

2019-03-28: Bias in Examinations

The following links were shared during the chat:

- Relationships of demographic variables to USMLE physician licensing exam scores: a statistical analysis on five years of medical student data <https://doaj.org/article/7f2b0f48b64c4e628274922030d9bf64>
- Detecting Gender Bias Through Test Item Analysis <https://aapt-scitation-org.libproxy.lib.unc.edu/doi/10.1119/1.3081303>
- Cultural Bias in University Entrance Examinations In the UAE <https://search-proquest-com.libproxy.lib.unc.edu/docview/1721972977?pq-origsite=summon>
- Do Racial and Ethnic Group Differences in Performance on the MCAT Exam Reflect Test Bias? <https://oce-ovid-com.libproxy.lib.unc.edu/article/00001888-201305000-00019/HTML>
- Patient-centered communication, ratings of care, and concordance of patient and physician race <https://www.ncbi.nlm.nih.gov/m/pubmed/14644893/>



MedEd Chat @MedEdChat 8 hours ago

Welcome to the [#mededchat](#) (US) I am your moderator for the next hour [@alliance4clined](#)
[#meded](#)



MedEd Chat @MedEdChat 8 hours ago

The [#mededchat](#) topic & questions will be announced in a moment...for now, please introduce yourselves [#meded](#)



Gary Beck Dallaghan @GLBDallaghan 8 hours ago

[@MedEdChat](#) [@Alliance4ClinEd](#) Gary here in Orlando at the [#SGEA2019](#) meeting
[#mededchat](#)



Dr. Christopher Tarolli @DrTarolliNeuro 8 hours ago

[@MedEdChat](#) Chris here, neurologist in Rochester, NY [#mededchat](#)



MedEd Chat @MedEdChat 8 hours ago

[@DrTarolliNeuro](#) Welcome, Chris! [#mededchat](#)



MedEd Chat @MedEdChat 8 hours ago

If you are tuning in to the [#mededchat](#), remember to use the [#mededchat](#) hashtag and try to answer with the Topic numbers (T1, T2, T3)



MedEd Chat @MedEdChat 8 hours ago

[@AJKleinhex](#) Happy to have you join, AJ! [#mededchat](#)



Brenda Roman [@BJBRoman](#) 8 hours ago

[#BrendaOnAStick](#) checking in for [#mededchat](#) from [#AAMCcgca](#) wearing my [#garyonsocks](#) <https://t.co/MP3YpBRYoc>



MedEd Chat [@MedEdChat](#) 8 hours ago

We will assume that all of your tweets during [#mededchat](#) are your own during this hour unless otherwise stated [#meded](#)



Jonathan Lim [@JonLimMD](#) 8 hours ago

Jon, a BCM CMR in Houston, having a lot of FOMO from [#SHM19](#) last week and [#SGEA2019](#) this week! Excited to learn more about bias in assessment tonight with [#mededchat](#)



MedEd Chat [@MedEdChat](#) 8 hours ago

TOPIC 1: What is meant by assessment bias? [#mededchat](#) [#meded](#)



Paul Haidet [@myheroistrane](#) 8 hours ago

[@BJBRoman](#) Oh dear! [#mededchat](#)



R Klein MD MEHP [@RKleinMD](#) 8 hours ago

[@MedEdChat](#) Looking forward to discussion on this topic. [#mededchat](#)



Gary Beck Dallaghan [@GLBDallaghan](#) 8 hours ago

[@MedEdChat](#) T1 [#mededchat](#) I found some interesting discussions about this....from bias in test results to bias in test items. Which is more bothersome?



