

## **The New Normal: Student Perspectives on Supportive University Policies during COVID and Beyond**

### **Maimuna Begum Kali, Florida International University**

Maimuna Begum Kali is a Ph.D. student in the Engineering and Computing Education program at Florida International University (FIU), in the School of Universal Computing, Construction, and Engineering Education (SUCCEED). She completed her B.Sc. in Computer Science and Engineering at the Bangladesh University of Engineering and Technology (BUET) in Bangladesh. She began her Ph.D. study in Computer Science but changed her program to Engineering and Computing Education a year later. Her research interests include exploration of marginalized engineering students' experience, hidden identity, student mental health and wellbeing, and student support in engineering and computing education.

### **Dr. Stephen Secules, Florida International University**

Stephen is an Assistant Professor Engineering and Computing Education at Florida International University. He has a prior academic and professional background in engineering, having worked professionally as an acoustical engineer. He has taught a number of courses on engineering and education, including courses on engineering design, systems in society, and learning theories. Stephen's research interests include equity, culture, and the sociocultural dimensions of engineering education.

# The New Normal: Student Perspectives on Supportive University Policies during COVID and Beyond

**Abstract:** In light of an emerging mental health crisis and the increasing diversity of the student body in undergraduate engineering education, this qualitative study explores student perceptions of university support regarding their wellbeing. We conducted focus groups with 16 undergraduate engineering students from a large R1 public minority-serving institution. Our participants largely perceived university personnel and resources as an insignificant source of support regarding their wellbeing. The findings on the lack of perceived support are organized by departmental and university-level influences. The students also identify areas for improvement that have posed barriers to their awareness and utilization of university supports and services and to their overall wellbeing. The method of soliciting student perspectives has implications for institutions wanting to examine their own practices and policies in order to better support students' whole selves.

**Keywords:** wellbeing, student support, undergraduate, student experience, student perception, thematic analysis

## 1. Background

Higher education is dealing with a mental health crisis [1]. According to the 2019 ACHA-National College Health Assessment II (ACHA-NCHA II) [American College Health Association], about 65% of college students felt overwhelming anxiety, 45% felt depressed to the point it impacted their ability to work, and 17% reported both depression and anxiety. Additionally, mental health trends from 2007 to 2017 [2] showed that 7% of students screened positive for depression, 8% reported suicidal ideation, and both rates keep increasing each year. On top of that, recent events such as police brutality toward Blacks and the COVID-19 pandemic have added an extra layer over the stressors that already affect students' mental health and wellbeing [3]. Students' mental health is getting worse so rapidly that it begs the question of what is causing the decline in students' mental health and what institutions can do to support them fully or as-a-whole. Even though most university presidents list mental health as one of their most pressing concerns, this understanding does not translate into devising policies and practices centered around mental health and wellbeing [4, p.2].

Higher education also sees an influx of people from diverse backgrounds with a new set of challenges adapting to university life [4]. The student body is becoming more diverse in a variety of institutions, including predominantly white institutions (PWI), minority-serving institutions (MSIs) (e.g., historically black colleges and universities (HBCUs), Hispanic-serving institutions (HSIs), and American Indian colleges (AICs)). All of these MSIs have a long history of serving underserved populations (e.g., Black, Latinx, first-generation students, community college transfer students) [5]. Some of these students enter the university with existing mental health concerns; others develop mental health challenges during college. A wide range of backgrounds and factors can influence a students' mental health and wellbeing:

living and financial conditions [6], academic preparation [7], student-faculty interactions [8], food insecurity, and family responsibilities [3], and peer relationships [9]. These stressors have wider impacts on student success [3]: a decrease in a student's wellbeing can negatively impact their educational experiences, leading to academic dissatisfaction, resulting in decreased academic performance or attrition [10]. A National Academies report [4] has listed tailoring the institutional culture to be inclusive of all students irrespective of their background, ability, or identity as one of the five major issues that must be confronted to work towards supporting students and their wellbeing. A holistic view of student mental health and wellbeing is crucial for maintaining high-quality educational experiences [11]. Thus, we posit that providing a supportive environment for students in academic settings and ensuring their safety and wellbeing is the institution's responsibility. Institutions should adapt their infrastructure to respond to emerging needs, and their efforts should include developing an institution-wide culture that values and supports student wellbeing.

Wellbeing has a particularly important place regarding engineering, which has been noted to exhibit a culture of a "boot camp" [12], "suck it up" mentality, and competition [13]. A 2019 study found a prevalence of mental health conditions (anxiety, depression, worry) in undergraduate engineering students with no past mental health issues [15]. While mental health and wellbeing are widely discussed in fields like education, medicine, and psychology [16], their impact on engineering culture is more newly explored (e.g., [10, 13-14, 17-21]). Engineering students show less intention to seek help regarding mental health concerns [13-14], and negative connotations or stigma associated with mental health concerns can be a significant barrier for them to obtain mental health care [14]. However, normalization of the discussion of student mental health and wellbeing in departments can promote help-seeking among students [20]. The expectations placed on students to be proactive and responsible in terms of seeking help can also inhibit their ability to seek support for their wellbeing. Several studies (e.g., [10, 15, 17]) have explored engineering mental health and wellbeing trends, but few have considered students' experiences or perspectives (e.g., [13, 18-19, 21]). Exploration of engineering students' perceptions and experiences on wellbeing is beneficial in promoting student wellbeing.

Most universities provide support and resources through student affairs offices and counseling/psychological services centers [4]. Typically, these counseling centers provide limited, short-term counseling, and they are often not well-staffed to handle the increasing number of students in need [4, 22]. Centers following this traditional model of serving [22], which generally entails short-term counseling and referrals to local providers if the extent of the problem surpasses what the campus counseling staff can handle, may not always consider the diversity of students' backgrounds. Typically, most resources and initiatives from universities are geared towards students who are 18-24 years old full-time students, live on campus, and are financially supported by parents [24-25]. These well-intentioned administrative policies are often inadequate for some segments of the student community, as these policies fail to consider the intricacies of different student identities and experiences [8]. Also, since many educational policies and practices are developed without student input [23], they tend to reflect institutional priorities rather than the needs of the students. While

important, these traditional resources should not be viewed as the only or ultimate solution to serve an entire university with a diverse student body.

