LAYERS OF BELONGING: UNDERSTANDING THE LEARNING JOURNEYS OF HIGHER-LEVEL CHEMISTRY STUDENTS

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SUBTHEME: Diversity, Inclusion, and Equity

PROBLEM

Student belonging plays a critical role in academic engagement, persistence, and identity development in STEM disciplines (Thomas L., 2021). Specifically, in the aftermath of COVID-19, many students continue to experience disconnection from their academic communities and identities.

PLAN

This study explored what students perceive as essential to belonging and how belonging influences their academic and career pathways. Grounded in the self-determination theory (Skinner et al.,2017) and the integrative framework of belonging (Allen et al., 2021), we examined science students' belongingness through a mixed-method approach.

ACTION

Data were collected from 108 second and third-year chemistry students at Deakin University in 2024 via three open-ended questions and five in-depth interviews. The data gathered was analysed through NVivo 14 software.

REFLECTION

Analysis revealed five main themes and 11 subthemes across two domains: (1) elements shaping belonging, including competencies, inner drive, and inclusive environments; and (2) the perceived role of belonging as a life aspiration, motivator for success, and driver of career goals. These findings highlight the multifaceted nature of belonging, encompassing students' perceptions, motivations, opportunities, and competencies. Together, these dimensions offer valuable insights to inform more inclusive and effective post-pandemic student support strategies in chemistry education.

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