“Ask the Asian! He Knows!”: Dismantling the Model-Minority Stereotype in Mathematics

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Abstract

Two firsthand experiences with the stereotype “All Asians are good at math” are shared—one as an undergraduate mathematics student and another as a teacher of mathematics. Although the two episodes are separated by nearly twenty years, the experiences are remarkably similar. The article discusses the origins of the stereotype, as well as how it racializes the subject of mathematics and burdens members of the Asian American community. Through narrative storytelling, advice is offered on how to confront and defuse racial prejudice in mathematical settings.

Discussion And Reflection Enhancement (DARE) Pre-Reading Questions

1. How would you reply if someone asked you, “What does race have to do with mathematics teaching?”?

2. Think of a time when the stereotype “All Asians are good at math” or a similar generalization emerged in a classroom situation. How did it make you feel?

3. How do you want to support students of mathematics who may be subject to unfair societal assumptions and racial stereotypes?

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Background

My mother is Japanese. This hardly makes me an expert on what it means to be Asian American but it does make for some experiences I had to grapple with as I grew up in a predominantly White community. Some people could tell I was Asian; some could not. Others could tell I was *something*. What follows is a reflection on how I have experienced and navigated the model minority myth surrounding Asian students in mathematics, from my own experiences as a student and also as a teacher of mathematics, from my emerging awareness of the stereotype to my continued learning of how to dismantle it. The names in these stories have been changed.

Two Stories, One Theme

When I was taking a probability course as an undergraduate, the professor asked the class the question, "Is this random variable discrete or continuous?" Silence. No one knew the answer. Some students were jarred awake by the professor's attempt at "engagement." A classmate I barely knew leaned in my direction and said the following, loud enough for about 10 classmates to hear: "C'mon, Keith. You know the answer, don't you? Use your ninja math to help us." Right there, in that moment, I had flashbacks to late middle school and early high school—Chinese restaurant takeout containers mysteriously left at my locker, students asking if I liked "flied lice" and the racist caricature, "Don't mess with Nabb—he knows karate." I snapped out of it and just answered the question: "It's definitely continuous." The professor heard neither my classmate's slight nor my reply. The professor was hard of hearing, always blaming the hum of the heater in the room (even on the days it wasn't running). And that was that.

As far back as I remember, I always sensed people thought I was good at math. In my formative years, I had no idea why. Many years passed before I would experience something similar to what happened that day in probability class. This time, I was standing at the other side of the room as the teacher. We were in the middle of a challenging problem in second-semester college-level calculus. We were calculating an arc length, simplifying the problem a bit, eventually collapsing the problem to some variation of $\int \sqrt{x^2+1}\,dx$ (which those readers familiar with calculus will recognize is the integral of the square root of the quantity x squared plus 1). I said something to the effect of, "Oh wonderful. Now what?" The most vocal student in the class partially stood up, grinning from ear to ear, and gestured repeatedly to the classmate to his left: "Ask the Asian! He knows!" It was said to invoke humor. Everyone in the room heard it. Some students laughed outright. Others covered their mouths in horror. Some silently shook their heads in disbelief. A student to my right lost part of her drink in my direction. She mouthed the words *I'm sorry*. For me, the air in the room suddenly grew thin. I simply said, "Tom, can you sit down?" Unfortunately, I was not prepared for this moment. I saw the pain in Jae's eyes. And I felt the weight of this dreadful familiarity. I needed time to process what had just happened. Even if some students found this humorous and others found it sad, I believe everyone knew it was wrong.

Tom is a white person who grew up within driving distance to the college. Jae was born in South Korea and had completed much of his early education there. To my knowledge, Tom and Jae were casual classroom acquaintances, exchanging words here and there and sometimes working as part of a larger team on group assignments. They never struck me as particularly close. This makes the episode all the more surprising—that such a prejudiced remark could be directed toward someone Tom did not know well. Similar to my experience as a student, I barely knew the person who asked me to answer the professor's question.

Sometimes I talk to colleagues about antiracist mathematics teaching and ask: What would it look like? Occasionally, a friend or colleague will ask me, "What does racism have to do with mathematics teaching?" Sometimes this question is heartfelt but other times it is presented as an intellectual challenge (e.g., *I dare you to give me an example*). My answer is always the same. We don't teach mathematics in isolation from the outside world. The everyday injustices "out there" can, and often

do, infiltrate our classrooms. It is fair to answer their question with this question: "What would you do with either of the above classroom situations?"

