Board 259: Engineering Faculty Members' Experience of Professional Shame: Summary of Insights from Year Three

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Dr. Amy Brooks is a Postdoctoral Associate at the University of Pittsburgh Swanson School of Engineering. Her dissertation research broadly focused on global issues related to sustainable waste management and plastic pollution. After earning her PhD 2021 from the University of Georgia, Amy developed skills in qualitative research methods in engineering education at Oregon State University. As part of this training, she used interpretative phenomenological analysis (IPA) to examine engineering faculty well-being and collaborated on the development of a reflective tool for researchers to build skills in semi- and unstructured interviewing. Building on her postdoctoral training, Amy aims to merge her methodological interests to pursue research questions in the nexus of engineering education, sustainable development, and resilient communities.

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Abstract

In this paper, we provide an overview of an NSF CAREER project (Award #2045392) where we seek to advance academic well-being by understanding how engineering faculty experience and reproduce experiences of professional shame. After conducting non-standardized interviews with engineering faculty (n = 23), we use interpretative phenomenological analysis to examine select individual cases (n = 10) that illustrate poignant individual experiences of professional shame. In this paper, we summarize three cases to demonstrate the complexity and function of professional shame in the interior world of faculty members.

Overview of Project

The purpose of this overarching project is stated below, as reported previously in prior papers connected to the ASEE NSF Poster Session. We restate it here and then describe the specific purpose of this paper.

> In this NSF CAREER project, as we have reported elsewhere, we investigate faculty members' experiences *of professional shame* [1-6] and then connect how these individual emotional phenomena facilitate or impede well-being in engineering programs. We aim to illuminate how faculty behaviors might reinforce dominant narratives [7, 8] of exclusion as they cope with shame and how they affect the overall climate of well-being in engineering departments.
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> We designed this project to address two notable gaps in prior research: 1) the role of professional shame in facilitating or mitigating cultural patterns of well-being; 2) the complex, dynamic nature of the lived emotional experiences of engineering faculty. We organize this project around the following objectives:
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> **Objective 1:** Examine social and individual experiences of professional shame in engineering faculty.
>
> **Objective 2:** Characterize the link between faculty's emotional experience and their surrounding cultures of well-being.
>
> **Objective 3:** Establish a framework to provide training for engineering programs to establish cultures that support healthy strategies for coping with painful emotional experiences.
>
> Huff, Brooks, et al. [9, 10]

In this paper, we focus on our interpretative phenomenological analysis [11] that we used to address Objective 1. In particular, we illustrate three individual cases from interviews to demonstrate the pernicious role of professional shame in faculty well-being.

Summary of Data Collection and Analysis

We define professional shame as a painful emotional experience resulting from a perceived failure to meet internally or externally defined expectations that are relevant to personal identity in a professional context. To examine participants' experiences with professional shame, we used

an unstructured interview [12] approach loosely guided by goals designed to elicit participant descriptions of 1) their personal identity construction, 2) perceived sociocultural expectations of engineering faculty, 3) experiences of shame in the engineering context, and 4) their responses to those shame experiences.

At the end of interviews, we also inquired directly about participants' perceptions toward the study and the phenomenon of professional shame. For each interview, we obtained informed consent and allowed participants to ask any questions prior to the start of the interview. We also employed a debriefing protocol with every participant immediately after the interview concluded to include remarks normalizing the experience of professional shame and making known that mental health and counseling services are available at each university. Additionally, we offered participants the option to continue off record conversations about the experience at their convenience. While some participants expressed emotions that emerged in discussing painful experiences related to inadequacy in their personal and professional domains, many participants expressed gratitude toward the study, citing a cathartic experience from the interviews, and we did not perceive lingering distress among the participants.

By following the interview approach, we collected rich and complex description of the experience of professional shame among a diverse group of engineering faculty participants. Across the 23 interviews, the duration ranged from 75 – 146 minutes long, with an average of 113 minutes per interview.

At present, we have conducted extensive interpretative phenomenological analysis (IPA, [11]) of 8 out of 10 cases. This analytical process involves intensive commitment to interview transcript data, where we carefully reads an interview transcript to identify descriptive, linguistic, conceptual, and psychological patterns of the data. After multiple layers of careful reading and annotation, we represent holistic patterns of how a certain faculty member might experience professional shame. Only after developing a careful understanding of each case do we conduct cross-case analysis. The outcome of an IPA study is a rich set of psychological knowledge claims that shed novel and often overlooked insight into a phenomenon like professional shame.

Summary of Individual Cases

Our analysis is ongoing, and we aim to present final results in forthcoming journal articles. For this conference paper, we offer an overview of three individual cases that help to illustrate complexity of individual experiences with professional shame. As faculty members could be readily identified, we are careful in these descriptions to not disclose any social identities or disciplinary backgrounds, using the pronoun "they" to obfuscate the gender identities of participants. We recognize that this choice removes important nuance but also preserves the anonymity of participation.

Participant 1: One faculty member identified as a teaching professor within an engineering academic unit. They described two episodes of professional shame in considerable detail. In the first episode, their identity as a scholar had been diminished by messages from tenure-track faculty in a meeting. In a second episode, they described how their teaching performance had been harshly criticized by students. In both instances of professional shame, the faculty member chose to interpersonally connect with colleagues who had shared similar experiences, a process that helped to normalize their experience. They also relied on their faith, in a more general to

sustain them through the difficult emotion and offer an identity buffer, where they could ground their understanding of who they were in a larger identity than that of an engineering professor.

Participant 2: One participant identified as a tenure-track faculty member within an engineering academic unit. They elaborated on the disorienting journey of finding belonging amid the uncertain terrain of pursuing tenure. Prior to their career as a faculty member, they had a childhood, high school, college, and graduate school trajectory of demonstrating superior intellectual performances. Encountering tenure created an ever present mystery where they wondered if they would be accepted into a role that they had dreamed of—unlike their prior experiences of being accepted through academic performance. Yet, this participant responded to the experience of professional shame felt in research processes of gaining tenure (e.g., grant writing, publishing) by focusing on how they could create social connection with their students.

Participant 3: One participant identified as a tenure-track-equivalent professor who had concluded a longstanding career in engineering industry. Their account focused somewhat on the disconnect that they had felt between following their career in industry versus what they perceived to be a more conventional academic pathway into faculty life. One poignant episode was the painful sense of inadequacy they felt when their students did not perform as hoped. In one instance, the participant simultaneously felt an acute sense of pain about their role as a professor while also directing blame on the student for their failure.

What is professional shame doing? These three summaries illustrate how professional shame is experienced by faculty from their interpretation of multiple messages on what it means for them to be a professional. The messages that induce such shame could come directly from colleagues, students, or unstated cultural norms of academic life. Moreover, in every case, shame would motivate further action onto the cultures around them. The experience of professional shame would motivate faculty members to craft social connection into their work environment, either through relationships with colleagues or students. Alternatively, the experience of professional shame could motivate unhelpful actions, such as blaming students in an educational setting. By understanding a robust picture on how professional shame *functions* in the interior worlds individual faculty, we aim to help faculty have tools to harness this powerful emotional state in ways that increase social connectedness, both for themselves and their academic programs.

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