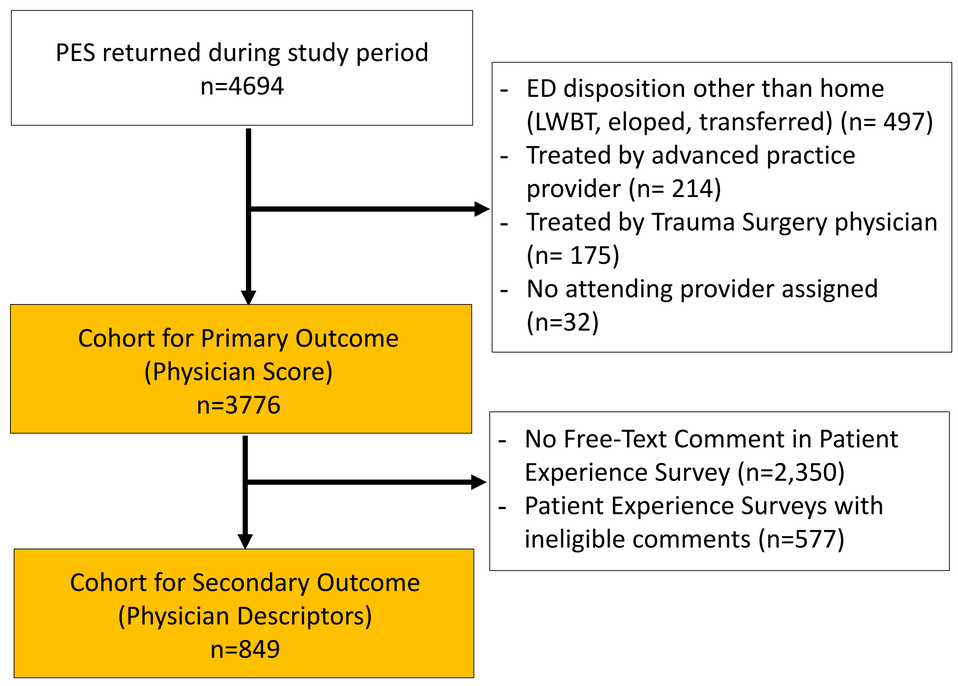

Table 2: Quantitative Scores by Physician Gender

Physician Gender	Average Quantitative Score (95% CI)
Women	**4.48 (4.43-4.52)**
Men	**4.41 (4.37-4.46)**

Table 3: Predictors of Quantitative Score

Variable	Coefficient (95% CI)
Attending	
Man	**-0.09 (-0.15 to -0.2)**
Non-Hispanic White	0.03 (-0.05 to 0.11)
Years in Practice	.002 (-0.001 to 0.005)
Patient	
Age	**0.002 (0.00004-0.003)**
Male	0.05 (-0.01 to 0.11)
Non-Hispanic White	0.04 (-0.02 to 0.10)
ED LOS	**-0.01 (-0.02 to -0.00)**

Table 4: Predictors of Agentic and Communal Descriptors

Variable	Agentic Positive Comments Odds Ratio (95% CI)	Communal Positive Comments Odds Ratio (95% CI)
Attending		
Man	0.94 (.60-1.49)	0.98 (.72-1.33)
Non-Hispanic White	0.84 (.49-1.46)	1.17 (.80-1.71)
Years in Practice	1.01 (.99-1.03)	1.01 (0.99-1.02)
Patient		
Male	0.94 (.60-1.48)	0.86 (.63-1.16)
Age	1.00 (1.00-1.01)	1.00 (0.99-1.00)
Non-Hispanic White	1.20 (.76-1.89)	0.96 (0.71-1.30)
Length of Stay (LOS)	0.94 (.87-1.01)	0.97 (0.93-1.02)

Limitations

- Single-center study
- PES questions emphasizing communal traits may prime respondents' free-text comments
- Unable to delineate to whom certain comments were directed to, resident vs attending, and thus attributed to attending

Conclusions

- Physician gender was associated with overall quantitative score
- Women physicians were more likely to receive higher mean scores compared to men physicians
- Physician gender was not associated with language used to describe physicians

Abstract QR Code

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