Universities that consider ‘*students-as-partners*’ or co-creator [26-28] learn from students about their experiences to better understand how to accommodate them further [3,11] by creating a campus culture and environment that promotes “the culture of wellness” [29-30]. Considering the amount of time students spend in the university settings and the setting’s potential impact on student mental health and wellbeing, holistic accounts derived from students are essential for understanding how to extend “compassion and care to students” [31, p.11] that will eventually result in an increased sense of belonging, student satisfaction, and retention.

Aligning with the notion of learning from students’ experiences [3], this paper describes the findings of a qualitative exploratory study that looked into students’ perceptions of university support in the context of engineering. We conducted focus groups with current engineering undergraduates to understand students’ perceptions and suggestions regarding the specific university support context. This study adds to the literature on engineering students’ perception of university support regarding student wellbeing. It can serve as a guide for departments and universities hoping to promote their students’ wellbeing in light of the student wellbeing crisis. Both the process of soliciting student opinions on university support and the specific ideas shared by these students are simple steps towards bridging the gap between staff and students, thereby working towards developing a ‘*students-as-partners*’ approach.

## **2. Guiding Framework: *Wellbeing***

Though wellbeing is often discussed as mental health and resilience [11, 32-33] or as the absence of ill-being, in our study, we consider wellbeing as a holistic notion that encompasses both physical and mental health [34]. Wellbeing can be thought of as a broader, dynamic category than mental health, and the Centers for Disease Control (CDC) lists nine different dimensions of wellbeing<sup>1</sup>, namely 1) Physical wellbeing, 2) Economic wellbeing, 3) Social wellbeing, 4) Development and activity, 5) Emotional wellbeing, 6) Psychological wellbeing, 7) Life satisfaction, 8) Domain-specific satisfaction, and 9) Engaging activities and work.

One operationalization of wellbeing for higher education settings focuses on two interdependent aspects: individual and community wellbeing (National Intramural and Recreation Sports Association (NIRSA), 2020)<sup>2</sup>. Individual wellbeing includes “three broad and interrelated categories: (a) the perceived assessment of one’s own life as being generally happy and satisfying (Subjective wellbeing), (b) having one’s human rights and needs met (Objective wellbeing), and (c) one’s contribution to the community (Civic wellbeing)” [35]

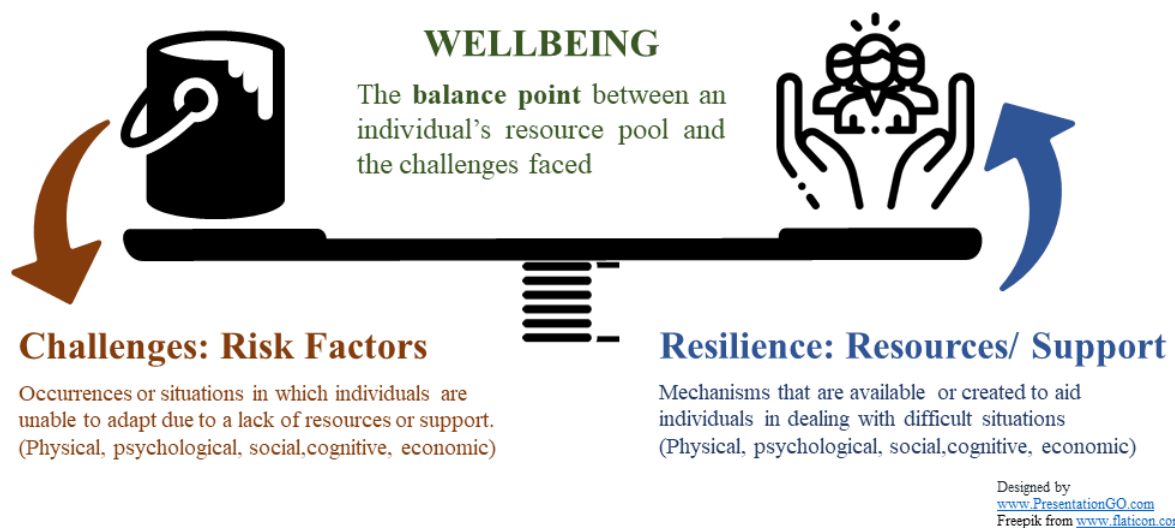
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<sup>1</sup> <https://www.cdc.gov/hrqol/wellbeing.htm>

<sup>2</sup> <https://j7y8m8g8.rocketcdn.me/nirsa/wp-content/uploads/inter-association-well-being-definition-2011b.pdf>

while community wellbeing refers to the community’s structures, systems, and normative conduct. It also focuses on how well the community meets the needs of all members. Individuals pursuing wellbeing require communities of wellbeing to engage in this pursuit fully. Wellbeing is a shared responsibility for the entire institutional community [35], and community wellbeing focus helps conceive the university as responsible for supporting student wellbeing.

In this vein, Dodge et al. [36] proposed a definition of wellbeing as “the balance point between an individual’s resource pool and the challenges faced” [36, p.230]. The authors employed a see-saw to represent an individual’s desire to return to a set position of wellbeing, retaining homeostasis or balance or equilibrium (see Figure 1).



**Figure 1: The definition of wellbeing, adapted from [36- 38]**

According to this definition, individuals will have stable wellbeing if they have the *resources* to meet specific *challenges*, and both resources and challenges can be psychological, social, or physical. Schultze-Lutter et al. [37], in their article on the association of resilience, risk, mental health, and wellbeing, linked concepts of resilience with the resources and risk with the challenges and enhanced the original figure given by Dodge et al. [36] with the spiral to illustrate the ever-changing process (Figure 1). Drawing from Sanford’s [38] Challenge and support theory (CST), the term *challenge* refers to occurrences or situations in which individuals are unable to adapt due to a lack of resources or support. Chaves [39] notes that the capacity to overcome challenges depends on the level of support students receive from their peers, instructors, and institution in an educational context. Furthermore, by *support*, the theory refers to the available or created mechanisms to aid individuals in dealing with difficult situations [40]. If the challenges outweigh the resources, the see-saw falls, as does the individual’s wellbeing. In an educational context, if challenges outweigh support, students may give up; but, if appropriate support is offered, students can rise to the challenge and excel in their academic endeavors, allowing the success to continue life after university. Given that the hypothetical goal of educational institutions is to help students reach their

maximum potential or excel, institutions should provide support so that students do not become overwhelmed due to a lack of ability to overcome challenges.