The "Asians Are Good at Math" Stereotype

Believing that individuals of Asian lineage are inherently skilled at math has roots in the model minority perception (Petersen, 1966), which, in the mid-twentieth century, applied mostly to Chinese Americans and Japanese Americans. Not only is there no data to support "All Asians are good at math," it is dehumanizing and racist (Chang & Au, 2008; Shah, 2019, 2020). The belief and ongoing perpetuation of this myth is harmful in the following ways (and this list is not exhaustive):

1. *It creates a racial hierarchy of who can do math* (Martin, 2009). "All Asians are good at math" is grounded in the stereotype that Asians are quiet, obedient, respectful, and hard-working. Scholars point to other reasons why immigrants (e.g., my mother) succeed—for example, *migrant advantage* (Kendi, 2019) or *relative functionalism* (Sue & Okazaki, 1990, as cited in Martin, 2009). Both are fundamentally anchored in resilience and adaptation, not race. The truth is, if Asian math achievement is due to some racial asset, the relational implication is clear for members of the African American, Latinx, and Indigeneous communities (Cvencek, Nasir, O'Connor, Wischnia, & Meltzoff, 2015; Martin, 2009). By saying "Asians are good at math" we devalue individuals by perpetuating the underperforming narrative of racial inferiority (Zavala & Hand, 2019).

2. *It paints the diversity of "Asian" into a monolith* (Chang & Au, 2008). The continent of Asia consists of over 50 countries. Asia contains half of the world's population. It is puzzling how one can assume "All Asians are good at math" when success in schools is an enormously complex metric to measure. Income, class, and parental educational attainment are just three driving factors. In addition to natural variance in achievement patterns, future success is tied to the historical, economic, social, legal, and political challenges one has had to overcome. Martin (2009) thoughtfully asked in our preoccupation with achievement why we focus so much attention on the "Black-White" gaps in mathematics but simultaneously ignore the White-Korean American gap or the White-Japanese American gap, among others.

3. *The myth places an unfair burden on Asian students to perform well in mathematics*. This unrealistic expectation causes depersonalization, emotional harm, and enormous pressure, all because of a societal assumption (Shah, 2019). My experiences with some of my former students from South Korea, Japan, China, Vietnam, and Hong Kong have been remarkably unique, almost equal parts "Let me help you with your question" and "You know, it's okay not to be great at math." One role I've relished as a math educator is helping students realize they can be "doers" of mathematics. In this situation, I find myself in an entirely different position, gently convincing my students it is normal not to score 100% on every mathematics encounter. Witnessing what Martin (2009) calls the "racialized nature of students' mathematical experiences" (p. 315) is painful, whether on the top rung or the bottom rung. Positive stereotypes can cause widespread damage.

4. *It opens the door to ethnic racism*. Despite the monolithic portrayal above, "All Asians are good at math" is almost always in reference to East Asia (e.g., Japan, China, Taiwan) and dismissive of Southeast Asia (e.g., Cambodia, Laos, Vietnam)[1]. This is a form of ethnic racism in that "we express a racist idea about an ethnic group" (Kendi, 2019, p. 63). Kendi's examples come from a different time and place but they are no less instructive—early American settlers making distinctions between "civilized" tribes and "wild" tribes and slave traders ranking their slaves by origin—e.g., Gold Coast slaves had the greatest value while Angolans were "lazy." (Kendi, 2019). Years ago, I witnessed a brief exchange between two students in the math tutoring center:

> **Student**: You look like you're good at math. Can you help me?
> **Tutor**: Uh, I guess.
> **Student**: Where are you from?
> **Tutor**: I grew up in Thailand.
> **Student**: Oh. [long pause] *Are you* good at math?

There is a piercing irony in the generalization "Asians are good at math" when what is really meant is "some Asians

[1] Singapore is a noteworthy exception.

are good at math." But to be clear, the whole stereotype is problematic.

Resolution

To return to the situation at hand, I will tell you what I did. At the end of class, I asked Tom if we could talk. Fortunately, he was free. I told him I wanted to share my perspective with him and that this was difficult for me to do. I told him I wanted him to listen and that I was trusting him by offering this advice. I shared with him why his remark was a form of racial prejudice and why it was hurtful to Jae. Tom immediately shot back with how it couldn't possibly be racist—how could it be when he was saying Jae was *good* at math? Tom added that he was simply joking with Jae and that they occasionally did this. He then offered how crazy our world is: "You know, I'm not going to be able to get a job because I'm white." I listened attentively, nodding as he told me the world was "stupid" and "full of snowflakes." He was the victim.

