Perceived and Experienced Gendered Microaggressions Among Medical Trainees

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Background

- **Microaggressions** are nuanced forms of disrespectful communications targeting certain groups, based on race, **gender**, and sexuality[1]
- In recent literature, microaggressions have been utilized to explain subtle sexism and sex-based discrimination against women[2]

1. Sue DW. Microaggressions in Everyday Life: Race, Gender, and Sexual Orientation. John Wiley & Sons; 2010.
2. Alexander, 2015; Capodilupo, et al., 2010; Nadal, 2009

Examples of Gendered Microaggressions (GMs)

An assertive female manager is labeled as “bossy” while her male counterpart is described as a “forceful leader.”

> **Hidden Message:** Women should be passive and allow men to be decision makers

A female physician wearing a stethoscope is mistaken as a nurse.

> **Hidden Message:** Women should occupy nurturing, and not decision making roles. They are less capable than men.

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https://www.psychologytoday.com/us/blog/microaggressions-in-everyday-life/201011/microaggressions-more-just-race

Microaggressions as mosquito bites

- Both are annoying
- Some people get bitten by mosquitos far more frequently than others
- Some Mosquitoes can carry harmful or potentially life threatening diseases

Fusion Comedy https://youtu.be/hDd3bzA7450

Project Overview

Goal: Create a survey tool to measure the perception and experience of gendered microaggressions in medical education

Hypotheses:

1) Higher prevalence of GMs will correlate with lower scores on overall learning climate, self efficacy, and wellbeing
2) Higher prevalence of GMs alters career trajectory

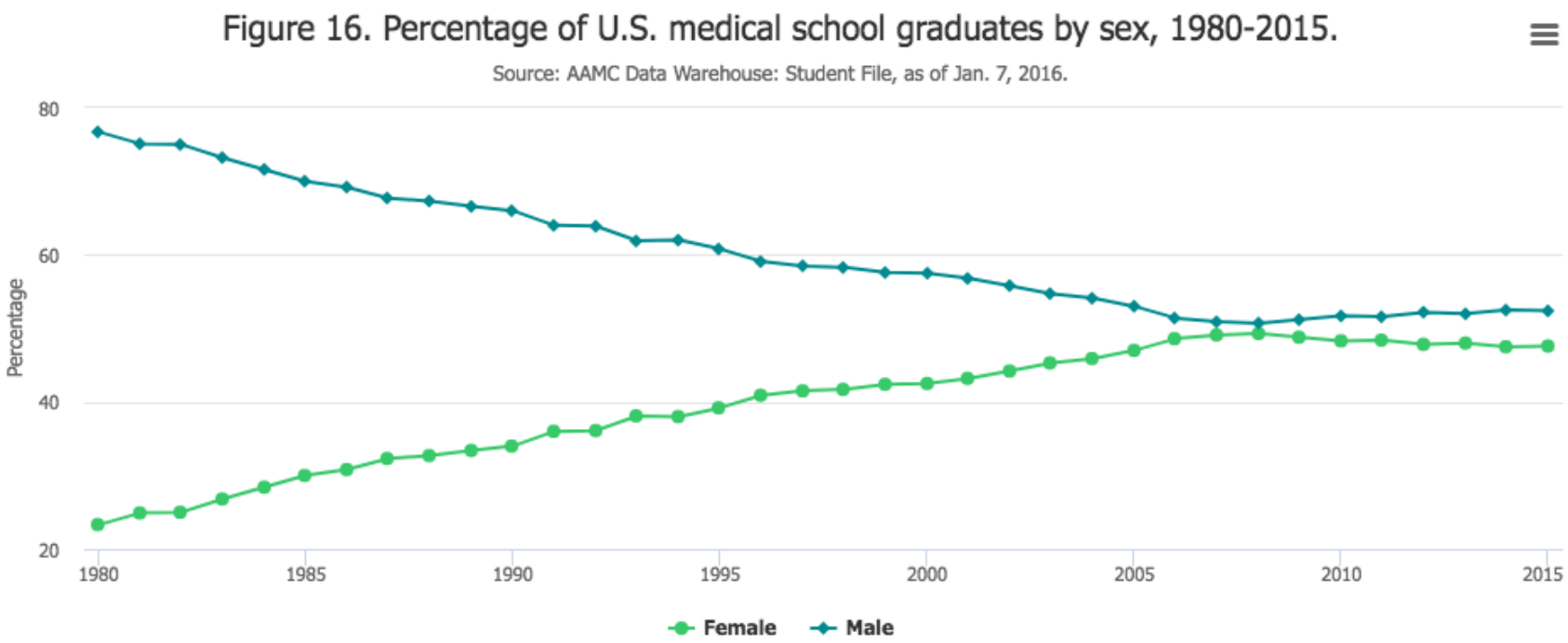
Study Design: Cross sectional analysis of medical students and medical trainees

