

Engineering Faculty Members' Experience of Professional Shame: Summary of Key Insights from 2025-2026 – NSF CAREER

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Abstract

In this paper, we present an overview of an NSF CAREER project (Award #2045392) that seeks to advance the academic well-being of engineering faculty by identifying and investigating phenomena of professional shame experienced by faculty members. For this purpose, we partnered with six academic institutions and interviewed their engineering faculty. We present an overview of our data collection of non-standardized interviews with engineering faculty (n=23) and using interpretative phenomenological analysis (IPA) to examine individual cases (n=10) that illustrate poignant experiences of professional shame. In this paper, we summarize the key insights from our interpretative phenomenological analysis (IPA) study on faculty members' lived experience of professional shame. Additionally, we describe our next steps to integrate the processes of two qualitative studies so that we can analyze how these experiences of professional shame might relate to faculty members' expectations of their students, peers, and their departments' culture, and ultimately train departments to build cultures where faculty and students are able to live well with the experience of professional shame.

Overview of Project-Background and Objectives

In this project, we address two notable gaps in prior research: 1) the role of professional shame [1], [2], [3], [4], [5] in facilitating or mitigating cultural patterns of well-being [6]; 2) the complex, dynamic nature of the lived emotional experiences of engineering faculty.

By professional shame, we refer to the “painful emotional state that occurs when one perceives they have failed to meet socially constructed expectations or standards that are relevant to their identity in a professional domain” (p. 414 in [1]). During the project, we examined multiple topics to address the gaps. For example, prior work has demonstrated that engineering students experience professional shame [7], [8] in ways that are integrated with their identity development [9] especially their engineering identity [1], [10]. In this study, we are investigating how engineering faculty both experience professional shame and connect their experience of social expectations to what they expect of others [10]. Additionally, we examine how professional shame and its impact contribute to the institutional cultures within which this emotional state is experienced.

As reported previously [11], [12], [13], we have organized this overarching project around the following objectives:

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.

Summary Research Design

In the overarching investigation of the CAREER project, we use a qualitative mixed-methods approach to study the aforementioned objectives. First, we use interpretative phenomenological analysis (IPA) [14] to study the lived experiences of professional shame in engineering faculty

(Objective 1). We embedded our IPA efforts within a constructivist grounded theory analysis [10] that generates a theoretical model of the relationships between faculty emotion regulation and cultures of well-being (Objective 2). Furthermore, the education plan to develop faculty training on regulating professional shame (Objective 3) is interwoven with the research focus on changing cultures of well-being (Objective 2).

With IRB approval, we conducted 23 in-depth, non-standardized, unstructured interviews [15] with faculty from six universities. To enroll in the study, faculty participants completed a study interest questionnaire where they identified their gender, racial, and ethnic identities. For each interview, we obtained informed consent and allowed participants to ask any questions prior to the interview's start. We also employed a debriefing protocol with every participant immediately after the interview concluded, which included remarks that normalized the experience of professional shame and made clear that mental health and counseling services are available at each university. We also offered the participants the option to continue off-record conversations about the experience at their convenience.

By following an interview approach, we collected rich, complex descriptions of the experience of professional shame among a diverse group of engineering faculty participants. Across the 23 interviews, the duration ranged from 75 to 146 minutes, with an average of 113 minutes per interview. While some participants reported emotions arising from painful experiences related to inadequacies in their personal and professional domains, many expressed gratitude toward the study, citing cathartic experiences from the interviews, and we did not observe lingering distress among participants. Additionally, they identified instances in which they failed to meet expectations of being faculty in two open-ended responses. At the end of the interviews, we also inquired directly about participants' perceptions of the study and the phenomenon of professional shame.

In this conference paper, we present an overview of key insights and themes derived primarily from interviews with 10 engineering faculty members, analyzed using the IPA approach (Objective 1). IPA allows the researcher to conduct an in-depth examination of the lived experiences elicited from individual participants during an interview and develop nuanced themes that characterize the experiences of participants [16].

Evaluation

In this IPA study, we used purposive sampling to recruit 10 engineering faculty members from six institutions and conducted in-depth interviews with them about what they felt was expected of them and how they experienced professional shame when they failed to meet these expectations. We have a recording of 10 individuals, which has been transcribed using the transcribing software. The transcripts were subsequently reanalyzed and matched to the audio recordings to mitigate transcription errors and omissions. These corrected and updated transcripts from 10 interviews with individual faculty members were analyzed using an IPA approach.

This analytical process involves intensive engagement with interview transcripts, in which we carefully read them to identify descriptive, linguistic, conceptual, and psychological patterns in the data. After multiple layers of careful reading and annotation, we present a holistic account of how a particular faculty member might experience professional shame. Only after we developed a careful understanding of each case did we conduct cross-case analysis. The outcome of an IPA study is a rich set of psychological knowledge claims that provide novel and often overlooked insights into phenomena such as professional shame.

Here, we summarize two key insights from our IPA study on faculty members' lived experiences of professional shame. **First, faculty experienced professional shame from a wide range of sources.** As we might expect, faculty encountered the experience of shame when navigating professional expectations related to their job performance (e.g., tenure and promotion standards). More surprisingly, faculty felt painful experiences of professional shame when they encountered messages that they had not met their students' expectations, either through peer evaluations or through graduate students departing their research laboratory. Also interestingly, faculty from teaching-focused roles (either described by their job or their institution type) would navigate expectations of tenure-track faculty at research-intensive environments. For example, faculty might defend why they were not producing research in their career, even though doing so was not a stated expectation of their faculty role.

Second, faculty constructed their professional and non-professional boundaries to buffer the effects of shame. Nearly all participants located clear boundaries between their professional roles as faculty and sought to separate their core identities from this role by looking to their professional lives (i.e., through their faith, their family relationships). Creating a sense of distance between their professional identities served them in a way that, at times, offered a reparative way forward to cope with experiences of shame. When they centered their identities outside of their work, they could reduce the identity-related threats of messages that they experienced in the workplace, remembering that they were whole people beyond a faculty position. Yet, maintaining these boundaries often created a struggle for faculty, who had often pursued this particular career to achieve strong identity-relevant goals related to intellectual achievement in research or generative service through teaching.

Conclusion

As we enter the current phase of this project, our work on key insights and themes has enabled us to evaluate the phenomenon of professional shame from the perspective of the engineering faculty. This helped us recognize the ways teaching faculty's personal well-being is influenced. It can be interpreted that professional shame could come directly from colleagues, students, or unstated cultural norms of academic life. Moreover, shame would further affect the culture around the faculty. This experience can either motivate faculty members to cultivate social connections or lead to unhelpful actions, such as blaming students, in educational settings. These insights indicate that professional shame is not merely an individual emotional experience but a relational and systemic phenomenon that shapes academic climates and affects student and faculty well-being.

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