A.J. Kleinheksel [@AJKleinhex](#) 8 hours ago

T1 Assessment bias is the cognitive and sociocultural biases we embed into our assessment instruments (usually unintentionally). [#mededchat](#)



Gary Beck Dallaghan [@GLBDallaghan](#) 8 hours ago

T1 This was one article that considered bias in examinations <https://t.co/TISEgrWwC4> [#mededchat](#)



Jonathan Lim [@JonLimMD](#) 8 hours ago

T1: My very basic understanding would be that assessment bias would be similar to any type of test we use in medicine that can have false positives or false negatives, issues with sensitivity and specificity [#mededchat](#)



R Klein MD MEHP [@RKleinMD](#) 8 hours ago

[@MedEdChat](#) Broad umbrella with this I think. Wondering how to prioritize types of bias in Assessment [#mededchat](#)



MedEd Chat [@MedEdChat](#) 8 hours ago

RT [@GLBDallaghan](#): T1 This was one article that considered bias in examinations <https://t.co/TISEgrWwC4> [#mededchat](#)



Sateesh Arja, MD, MPH [@ArjaSateesh](#) 8 hours ago

[@MedEdChat](#) [#mededchat](#) T1 unfair grades. Assigning unfair grades or penalizing certain groups of students. I also consider being liberal or giving high grades which students don't deserve can be considered as bias [#meded](#)



Jonathan Lim [@JonLimMD](#) 8 hours ago

T1 especially when so many of our assessments are psychosocial-- they have historical and cultural contexts-- usefulness for certain populations more than others [#mededchat](#)



Gary Beck Dallaghan [@GLBDallaghan](#) 8 hours ago

[@AJKleinhex](#) T1 So you're looking at it more from an item level bias? How do you think that impacts the learners? [#mededchat](#)



Dr. Christopher Tarolli [@DrTarolliNeuro](#) 8 hours ago

[@GLBDallaghan](#) [@MedEdChat](#) [#mededchat](#) think bias in test items more insidious and potentially more dangerous because more challenging to identify



Alliance4ClinEd [@Alliance4ClinEd](#) 8 hours ago

T1 Now that is an interesting take on bias with exams. Would you say that OSCEs can have that kind of bias due to elevated grades? [#mededchat](#)



Gary Beck Dallaghan [@GLBDallaghan](#) 8 hours ago

[@DrTarolliNeuro](#) [@MedEdChat](#) Tell me more. Why do you think item level bias is more dangerous? [#mededchat](#)

A.J. Kleinheksel [@AJKleinhex](#) 8 hours ago



[@GLBDallaghan](#) T1 Well, in that instruments are made up of items. But bias can be found in both individual assessments as well as systems (and constructs) of assessment. Bias affects learners by unfairly putting them at a disadvantage due to their identity &/or socioeconomic status. [#MedEdChat](#)

Dr. Christopher Tarolli [@DrTarolliNeuro](#) 8 hours ago



[@GLBDallaghan](#) [@MedEdChat](#) I feel like bias in test results may be more obvious, so therefore easier to identify and correct. Bias in items much less likely to be identified by students or educators - so potentially more dangerous. [#mededchat](#)

MedEd Chat [@MedEdChat](#) 8 hours ago



RT [@AJKleinhex](#): [@GLBDallaghan](#) T1 Well, in that instruments are made up of items. But bias can be found in both individual assessments as we...

Gary Beck Dallaghan [@GLBDallaghan](#) 8 hours ago



[@AJKleinhex](#) You're hitting at it from a macro level down to the individual. Nicely stated. [#mededchat](#)

MedEdBot [@MedEdBot](#) 8 hours ago



RT [@MedEdChat](#): TOPIC 1: What is meant by assessment bias? [#mededchat](#) [#meded](#)

Dr. Christopher Tarolli [@DrTarolliNeuro](#) 8 hours ago



RT [@AJKleinhex](#): [@GLBDallaghan](#) T1 Well, in that instruments are made up of items. But bias can be found in both individual assessments as we...