After affirming his feelings, I shared some of my own experiences. I told him I used to believe the false stereotype "All Asians are good at math" and that I likely benefitted from its application. He was shocked. Once he was invested in the conversation, we made some progress. I told him what I believe: we are socialized into a racist culture, and this episode wasn't about him or Jae as individuals but part of a much larger problem. I asked him if he would have said something similar were it not Jae but perhaps some other person of Asian descent. He just bit his bottom lip. I tried to make this less about Tom—to explain that we all have a racist worldview. Our conversation de-escalated quickly after this. In the course of about 10 minutes, Tom went from angry and defensive to reflective and guilt-stricken. Tom told me he still had some thinking to do and that he was sorry for what had happened. I told him I appreciated this but that he should probably apologize to Jae directly.

I emailed Jae that evening and asked him if he wanted to talk. He did and we spoke the next day. To my surprise, Tom had already told Jae he was sorry (they were in another class together). Jae told me he was used to things like this. "I always feel pressure to perform well in math. But this is a difficult subject for me. I never want to ask for help because that's not what we're supposed to do." He said this was the first time a teacher had ever acknowledged this stereotype. "Sometimes people ask me to tutor them in math and I say, 'I can't help you.'" We shared a laugh. I shared with Jae my experience as an undergraduate. He told me he was "surprised but not so surprised" to hear about this.

Before the next class meeting, I was feeling much better about the recent discussions with Tom and Jae. Admittedly, I was relieved these events were in the past. At the start of our next meeting, completely unexpected and unscripted, Tom stood up from his seat. It was clear to me he was about to say something important. I thought I was going to have a heart attack. He announced that he was sorry for what had happened—that he said something ignorant and racist. He apologized to the class, to me, and to Jae. I could not believe what I was experiencing. Tom was very nervous but he was authentic. I could feel his sincerity. Jae closed his eyes and nodded. There were many silent nods from classmates. And that was that.

Then and Now

Sitting in that probability class as an undergraduate, I cocooned myself from racism. I knew my classmate's remark was racial prejudice but I convinced myself it was not harmful due to its positive connotation. I'm grateful to people like Shah (2019, 2020) who tell us why this is fallacious. Today, I see things a little differently. Being an antiracist educator means not being complacent and not being silent. It means going beyond simply seeing or contemplating an existing problem. The calculus teacher in me wanted to run the other way just as the probability student had 20 years earlier. But burying the problem doesn't make it go away. I saw myself in Jae and I had already heard this story. It was my responsibility to rewrite this story—or at least a chapter—to attempt to do the right thing, even if I should fail. Kendi (2019) uses two words to describe his experiences and demeanor in defending what you know is right—*respectful* and *measured*. Honor people's humanity, give them time and space, and listen deliberately. Had I not affirmed Tom's experiences (DiAngelo, 2018; Kernahan, 2019)—had I not listened to how he felt, I believe this story would have had a different ending.

At the same time, it is important we do not unintentionally elevate ourselves in this work—that we do not fall victim to our own racism and our own hypocrisy. Growing up as a member of a small white community, I was one of just two Japanese American

students (the other one was my brother). While I'll never really know what the community said or felt about me, I do know what was said about the one Black boy in our community. He was "really good at sports" but "lazy and not so bright" when it came to academics. I recall a parent saying, "He'll be on welfare, eventually a danger to society." I grew to believe these stereotypes. When we are surrounded with this rhetoric—when this is what we are taught by those we trust and love—it becomes part of our world view. As Tatum (1992) so eloquently reminds us, we cannot be blamed for what we were taught as children, but as adults we are responsible for interrupting cycles of racism and prejudice (p. 4). I have certainly learned from day-to-day experiences that provide the necessary counter-narratives. But I still have work to do and I still have blind spots. And I'm far from perfect. If I embrace these flaws as axiomatic, then I can move forward.

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Discussion And Reflection Enhancement (DARE) Post-Reading Questions

1. In what ways can teachers support Asian American students who may not view mathematics as their favorite or strongest subject?

2. How can teachers identify and address classroom situations in which "All Asians are good at math" is assumed and propagated by others?

3. The article lists four ways in which the perpetuation of "All Asians are good at math" is harmful to both the Asian American community and to other communities. List and explain another way in which you believe this stereotype causes unintentional harm to individuals wishing to engage in the study of mathematics.

4. In what ways do you think this stereotype is passed on to others? What enables the myth to continue to be propagated in mainstream society?