

Basic Needs Access and the Impact of COVID-19 in the Undergraduate Population at the University of California, Berkeley

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ABSTRACT

Although basic needs have frequently been studied in the university context, the impact of the COVID-19 pandemic has been less focused on. Basic needs instability impacts a disproportionate number of university students in the United States and across the University of California system, and this is only exacerbated during global pandemics when resources become even more difficult to access for those in need. Through surveys with undergraduate students, I determined how the COVID-19 pandemic has affected access to and use of basic needs resources at the University of California, Berkeley as well as collected student suggestions for how the University may begin to improve support for those disproportionately impacted in times of crisis. Results revealed that the COVID-19 pandemic has increased both demand for and use of basic needs resources in the undergraduate population with over 40% of students reporting increases in both categories. The study also found that many students used basic needs resources for the first time during the pandemic, and that the primary impacts of testing positive for COVID-19 on basic needs were the ability to attend classes (70.59%), the ability to work (52.94%), and the ability to complete coursework (48.06%). Students suggested various improvements for financial, food, housing, mental and physical healthcare related campus resources that would better help them to meet their needs. Implications for future basic needs programming on campus to mitigate basic needs insecurity in the undergraduate population during times of health and environmental crisis are also discussed.

KEYWORDS

pandemic, college students, higher education, food insecurity, housing insecurity

INTRODUCTION

Basic needs are the most fundamental resources human beings need to survive and remain healthy throughout their lifetime, but a significant number of United States residents lack some entirely. The term basic needs can encompass many concepts such as the ability to access nutritious food, stable housing, water, sanitation services, reliable transportation, adequate sleep, mental and physical healthcare, financial stability, and more (Farquhar et al. 2020). When basic needs are not met, even when data is controlled for income, education, and additional demographics, people experience declined physical functioning, increased depression, increased mortality, and higher usage of healthcare services (Kreuter et al. 2016). Basic needs can be destabilized further during times of environmental or climate-related crises such as wildfires, droughts, storms, and pandemics, including the current COVID-19 pandemic, leading to widespread public health challenges, even for those who normally have their needs securely met.

An estimated 13% of US households or over 40 million individuals were food insecure in 2015 (Watson et al. 2017). Furthermore, the COVID-19 pandemic and associated local and state-wide stay-at-home mandates and business closures have intensified basic needs instabilities, with twice as many US households experiencing food insecurity as did at the start of the pandemic (Owens et al. 2020). The issue of food insecurity is even more severe amongst college students, impacting some 35-42% of the undergraduate population while housing insecurity impacts one third (Leung et al. 2021). During the pandemic, many college students were not able to qualify for federal food assistance programs such as SNAP or stimulus checks because they were claimed as dependents on their parents' tax returns (Owens et al. 2020). This heightened vulnerability and lack of resource eligibility is especially relevant because surveyed university students in the United States with unmet basic needs reported negative impacts on their academic performance, as well as their physical, mental, and emotional health (Crutchfield et al. 2020). Moreover, university students are even more vulnerable to the negative health impacts that many US residents face, with a direct relationship between food insecurity and student grade point average when controlled for demographics, and historically, the food insecure are more likely to suspend their studies because of financial insecurity (Martinez et al. 2018).

The status of basic needs in the UC system is particularly tenuous, primarily due to the increasing cost of attendance at California public universities. Per student costs were 78% state-

funded in 1990, but this amount had dropped to only 39% in 2011, leaving students to bear additional fees, alongside increased housing costs (Martinez et al. 2020). One recent systemwide survey revealed that 42% of UC students experienced some kind of food insecurity, which is three times more than US households on average (Watson et al. 2017). At UC Berkeley, 34% of students experience low or very low food insecurity, and this insecurity increases for some groups when separated by race and ethnicity, with about half of students from historically underrepresented groups food insecure (“University of California Undergraduate Experience Survey (UCUES) Data Tables, 2020” 2020).