In our study, we used both the universal definition of wellbeing from Dodge et al. [36] and the NIRSA [35] definition of wellbeing to brief the participants about the concept and our study purpose. We also used Figure 1 during our focus group discussions as a discussion point. The CST theory aids in defining both the challenges and the support that our students perceive, as well as positioning the institution as a source of support or resource to help students in reaching their maximum development and maintaining their wellbeing.

We explored students' challenges and wanted to understand whether they are equipped with resources to tackle them, especially emphasizing student support and services or resources available in the university. We also inquired about their perception of university support regarding student wellbeing. Adopting the broad concept of wellbeing helped students to think about various aspects of wellbeing as opposed to focusing on a single aspect (e.g., social, psychological, economic.)

### **3. Purpose**

The purpose of this exploratory study is to understand **student perspectives on how universities can better support their wellbeing** at a particular minority-serving institution with a diverse student body. This research also elicits some of the challenges students faced during the COVID-19 pandemic in order to understand how students' perspectives on university support did or did not change as a result of the pandemic. The research question this study seeks to answer is the following:

How do students envision university support regarding student wellbeing in light of past and present challenges?

### **4. Methodological Approach**

This exploratory study used focus groups as the primary data collection method to reach a wide number of students, as well as to see how people exchange and build on each other's ideas through conversational exchanges in a group setting. Focus groups are useful for acquiring insight or gathering baseline information about a topic of interest from a group's perspective, allowing multiple opinions and perspectives to be heard and debated rather than individual meaning-making [41].

#### ***4.1 Institutional Context***

This exploratory investigation was conducted at the researchers' university, a public R1 Hispanic-Serving Institution (HSI), with over 50,000 undergraduate students. During the spring 2020 semester, the university moved to remote settings and was preparing to return to in-person instruction for a fall 2021 semester at the time of data collection. The College of Engineering contains eight departments and around 6,000 undergraduate students, with a large number of community college transfer students. There are differences between the

systems that support students at the department, school, and university levels, as there are at any large university. At the university level, a student affairs office oversees a variety of resources, including recreation, counseling/psychological services, and career services. The offerings by specific engineering departments are more varied, but the faculty in these departments and department-focused administrators of undergraduate degree programs are partial advisors as well. Support staff at all levels try to reach students using various means, including announcements, postings on student portals, social media, and websites, as well as outreach activities and events.

#### ***4.2 Participants***

We sent out the recruitment survey to the schools/departments under the college of engineering using departmental listservs, student organizations, and different resource centers (e.g., Disability resource center, diversity center) to reach a broad student group. Undergraduate students who identified as engineering majors at the time of the study or at any time prior to the study were invited to take part. Participants had to be at least 18 years old to participate.

Sixteen students (n=16) participated in three 60-90 minute semi-structured focus groups using Zoom video communications software in July 2021. The first author facilitated the focus group, and each focus group consisted of 3-5 participants. Table 1 shows that most of the Focus Group Participants (FGP) were White Latinx and between the ages of 18 and 25. The majority were Biomedical Engineering and Computer Science juniors or seniors. Furthermore, roughly half of our study sample (n=8) were university students before COVID-19 brought about remote instruction. Among sixteen FGPs, nine were women, and seven were men. These demographics show that the study included individuals with a wide range of characteristics and is representative of the university student population. The details of the demographics can be found in the Appendix.

#### ***4.3 Data Collection Procedures***

The study's guiding assumption is that students are the experts regarding their own experiences and needs, and student perspective regarding university support is underutilized in both the research and practice discourse. In addition to the focus groups, the first author spoke with two administrators and browsed the university's website for information on the university's existing resources and supports for student wellbeing.

The focus group protocol primarily consisted of open-ended questions, such as:

- 1) *What are some of the challenges you faced over the past year and a half?*
  - a) *How much has COVID impacted you personally?*
  - b) *How much has COVID impacted you academically?*
  - c) *How much has COVID impacted you financially?*
- 2) *How did [current university] support you in the past?*
- 3) *Moving forward, how do you want [your university] to support student wellbeing?*

Other than these open-ended questions, six items (two from each side, university, department, and faculty) from the Engineering Department Inclusion Level (EDIL) survey [46] were also used during focus groups. Focus group participants (FGP) used their hands to indicate their level of agreement to the Likert-type scale (1-Strongly disagree to 5- Strongly Agree). These statements were useful in establishing a baseline understanding of participants' perceptions of university support at the university, departmental, and faculty levels.

To give the study participants a brief overview of the concept of wellbeing, the definition provided by [35] was used, and Figure 1 was shown to them [36]. Focus group participants (FGP) used the concept of wellbeing as per their understanding in our focus groups. As a result, we found that certain FGPs were more concerned with financial wellbeing, while others were more concerned with mental wellbeing.

#### ***4.4 Analysis Procedures***

All the focus group responses were transcribed verbatim and de-identified to maintain confidentiality. Minor modifications were made to the transcript, such as removing punctuation and extra spacing and the filler word "umm." The responses were examined using thematic analysis [42-43], with emerging themes grouped into categories to aid pattern recognition. We also employed prior coding schemes during the categorizing process based on specific questions we asked students during focus groups. The lead author followed Braun and Clarke's six methods to complete the theming procedure [42-43]. Throughout this approach, the authors of this study discussed and double-checked the lead author's data analysis to ensure its accuracy.

Because the study was conducted during COVID, many of the recommendations reference immediate COVID support. However, the time spent over the last year and a half was beneficial for some students since it allowed them to reflect on and reconsider their previous views and behaviors. Furthermore, this study does not place blame on either side (students or universities) for why students as-a-whole are not reaching their full potential. Instead, the purpose of this article is to bring students' viewpoints to the forefront in order to initiate a conversation with other entities, which will aid in the future in the construction of a "culture of wellness" [29-30] for all.

