

## Audio file

[Equity Matters - Episode 2.m4a](#)

## Transcript

Bob Bifulco

Welcome to Equity Matters. My name is Bob Bifulco, director of PEEPs- the PEEPs program at Syracuse University. Today's guests are doctors Ying Shi and Maria Zhu. Doctor Shi is an assistant professor of public administration and Maria is an assistant professor of economics, both at the Maxwell School of Citizenship and Public Affairs and both are researchers at the Center for Policy Research. They've been doing super interesting work together on racial and ethnic bias among teachers that they'll be talking about today on the podcast. Thanks for joining us, Ying and Maria.

Maria Zhu

It's great to be here.

Ying Shi

Thanks, Bob. It's great to be here.

Bob Bifulco

So at the heart of this work you're doing on teacher bias is the unique data from North Carolina that allow you to develop pretty convincing measures of teacher bias. I was wondering, if you can start by telling us a little bit about that data and talk about the measures of bias that you've developed using this data.

Maria Zhu

Yeah, definitely. So, as you mentioned in this project, we're using administrative data from North Carolina on all public school students in the state. And in North Carolina, students in 3rd grade through 8th grade take standardized tests in math and reading at the end of each school year. One interesting aspect of this setting is that teachers are also asked to assess their students on achievement in math and reading along the same criteria that the standardized tests are designed to measure. And so these teacher assessments are also collected at the end of the year, but they're collected before teachers get a chance to see how their students performed on the standardized tests. And so the way that we're measuring bias in this paper then is to look at whether teachers systematically differ in their assessments of Asian students compared to white students with the same standardized test scores who are in the same classroom. We're also accounting for things like differences in students' behavior that could perhaps influence teachers' judgments using measures like a student's absences, as well as their disciplinary referral history. So basically the idea is if we have an Asian student and a white student who are in the same classroom and who receive the same scores on their standardized tests, in the absence of bias, we would expect that the teacher would then give these two students the same assessment score, right? Because this is the same teacher and these students perform the same on their

standardized tests. So then we define bias as a systematic difference in the ways that teachers assess academically comparable students of different races where academic comparability is measured by standardized test performance. And the idea is this bias could go in a positive or a negative direction depending on whether teachers tend to assess Asian students at a higher or a lower academic achievement level compared to academically comparable white peers.

Bob Bifulco

Great. So yeah, I mean, I personally have found these measures pretty convincing and sets up a lot of opportunities for interesting work. So Ying, you have an earlier paper with another colleague that focuses on teacher bias towards black students relative to white students. Can you tell us a little bit about what you find in that paper?

Ying Shi

Yeah, absolutely. So that paper is with my collaborator, Marcos Rangel, who's at Duke University. And the paper opens up by looking at black/white differences in teacher assessments. And when you look at, you know, a black and white student who are in the same classroom who have the same standardized test scores, whether or not teachers assess black students lower in terms of math and reading ability compared to the white peers and Maria has given a thorough and thoughtful overview of sort of the data that we're using. It's essentially using the same underlying North Carolina micro data focusing on elementary teachers. And so we do show in that paper with Marcos that black students are rated lower than you know, otherwise observationally equivalent white students. But really, the bulk of that paper is then sort of pivoting towards this question of, you know, how does this sort of bias- this negative bias against black students- sort of come to be, right? What is sort of the origin of this bias? And there's a lot of work kind of- more work now- looking at racial differentials and teacher judgment, but less so looking at the inception, right, of these racial differentials. And so our hypothesis in that paper is that first impressions matter, which is to say in that context, when novice teachers step into a classroom for the first time. The particular context of those initial classrooms, you know, the racial compositions of those classrooms and how well students in each racial group do vis a vis the other really matters, and it has persistent effects. And so what we find is that when novice teachers are in the classroom with black students that on average perform less well than their white peers in the same classroom, the same teachers, one to three years down the road, are effectively imposing a penalty on future cohorts of black students, even though those black students might be performing the same as their white peers in those classrooms. So it's sort of this assessment penalty that's inflicted on black students that we can trace back empirically to the context of their early classroom- that these novice teachers early classrooms. And the persistence of this first impression is very specific, right, to the early classroom context. So racial differentials in the first classroom carries over to the ways in which teachers differentially judge black and white students in later classrooms, but not when it comes to judging, for example, boys and girls, so it doesn't carry over to the gender side and vice versa. We furthermore find that the intersection of race and gender- so for example, there are gender specific racial gaps, right, in those early classrooms- that has persistent effects on gender specific racial assessment gaps one to three years down the road. And so the persistence is seen in a variety of contexts. And one other thing I should mention that I think is really maybe a little bit disheartening about what we find in that paper is the asymmetry. And so what I mean by that is that teachers seem to pay a lot of attention to what's going on the lower tail of the performance distribution. So, let's say, you know, you're a first time teacher. And then you have a low

