How I Got Here - Trajectories of Undergraduate Latinas in STEM

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Synopsis:

This study examines the trajectories of fifteen Latinas in STEM at a private institution through the social cognitive career theory and resilience lenses. It highlights instances when they felt encouraged to pursue STEM, protective and risk factors they encountered, introduction to STEM degrees and their STEM experience prior to and at their university. There is an emphasis on how mentors, parents, professors, and academic programs impacted their educational experience and pathway into STEM.
This qualitative study draws upon the social cognitive career theory (SCCT) and resilience framework to understand experiences that contribute to Latinas’ interest in STEM, (Science, Technology, Engineering, and Mathematics) their decision to pursue and be successful in a STEM field. Fifteen undergraduate Latinas attending a selective institution were interviewed to examine their STEM trajectory at different time points while focusing on achievement, self-efficacy beliefs and contextual factors. I transcribed the interviews and coded them based on four sub-sections the interview was divided into (early STEM experience, high school experience, transition to college and college experience) and analyzed them using SCCT.

Using the lens of SCCT I observed that participants had strong self-efficacy beliefs, constant positive reinforcement from adults and positive classroom experiences that motivated them to pursue STEM. Throughout their journey they struggled with diverse risk factors that impacted their self-confidence: feeling ill-prepared, peers, microaggressions, building relationships with professors and some have faced racism and sexism. Contrary to previous findings, the Latinas I interviewed expressed happiness at their institution. The resource availability and particularly their resilience has helped them remain persistent despite the challenges, specifically with coursework.

This research contributes to the few studies on Latina women in STEM and of Latinas at private institutions. This gives us an insight on the experiences they encountered on their way to pursuing STEM at a competitive institution, and how something as simple as reaching out to students and talking about what engineering is can impact their college career choice. This research opens up discussion on how we can better introduce STEM majors and opportunities to students earlier on in their academic career and what other summer programs universities can create to invite more Latinas who have the potential of pursuing a STEM degree.