#### ***4.5 Positionality***

The first author is a cis-female international graduate student from a South Asian country studying in the College of Engineering. She has been working on this project for the past few months, intending to increase awareness of the university and the support programs and services. As an overseas student, she is unfamiliar with the university system, which has led her to learn more about university support from engineering students, whom she considered experts in this issue. This intent likely contributed to establishing rapport and a trusting relationship with the FGPs. The second author is a cisgender White man who works as a professor of engineering and computing education and centers his research on equity and inclusion [44]. His familiarity with the university system and US universities, in general, helped contextualize some of the findings in conversation with the first author.

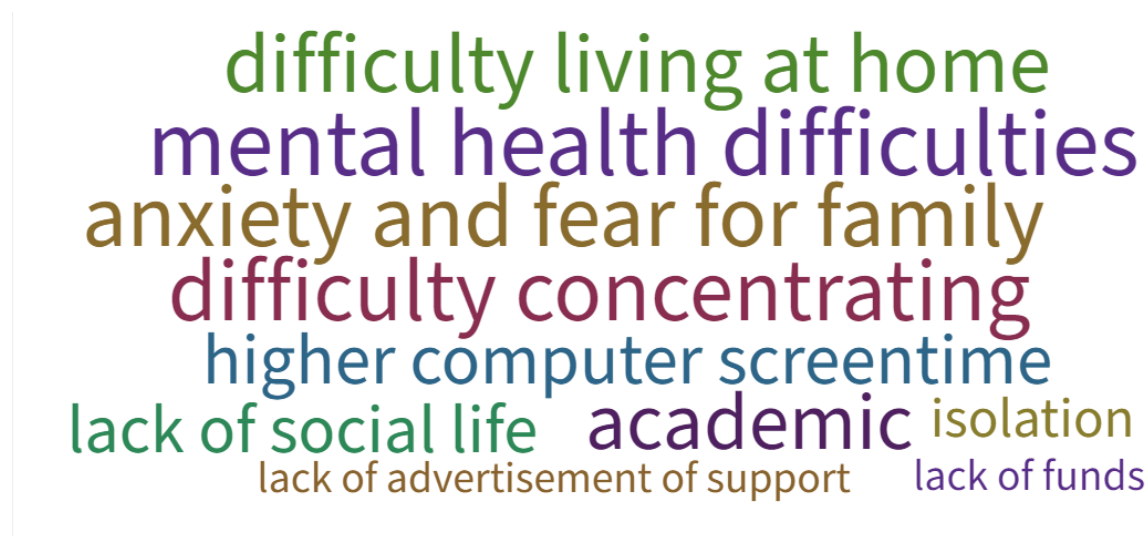


## 5. Findings

This section includes students' perspectives on some of the most pressing issues, as well as their predictions for how university support for student wellbeing will evolve in the future.

### *5.1 An overview of student challenges and perspectives on support*

FGPs provided different sets of challenges in response to questions about how COVID has impacted them personally, academically, and financially. Figure 2 depicts a snapshot of some of the most commonly cited issues by students in our focus groups, where size is related to how frequently a challenge is mentioned.



**Figure 2: A wordcloud of the set of recent challenges shared by FGPs during the focus groups (July 2021, during the COVID-19 pandemic). Larger texts refer to more frequently mentioned challenges, while smaller texts refer to challenges mentioned less frequently.**

Some of the oft-cited challenges were difficulty living at home, difficulty concentrating, anxiety and fear for families, mental health difficulties, and so on. As expected, this list includes challenges (difficulty living at home, higher computer screentime, anxiety and concern for one's family, lack of social life, isolation) that are likely related to COVID-19. Other challenges (difficulty concentrating, funding issues, physical and/or mental health difficulties) are challenges that students have faced in the past that are more relevant and endemic to the student experience as-a-whole (not only experienced in the last year). The problems faced by students, both new and persistent, present an opportunity for institutions to reconsider the types of support they might offer students by considering their experiences [45].

When asked how much support FGPs felt in the previous year and a half, six felt supported, six felt unsupported, and four felt neutral. Regardless of whether FGPs felt supported or not, their knowledge of the university's support services and resources was limited, and very few students had sought help from these services. Some FGPs thought that they could have

availed themselves of the resources if they had wanted, whereas some FGPs experienced the resources as unavailable. At root, it seems that students simply do not view the university as a source of important help/support services. We thought this finding was troubling, so we focused our attention on learning more about the university and departmental factors that contribute to a perceived lack of support.

FGPs also carried particular personal views on help-seeking. In general, FGPs believed that supporting students was not the primary responsibility of universities, that universities are doing their best, and that it is more of an individual's responsibility to survive on their own. FGPs also stated that they prefer to deal with difficult situations by employing own healing and coping strategies (e.g., going to the gym, doing activities to calm themselves, sleeping it off, etc.) rather than seeking help because seeking help, especially for mental health, is frequently linked with weakness. Although these personal attitudes against help-seeking are also concerning, they are consistent with the literature [13-14]. For this reason, we chose to focus this paper's analysis on the university and departmental systems to help leverage practical insights for institutional processes. Next, we identified specific departmental and university-level influences that undermine the university as a source of support for student wellbeing.

### ***5.2 University resources as impersonal and inaccessible***

Overall, students in the university felt campus-wide student support is impersonal and not well-aligned with them or their identities. Many FGPs felt like "just a number" in a large university [FGP11 Jc, Male; FGP12 Jq, Male; FGP43 R, Female]. Upon asking students to agree or disagree with the statement, "I am comfortable voicing my concerns at the university" (Likert item 1-5 scale, borrowed from the EDIL survey [46]), some FGPs shared that they have tried in the past, but their voice was not considered. These experiences discouraged them from seeking support or raising concerns.

Though our initial study purpose did not include looking at gender differences among FGPs, during focus groups, we found some emergent patterns of gender differences. To gain a better sense of this pattern, we divided the EDIL survey responses by gender (Women = 9, Men = 7) to see if their viewpoints differed. Figure 3 depicts a summary of the responses stratifying by gender.

