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Board 270: Engineering Faculty Members' Experience of Professional Shame: Summary of Insights from Year Two

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Engineering Faculty Members' Experience of Professional Shame: Summary of Insights from Year Two

Abstract

In this paper, we present an overview of an NSF CAREER project, in which we seek to advance academic well-being by understanding how engineering faculty experience and reproduce experiences of professional shame. We present an overview of our data collection of non-standardized interviews with engineering faculty ($n = 21$) and how we are using interpretative phenomenological analysis to examine select individual cases ($n = 12$). We report our preliminary insights that 1) participants experienced complex and manifold socially constructed expectations that form the basis of their professional shame experiences and 2) participants' experiences of professional shame varied according to how central their roles as faculty were to their identities. We describe our immediate next steps to integrate the processes of two qualitative studies so that we can generate insight into how engineering faculty link their experiences to their departmental cultures 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

In this NSF CAREER project, we investigate faculty members' experiences *of professional shame* [1-5] 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 [6, 7] of exclusion as they cope with shame and how they affect the overall climate of well-being in engineering departments.

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]). Prior work has demonstrated how engineering students experience professional shame in ways that are integrated with their identity development as engineers [1, 8]. In this investigation, we aim to examine the how engineering faculty both experience professional shame and contribute to the institutional cultures in which this emotional state is experienced.

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:

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.

In the overarching investigation of the CAREER project, we use a qualitative mixed-methods approach to study these objectives. First, we use interpretative phenomenological analysis (IPA) study [9] to study the lived experiences of professional shame in engineering faculty (Objective 1). We embed 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). Further, the education plan to develop faculty training on regulating professional shame (Objective 3) is interwoven with the research focus to change cultures of well-being (Objective 2).

In this paper, we focus on our data collection and analysis efforts related to understanding the lived experiences of professional shame in engineering faculty (Objective 1) and discuss how we leverage this in-depth insight to establish our aim to theoretically model relationships between faculty emotion regulation and cultures of well-being in engineering departments (Objective 2).

Summary of Data Collection and Analysis

With approval from the IRB (HU #2020-138), we have conducted 21in-depth and non-standardized interviews with faculty from four universities. To enroll in the study, faculty participants completed a study interest questionnaire where they identified their gender, racial, and ethnic identities. Additionally, identified instances in which they failed to meet expectations of being faculty in two open-ended responses. While all

We followed a non-standardized approach [11] to eliciting the data, in which we began by asking questions about how the participant generally understand their self-concept, holistically, then how they understood their identity in the context of their role as engineering faculty, then moments where they failed to achieve identity-relevant expectations in their roles as faculty. On this final line of questioning, we would probe for detail regarding the emotional experiences that accompanied these instances of failing to meet expectations (i.e., professional shame). We closed each interview by making known the explicit study objectives and giving the participant opportunity to address whether they spoke to those objectives or whether they wanted to add or modify anything they said. We debriefed each participant by normalizing and making known mental health services at each university. We further stated our willingness to hold additional conversations about the experience, off the record from the study. We note that we did not perceive any lingering distress in participants, and in fact, nearly all of the participants expressed gratitude for the opportunity to make their holistic experiences known.

Participants discussed robust and complex experiences with professional shame in the interviews. While we are only beginning data analysis for the project, we are enthusiastic about the volume and quality of the data in the interviews in addressing the study objectives. The 14 interviews ranged from 75 – 146 minutes with an average of 115 minutes per interview.

While all participant interviews will be analyzed in the grounded theory investigation on linking individual emotions to disciplinary cultures (Objective 2), we have purposefully sampled a smaller set of interviews, in which faculty demonstrated experientially robust descriptions of their lived experiences, to analyze using IPA, so that we may better understand the lived experience of professional shame in engineering faculty (Objective 1). Specifically, we are examining 12 cases, each using a thorough process of examining descriptive, linguistic, interpretive, and experiential characteristics of each statement within a transcript [4]. Only after a thorough examination of each case do we examine cross-case patterns of insight. While we

refrain from making bold claims of our findings, we do highlight preliminary insights from the interviews.

Summary of Preliminary Insights

We highlight two preliminary insights from our ongoing analysis. First, the professional identity of engineering faculty contain multiple dimensions, and thus, multiple opportunities to experience professional shame. As might be expected, some faculty felt that they failed to meet the expectations of their institution or academic unit. However, the nature of such institutional expectations were rarely formal, and in addition to managing the lived experience of professional shame, faculty participants often needed to invest time in being clear on the nature of ambiguous expectations that they encountered in messages from their institution. However, participants also demonstrated sensitivity to how they were perceived by students, how they were perceived by peers, and how they were upholding managing their lives outside of work. The ways that socially constructed and identity-relevant expectations were constructed were complex and manifold to the individual faculty participants. Similarly, the nature of how they experienced professional shame when failing to meet such expectations were multifaceted.

Second, participants varied greatly in how they coped with the experience of professional shame. We note that participants who held their roles as faculty as central to their identities generally experienced professional shame in ways that were challenging to recover from. When they felt professional shame, the emotional experience became a pronounced phenomenon in their overall lived experiences. Other participants viewed their role as faculty as less central to their identities, and thus, when they experienced professional shame, they generally reframed the emotional experience to focus on what they could learn from the phenomenon rather than harshly criticizing themselves. All participants demonstrated remarkable insight into how they cope with instances of professional shame, and we are in the process of analyzing these patterns.

Next Steps and Future Work

In our immediate next steps, we will finalize the analysis of the IPA participants ($n = 12$) and generate insight into the complex lived experience of professional shame in engineering faculty. We also will leverage the inductive IPA insights to form the basis of the grounded theory investigation. Specifically, grounded theory requires a commitment to multiple layers of coding to generate robust, data-informed connections through cross-case analysis. Since IPA requires an in-depth investigation of individual experiences, we will be well-positioned to generate theoretical insight on the relationships between individual emotional experienced and departmental cultures using the more conceptual analytical framework of grounded theory.

We are enthusiastic about how we can use the findings to inform and train engineering departments on building cultures that enable faculty to both live well in the individual experience of professional shame and to cultivate equitable and healthy ecosystems that invite the whole student into the cultures of their engineering degree programs. By advancing academic well-being in engineering programs, we aim to contribute to a culture of engineering that demonstrates compassion, both interpersonally in the practice of engineers and intrapersonally such that we collectively value our holistic identities.

Acknowledgements

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