Universities across the United States have undertaken various programming efforts to mitigate the impacts of these basic needs instabilities on students. At UC Berkeley, the Basic Needs Center has implemented a Food Pantry, food recovery program, food and nutrition seminar series, student awards program, one-on-one care counseling, and more (Farquhar et al. 2020). However, many students are unaware of these programs, do not take advantage of them, do not have their needs fully met by them, or the resources they need are simply not available. Reasons for use and nonuse of programs are complex, with one recent study finding that students frequently experience feelings of shame and ambivalence as they attempt to meet their basic needs, and that these emotions impact their perceptions of self and how or if they accessed basic needs services (Crutchfield et al. 2020). Additionally, most research and programming has been focused on food insecurity, and while this issue is important, many students also struggle with financial, housing, transportation, sleep, and mental and physical healthcare insecurity. These basic needs areas cannot be viewed independently, as insecurity in one area may intensify that in another, for instance, food and housing (Martinez et al. 2021). Frequently under-supported basic needs categories are especially of note during the COVID-19 pandemic as many undergraduate students newly encounter problems with unemployment, high-cost and density housing, food accessibility, negative mental and physical health impacts, and barriers to their education.

The objective of this study is to examine the various impacts and gaps in basic needs resource programs (or lack thereof) in the UC Berkeley community, especially during times of environmental catastrophe such as the COVID-19 pandemic. More specifically this study will include examining the current status of undergraduate basic needs stability and resource access at UC Berkeley, the various barriers to accessing basic needs resources and how this affects students, and how COVID-19 has impacted basic needs status and the demand for and access to basic needs

resources. To meet these objectives, I collected survey responses from undergraduate students on their basic needs status, use and awareness of on-campus and off-campus basic needs resources, how resource use has changed as a result of the COVID-19 pandemic, and perceptions of University efforts as well as any potential solutions they propose. Although many basic needs resources exist on campus, the university and campus organizations may still improve their programming to support undergraduate students more effectively with housing, transportation, financial stability, healthcare, and other primary basic needs categories, especially given the severe destabilization resulting from an environmental catastrophe like a global pandemic.

BACKGROUND

The structure of basic needs programming at the University of California, Berkeley

The University of California, Berkeley has several avenues for interacting with student affairs. These avenues include the Office of the Vice Chancellor, Admissions & Enrollment, Dean of Students, Residential & Student Service Programs and Student Affairs Services, and University Health Services (UHS) (“Organizational Charts” 2014). The Financial Aid and Scholarships Office aims to increase access to basic needs resources by strengthening aid programs through allocation of federal, state, and institutional dollars (“2020-2021 Division of Student Affairs Impact Report” 2021). Cal Dining supports the basic needs of students through a food donation program and two student gardens.

UC Berkeley undergraduate students interact with the University in several ways including through the Associated Students of the University of California (ASUC), direct conversations with those in positions of influence, and protest. Through these interactions students are able to request access to necessary basic needs resources including housing, food, water, and sanitation. One of the primary and most structured ways students become involved with the larger university structure is through the ASUC which serves as a political structure that allows students to elect representative officials that influence the organization and governance of the university (“ASUC | Home” n.d.). The ASUC also provides student support in handling student grievances.

The ASUC building is home to the UC Berkeley Basic Needs Center which provides services such as access to nutritional food, stable housing, hygiene, transportation, healthcare,

mental wellness, and financial stability (“UC Berkeley Basic Needs Center” n.d.). The Food Pantry is an emergency food services program under the Basic Needs Center that provides food staples once a week to all students on a self-assessed basis (“Food Pantry” n.d.). CalFresh is another food access program that awards students up to \$250 per month for groceries.

UC Berkeley response to COVID-19

UC Berkeley enacted notable changes to its on-campus operations as a result of the COVID-19 pandemic, and these had a significant impact on the student body. On March 13th, 2020, UC Berkeley announced that the temporary remote instruction model announced previously on July 21, 2020, would be extended through the end of the semester (“Previous Updates” 2020). On March 20, 2020, the university officially implemented a grading policy change that switched the default grading basis to Passed/Not Passed (P/NP) for undergraduate students (“Previous Updates” 2020). This shift reduced the stress of academic performance for many students and allowed them to focus on other pressing measures such as moving home, taking care of family members, and taking care of their own basic needs. UC Berkeley communicated with students through a biweekly to weekly newsletter titled “Response and Recovery” from July to October 2021 (“UC Berkeley Coronavirus (COVID-19) updates and resources” n.d.) and more generally through the site coronavirus.berkeley.edu. This newsletter included information on topics such as building re-openings, mask mandates, vaccine requirements, contact tracing, exposure notifications, and more. Additionally, the university designed a dashboard with Coronavirus test and case counts and information on the number of students quarantining.