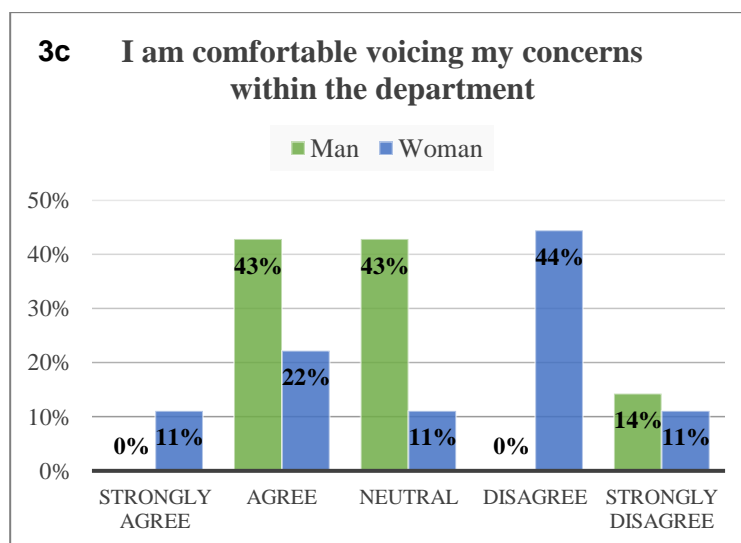
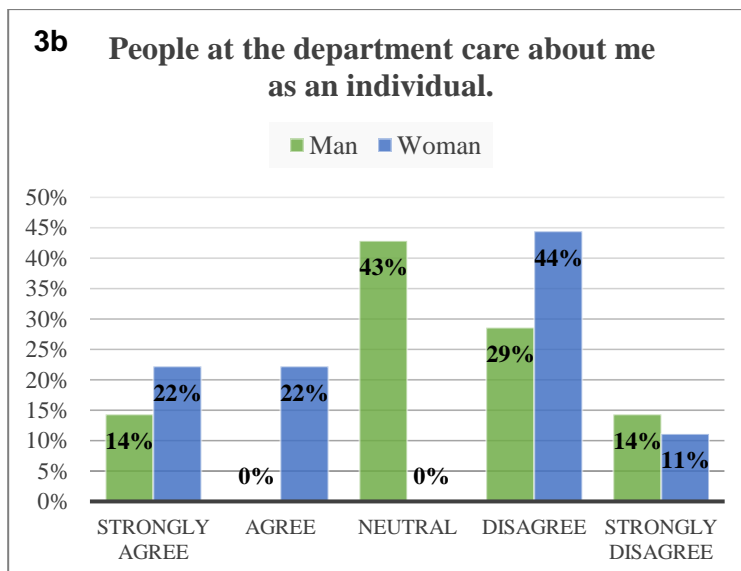
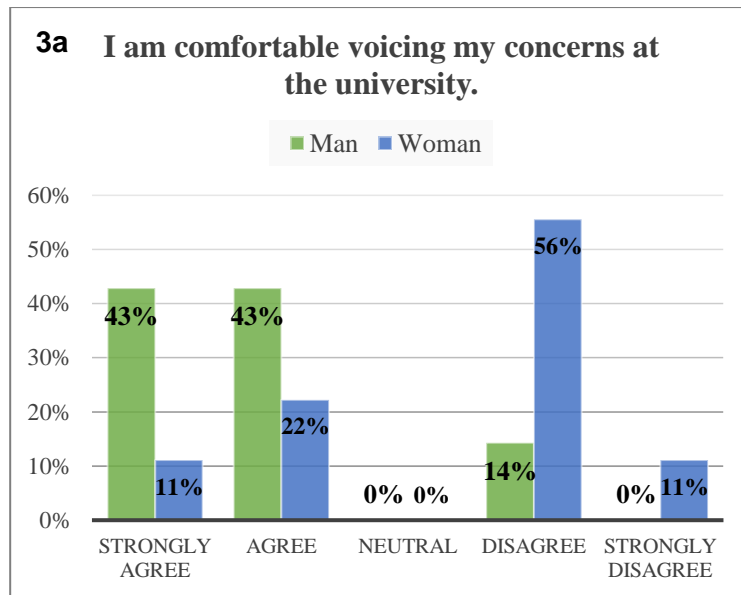


Figure 3a, 3b, 3c: Responses to survey items stratifying by gender (Men=7, Women=9)

From figure 3a, we notice that the polarization is gendered: female students are less likely than their male counterparts to report comfort voicing their concerns at the university. An FGP shared her experience working as a Resident Assistant (RA),

It was about a concern ... a group of RAs and I came up with an idea and when we went to speak to [certain offices] about said issue, they decided that ... it [was] almost like they, they were upset that we brought it up because it was just like another chore to them. So, it's the minor comments, and responses or lack of comments ... when you reach out for help, or when you ask against certain members. [FGP21 De, Female]

Both female and male FGPs shared that they believe even if they contact the institution and express their opinions and concerns, they will be disregarded, rendering the entire process worthless for them, and reducing the value of the resources.

Upon asking the names or types of resources available for students, most students could not recall any. Many students are simply unaware of these key support services, regardless of their length of time at the university. As we probed deeper about the availability of resources, some students described insufficient resources, while others claimed that there were actually too many resources. Nevertheless, a key finding was that locating resources is up to the students; students must be proactive in seeking help, for example:

I really think it's more about like, those who know, to look. And they are almost like the Easter eggs that are in the video games, where if you know that there are easter eggs, and you can find them pretty easy, but if you don't, then you're kind of just going to fulfill your degree, your task, whatever obligation you went there for. [FGP21 De, Female]

Given that the student affairs resources available to students are mostly university or college-wide and designed to serve a large number of students (nearly 56,000 undergraduates), accessing them would require a significant level of student proactivity. Some FGPs, however, noted that being proactive is complicated since many commuting students and full-time workers find it difficult to participate in certain types of campus activities. Furthermore, because many undergraduate students work full-time, finding guidance or support from university resources is difficult from a practical standpoint.

