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# Well-being and Engineering: Personal and Professional Well-Being Experiences of Tenured Female Engineering Faculty

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## What is Qualitative Educational Research?

Study of people's perceptions, motivations, experiences, and meanings to collect rich, descriptive stories from individuals to inform policy, enhance learning, or program, development.



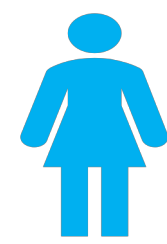
Words serve as our data instead of numbers and measurements, so **we ask individuals about their lives and analyze their responses** to determine what common threads they share, how they may differ in nuanced ways, and what others can learn from their stories.



Study aims to uncover **how female engineering faculty members incorporate well-being across their personal and professional lives in support of their professional success**, to consider this often overlooked dimension of the faculty experience into policy and support structures.

## Details of Dissertation Study

**Methodology:** Interpretative phenomenological analysis (IPA) is a systematic analytical approach designed to allow researchers to explore and understand how people make sense of their experiences.



**Sample:** 8 African American or White women from engineering sub-disciplines of chemical, mechanical, civil, environmental, and industrial engineering, and faculty ranks of Associate to Full Professor as well as administrators.

Frances JoAnn Allison Mary Gabriella Marie Dylan Rose

44 women completed an online open-ended survey about salient roles, a happy time in personal and professional domains, and a personal WB strategy or value. 8 were selected for in-depth semi-structured interviews.

**Current phase:** all data has been collected and the analysis is underway. Detailed results of one of the eight participants, Frances, is presented here.

## Why Should We Be Concerned About Faculty Well-Being?

Faculty have spoken<sup>[1-3]</sup> about strenuous time and performance demands including:



- pressure of promotional and tenure expectations
- overload of work hours
- challenges with colleagues and feeling isolated
- pressure to be awarded research funding and publish
- perceived incompatibility between motherhood and academia
- lack of autonomy
- lack of guidance from experienced colleagues



documented "**chilly climate**" of male-dominated fields like engineering, where women experience subtle and overt discrimination and sexism.<sup>[4-6]</sup>

## Benefits of Enhancing Employee Well-Being

**Promoting and preserving employee WB leads to marked increases in organizational health** where WB and retention were shown to be linked. Increased WB was also shown to **foster organizational success through job satisfaction and productivity** with a correlation between job satisfaction and life satisfaction.<sup>[7-9]</sup>

## What Does Well-Being Mean in This Study?

Several distinct ways WB is conceptualized with many researchers using "well-being" and "happiness" interchangeably. According to the **Psychological Well-being Framework** happiness arises from personal fulfillment and expressiveness, self-actualization, and self-determination.<sup>[10]</sup> **Six components:**

*"the backstory I just told you, is the reason I'm so passionate about doing faculty development, 'cause I don't want anybody to go through the crap I went through. I don't care what color you are. So I'm very passionate about trying to help faculty be successful because of the bad stuff I went through."*

*"He's going to be sensitive, I mean I've been able to go into his office and talk to him about any and everything."*

*"[Mentoring students] is something I do because I want to, not because I have to [...] if I stopped doing it tomorrow nobody would care. Cause that's the kinda position I have, I have that flexibility."*

*"And so I had autonomy to create this program [...] it was everything that had to do with diversity that I wanted to do. [...] [Superior] never made me choose between my passion and my position."*

*"That's an amazing boss, amazing boss, which is why I'm still at [university]. In spite of everything that's happened, to be working for him in this environment, to know how much he, he really celebrates the things I do for the faculty and he's so excited about it, that validates what I do. It makes me feel good and creates an environment that I can survive in and thrive in."*

(1) **Self-Acceptance**  
positive evaluation, knowledge, and acceptance of one's self including limitations

(2) **Purpose in Life**  
belief that one's life has meaning, purpose, and direction

(3) **Environmental Mastery**  
capacity to effectively manage life situations and surrounding world

(4) **Positive Relations with Others**  
possession, quality, and depth of connection with significant others

(5) **Autonomy**  
sense of self-determination and living in accord with one's personal convictions

(6) **Personal Growth**  
continued growth and development as a person and using talents and potential

*"Because, um, this whole idea of being near my son and – and trying to create adventures for our family is really important to me [...] so I guess what I'm saying is this job has allowed me the flexibility to create spaces for my family without going on a true sabbatical, and having fun."*

*"I had things in place to help me with the stuff that I wasn't interested in doing so I could spend that kind of time I needed with my family."*

*"You know, sometimes I wonder if I should have any regrets and I don't have any actually. I don't have any regrets at all, "if hadn't done this then I could have been a better mom," I don't have any regrets."*

*"So the other thing is women often don't talk about what they do privately. When they are in male dominated faculty environment, you know it's no big deal for a guy to come and say, "oh I did this and my kid did that" but if a woman starts talking about that stuff? Now I am very friendly with the women secretaries, the assistants, that was also a great source of support I had at the university [...] it didn't matter what color they were I was very close to them."*

*"So this is important, right? I didn't do it for the money, I did it because I wanted to do something different. [...] So by making me an [administrator] and putting me at the table, he made me part of the leadership team. So he elevated me from this position in the department as a Full Professor, now I was a Full professor, but up to this position where I had power."*

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