

Compiling Resilience: A Study on First-Generation Women Pursuing Computing Degrees

Ella Kokinda, Makayla Moster, Paige Rodeghero, D. Matthew Boyer

Clemson University

Background

- Computing profession was women-dominated in mid 1900s
- First generation women in STEM often face obstacles, biases, and stereotypes
- First generational support structures can be lacking or misunderstood



Research Question

- **Goal:** Provide insights into the experiences that other first generation women in graduate computing degrees face
- **Research Question:**
 1. What are the experiences of first generation women in graduate Computing degrees and the challenges that they face?



Proposed Study Design - Pilot Study

Pilot Study:

- Developed a 26 question interview protocol
 - experiences, support, goals, opportunities
- Administered the interview between first and second author
- Identified themes based on interview responses

overall experiences

navigating difficult situations

advisor-student relationships

departmental politics

mental health

validation in academic success

Subset of Interview Questions

- Who/what influenced you to start a PhD?
- What is motivating you to stay?
- Do you have any personal strategies or rules to keep work-life balance in place?
- What support do you provide to your research group/lab?
- What is something you are most proud of in your academic career?

Quotes:

- Validation in Successes

“No one in my personal life really understands the academic process, no matter how much I try to explain it. People [are] supportive, but it just kind of sucks because don't quite understand it.”

- Difficult Situations/Departmental Politics

“I showed interest [in leading an organization], and they were like, you can have it. Once word got out that I was the new President, I heard through the grapevine that there were some people in the department, I am pretty sure they were faculty or staff, they were like, “Oh, good! We can, have a puppet.” Now, I'm like, what [the heck]?”

Proposed Study Design - Full Study

- Take identified themes from interview and formulate survey questions
- Likert scales based on attitudes toward each theme with optional open response
- End of survey interview inquiry for more in depth detail

Potential Outcomes

- **Comprehensive overview and collection of shared experiences and successful practices for graduate school by first generation women for all**
- **Acknowledge the difference experiences and find ways to understand graduate school expectations and outcomes**
- **Empower, inform, and guide women in graduate computing programs**

Thank you!

Interested in contributing or collaborating? Send us an email!

- Ella Kokinda
 - ekokind@clemson.edu
- Makayla Moster
 - mmoster@clemson.edu