Larry Hurtubise [@hur2buzy](#) 8 hours ago



[#mededchat](#) checking in from [#aamcCGEA](#) with [@2LindaMLove](#) [@carens8892](#) [#garyonsocks](#) <https://t.co/wljzMPmGAA>

A.J. Kleinheksel [@AJKleinhex](#) 8 hours ago



[@GLBDallaghan](#) ALL THE LEVELS [#mededchat](#) <https://t.co/lyU6uKuvuy>

Sateesh Arja, MD, MPH [@ArjaSateesh](#) 8 hours ago



[@AJKleinhex](#) [#mededchat](#) T1 every assessment has hidden bias as we are assessing the proxy of learning and we are not actually measuring what is learned. Some assessments require written and verbal communications. It can be a bias if students are not taking these exams in their native language

MedEd Chat [@MedEdChat](#) 8 hours ago



RT [@AJKleinhex](#): [@GLBDallaghan](#) ALL THE LEVELS [#mededchat](#)
<https://t.co/lyU6uKuvuy>

Paul Haidet [@myheroistrane](#) 8 hours ago



If humans are involved, there's potential for bias, either in the construction of the instruments themselves (think SAT) or in the application of instruments (think differential application of rubrics) [#mededchat](#)

MedEd Chat [@MedEdChat](#) 8 hours ago



RT [@myheroistrane](#): If humans are involved, there's potential for bias, either in the construction of the instruments themselves (think SAT)...

Paul Haidet [@myheroistrane](#) 8 hours ago



[@hur2buzy](#) [@2LindaMLove](#) [@carens8892](#) [@GLBDallaghan](#) Where can I get a pair of [#garyonsocks](#)???

ADMSEP [@admsep](#) 8 hours ago



[@ArjaSateesh](#) [@AJKleinhex](#) That's an excellent point. The psychological toll that can take with oral exams also interferes with performance. [#mededchat](#)

Miranda Huffman, MD, MEd [@mirandahuffman](#) 8 hours ago



[@MedEdChat](#) It's easy to give better grades to students you like or can relate to. [#mededchat](#)

Gary Beck Dallaghan [@GLBDallaghan](#) 8 hours ago



[@mirandahuffman](#) [@MedEdChat](#) In those situations, how do you check yourself to not be biased? [#mededchat](#)

Sateesh Arja, MD, MPH [@ArjaSateesh](#) 8 hours ago



[@Alliance4ClinEd](#) [#mededchat](#) T1 to some extent yes. Even though OSCE, we use checklists or rubrics there is still possibility for bias. If we are using global ratings, there is more possibility for subjective bias. But grades by checklists and globally ratings are generally comparable [#meded](#)



MedEd Chat [@MedEdChat](#) 8 hours ago

RT [@ArjaSateesh](#): [@Alliance4ClinEd](#) [#mededchat](#) T1 to some extent yes. Even though OSCE, we use checklists or rubrics there is still possibili...



MedEd Chat [@MedEdChat](#) 8 hours ago

TOPIC 2: If bias exists, what does that say about the validity of the assessment?
[#mededchat](#) [#meded](#)



Jonathan Lim [@JonLimMD](#) 8 hours ago

T1 in UME/GME, I think end of rotation evaluations that we currently use can be challenging. The 1-10 can be interpreted differently, but in particular, I worry about the narrative assessment that the teacher does of the student as being vulnerable to unconscious bias [#mededchat](#)



Paul Haidet [@myheroistrane](#) 8 hours ago

[@mirandahuffman](#) [@MedEdChat](#) In the communications literature, Lisa Cooper found that race concordant pairs spent longer with each other, often spending the time on social chit-chat. Relationship building is better when there's a connection - probably in assessment, too. [#mededchathttps://t.co/7aUdilc2RV](https://t.co/7aUdilc2RV)



A.J. Kleinheksel [@AJKleinhex](#) 8 hours ago

[@JonLimMD](#) [@GLBDallaghan](#) Certainly! Item-level assessment bias may be implicit (e.g., an example in a question that only upper SES would get, such as referencing certain financial products), or explicit (e.g., racial stereotypes in a case vignette). [#MedEdChat](#)



R Klein MD MEHP [@RKleinMD](#) 8 hours ago

[@MedEdChat](#) Assessment validity should be what we strive for. But its not a given.
[#mededchat](#)



MedEd Chat [@MedEdChat](#) 8 hours ago

RT [@myheroistrane](#): [@mirandahuffman](#) [@MedEdChat](#) In the communications literature, Lisa Cooper found that race concordant pairs spent longer w...



