Supplementary Online Content

Sudol NT, Guaderrama NM, Honsberger P, Weiss J, Li Q, Whitcomb EL. Prevalence and nature of sexist and racial/ethnic microaggressions against surgeons and anesthesiologists. *JAMA Surg.* Published online March 24, 2021. doi:10.1001/jamasurg.2021.0265

eFigure. Survey Branching Logic

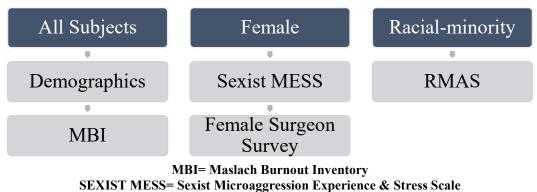
eTable 1. Demographic Survey

eTable 2. Sexist Microaggression Survey (Sexist MESS)

eTable 3. Racial Microaggression Survey (RMAS)

This supplementary material has been provided by the authors to give readers additional information about their work.

eFigure 1. Survey Branching Logic



RMAS= Racial Microaggression Scale

Demographics Survey (eTable 1)

1. How old are you?

- a) 20-29
- b) 30-39
- c) 40-49
- d) 50-59
- e) 60-65
- f) 66-70
- g) >=71

2. What is your racial/ethnic heritage, select all that apply? (BRANCHING LOGIC HERE→ b through I completes RMAS)

- a) White (non-hispanic)
- b) Hispanic, Latino or Spanish origin
- c) Asian
- d) South east Asian/Indian
- e) Middle Eastern
- f) Black or African American
- g) Native Hawaiian or Other Pacific Islander
- h) American Indian or Alaska Native
- i) Other (please specify)

3. What is your self-identified gender? (BRANCHING LOGIC HERE→ a, c, d, e, completes SEXIST MESS)

- a) Female
- b) Male
- c) Transgender Female
- d) Transgender Male
- e) Gender non-binary
- f) prefer to self describe _____
- g) prefer not to answer

4. What SCPMG site do you primarily work out of?

- a) San Diego
- b) Orange County (Anaheim, Irvine)
- c) Antelope Valley
- d) Baldwin Park
- e) Downey
- f) San Bernardino (Fontana, Ontario)
- g) Kern County h) Los Angeles
- i) Moreno Valley
- i) Panorama City
- k) Riverside
- l) South Bay
- m) West Los Angeles
- n) Woodland Hills
- e) Sunset
- e) Sunset
- o) Other ____

5. What SCPMG division do you work in?

- a) Cardiothoracic Surgery
- b) General Surgery

- c) Neurosurgery
- d) Obstetrics and Gynecology
- e) Ophthalmology
- f) Orthopedic Surgery
- g) Otolaryngology
- h) Pediatric Surgery
- i) Plastic and Reconstructive surgery
- j) Surgical Oncology
- k) Urology
- l) Vascular Surgery
- m) Anesthesia

Other:

6. Did you complete a fellowship?

- a) Yes
- b) No
- c) not applicable

7. How long have you been independently practicing since graduation from residency or fellowship?

- a) 0-3 years
- b) 4-7 years
- c) 8-10 years
- d) 11-20 years
- e) > 20 years

8. How long have you been at SCPMG?

- a) 0-3 years
- b) 4-7 years
- c) 8-10 years
- d) 10-20 years
- e) > 20 years

9. What is your current job title?

- a) Per Diem Physician
- b) Associate Physician
- c) Partner Physician
- d) Retired Per Diem Physician
- e) Other:

10. Do you work part time or full time?

- a) Full time (0.6-1.0)
- b) Part time (0.5 or less)

11. How many days per week are you in the operating room?

- a) 0-1
- b) 1-2
- c) 2-3
- d) 3-4 e) >4

12. Which gender comprises the *majority* of the people you work with on a daily basis?

- a) Female
- b) Male
- c) Equal number of female and male

13. What is your relationship status?

- a) Single, never married
- b) Married or domestic partnership
- c) Divorced
- d) Separated
- e) Widowed

14. Are you a parent?

- a) Yes
- b) No

Sexist Microaggressions Experiences and Stress Scale (Sexist MESS) (eTable 2)²

Instructions:

This survey consists of statements that describe experiences some women have in their lives. Please read each statement carefully and then rate each statement based on your personal experiences. First, rate how often you have had this experience in your own life. Second, rate how stressful each experience is for you when you do experience it. Please use the following scale: 0 = Never

How Often:

- 1 = A Few times
- 2 = Many times
- 3 = Most of the time

How Stressful: 0 = Not at all Stressful/NA

- 1 = Minimally stressful
- 2 = Moderately stressful
- 3 = Extremely stressful
- 1. You have attempted to 'overcompensate' for being female
- 2. You have attempted to appear assertive at work or school so that your colleagues do not dismiss you because you are a female
- 3. You have attempted to hide your emotions at work or school in order to not appear too emotional
- 4. You have intentionally dressed in ways considered less feminine (swapping a skirt for pants, etc.)
- 5. You have been catcalled or whistled at by male strangers
- 6. The first compliment someone has given you was related to how you look ("you're so pretty," etc.)
- 7. A male stranger has complimented your body
- 8. You have received unsolicited comments about your physical appearance
- 9. A male has greeted you by saying "hey sexy"
- 10. You have noticed someone looking at your body instead of listening to you talk
- 11. You have been referred to as a body part ("tits," etc.)
- 12. You have been told you are "too pretty" to do something (to frown, to be mad, etc.)
- 13. You have overheard other females being referred to as a body part ("tits," "piece of ass," etc.)
- 14. You have overheard males talking about other females in degrading terms ("bitch," "slut," etc.)
- 15. You have seen images of female bodies in the media that do not reflect your own body
- 16. You have overheard males being told to "not act like a girl" or to "be a man"
- 17. You have been told there is no longer a need for a women's rights movement
- 18. You have been told women no longer experience discrimination
- 19. You have expressed concerns about sexism and, you were told that sexism does not exist
- 20. You have expressed concern about sexist discrimination, and you were told that you were too sensitive, too crazy, or wrong
- 21. You have discussed sexist discrimination with someone, and that person told you that they were not sexist
- 22. You have heard women referred to as "femi-nazis"
- 23. You have heard someone in a position of authority (news pundit, politician, teacher, etc.) say that women are to be blamed when they are sexually assaulted.
- 24. You have overheard others joking about rape
- 25. You have been told that women have all the same rights as men
- 26. You have overheard others complaining about women's liberation
- 27. You have been asked when you want to get married before you were asked if you want to get married at all
- 28. You have been asked when you are going to have children before you were asked if you want any children at all
- 29. You have been asked how many children you want before you were asked if you want any children at all
- 30. You have been asked about your "dream wedding"
- 31. You have been asked why you are not married
- 32. You have been told "you will make a great wife someday"
- 33. You have been told you need to change your body in some way in order to be attractive to men
- 34. You have been told you need to watch your weight

- 35. You have been told "you would be so pretty if you..." (smiled more, lost weight, changed something about your appearance)
- 36. You have been in a work, school, home, or social setting where the person in charge asked only males to provide feedback
- 37. You have been in a work, school, home, or social setting where a male was automatically allowed to dictate the agenda
- 38. Someone has assumed a male was responsible for work you actually did
- 39. A male has ignored or dismissed your contribution at work, school, home, or in a social setting
- 40. You have been in a work, school, home, or social setting where the more complicated tasks were assigned to males
- 41. You have been passed over for an important project or promotion for which you were qualified, and the role was given to a male instead
- 42. A male has spoken for you at work, school, home, or in a social setting
- 43. A male peer, family member, coworker, or fellow student was the only member praised for group work you contributed to
- 44. You have been in a group at work, home, school, or in a social setting where a male automatically assumed the leadership role

1 - 4 (LGD) = Leaving Gender at the Door

- 5 12 (SOB) = Sexual Objectification
- 13 16 (ENV) = Environmental Invalidations
- 17 26 (IRW) = Invalidation of the Reality of Women
- 27 32 (TGR) = Traditional Gender Roles
- 33 35 (EXA) = Expectations of Appearance
- 36 44 (INF) = Inferiority

SCORING: Divide questions into aforementioned domains and total the scores for each domain

Racial Microaggressions Survey (RMAS) (eTable 3)¹

The following questions ask whether you feel that you have been treated a certain way by others because of your race. For each question, please mark *how often* you feel you have experienced the event described, and whether the incident caused you to feel stressed, upset, offended, or frustrated. If you have never noticed or experienced the interaction listed, please circle 'never' and go on to the next question. If you are multiracial, please think about whether people treat you as described below because of your mixed or multiple racial backgrounds.

	A. HOW OFTEN does this happen to you?				B. IF THIS DOES HAPPENS TO YOU, how <i>stressful, upsetting, or bothersome</i> is this for you?					
	Never	A little/ Rarely	Sometimes/ a moderate amount		This has never happe ned to me	Not at all	A little	Moder ate level	High level	
1. Because of my race, other people assume that I am a foreigner.	0	1	2	3	0	0	1	2	3	
2. Because of my race, people suggest that I am not a 'true' American.	0	1	2	3	0	0	1	2	3	
3. Other people often ask me where I am from, suggesting that I don't belong.	0	1	2	3	0	0	1	2	3	
4. Other people treat me like a criminal because of my race.	0	1	2	3	0	0	1	2	3	
5. People act like they are scared of me because of my race.	0	1	2	3	0	0	1	2	3	
6. Others assume that I will behave aggressively because of my race.	0	1	2	3	0	0	1	2	3	
7. I am singled out by police or security people because of my race.	0	1	2	3	0	0	1	2	3	
8. People suggest that I am 'exotic' in a sexual way because of my race.	0	1	2	3	0	0	1	2	3	
9. Other people view me in an overly sexual way because of my race.	0	1	2	3	0	0	1	2	3	
10. Other people hold sexual stereotypes about me because of my racial background.	0	1	2	3	0	0	1	2	3	
11. Other people act as if they can fully understand my racial identity, even though they are not of my racial background.	0	1	2	3	0	0	1	2	3	