performing black student in your classroom. And that seems to result in these penalties- assessment penalties later on for future cohorts of black students, but we don't observe a symmetric effect when you have a black superstar student in your early classroom. You know, we're not seeing that teachers update accordingly or symmetrically when these high achieving black students are the students they face for the first time. And so there's a sense in which these sort of stereotypes may be conforming. Black students are really leaving those lasting impressions and potentially exacerbating racial inequality when it comes to teacher assessments. But there's not that kind of correcting mechanism when teachers are exposed to a really high performing black student.

Bob Bifulco

Yeah, that's what really struck me about that earlier paper is kind of the suggestion that, you know, consistent with what we know about the human mind, information that conforms to stereotypes, we tend to hold on to, whereas we dismiss or forget about information that doesn't conform to the stereotypes we bring. And I agree, probably a little disheartening as well. So now tell us a little bit more about your recent work on teacher perceptions of Asian students. What questions are you trying to address with this work?

Maria Zhu

Yeah. So we're looking at a few different research questions in this paper. First and foremost, we're looking to address whether teachers do in fact, display biases in their assessments of Asian American students, which was an open question before this study. So furthermore conditional on finding evidence of bias, we also want to quantify the direction and the magnitude of this bias. So that's kind of the main overarching question. Second, though, we're also looking at whether these biases towards Asian students differ by various- differ by ethnic subgroups. And the idea here is Asian Americans are often lumped in together as one category and treated as an aggregate group when it comes to policy considerations. However, we want to highlight that Asians are a heterogeneous group in terms of their immigration histories, circumstances and timelines, which has led to different subgroups having very different experiences in the US and so one of the goals in this paper is to shed light on whether this is differentially affected perceptions and experiences of these various subgroups. And the third question that we're looking at is whether there are spillover effects of teachers' biases towards Asian students on other groups of minority students. So this is kind of a spoiler alert, but in our main analysis we do find that teachers are more positive in their assessments of Asian students than they are white students with the same test scores. And so one concern here is that these positive stereotypes that teachers display towards Asian students- one concern is that these biases may reinforce the notion of fundamental differences across groups or bolster teachers' negative stereotypes for other underrepresented minority groups kind of going back to what you were saying, Bob, about, you know, reinforcing kind of the stereotypes that we already have in place in our minds.

Bob Bifulco

Great. So you already started to talk a little bit about the findings. But I was wondering if there was more you might want to say about the findings in this paper.

