

From Surviving to Thriving: Identifying the Barriers Faculty, Staff, and Administrators Face in Supporting Student Mental Health and Well-Being

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IUSE: From Surviving to Thriving: Identifying the Barriers Faculty, Staff, and Administrators Face in Supporting Student Mental Health and Well-Being

Introduction

This Improving Undergraduate STEM Education (IUSE) Institutional and Community Transformation Level 2 project addresses cultural change through a community of transformation. Ultimately, the project seeks to shift the culture in engineering programs from one of expected, required high stress [1] to one of thriving for all community members. Engineering faculty, staff, and administrators are in critical positions to influence and support students' mental health and well-being (MHWB) [2] through roles in the classroom, on committees, as student advisors, and as policy developers [3-9]. At the same time, the MHWB of engineering faculty, staff, and administrators is also important. To address these needs in transforming engineering culture, the project leverages multiple community transformation initiatives to enable change efforts. To inform these community transformation initiatives, the project addresses research questions that support effective and lasting community change.

Project Overview

The goal of the project is to catalyze a shift in engineering culture toward greater well-being, defined not only as the absence of mental illness but also as a mental state in which engineers can effectively cope with stress, realize their full potential, and engage meaningfully with society. Towards this goal, the project combines research and community transformation initiatives to shift the narrative in engineering higher education from mere survival to thriving. The project includes a three-phase research initiative that addresses the overarching research question: *How can faculty, staff, and administrators serve as agents of change for cultures of well-being in undergraduate engineering education?* The overarching research question will be investigated through three phases of data collection, including interviews, focus groups, and surveys.

This presentation will provide an overview of the first wave of data collection and preliminary findings addressing the following research questions: *What are engineering faculty, staff, and administrators' lived experiences with student mental health? How do they define a culture of well-being? How do they view their role in driving a cultural shift towards being supportive of well-being? What would they consider measures of success of a cultural shift towards being supportive of well-being?* Finally, we conclude with a brief description of three ongoing community transformation activities: a national virtual community of practice, instructor workshops, and mentored intervention projects.

Theoretical Frameworks

TRIPLE Change Model

The Theories and Research on Intersectional Power, Learning, and Evolutionary (TRIPLE) Change model was developed from interactions within institutional change teams and encourages the examination of cultural change through three intersecting lenses: a theory of change, a theory of learning, and a theory of power [10,11]. These theories are encouraged to be selected as relevant to the change efforts. We use the TRIPLE change model as a framework to develop and assess the efficacy and interaction of our community. We include Henderson's model as our theory of change [12], communities of practice as our theory of learning [13], and intersectionality as our theory of power [14].

Advocacy Identity

In addition to the TRIPLE Change model, we are leveraging the Advocacy Identity framework in the first wave of data collection. The Advocacy Identity framework encourages consideration of situational and personal aspects that may act as barriers to participation in advocacy, while implementing supports that make advocacy less daunting [15]. Adding this perspective enables us to identify the barriers that engineering faculty and staff face in implementing cultural change related to well-being.

Methods

We developed a semi-structured interview protocol leveraging theoretical frameworks that (1) center on participants' experiences and potential barriers to implementing change to support student mental health and well-being, as well as (2) participants' relationships with student mental health and well-being advocacy. Example questions included:

1. Would you describe yourself as an advocate for mental health and well-being?
2. How has your workload impacted your ability or comfort level in speaking up about mental health or carrying out policies or activities that support students?
3. In your experience, what unspoken rules have made it easier or more difficult to speak up about mental health and well-being in engineering?

Two research team members conducted interviews with participants on Zoom. All interviews were audio-recorded locally on a computer and then transcribed by a professional transcription service. Transcripts were reviewed by research team members and redacted as appropriate to ensure participant anonymity. Participants ($n = 16$) included faculty ($n = 13$) and staff ($n = 3$). Some faculty and staff participants also held administrative roles. Analysis of the 16 interviews is ongoing, employing a thematic analysis approach [16]. The preliminary codebook includes the identification of barriers to action and advocacy described by participants.