Jonathan Lim [@JonLimMD](#) 8 hours ago

T2 a consistent bias probably is an indictment of the construct validity of the assessment tool-- it's measuring some other factor that's impacting the results [#mededchat](#)



MedEd Chat [@MedEdChat](#) 8 hours ago

RT [@JonLimMD](#): T1 in UME/GME, I think end of rotation evaluations that we currently use can be challenging. The 1-10 can be interpreted diff...



R Klein MD MEHP [@RKleinMD](#) 8 hours ago

[@myheroistrane](#) [@MedEdChat](#) Agree! I think we often are happy to accept a Faldo sense of security in assuming assessments are free of bias. [#mededchat](#)



Sateesh Arja, MD, MPH [@ArjaSateesh](#) 8 hours ago

[@MedEdChat](#) [#mededchat](#) T2 validity is more of accuracy of the assessments rather than results in my opinion. Validity is more dependent on content of the assessments, blueprinting, learning objectives and outcomes. Bias distorts more of reliability which is reproducibility of assessments.



A.J. Kleinheksel [@AJKleinhex](#) 8 hours ago

[@JonLimMD](#) [@GLBDallaghan](#) System-level bias could be the inclusion of problematic constructs (e.g., "professional attire" that penalizes natural hair styles), or course grading that is affected by personal instructor bias, or institutional frameworks that assume access/resources. [#MedEdChat](#)



Paul Haidet [@myheroistrane](#) 8 hours ago

T2: we can only know how our instruments (tests, OSCEs, clinical forms, etc) perform for different groups if we look. Examining differences along ethnicity, gender, disability, etc should be a routine part of analysis, and should be investigated when differences found. [#mededchat](#)



MedEd Chat [@MedEdChat](#) 8 hours ago

RT [@myheroistrane](#): T2: we can only know how our instruments (tests, OSCEs, clinical forms, etc) perform for different groups if we look. Ex...

Gary Beck Dallaghan [@GLBDallaghan](#) 8 hours ago



T2 Even though there is evidence of poor performance by certain groups on the MCAT, the authors of this article felt there really was no bias in the exam. Do Racial and Ethnic Group Differences in Performance on the MCAT Exam Reflect Test Bias?

<https://t.co/My3Q77Utrg> [#mededchat](#)



A.J. Kleinheksel [@AJKleinhex](#) 8 hours ago

[@JonLimMD](#) Agreed! If there is demonstrable bias, the instrument cannot be valid.

[#MedEdChat](#)



Gary Beck Dallaghan [@GLBDallaghan](#) 8 hours ago

[@ArjaSateesh](#) [@MedEdChat](#) I don't know. There are aspects of validity evidence that are impacted by bias in exams. Consequences validity as well as response process are pieces of validity evidence that are compromised by bias. [#mededchat](#)



A.J. Kleinheksel [@AJKleinhex](#) 8 hours ago

[@ArjaSateesh](#) [@MedEdChat](#) I don't know, I think an instrument (and/or person) can be consistently biased. Construct validity is where I think that bias is typically found. The content included maybe valid, but the construct is off-center. [#MedEdChat](#)



Nav Sidhu [@NavSidhu08](#) 8 hours ago

RT [@myheroistrane](#): T2: we can only know how our instruments (tests, OSCEs, clinical forms, etc) perform for different groups if we look. Ex...



Nav Sidhu [@NavSidhu08](#) 8 hours ago

RT [@JonLimMD](#): T1 in UME/GME, I think end of rotation evaluations that we currently use can be challenging. The 1-10 can be interpreted diff...



Jonathan Lim [@JonLimMD](#) 8 hours ago

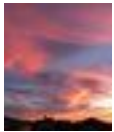
T2 what if all our assessments are biased and therefore not valid. help! [#mededchat](#)

<https://t.co/y8cywJVTHH>



MedEd Chat [@MedEdChat](#) 8 hours ago

T2 How would you address threats to validity with biased items? [#mededchat](#)



Paul Haidet [@myheroistrane](#) 8 hours ago

It's hard to stay focused when the game is tied with 0.1 sec left! [#mededchat](#)

<https://t.co/koWNiTceji>



A.J. Kleinheksel [@AJKleinhex](#) 8 hours ago

[@GLBDallaghan](#) I'm paywalled in the hotel, but I suspect this would be a case of systemic bias, rather than item-level. Is that the case? [#MedEdChat](#)



Gary Beck Dallaghan [@GLBDallaghan](#) 8 hours ago

[@AJKleinhex](#) T2 [#mededchat](#) I think it is. Reading some of the letters rebutting their findings gave me hope that people didn't buy their conclusions.



