How did you choose your major?

I think this experience is different for everyone. There are some people who come to college with a strong sense of what they will major in (some people even know what they want to do for their career? What? Excuse me?), others come in with one idea and end up changing their mind once or several times, and others come undeclared and do a little exploration before settling in. For me it was some combination of all of these things, and in my final semester here at UMass I can say that I’m happy with the experience that I have had in the majors that I chose.

Whatever your journey toward your chosen major looks like, I think that we all like to think that our academic and career decisions are influenced only by our own interests and talents - that these are free choices based only on our abilities. I was surprised to learn that there is empirical evidence to suggest that - for female students in STEM fields - that is simply not the case.

I attended a lecture by professor of psychology Nilanjana Dasgupta entitled “STEMing the tide: How Female Experts and Peers act as "Social Vaccines" for Girls and Women in STEM” last week, where I learned that our learned associations and implicit biases create the automatic assumption that Science, Technology, Engineering, and Mathematics are the realm of men, not women. These implicit stereotypes prevent broad participation and unintentionally influence who we believe is talented and worthy of success in these fields. Because humans are social beings, the academic and professional choices of women are often affected because, subconsciously, they do not feel like they belong in these fields. Dr. Dasgupta showed through her studies that feelings of belonging and confidence can be increased in female students when they see other women successful in these fields - in this way female experts and professors act as a “social vaccines” against implicit, internalized sexism.
The results of Dr. Dasgupta’s studies were staggering to me. When taking STEM classes under female professors, female students felt more confident about their abilities in the class, less anxious, more able to identify with the professor, and more positive about the subject in general than female students with male professors, but male students weren’t affected at all. However, despite this increased anxiety and lack of confidence, female students outperform their male counterparts across the board, regardless of the gender of their instructor.

This talk gave me a lot to think about. I was always successful in my math and science classes in high school, and interested too, and yet in college I’ve chosen to focus on humanities. I did briefly consider with some seriousness stepping into the sciences (at the suggestion of the seriously stellar astronomy professor (sorry not sorry for punning) Mauro Giavalisco) - I even set up appointments with department advisors and enrolled in classes, but after those first meetings and attending the first classes, I stepped back into the humanities where I felt comfortable. It wasn’t that I thought I wasn’t capable of the work, I just felt overwhelmed by the whole experience, and I think it’s likely that those feelings were much of what Dr. Dasgupta described in her talk.

Luckily, Dr. Dasgupta’s lecture was well attended by faculty members from all departments of CNS, and after she was done professor after professor stood up to ask what more they could do to help their female students succeed. I love my majors and I’ve had a great academic experience, but I’m so glad to see the real commitment that UMass professors are making toward supporting their female students in STEM fields.
I’m also proud that I will be able to contribute to this cause at an earlier level - I’ll be teaching high school math in South Carolina with Teach for America next year. My thanks to Dr. Dasgupta for such an interesting and inspiring lecture.

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