Ying Shi

So I can add a little bit more to that. So as Maria already mentioned that we find positive bias for Asian Americans in the context of this paper and I'll just add that, you know, the magnitude of those- I guess the positive teacher assessments for Asian students who are observationally equivalent to their white peers in the same classrooms- the magnitudes are at least as large, usually even larger than the sort of negative bias that we can quantify for black and Hispanic students vis a vis white students in those classrooms. And to Maria's point about, you know- we see a lot of times, for example in popular media, Asian Americans are kind of like viewed as this monolithic group. So we were really interested in sort of taking a step kind of deeper into all of the subcategories of Asian Americans. And what we find is that the extent of positive bias is larger for Asian students in our sample who we characterize as East Asian or South Asian, based on their home languages, and so you can think of these students as very likely those students are or have, you know, these are students potentially with families from China, Japan, South Korea, for example, as well as India, Pakistan, Bangladesh and then compared to students from Southeast Asian countries. And so these would be, for example, Vietnam, Philippines, Indonesia, Cambodia, etc. So there's within the Asian group just a lot of heterogeneity in terms of how large this bias is. And then turning to the second part of this paper, which is really, as Maria mentioned, thinking about spillover effects. So we don't really look at consequences of this positive bias for Asian Americans in the context of this paper. But we do look at sort of short-term effects when there is a single Asian student in the classroom, like, how does that matter? Or does it not matter for the ways in which teachers assess other underrepresented minority groups, so black and Hispanic students relative to their white peers? And, you know, the richness of this data really allows us to kind of construct, I guess, or isolate these contexts whereby, you know, whether or not there's a single Asian student in the classroom is plausibly kind of random. So it's just like these localized little experiments where classrooms are broadly similar but some have, you know, one Asian student in them and others don't. And when there's a classroom with an Asian student, it appears that the- sort of the gaps in teacher assessments, you know, the black, white and Hispanic white gaps- and these are negative biases towards these students, marginalized students- are getting larger. Right. And I think in the paper we say about 1/4 larger. I mean there's a range there, but we're looking at accentuated teacher assessment gaps for black and Hispanic students when in the presence of an Asian student. And so obviously that begs the question of, you know, is it something about Asian identity in particular or is it something about the correlates of Asian students, right? So they're oftentimes, in the North Carolina context, oftentimes they're higher achieving and sometimes higher assessed. So we do dive into this in the paper as well. And we do find that for example- this effect for example, is sometimes concentrated when it comes to exposure to an Asian student who's quite high achieving. So is it something particular to Asian students? Well we look at this by seeing what happens when classrooms are similarly exposed to a single black student or Hispanic student who's high achieving. And so for example, exposure to a high achieving black student doesn't do anything to the ways in which teachers assess fellow Hispanic students. Right? So we provide some additional evidence in the paper that the patterns of results that we observe are very much specific to Asian students, right? Doesn't necessarily mean that it's only Asian identity that matters, but it could be the combination of Asian identity and all the correlates of race in this particular context. But there's certainly something unique going on with Asian students that we wanted to underscore.

Bob Bifulco

Yeah, that's one of the things I really appreciate about the work you're doing. First, it's important to document these types of biases and your data allow to do that- allowed you to do that in ways that aren't always available, but also then trying to understand the kind of- the complex social processes by which these biases emerge get reinforced and get strengthened. So next, I'd like you to talk a little bit about the importance of your finding both here and in the earlier work we talked about, you know, and how should people in school systems respond to your findings.