Sometimes, students are unsure what resources might fit them well or whether they will meet their particular needs. Resources not tailored to individuals' needs could be one of the reasons students are not aware of existing resources created to support students, as this FGP notes:

[Counseling center]... talks like you know [the specifics], but the specifics of what they offer, you do not know, like, if they can help you with your depression or anxiety, or other mental health problems... It just seems like, I feel like a lot of people

don't see [counseling center] as a solution that, you see like, here's something that you can go to, but might not work for you. [FGP23 Ag, Female]

FGPs identified that a primary way to disseminate various resources and support to students is by mass emailing. These mass emails can include information about existing resources, job opportunities, and many other things. Though students knew the purpose of these emails, they also found the volume of emails overwhelming and ultimately unsupportive. They also noted that student support services often require students to sign up for their service; thus, only those students who proactively sign up can receive those emails. The second most identified communication medium was social media. The social media accounts require engagement (e.g., follow on Instagram) to receive updates; thus, the perception is that students must be proactive in order to receive help/support. Thirdly, students mentioned support websites which they found to be generic, impersonal, and unclear; explained by an FGP, "I never really reached out to [counseling center]. When I looked it up online, it didn't have that much information, how to reach out to them throughout the pandemic" [FGP24 W, Female]. The counseling center seemed to be the resource that was most readily advertised:

The main reason why I know [counseling center] is like solidified in my brain is because like every bathroom I go in, has it on the stalls so ... just staring at the [counseling center] logo to get help so that really build it in and if I needed help, I can go there. [FGP23 Ag, Female]

Even though [counseling center] was widely advertised, the inaccessibility of these support services and resources also deterred students from pursuing them. For example, an FGP shared,

I actually tried calling [counseling center] ...and I was just like really discouraged because, first of all, I am not really the type to ask for help as it is, especially mentally. You know, what do you mean you have a problem? And to find a therapist was an issue, they were so busy and so overwhelmed, and this is like right before midterm time which I guess reflects ...the influx of calls but, you know, to me that kind of not putting me in a darker place but it is---it wasn't really (pause) encouraging for me to want to keep calling, for me to want to keep engaging. [FGP21 De, Female]

This response shows that the FGP already does not feel comfortable seeking help, especially for mental health concerns. Despite her uneasiness, she attempted to use the counseling center. And although she understands therapists may be overburdened with students (mid-term time), nevertheless, the long wait time discourages her from using the resource and/or service again. Thus, even though the resources exist and students know about them, students will not see university as a potential source of support regarding their wellbeing due to their inaccessibility.

### *5.3 Department resources as purely academic*

Next, we discuss how students perceive the support from their major department and the personnel inside the department. When our focus groups discussed departmental support, two entities came up most frequently: academic advisors and faculty. These two entities were seen to be the closest point of contact for most students in the university and the people students have the most interactions with other than their peers.

To get a baseline idea about support in the department, we asked students if the department cares about them as a person. Our emergent gender analysis found that 55% of our female FGPs disagreed or strongly disagreed (Figure 3b), whereas most male FGPs had relatively neutral responses. In terms of voicing concerns within the department (Figure 3c), we observed, similar to the university level: female students are not comfortable voicing their concerns within the department while their male counterparts are more comfortable.

Due to perceived lack of anonymity within the department, FGPs shared that they are less likely to raise their concerns about them and that they do not think their concerns would be addressed, for example:

I feel like voicing concerns to the department, it just feels a bit pointless. So. ... I don't feel comfortable doing that. It's kind of like saying, okay, here's a suggestion box, put your suggestion in there. And we lost the key, by the way, we don't know how to open it. So, it just feels like it's pointless, or you just feel like that there is no point in me going in there and comfortably feeling like suggesting something. I feel like it'll be counterproductive. [FGP41 Ad, Male]

I have had some really rude professors, really rude, so had a really bad experience, because there are people who, you know, they are doctorate and, and they have like this power over the university because they've been so many years, that sometimes your--- your voice is not going to be taken into account because that person is just like, untouchable. [FGP32 Pu, Female]

As these quotes demonstrate, providing input on departmental concerns is challenging. Perceived power dynamics lead students not to seek help or, at the very least, communicate their issues with those in the department.

According to the FGPs, advisors assist students in making their schedules and provide counsel to ensure that undergraduate students are on track to graduate on time. Aside from focusing on time to degree, graduation, and course selection, FGPs valued their advisor's recommendations of resources such as the writing center and the university library to students. At the same time, students have also reported that advising meetings are infrequent and not timely. Aside from academic matters, students felt that the advisor had little to no personal connection with them:

My advisor never really connected with me. ... I don't know what advisors are up to, but they don't really seem that engaged. I've never -- I don't hear like my friends telling me that their advisor was like, hey, how you doing? Are you doing good in your classes? Do you need some help with something? Did you know that there's a tutoring lab? Did you know that there's help for you? I've never heard anyone telling me that their advisor was interested in them, in their success, which seems kind of counterintuitive. But that's just been my experience. They just need to ask like, hey, how are you doing in the class? How are you feeling? How's your week been? Do you need any help with something? Do you think you could? There could be like five questions that they just cover, you know, on a checklist, and then they leave. [FGP43 R, Female]

This FGP also wished that advisors would engage with students to inquire about their wellbeing. This FGP's comment raises the question: should advising only address academic concerns, or does it also include non-academic matters? Added personal touches on top of other academic work can have an impact on students. To this end, one FGP shared an experience when a success coach approached him, checked on his wellbeing, and helped him connect with appropriate resources. He recalled that the personal support from the success coach was "simple, but it was powerful" [FGP41 Ad, Male].

Other than the advisor, students talked about faculty being a close point of contact for many students. This matter is especially true for students who started during the pandemic; for them, the faculty was the only representative from the university. However, FGPs mentioned faculty only relate to students narrowly on their courses. FGP31 Ig, a transfer student who started school during spring 2020, shared an experience when she heard her uncle died during a class. At that moment, she did not feel the faculty were approachable enough for her to share the news; she also did not find any resources about how to deal with the unpleasant situation. During the break, she sought support from a peer who had gone through a similar difficulty. Recalling about that time, she wondered, "how many students have lost family? And I don't see that the school has really addressed that issue at all." From this FGP's experience, it is evident that faculty play a clear role in students' lives. A continuing student shared that she would always go to faculty in case she needed any help,

Whenever I did need help, I feel like, I would go to a professor, and they always helped me out. Even if it was academically or just anything personally, before the pandemic, I always knew that I could walk into those office hours and had someone to talk to. [FGP24 W, Female]

We can notice a difference in student perceptions about approaching professors in these FGPs' responses. This disparity could be attributed to their student status (returning versus new student) or faculty personality as "it all really depends on which teacher you get, not accommodating or how harsh they are on all of their students" [FGP33 Er, Male].

