

How Middle School Boys From Underrepresented Communities Perceive Computer Science and Computer Science Careers

by *Cristal Kelly | Karina Bhutta | Remy Dou | Monique Ross*

Abstract Id: 556 Submitted: **March 8, 2019** Event: **Conference for Undergraduate Research at FIU 2019**
Topic: **Computer Science**

Computer science (CS) as a field is characterized by significant disparities in the representation of people groups from minority populations. In this phenomenological study we sought to understand how middle school boys from minority groups perceive CS and related careers with the goal of identifying the factors that contribute to their career intentions. Specifically we sought to answer the following questions: How are salient factors reported by middle school boys related to CS career aspirations associated with their cultural values? How do perceived barriers shape their career intentions? And how do high CS interest and negative perceptions interact to affect CS career intentions? Although CS was not the first career choice of any of the students interviewed in this study, the results of interview analyses revealed differing attitudes. Several participants self-identified with the field and activities associated with the profession. Those who identified with CS saw CS as a career option accessible to everyone. CS career intentions were associated with students' interest and self-identification with CS. These, too, were associated with student perception of the field as "difficult." Finally, while negative CS stereotypes generally dissuaded students from the field, surprisingly, in the case of "computer scientists are not athletic", this had the opposite effect. Participants seemed to view this specific stereotype as a compelling myth to disprove.