Ying Shi

So you know, Maria and I- you know, we think there's potentially several implications. So in terms of the importance of our findings, and also with regard to the findings from the other paper, the fact that we're showing these racial differences in teacher assessments, whether it's Asian/white or black/white gaps, right? It matters because while teachers are an integral part of the system that kind of shepherds students along and whatever academic trajectory that they take, right- teachers play a role for example, in shepherding students through gifted and talented programs and other heroic tracks, so teacher judgments and expectations matter in that way. There's also now a small growing literature showing that teacher expectations are self-fulfilling prophecies right? This so-called Pygmalion Rosenthal effect. So I think Andrew Hill and Daniel Jones as well as Nick Papageorge, Seth Bergensen and co-authors- they have nice papers on this by showing empirically that students might, you know, change their investments in their own human capital based on what they perceive their teacher expectations to be. And so students might disinvest, right, if a black student perceives that teacher expectations are lower. And so these expectations really are potentially a very important input and into how well students fair. And then I think our work also kind of underscores the extent to which kind of you alluded to this, Bob, this sort of the classroom context, these sort of nuanced classroom contexts might matter, just the presence, for example, of the single Asian student, right, can have all these consequences. And also this pointing out that sort of, you know, this positive evaluation bias for Asian students might just be the other side of the same coin, right? You have these negative biases and these fundamental differences that Maria was mentioning are really underscored when there's a presence of an Asian student. So in terms of what I guess school administrators or kind of policymakers can take away, I mean, I guess one of the things that we would point out is that perhaps there could be things done, maybe even in a professional development context, just to raise awareness, for example of some of these issues. So I think Alesina ET al has a paper showing that, you know, teachers who are made aware of their implicit biases- I think this is in the Italian context, so somewhat different but still potentially relevant here- they change, for example, their assessments of immigrant students relative to nonimmigrant students. And so there could be a way in which just informing teachers of their potential to make these, you know, to kind of racially kind of based on race differentially evaluate students could nudge them to changing their behavior and then- and this is, you know, may be true in both cases- but thinking about like for example in the paper with Marcos, that initial allocation of teacher to classrooms, right, to the extent is random. But just thinking about, you know, when there is let's say a black student in the classroom whose performance is a little bit stereotype conforming, that could have negative consequences down the road so thinking more deliberately about the types of classrooms, particularly novice teachers, stepped into would be worthwhile.

Bob Bifulco

Terrific. So maybe to get even a little more specific, one of the things that we hope to do in this podcast is to kind of bring it home for listeners in the Syracuse area. So as you know, the Syracuse area is typical of many metropolitan areas in the northeast with considerable amounts of racial and ethnic diversity including large immigrant populations from places like the Sudan and Burma in the City Schools at least, also high levels of racial segregation across school districts, concentrations of poverty in the central city, and large achievement gaps between various groups of students. So are there any implications of your work and findings for the education in the Syracuse area?

Maria Zhu

Yeah, that's a great question. And I think Syracuse is a good example of a context where our findings have some important implications. So as you mentioned Syracuse is a very diverse city, racially and ethnically. We're also a very big refugee receiving city. One implication of our findings is the importance of recognizing the role of this diversity of backgrounds in shaping students experiences as well as the perceptions that they're receiving from other people and how that shapes their trajectories. In particular, our subgroup results highlight the value of not lumping different groups of students together, as this can mask differences in underlying experiences. For example, just because two students both come from refugee backgrounds or their families come from the same continent doesn't necessarily mean they're subject to the same types of biases from society, and so we shouldn't necessarily view them through the same homogeneous framework. And the fact that there are large achievement gaps between different groups of students in Syracuse, going back to something that Ying mentioned, I think further highlights the importance of being cognizant of and addressing teachers' biases given that we do have research now showing that teachers expectations matter, right. They, you know, sometimes they essentially function as self-fulfilling prophecies. They also, right, affect things like teachers' recommendations for, you know, what type of academic track a student is on or things like that. And so, given that there are already large disparities, racially and ethnically in this area, and that we know that, you know, these- that these biases can be, you know, self-fulfilling and exacerbating, I think that's something to be even more aware of moving forward. Finally I think our research also shows that biases are context specific, so we should definitely take that into consideration as well when trying to understand how racial and ethnic diversities, racial and ethnic identities, effect perceptions of students. For example, when we're thinking about differences in student demographic makeup in central city areas and suburban versus urban areas or more rural areas. So for example, in North Carolina, like in Syracuse, we find that student demographics in the central city versus non central city areas do differ significantly, and we find in North Carolina that teacher biases also look different in city versus non city areas, suggesting that differences in student composition in terms of sociodemographic characteristics by racial and ethnic groups across schools also affects biases and perceptions, and that's something that we should be aware of in other settings as well.

Bob Bifulco

So what's next for you guys on this line of work? Are there further questions that you're looking to pursue and what's next?

