

**The Role of Resilience in the STEM Identities of Post-Secondary Students:
A Qualitative Metasynthesis
Karen Benn Marshall, Oakwood University
Sylvia M. James, National Science Foundation
NARST 2020 ANNUAL CONFERENCE**

Abstract

The purpose of this qualitative metasynthesis is to explore the relationship between science, technology, engineering, and mathematics (STEM) identity and resilience in racially and ethnically diverse post-secondary students. This study identifies experiences that impact STEM identity development in diverse undergraduate and graduate students. The results of a constant targeted comparison (an analytical technique not often used in educational studies) between STEM identity and student resilience suggests that STEM identity contributes to resilience in diverse students. Findings suggest that common adverse experiences that may impact racially and ethnically diverse students can be overcome in the presence of a well-developed STEM identity. This resilience in STEM appears to be impacted by factors such as group membership, race, gender, agency, internal and external supports, validation, and access. Diverse students may have access to a range of coping mechanisms including family and peer support systems, as well as a personal cache of innovative approaches to self-define their STEM identities and help them navigate the academic milieu. Additional research is needed to better understand the relationship between a strong STEM identity and resilience in diverse undergraduate and graduate students.