Preliminary Findings

Faculty and staff identified many barriers to supporting student mental health and well-being. A common barrier was the limited capacity to support students' mental health amid competing

professional demands. These demands ranged from an inability to allocate sufficient time to students to feeling overwhelmed and lacking the emotional energy to engage. One participant stressed this, saying, "So, basically, within the context of, 'we care, we wanna do this, it's important to us,' we're still all over capacity and stretched too thin." (Staff participant, Daisy).

In addition to these external barriers, participants expressed a lack of confidence in their ability to advocate for their students. This lack of confidence stemmed from feeling ill-equipped to address the obstacles they faced and from the inability to assess the outcomes of their advocacy. One participant noted this lack of confidence, saying, "How do I know if I'm helping? Hopefully you're not hurting, but how do you know? It's just trying to assess...am I having an impact?" (Faculty Participant, Ashley). Together, these barriers make it more challenging for faculty and staff to engage in efforts to support student well-being, because even if they find the time to support their students, how do they know if they are actually helping?

Community Transformation

Our ultimate goal is to change the culture in engineering higher education for all community members. Towards this goal, we are leveraging our research findings in three main ways to change the narrative in engineering education, specifically by facilitating: (1) the Mental Health and Wellness Virtual Community, (2) instructor workshops, and (3) mentored small grant projects.

Mental Health and Wellness Virtual Community

The Mental Health and Wellness Virtual Community (MHW-VC, <https://sites.google.com/umich.edu/mhw-vc/home>) began in 2022 to bring together researchers, facilitate discussions on mental health in engineering, and foster cross-institutional collaborations. The community hosts regular (approximately monthly) virtual meetings with community facilitators. Topics of recent meetings include psychological safety for doctoral students, emotional support from traditional and chosen family, prioritizing self-care, and responding to students who disclose mental health distress. Currently, the community comprises 245 members on the listserv. In addition to the meetings, the community also hosts a Slack channel for sharing resources and continuing community discussions.

Workshops

We aim to equip faculty and staff with the knowledge and skills necessary to support the mental health of undergraduate engineering students. To achieve this goal, our team is offering research-based workshops for instructors nationwide at various venues. In addition to addressing student topics, our workshops also support the mental health and well-being of instructors.

Mini-Grant Projects

To support community members in enacting transformations in their local communities, the project will facilitate a small-grant program that provides funds for faculty, staff, and students to implement interventions to support student mental health and well-being. By crowdsourcing lessons gained from evaluations of the assessments, the program will expand the community's collective knowledge of the effectiveness of interventions that support scaling these initiatives across institutions.

Discussion and Future Work

Moving forward, a second wave of data collection will include a qualitative survey of four-year college engineering faculty, focusing on the problems and challenges they experience in supporting mental health in engineering education. The initial survey is designed around Bronfenbrenner's Ecological Systems to integrate Intersectionality. The survey responses will be inductively coded using thematic analysis and grouped into distinct issues. The results from this survey will be used to facilitate focus groups and to synthesize actionable solutions to the prevalent problems identified. These focus groups will be analyzed using the TRIPLE framework, with particular attention to Henderson's Theory of Change. In addition to the upcoming data collection, our team will continue to facilitate the Mental Health and Wellness Virtual Community and instructor workshops, and we plan to launch the mini-grant projects in the upcoming year. Collectively, our research and community transformation efforts will foster a culture of thriving for all community members.

Acknowledgements

The project team thanks Yaa Donkor for her engagement in the project, including the project preparation, data collection, and preliminary analysis. This material is based upon work supported by the National Science Foundation under Grant Nos. 2336267 and 2336268. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the National Science Foundation. We thank Dr. Andrew Danowitz for support in the formation and continuation of the MHW-VC. The authors thank project advisory board members Drs. Joseph Hammer and Jerrod Henderson for their valuable insight. The authors also thank the interview participants for sharing their perspectives.

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