Supporting Undergraduate Engineering Students Who Are Primary Caregivers to Children

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About 1 in 5 undergraduate students is a caregiver. Because data on student caregivers is less likely to be collected than data on other student groups, there are gaps in our understanding of their experiences, including their unique challenges and strengths as well as best practices for supporting them. There is very little research that focuses specifically on student caregivers who are studying engineering, a field that may require extra lab time and other subject requirements that contribute to the unique needs in the field.

This research makes an important contribution in that it is one of the first to explore how the literature related to student caregivers might apply specifically to engineering students. The paper includes recommendations for better meeting the needs of caregiving students based on the review of literature and can lead to a study that inquires if these recommendations are also helpful in supporting engineering students or whether they have unique needs.

Given that the demographics of student caregivers mirror the demographics of those who are underrepresented in engineering, better meeting the needs of student caregivers is likely to be a crucial piece of the puzzle in remedying the inequities in engineering education.

Recommendations to better support caregiving engineering students:

- consider caregiving status an equity issue
- collect more data about the experiences of caregiving students
- conduct more research about caregiving students, especially engineering students
- highlight caregiving students' assets
- adopt supportive policies and programs
- improve student awareness of and access to supportive policies and programs
- promote a caregiving ethic





We conducted a systematic literature review to answer these research questions:

What does previous research indicate about the experiences of student caregivers?

How does that knowledge apply to recruiting and retaining undergraduate engineering students?

Student caregivers differ from other students in significant ways:

They are more likely to be women, in community college, and/or from racially minoritized backgrounds.

Student caregivers also tend to have higher GPAs, and they have a tendency to feel isolated.

The three major challenges that they face involve:

- time constraints
- lack of knowledge about available resources for caregiving students
- lack of access to affordable child care.

Strengths of of caregiving students include a tendency to have higher motivation levels and better time management skills.

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