When asked if faculty shared any academic or non-academic resources or information, several students said that instructors only give information in the syllabus and do not go beyond the syllabus/canvas to connect students to appropriate resources. Faculty typically do not share any non-academic help or resources: “I believe my professor just kept it totally academic,” one FGP explained. However, FGPs believe a little effort from faculty could encourage student help-seeking. FGPs expressed that faculty sharing information about resources available at the university to support students as-a-whole can be encouraging for students to know about resources and seek help, if necessary:

The best way for [resource/support] to get into my head that I need to go is if someone tells me. So, like, when professors tell me I need to do something, I take that more seriously than seeing it on like the bathroom stall ...it would have been very appreciated if they would have reassured their students or had like anybody, like professors whatever get more personal and assert that we are all in this together.  
[FGP23 Ag, Female]

FGPs acknowledged that it is quite difficult for some professors to check on hundreds of students, given that the university and class sizes are so large. However, they felt that it would aid their wellbeing if faculty were more approachable and moved away from the narrow focus on the content taught in the classrooms.

Overall, we have shown in these sections that a range of factors (departmental and university) might influence students’ perceptions of student support and services. Consistent with higher education research [47-49], we found that students do not typically seek out services, are mostly unaware of their usefulness, and awareness does not necessarily translate into accessing or utilizing those resources.

#### ***5.4 Moving forward: What can be done better?***

In this section, we present the recommendations made by the FGPs in our focus group on how the university can support student wellbeing in undergraduate engineering education. While some of the recommendations shared apply to the transitional COVID-related period in Summer 2021, they are also generally applicable for the future. We present these promising student ideas for enhancing support while recognizing that institutional and administrator realities/conflicts may limit some of them. Further work is needed to coordinate ‘*students-as-partners*’ more holistically.

First, we present ideas students had related to new forms of support services:

- *Guidance Counselor*: First, students suggested that having fewer students per class might help with the impersonal nature of their education while acknowledging that this might not be feasible in the current university. Thus, students also brought up the idea of an emotional advisor or guidance counselor. By guidance counselor, students meant “someone [who] connects with us, and then like, as a liaison with the professor, something, you know, just so that we don’t feel like we’re talking into a void,” explained by an FGP [FGP43 R, Female] or someone with whom they can talk about



non-academic things such as joining student organizations, resources about mental health, or wellness checks. They thought this role could be played by their academic advisor, the teaching assistants, or maybe the faculty. The key is to go out of their way to make sure “people around you are just as good, if not better, mentally, academically, physically as you are,” expressed by an FGP [FGP21 De, Female].

- *Onboarding Survey/questionnaire:* According to students, lists of resources are frequently shared in a syllabus or Learning Management System (e.g., Canvas, Moodle, etc.) or during the onboarding process. It can be challenging for students at this huge university with such a diverse student body to recognize which resources/services are appropriate for their needs. Students proposed using onboarding surveys or questionnaires at student orientation to get to know students and their needs.

Next are two ideas that relate to university culture:

- *Being considerate of student needs:* The need for students to be seen as a person emerged from our analysis of students’ comments on how the university can support student wellbeing. Students noted that the resources and/or supports provided by the university are sometimes unintentionally dismissive of a diverse set of needs. For example, students shared how university-led initiatives or efforts are often designed to serve a small group of students, such as traditional, on-campus students rather than commuter students. Moving forward, students [e.g., FGP31 Ig, Female; FGP32 Pu, Female] suggested that university support should keep in mind most students’ diverse identities such as commuter status, citizenship status, and economic needs.
- *Creating support structure for faculty/staff:* Students in the focus group also stated that support should be top-down—the university should support the faculty and staff wellbeing, and faculty and staff will, in turn, pay this support forward the support towards students.

The feelings of being supported, it’s top-down. And it starts with the university, supporting staff, and teachers. And I know that when teachers feel supported, they’re more likely to support students. [FGP31 Ig, Female]

Third, we offer some ideas for faculty:

- *Hybrid instruction mode:* FGPs also suggested keeping the remote/hybrid instruction option even when the university returns to pre-COVID condition. Students wanted to keep this option to leverage its flexibility, which we have found to be beneficial for commuter students, full-time working students in our focus groups.
- *Making faculty aware:* FGPs recommended that the practice of being considerate towards students’ needs should also extend to the classrooms; for example, students suggested making faculty aware of students’ struggles [e.g., FGP33 Er, Male; FGP41 Ad, Male]. Students also expressed that personal interventions from the faculty could be more effective than publicly advertised resources [e.g., FGP23 Ag, Female; FGP33 Er, Male]. Students would appreciate it if faculty could reach out and connect more to

students [e.g., FGP21 De, Female; FGP41 Ad, Male]. In preparation for making faculty aware of students and their needs, the students also suggested educating faculty about identifying students in distress, which aligns with recommendations from Wilson et al. [50].

- *Encouraging co-curricular activities and practices:* Students suggested that curricular and co-curricular planning include efforts to build social connections (e.g., interactions among peers and faculty). Students also suggested that faculty could take the initiative to engage in non-academic activities (e.g., teambuilding exercises, games, etc.) with students to provide some relief from their academic responsibilities, thereby fostering nurturing relationships.

Finally, in light of the available but overwhelming resources at the university, these suggestions promote existing resources:

- *Making avenues to voice concern more accessible:* Students made recommendations about making resources and/or student support and services accessible. Several FGPs highlighted their frustrations with long response times while accessing services and/or resources and how it deterred them from seeking help. The avenues for making suggestions or sharing concerns about the existing resources, practices should also be accessible for students. Townhall came up during focus groups as a potential way students can provide their input and share their concerns in different situations (e.g., Townhall about post-COVID transition, etc.); however, very few students knew about it. Townhalls are usually campus-wide meetings where higher-level administrators gather and communicate with students or other entities. Within the department, students often find themselves in a difficult position voicing their concerns about faculty or department; as we discussed before in the findings section, in situations like this, students suggested having some anonymous complaint system as a way of protecting students. Students also suggested having departmental small-scale townhalls alongside the university-wide town hall to put forth their voice within the department.
- *Promoting personal mode of disseminating information:* The majority of the students in this study shared that most of the time, they learned about some resource or resources by hearing about it from a person directly, not from official emails or social media. University is a large university, and students are expected to be proactive in order to find resources that can support their wellbeing. Students suggested that faculty aware of the resources and/or assistance available can delegate the responsibility to students. For example, an FGP [FGP43 R, Female] suggested a student-led approach where students with campus-life experience could help new students. Faculty might select five students to pass the knowledge on. These five students will fill in for the faculty and pass it on to other students. Students hoped that by developing a knowledge base among themselves, information about resources would spread more quickly. It would also reduce faculty work because they only need to focus on a few students rather than many.