MedEd Chat [@MedEdChat](#) 8 hours ago

TOPIC 3: What are strategies to ensure assessments are not biased? [#mededchat](#)

[#meded](#)



Matt Lineberry [@TestTransformed](#) 8 hours ago

[@ArjaSateesh](#) [@MedEdChat](#) [#mededchat](#) T2 We generally say "bias" to mean a consistent, "directional" error in scores (a validity issue); reliability is all about - and only about - random (non-directional) error



MedEd Chat [@MedEdChat](#) 8 hours ago

RT [@TestTransformed](#): [@ArjaSateesh](#) [@MedEdChat](#) [#mededchat](#) T2 We generally say "bias" to mean a consistent, "directional" error in scores (a v...



A.J. Kleinheksel [@AJKleinhex](#) 8 hours ago

T2 As with all instrument design, there are methods to ensure rigor and fairness. But those processes have to be inclusive if we want our assessments to be inclusive: diverse panels for expert review, pilot testing across all appropriate demographics, etc.

[#mededchat](#)

Jonathan Lim [@JonLimMD](#) 8 hours ago



T3 probably careful [#DiversityandInclusion](#) in populations used for assessment validity testing such as think-alouds or more broader statistical validation. Probably also important with iterative faculty revision of an assessment tool that they are a diverse set [#mededchat](#)



MedEd Chat [@MedEdChat](#) 8 hours ago

RT [@JonLimMD](#): T3 probably careful [#DiversityandInclusion](#) in populations used for assessment validity testing such as think-alouds or more b...



MedEd Chat [@MedEdChat](#) 8 hours ago

RT [@AJKleinhex](#): T2 As with all instrument design, there are methods to ensure rigor and fairness. But those processes have to be inclusive...



Paul Haidet [@myheroistrane](#) 8 hours ago

RT [@TestTransformed](#): [@ArjaSateesh](#) [@MedEdChat](#) [#mededchat](#) T2 We generally say "bias" to mean a consistent, "directional" error in scores (a v...

Jonathan Lim [@JonLimMD](#) 7 hours ago



T3 I feel the bias revealed especially when I've made a survey and then give it to someone even a few years my junior and they have no idea what I'm talking about or in the reverse to a senior faculty member as well. Or it's just me writing bad questions... or both [#mededchat](#)



Gary Beck Dallaghan [@GLBDallaghan](#) 7 hours ago

[@JonLimMD](#) As you and [@AJKleinhex](#) noted, pilot testing and using reaction panels of diverse populations is important to address bias [#mededchat](#)



Paul Haidet [@myheroistrane](#) 7 hours ago

T3: increase diversity among faculty; examine concordance between assessor and assessee and look for concordance effects in clinical assessments. [#mededchat](#)



MedEd Chat [@MedEdChat](#) 7 hours ago

RT [@myheroistrane](#): T3: increase diversity among faculty; examine concordance between assessor and assessee and look for concordance effects...

Matt Lineberry [@TestTransformed](#) 7 hours ago



[@ArjaSateesh](#) [@MedEdChat](#) [#mededchat](#) T2 One trick with bias: you can't sample your way out of it. A very smart [#meded](#) scholar was once pushing "wisdom of the crowds": "just ask 40 people, 'would you let this doc treat your mom?'" But that does almost nothing to mitigate common biases.