12. Other people act as if all of the people of	0	1	2	2	0	0	1	2	2
my race are alike.	0	1	2	3	0	0	1	2	3
13. Others suggest that people of my racial	0	1	2	3	0	0	1	2	3
background get unfair benefits.	0	1		5	0	0		2	5
14. Others assume that people of my	0		2	2	0	0		2	2
background would succeed in life if they	0	1	2	3	0	0	1	2	3
simply worked harder. 15. Other people deny that people of my race									
face extra obstacles when compared to	0	1	2	3	0	0	1	2	3
Whites.	0	1	2	5	0	U	1	2	5
16. Other people assume that I am successful									
because of affirmative action, not because I	0	1	2	3	0	0	1	2	3
earned by accomplishments.									
17. Others prefer that I assimilate to the									
White culture and downplay my racial	0	1	2	3	0	0	1	2	3
background.									
									_
	0	1	2	3	0	0	1	2	3
	0	1	2	3	0	0	1	2	5
18. Others hint that I should work hard to									
prove that I am not like other people of my	0	1	2	3	0	0	1	2	3
race.									
19. Others suggest that my racial heritage is	0	1	2	3	0	0	1	2	3
dysfunctional or undesirable.	0	1		5	0	0	1	2	5
20. Others focus only on the negative aspects	0	1	2	3	0	0	1	2	3
of my racial background.		_			-				-
21. I am mistaken for being a service worker	0	1	2	2	0	0	1	2	2
or lower-status worker simply because of my	0	1	2	3	0	0	1	2	3
race. 22. I am treated like a second-class citizen									
because of my race.	0	1	2	3	0	0	1	2	3
23. I receive poorer treatment in restaurants									
and stores because of my race.	0	1	2	3	0	0	1	2	3
24. When I interact with authority figures,									
they are usually of a different racial	0	1	2	3	0	0	1	2	3
background.	-	_	-	-	-	-		-	-
	·	•			•	·			

						1		1	
25. I notice that there are few role models of	0	1	2	3	0	0	1	2	3
my racial background in my chosen career.	•		_	-			_	_	-
26. Sometimes I am the only person of my	0	1	2	2	0	0	1	2	2
racial background in my class or workplace.	0	1	2	3	0	0	1	2	3
27. Where I work or go to school, I see few	0	1	2	3	0	0	1	2	2
people of my racial background.	0	1	2	5	0	0	1	2	5
28. I notice that there are few people of my									
racial background on TV, in books, and in	0	1	2	3	0	0	1	2	3
magazines.									
29. Sometimes I feel as if people look past me									
or don't see me as a real person because of my	0	1	2	3	0	0	1	2	3
race.									
30. I feel invisible because of my race.	0	1	2	3	0	0	1	2	3
31. I am ignored in school or work	0	1	2	3	0	0	1	2	2
environments because of my race.	0	1	2	3	U	U	1	2	3
32. My contributions are dismissed or	0	1	2	3	0	0	1	2	2
devalued because of my racial background.									3

Scoring of the RMAS

The perceived microaggression subscales are computed using the (a) part of each item, the first part that assess the respondents perception of <u>how often</u> or <u>frequently</u> they experience a given microaggression.

For the occurrence/frequency subscales, compute the mean of the corresponding subscale items.

Foreigner/Not Belonging subscale: $\frac{1a+2a+3a}{3}$

Criminality subscale: $\frac{4a+5a+6a+7 a}{4}$

Sexualization subscale: $\frac{8a+9a+10a}{3}$

Low Achieving/Undesirable Culture subscale: $\frac{11a+12a+13a+14a+15a+16a+18a+19a+20a}{9}$

Invisibility subscale: $\frac{17a+21a+22a+23a+29a+30a+31a+32a}{8}$

Environmental subscale: $\frac{24a+25a+26a+27a+28a}{5}$

Microaggression Distress. In addition to the perceived microaggression subscales, I have developed a second set of subscales that correspond to the 'b' part of each scale item. These items measure how *bothersome, upsetting, or stressful* the individual perceives these experiences to be. The distress subscales are computed using the (b) items, the second part of each item. For the distress scales, compute the mean of the (b) items answered on a given subscale. However, if the (a) item is zero, then the b item should also be coded as zero.

Foreigner/Not Belonging Distress: $\frac{1b+2b+3b}{2}$

Criminality Distress: $\frac{4b+5b+6b+7b}{4}$

Sexualization Distress: $\frac{8b+9b+10b}{3}$

Low-Achieving/Undesirable Culture Distress: 11b+12b+13b+14b+15b+16b+18b+19b+20b

Invisibility Distress: $\frac{17b+21b+22b+23b+29b+30b+31b+32b}{8}$

Environmental Distress: $\frac{24b+25b+26b+27b+28b}{5}$

References:

- 1. Derthick A. The Sexist Mess: Development and initial validation of the sexist microaggressions experiences and stress scale and the relationship of sexist microaggressions to women's mental health (Doctoral dissertation). 2015 ProQuest Dissertations Publishing. https://search.proquest.com/docview/1752638981?pq-origsite=gscholar
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