We recognize that the examined university is most likely already implementing or attempting to implement some of the recommendations students made in this report. However, if students continue to share these practices as potential recommendations, it begs the question of who is receiving support as a result of these practices or for whom the practices are intended and warrants further investigation.

## **6. Conclusion**

This study looked at how students perceive university support regarding student wellbeing and how they see it evolving in the future. We found that the students do not regard the university as a major source of support and that the present condition of university offices may be attributable to this perception in terms of resource availability. The current reality is that understaffed offices are unable to meet students' needs, and students become disappointed due to not having their needs met, and they gradually stop seeing the university as a valuable source of support. We also found that students consider faculty and advisors as closest to them and wish that these people were more intentional and mindful of students and considered them as whole persons.

### ***6.1 Implications for Policy and Practice***

Supporting student wellbeing, especially for more diverse groups of students, has become increasingly important to university missions, as most higher education policies largely focused on student retention and attainment, increased graduation rates, and so on. Institutions have been forced to make accommodations in order to fulfill an urgent need and make quick choices as a result of the pandemic. Since the pandemic has shown that universities may adapt in response to specific circumstances, a similar method can be utilized to make universities more supportive of student wellbeing. Universities can better support students' wellbeing by including a '*students-as-partners*' [28] approach in developing supportive policies and projects, leveraging their huge student resource pool. The findings of this study can be used as a starting point for other STEM departments and universities to investigate their own practices and policies by adapting our study protocol to their own context. In addition, the protocol used in this study can be used by other universities to solicit student perspectives on the support they require.

Similarly, the findings can help faculty adjust their teaching practices in light of the difficult experiences students had and may still be having. At this moment of significant transition and in the future, lifting student perspectives can help inform everyday practices and policies to better accommodate and support our students. Also, since faculty and advisors typically deal with academic matters, a viable route could be to deepen the collaboration between student affairs and faculty/advisors or bridge the gap between academic and non-academic student support more substantially.

### ***6.2 Future work for Research***

This initial study uncovered student perceptions of student support and how these perceptions differ from the reality of university support and services. Digging deeper into the perspectives

of both administrators and students may provide opportunities for more inclusive policies and practices with increased student input. Future work may attempt to bring students and administrators into the same focus group to share perspectives on existing and new policies and practices. We also found some gender differences in response to being supported and raising concerns. We may delve deeper into the nature of this gender disparity in future work and investigate what worked well for whom in terms of student support. Alternatively, a large-scale survey study (e.g., [11]) could elicit mass student and administrative perspectives on inclusive policies and directly address misalignments in policymaking and public comments, incorporating students' perspectives in decision-making surrounding students. Wellbeing is an understudied area that requires more research, and studies that consider students' voices can serve as a starting point for redesigning existing university resources, such as recent work [51]. Based on student survey data, this study outlined many mental health and wellness programs offered by two Ohio State University departments.

\* \* \*

As we all continue to adapt to our changing realities, including those brought about by the pandemic and the increasing mental health crisis, we have an opportunity to reflect upon our ordinary ways of operating. We invite students, researchers, administrators, faculty, and staff to become partners in this reflection and to have an open dialogue about our policies and practices. Together we can create a new normal that is more inclusive and more supportive of student wellbeing.

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## Appendix

**Table 1 Focus Group Participants Demographics**

<b>Academic Standing</b>	<b>N</b>	<b>%</b>	<b>Transfer Status</b>	<b>N</b>	<b>%</b>
Freshman	1	6.25	Transferred from a 2-year college.	6	37.5
Sophomore	1	6.25			
Junior	6	37.5	Transferred from a 4-year college or university.	3	18.75
Senior	8	50			



5th-year undergraduate student	0	0	Not a transfer Student	7	43.75
<b>Gender</b>	<b>N</b>	<b>%</b>	<b>Engineering Major</b>	<b>N</b>	<b>%</b>
Man	7	43.75	Biomedical Engineering	7	43.75
Woman	9	56.25	Civil Engineering	0	0
<b>Race/Ethnicity</b>	<b>N</b>	<b>%</b>	Computer Engineering	0	0
White	8	50	Computer Science	8	50
Black or African American	2	12.5	Electrical Engineering	0	0
Native American or Alaskan Native	1	6.25	Environmental Engineering	0	0
Asian	1	6.25	Information Technology	0	0
Native Hawaiian or Other Pacific Islander	0	0	Interdisciplinary Engineering	1	6.25
Middle Eastern or North African	0	0	Internet of Things	0	0
Mixed Race	2	12.5	Material Science and Engineering	0	0
Another race or ethnicity not listed above	2	12.5	Mechanical Engineering	0	0
<b>Age</b>	<b>N</b>	<b>%</b>	Telecommunications and Networking	0	0
18-24	13	81.25	<b>First Generation Student</b>	<b>N</b>	<b>%</b>
25-34	2	12.5	Yes	4	25
35-44	1	6.25	No	12	75
Older than 45	0	0	<b>Student before Spring 2020</b>	<b>N</b>	<b>%</b>
<b>Student before Spring 2020</b>	<b>N</b>	<b>%</b>	<b>Latinx/Hispanic identity</b>	<b>N</b>	<b>%</b>
Yes	8	50	Mexican/Mexican-American	0	0
No	8	50	Latin American/Latinx	11	68.75
<b>Disability Status</b>	<b>N</b>	<b>%</b>	Afro-Latinx	0	0
Yes	1	6.25	Other Spanish/Spanish-American	0	0
No	12	75	No	5	31.25
Prefer not to share	3	18.75			