Literature Review Findings

- There is a high prevalence of burnout among trainees driven by factors within the learning and work environment[1]
- Burnout may persist beyond medical school[2]
- Medical education literature is sparse
- Majority of the existing literature on microaggresion theory is focused on racial and ethnic microaggressions[3,4]

1. Dyrbye, L. & Shanafelt, T. (2016)
2. Ishak, W. et al. (2013)
3. Nadal (2011)
4. Sue et al. (2007)

Significance



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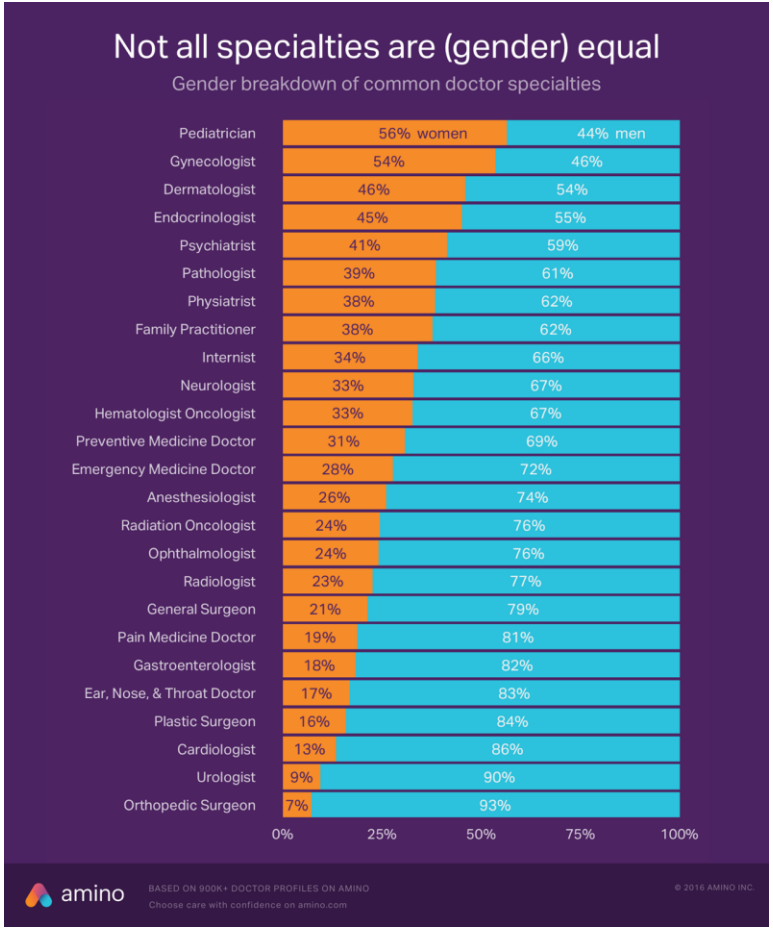
http://www.aamcdiversityfactsandfigures2016.org/report-section/section-3/#figure-15

Significance

- Women make up majority of pediatricians and gynecologists
- Men make up majority of urologists and orthopedic surgeons



https://amino.com/blog/how-the-gender-gap-is-shifting-in-medicine-medical-specialties-by-gender/

Significance

- Recent studies have linked perceived microaggressions with:
  - Higher degrees of burnout in graduate students[1]
  - Increased risk of depression[2]
  - Higher rates of medical errors among residents[2]
- Little is known about microaggressions experienced by medical trainees