The university also began free weekly “surveillance testing” in September of 2020 for all students living in on-campus dormitories, and strongly encouraged it for others living in housing circumstances with a high-risk for transmission (e.g., Greek life and Berkeley Student Cooperative buildings). Since student campus dormitory halls frequently have a higher density of residents, the university took specific safety measures to mitigate the spread of COVID-19. In August of 2020, all new students were required to complete a COVID-19 test before moving in, and those who tested positive were temporarily housed in the Foothill residential complex to isolate and quarantine until they were cleared by UHS to return to their dorm (“Previous Updates” 2020). Isolation and quarantine spaces on campus remained open to dorm students and other students in

emergency housing situations until the finishing of this project in May 2022. As the university increased its sample testing capacity, free surveillance testing became available to all students and staff regardless of their housing circumstances, and on October 9th, 2020, an additional testing site opened at Memorial Stadium to accommodate up to 60,000 campus tests per month. This expansion allowed the university to trace contacts of asymptomatic cases of COVID-19 more effectively among undergraduate students on campus. Many buildings remained completely inaccessible to students for most of the pandemic and were restricted to staff only, often by keycard access alone. Campus libraries were entirely closed for a number of months, only reopening four months after California first issued its stay-at-home order in March of 2020. Hours of operation for almost all buildings were decreased.

Many students were disproportionately impacted by these changes. Students with a lack of reliable Wi-Fi found it difficult to participate in online classes, and a closed campus meant a severe reduction of quiet spaces for studying and taking exams (“Berkeleyans share their year of change, distance, loss and service” 2021). As one student Grecia Resendez reported to Berkeley News: “Not everyone is a single student at home living with their parents.” Because access to campus was limited during much of the pandemic, the University implemented the Student Technology Equity Program (STEP) to connect students in need to laptops, Wi-Fi hotspots, and other technological peripherals (“Student Technology Equity Program: A COVID-Relief Effort” 2020). This program allowed students living in remote areas or those with housing instability to continue work on their education. However, barriers to accessing resources such as these still exist, as STEP requires an online application approved only if financial and COVID-19 related need or instructional roles are demonstrated, and technology is not available for those students living outside of the United States (“STEP FAQs” 2020).

The majority of UC Berkeley students returned to campus for the fall semester of 2021. As in-person instruction began and capacity once again increased, the university took precautions such as requiring full vaccination including boosters of students and staff in almost all cases, weekly surveillance testing for those not vaccinated and monthly testing for those vaccinated, requiring masks in all indoor spaces, and restricting class sizes to reduce the risk of classroom transmission (“Response & Recovery: Vaccine mandate finalized, Wi-Fi changes, more” 2021). On May 6, 2022, the major surveillance testing location at the Recreational Sports Facility closed permanently (“Campus Surveillance Testing” n.d.).

The economics of education

Universities in the United States have a variety of revenue sources and expenses, including those that will impact students' access to resources, such as student services and utilities. One method of viewing financial changes that occur in higher education is incrementally, meaning small alterations are usually made to the previous year's budget. In this case, substantial changes are only likely to occur when shifting finances to align with state policies on financial aid, dealing with budget cuts, or in cases of significant changes in institutional and political leadership. Another arguably more accurate concept for understanding allocation of financial resources in higher education is punctuated equilibrium. Rather than viewing finances incrementally, this theory sees long periods of relative equilibrium, interrupted by major changes or punctuations (Ecton and Dziesinski 2021). One hypothesis for why this may occur is a result of bounded rationality: decision makers are unable to process large amounts of financial decisions until they are forced to face a major problem (Ryu 2011). Universities also have interdependent relationships with the bodies that fund them, sometimes forcing them to spend in ways that do not align with student support. The relative unlikelihood of universities to shift their budgets year-to-year and their prioritization of meeting the needs of outside funders introduces potential conflicts when considering the funding of basic needs support for the student body.

Only 1% of UC Berkeley's \$3 billion budget is spent on maintaining campus utilities such as electricity and water ("Office of the Chief Financial Office" n.d.). In contrast, 34% of UC Berkeley's revenue is generated by student tuition and fees, and student services themselves account for 10% of UC Berkeley's core expenses, which is less than both day-to-day operational spending and research categories ("IPEDS Data Center" n.d.). State general funding of the University of California system has decreased by over 60% in the last three decades, while tuition and fees has more than doubled ("Budget for Current Operations (2019-20)" 2020). When following the punctuated equilibrium theory of higher education financing, it is clear that any changes in favor of increasing support for basic student needs will need to be a drastic shift in how finances are handled and viewed at institutions like UC Berkeley.