Miranda Huffman, MD, MEd [@mirandahuffman](#) 7 hours ago



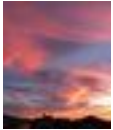
[@MedEdChat](#) Part of the way to increase validity is [#facultydevelopment](#) on the instrument. Are our [#meded](#) faculty open to acknowledging their biases? [#mededchat](#)

MedEd Chat [@MedEdChat](#) 7 hours ago



RT [@TestTransformed](#): [@ArjaSateesh](#) [@MedEdChat](#) [#mededchat](#) T2 One trick with bias: you can't sample your way out of it. A very smart [#mededsc...](#)

Paul Haidet [@myheroistrane](#) 7 hours ago



[@mirandahuffman](#) [@MedEdChat](#) I have my reservations... [#mededchat](#)

Miranda Huffman, MD, MEd [@mirandahuffman](#) 7 hours ago



[@MedEdChat](#) T3: best way to avoid bias is having multiple evaluators and multiple assessments. Avoiding any high-stakes assessments. Portfolios of work. [#mededchat](#). [#step1passfail](#)

A.J. Kleinhexel [@AJKleinhex](#) 7 hours ago



T3 The elimination of assessment bias is bidirectional from the instrument to the system. Eliminating bias in both requires greater transparency, increased rigor, more frequent evaluation, and many more open and honest conversations. [#mededchat](#)

Paul Haidet [@myheroistrane](#) 7 hours ago



RT [@AJKleinhex](#): T3 The elimination of assessment bias is bidirectional from the instrument to the system. Eliminating bias in both requires...

MedEd Chat [@MedEdChat](#) 7 hours ago



RT [@AJKleinhex](#): T3 The elimination of assessment bias is bidirectional from the instrument to the system. Eliminating bias in both requires...



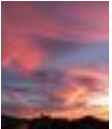
Miranda Huffman, MD, MEd [@mirandahuffman](#) 7 hours ago

[@myheroistrane](#) [@MedEdChat](#) Me too. It's hard to admit your own biases. [#MedEdChat](#)



Gary Beck Dallaghan [@GLBDallaghan](#) 7 hours ago

[@mirandahuffman](#) [@myheroistrane](#) [@MedEdChat](#) T3 If we set the example of being transparent that gets the ball rolling. Most people who know me know I will put that out there just to ensure there is understanding of where I'm coming from. [#mededchat](#)



Paul Haidet [@myheroistrane](#) 7 hours ago

[@mirandahuffman](#) [@MedEdChat](#) Agree. First step in mitigating bias: faculty need to “own” their personal biases. [#mededchat](#)



MedEd Chat [@MedEdChat](#) 7 hours ago

We have about 5 more minutes left in our discussion. Please feel free to give some final thoughts [#meded](#) [#mededchat](#)



Gary Beck Dallaghan [@GLBDallaghan](#) 7 hours ago

[@myheroistrane](#) [@mirandahuffman](#) [@MedEdChat](#) There is also a need to respect the others who the bias may be intentionally or unintentionally leveled at. [#mededchat](#)



Jonathan Lim [@JonLimMD](#) 7 hours ago

Just want to share a moment of gratitude-- nothing like a fun, engaging [#mededchat](#) with experts that leads to a lot of learning and thought-provocation! Feeling uplifted and inspired [#mededchat](#) [#meded](#)



Gary Beck Dallaghan [@GLBDallaghan](#) 7 hours ago

Final thoughts: This issue of bias in testing was new for me. I appreciate [@AJKleinhex](#) for suggesting it. I feel like I've learned a good deal over the past hour. [#mededchat](#)



Matt Lineberry [@TestTransformed](#) 7 hours ago

[@ArjaSateesh](#) [@MedEdChat](#) T2 [#mededchat](#) It is easy to forget that admittedly limited test methods (MCQs and the like) were once a pretty remarkable social justice innovation: moving away from the subjectivity in oral exams/etc., when examiners may not have believed some types of people “should” be docs



MedEd Chat [@MedEdChat](#) 7 hours ago

Join us again next week at 9 pm Thursday. Don't forget to suggest topics by DM or email [#meded](#) [#mededchat](#)



Miranda Huffman, MD, MEd [@mirandahuffman](#) 7 hours ago

[@myheroistrane](#) [@MedEdChat](#) All kinds of diversity are needed. Our faculty should mirror the population. [#MedEdChat](#)



Sateesh Arja, MD, MPH [@ArjaSateesh](#) 7 hours ago

[@MedEdChat](#) [#mededchat](#) T3 what if the bias come from a SP rather than a faculty member in case of OSCE? I think constant analysis of results and data is required to find out if there is any bias. Evaluation of SP, station itself, and faculty required. Training of faculty and SP is required.