Ying Shi

Great question. So as with any research project, right, we might have answered some of our initial questions, but it always kind of spurs additional ones and let's say Maria and I certainly have got quite a

few of those and are excited to kind of move forward and to start to think about them and invite kind of other collaborators working these similar areas to kind of be our interlocutors and so that we can maybe collaborate. So kind of immediately from this work on Asian Americans, we looked at kind of near term effects and consequences for students of color, right, other students of color in the same classrooms. But we didn't look at the consequences for Asian students themselves, and so that's certainly kind of one direction that we could go is to look at maybe even longer-term consequences for those Asian students. And to go back to this reoccurring theme of Asian students are monolithic, it would be really interesting, right, to kind of better understand to what extent these types of, you know, stereotypical expectations in some ways from teachers might differentially affect students who conform to those expectations. What about Asian students, for example, that, you know, are not kind of typically like achieving highly, at least in conventional terms, right? And this certainly expands to be on Asian students, right. So if you think about black students, right. Black students who are high achieving, who maybe do not fit neatly into our stereotype priors, how do these types of expectations affect them differentially than in black students that might kind of affirm whatever stereotypes we all have? And so that's kind of one direction. And then, of course, there's a whole set of questions around the inception of these biases, and so Marcos and I, we have looked at something that was sort of early career for teachers. But you know these sort of prejudices and beliefs are shaped throughout individuals' lifetimes. And so you can even think about looking at sort of pre labor market factors, you know, what's going on post-secondary and, you know, and things like that. So really kind of tracing back and trying to understand what or maybe even, you know, teachers' own educational experiences growing up, right? So I'm just a little bit brainstorming here. But what are sort of the contexts and environments in which that might give rise to some of these behaviors that we see. And then there's more of a general thought. Maria and I are obviously- so this is a paper largely on Asian Americans- we're very interested in topics in this area. So Asian Americans are the fastest growing racial and ethnic group in the United States. But we both have this feeling that sometimes when we're reading research papers in particular, and you know, we're looking at disparities let's say between white students or white individuals and you know, black or Hispanic individuals and Asians are not really part of the picture or a little bit- there's not enough information. And so just, you know, trying to build out a research program that really is focusing on that group and the sort of challenges that are faced by that group in particular. And Asian Americans are increasingly, I guess, in the news. And so, you know, when you hear about issues like race affirmative action in both the sort of post-secondary context as well as when it comes to selective secondary school. So that's, you know, one thing that's going on. Obviously with the COVID-19 pandemic, we hear a lot about hate crimes against Asian Americans in particular that are highly salient and so you could, you know, also think about what are the consequences of at least just even hearing about these hate crimes, right? Not only for the victims themselves, but potentially for whole communities of Asian Americans. When they're exposed to such incidents, how does that affect, you know, the ways in which they engage either civically or in other ways? And so certainly there's no shortage of questions for this line of research, and I would say that, you know, Maria and I are excited to move forward and we very much hope that we can come back with exciting research updates in the coming months and years.

Bob Bifulco

Yeah, I couldn't agree more that, you know, as important as it is to document these types of biases, which is a, I think a big contribution here, you know, thinking about the processes by which they emerge

and by which the consequences of those biases are realized is what we really need to focus on if we're going to try to improve things. So I appreciate all the work you guys are doing. So thank you for joining us. We really appreciate you taking the time to talk with us about the fascinating work you're doing, and I wish you luck as you move forward with this work.

Maria Zhu

Yeah. Thank you so much for having us, this is great.

Ying Shi

Thanks, Bob. It's been a pleasure.

Bob Bifulco

Great. Thanks a lot.

Bob Bifulco

Thanks for all the listeners for joining us for this episode of Equity Matters. We encourage you to visit the Program for Educational Equity and Policy website at [educational-equity.org](http://educational-equity.org). There you'll find working papers, policy briefs, a blog and other products to inform your own research, help with your courses on educational policy, and guide you through complex educational policy issues. And if you enjoyed the podcast, please share it with your friends and tweet about it. Finally, look for future episodes of Equity Matters on our website and on whatever platforms you use to find your favorite podcast. Thank you for listening to Equity Matters.