1. Wells, EM. (2009)
2. Dyrbye (2015)

Aims

Aim 1: Survey Development and Validation

Aim 2: Survey Dissemination

Methods

Aim 1: Survey Development

1. Draw upon validated tools
    a. To Measure GMs
    b. To measure burnout, self efficacy, and learning climate
2. Collaborate with experts from other institutions
3. Receive critiques and advice from experts from Penn
4. Test for construct validity of our preliminary survey

Survey Development Methods

Measured GM Prevalence via:

- Gendered Microaggression Inventory (GMI) as a baseline tool[1]
- Racial and Ethnic Microaggressions Scale (REMS)[2]
- Gendered Racial Microaggressions Scale -Black Women (GRMS-BW)[3]

1. Yang, Y. & Carroll, D. (2016, April).
2. Nadal (2011)
3. Lewis and Neville's (2015)

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Survey Development Methods

Validated Tools used to Measure Impact of GMs:

- Generalized Self Efficacy Scale
- The Maslach Burnout Inventory
- DREEM Scale
- D-RECT learning Climate Scale

Questions	
Emotional fatigue	
1	I feel emotionally drained from my work
2	I feel used up at the end of the work day
3	I feel fatigued when I get up in the morning and have to face another day on the job
6	I feel frustrated by my job
8	Working with people directly puts too much stress on me
13	I feel very energetic
14	I can easily create a relaxed atmosphere with my recipients
16	I have accomplished many worthwhile things in the job
20	I worry that this job is hardening me emotionally
Personal fulfillment	
4	Working with people all day is really a strain for me
7	I feel I'm working too hard on my job
9	I feel like I'm at the end of my rope
12	I feel I'm positively influencing other people's lives through my work
17	In my work, I deal with emotional problems very calmly
18	I feel I treat some recipients as if they were impersonal 'objects'
19	I've become more callous toward people since I took this job
21	I don't really care what happens to some recipients
Depersonalization	
5	I feel burned out from my work
10	I can easily understand how my recipients feel about things
11	I deal very effectively with the problems of my recipients
15	I feel exhilarated after working closely with my recipients
22	I feel recipients blame me for some of their problems

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Next Steps Moving Forward

Aim 2: Survey Dissemination

1. Administer the survey to a test group of medical trainees and a test group of medical students
2. Test for Construct Validity
3. Administer to a larger sample of individuals here at Penn as well as two other geographically distinct institutions

Next Step Analysis

- Use feedback from experts to improve our survey
- Descriptive statistics
- T-test

Limitations

- Response Bias
- Response Rate
- Focusing solely on Gender
- Generalizability

Additional Roles

Gender differences in faculty evaluations

Manual Coding Themes

- Overall Comment (Positive or Negative)
- Teaching Attributes
- Physician /Patient Care Attributes
- Other Leader Attributes
- Other Notable Comments

Number	Comment	Unblinded	Overall positive	Overall negative	No information	Constructive Comment	General Teaching	Specific Teaching abilities comment	Enthusiasm for Teaching	Learning environment
265	Dr. LASTNA	.	1				1			
266	Excellent p	.	1							
267	Took some	.					1			
268	Taught a lo	.					1			
269	Excellent M	.	1							1
270	Dr. LASTNA	.	1							
271	Excellent ir	.	1				1			1
272	Dr. LASTNA	.	1							1
273	Dr. LASTNA	.	1						1	
274	Great lectu	.	1							
275	Dr. LASTNA	.	1							1
276	FIRSTNAM	.	1				1			
277	eager to he	?								
278	It was truly	.	1				1			
279	Dr. LASTNA	.					-1			
280	Dr. LASTNA	.	1							
281	Dr. LASTNA	.	1				1			
282	Dr. LASTNA	.	1				1			
283	Dr. LASTNA	.								
284	Dr. LASTNA	.	1			1	1	-1		

Preliminary Findings of Faculty Comments

- No significant differences in themes discussed between genders
- No difference in comment themes in High rated faculty vs. Low rated faculty
- Residents comment more about autonomy than medical students
- Faculty evaluations may not be helpful/useful

Lessons Learned

- Survey Construction is a laborious and iterative process
- Construct validity
- Manual Coding in Qualitative Research

Acknowledgements

Thank you Dr. Dine, Janae Heath, LDI, and SUMR!