Paul Haidet [@myheroistrane](#) 7 hours ago

Final thought: to mitigate bias: 1) “own” yours 2) develop situational awareness of bias activating 3) call a time out when it does 4) ask yourself how you would act if the other person were your ethnicity/gender/ability/etc 5) repeat liberally [#mededchat](#)



MedEd Chat [@MedEdChat](#) 7 hours ago

That's a wrap...I will post the [#mededchat](#) transcript tomorrow morning on <https://t.co/mJivoKroXx> on the Resources page. Thanks everyone for participating! [#meded](#)



MedEd Chat [@MedEdChat](#) 7 hours ago

RT [@myheroistrane](#): Final thought: to mitigate bias: 1) “own” yours 2) develop situational awareness of bias activating 3) call a time out...



Sateesh Arja, MD, MPH [@ArjaSateesh](#) 7 hours ago

RT [@myheroistrane](#): Final thought: to mitigate bias: 1) “own” yours 2) develop situational awareness of bias activating 3) call a time out...



Sateesh Arja, MD, MPH [@ArjaSateesh](#) 7 hours ago

[@GLBDallaghan](#) [@AJKleinhex](#) [#mededchat](#) agree. I too learned many new things.



Jonathan Lim [@JonLimMD](#) 7 hours ago

RT [@AJKleinhex](#): T2 As with all instrument design, there are methods to ensure rigor and fairness. But those processes have to be inclusive...



Jonathan Lim [@JonLimMD](#) 7 hours ago

RT [@mirandahuffman](#): [@MedEdChat](#) T3: best way to avoid bias is having multiple evaluators and multiple assessments. Avoiding any high-stakes...



Jonathan Lim [@JonLimMD](#) 7 hours ago

RT [@AJKleinhex](#): T3 The elimination of assessment bias is bidirectional from the instrument to the system. Eliminating bias in both requires...



Miranda Huffman, MD, MEd [@mirandahuffman](#) 7 hours ago

[@AJKleinhex](#) [@MedEdChat](#) And willingness to develop and empower junior faculty, esp those who don't look like traditional academic medicine faculty. [#MedEdChat](#)



Adam Hoverman DO [@ahoverman](#) 7 hours ago

RT [@myheroistrane](#): T3: increase diversity among faculty; examine concordance between assessor and assessee and look for concordance effects...



Miranda Huffman, MD, MEd [@mirandahuffman](#) 7 hours ago

[@TestTransformed](#) [@MedEdChat](#) [@ArjaSateesh](#) Great point. I also think about communication - are our assessment tools assessing how a white male physician would best communicate with a white, educated, sober, heterosexual patient? Is this why we're having so much trouble impacting [#sdh](#) ? [#MedEdChat](#)



Miranda Huffman, MD, MEd [@mirandahuffman](#) 7 hours ago

[@myheroistrane](#) [@MedEdChat](#) Or be vulnerable and ask someone else who doesn't share your lived experiences to call you out. [#MedEdChat](#)



Kristina Dzara, PhD, MMSc [@kristinadzara](#) 7 hours ago

[@myheroistrane](#) [@hur2buzy](#) [@2LindaMLove](#) [@carens8892](#) [@GLBDallaghan](#) How much is the purchase price? Can I buy in bulk? [#GaryOnSocks#MedEdChat](#)



Miranda Huffman, MD, MEd [@mirandahuffman](#) 7 hours ago

[@myheroistrane](#) [@MedEdChat](#) Geographic region, age, SES, language spoken at home. So much diversity in the world! [#MedEdChat](#)



Matt Lineberry [@TestTransformed](#) 7 hours ago

RT [@mirandahuffman](#): [@TestTransformed](#) [@MedEdChat](#) [@ArjaSateesh](#) Great point. I also think about communication - are our assessment tools asses...