Community activism in a University context

The COVID-19 pandemic was an emergency that required a rapid response that local and larger governmental bodies could not fully provide, leaving community organizations to address resource gaps. Communities can take meaningful action even when political bodies are not. Sometimes community action is necessary when the situation is so dire that the lag time associated with large-scale political change will cost lives. In Puerto Rico following Hurricane Irma and Maria, community organizations worked using grassroots knowledge and resources to advocate for food sovereignty (Andrade et al. 2021). In Berkeley, community-centered projects, and organizations such as the City of Berkeley Relief Fund, city-wide Berkeley Mutual Aid Network, university-specific Mutual Aid at Berkeley, and more provide financial and educational support in basic needs in areas such as housing, food, water, sanitation, and mental health. During COVID-19, these organizations have also provided pandemic-specific resources such as matching pairs of those low and high-risk for COVID-19 complications to coordinate delivery of food, toiletries, and other basic needs resources (“Request Help” n.d.). Actions such as these have the potential to save lives when political and institutional changes move on much slower time scales. In recent years governments and foundations have increased their requests of community-based organizations (CBOs) for evaluative data on the populations they serve (Carman 2007), highlighting the unique ability CBOs have to more intimately understand the needs of the populations they serve. The population of interest in this study, UC Berkeley undergraduate students, participate in various community based as well as university programs to better meet their basic needs.

METHODS

To answer the research question of how the presence or lack of basic needs resources impacts undergraduate university students, especially in the case of environmental catastrophes such as the COVID-19 pandemic, I focused primarily on student voices and opinions. To determine awareness and use of basic needs resources, barriers to access, and the impacts of COVID-19 on these areas, I collected student-reported measures through surveys and additional student experiences through open-ended survey questions. With a goal to identify community-based solutions to basic needs stability issues, I asked undergraduate students what they felt could

be improved about the University’s communication and provision of basic needs resources on campus.

Study population

My study population included primarily undergraduate students at the University of California Berkeley, and several individuals from other UC Berkeley affiliated categories, including recently graduated undergraduates, graduate students, and campus staff members. The 131 total survey respondents were 65.33% female, 22.67% male, and 8.00% non-binary. Race(s) and ethnicity(ies) of research participants were 13.51% from underrepresented groups (Table 1), compared to 23% amongst all undergraduate students (“UC Berkeley Fall Enrollment Data for New Undergraduates” 2021). Although 29% of the UC Berkeley undergraduates are first generation college students (“Diversity Data Dashboard” 2021), only 12% of my survey respondents were first generation college students. However, 10% of UC Berkeley undergraduates have a disability (“Diversity Data Dashboard” 2021), and 13.33% of my survey respondents would consider themselves to have a disability.

Table 1. Race(s) and ethnicity(ies) of research participants and UC Berkeley fall enrollment data for new undergraduates. UC Berkeley fall enrollment data was collected from the Office of Planning and Analysis and consists of new freshman entrant enrollment data by ethnicity in Fall 2021 for comparison to survey results. This dataset also includes 12.8% international students, which was not included in the table.

Race/ethnicity	Research participants (n = 74)	UC Berkeley freshman enrollment (Fall 2021)
African American / African / Black	0.00%	3.7%
Asian / Asian American	48.65%	21.9%
Hispanic / Latino	12.16%	18.9%
Middle Eastern / Southwest Asian / North African	6.76%	19.2%
Native American / Alaska Native	0.00%	0.4%
Pacific Islander	1.35%	0.3%
White	35.95%	19.0%
Not Listed	2.70%	–

Decline to state	5.41%	3.9%
Underrepresented group*	13.51%	23.2%

*The underrepresented group category consists of African American/African/Black, Hispanic/Latino, Native American/Alaska Native, and Pacific Islander.

Data collection

I distributed a Qualtrics survey to UC Berkeley undergraduate students which accepted responses from April 4th to May 6th of 2022. The study participants were predominantly identified through outreach to a variety of campus organizations. The survey consisted of 41 questions with a variety of response categories including check all that apply, yes/no, Likert, and open-ended response and took approximately 10 minutes to complete (see Appendix A). Respondents were asked to answer questions on how they would define basic needs, their food security and housing status, their awareness and use of on- and off-campus basic needs resources, the barriers to their use of basic needs resources, and the impacts of COVID-19 on their basic needs. An example of a more quantitative survey question asked was “Of the on-campus resources you have heard of, please indicate the frequency with which you have used them during your time at UC Berkeley;” in contrast, an example of a more qualitative survey question asked was “How can the University better communicate with students to aid in access to resources?” The survey allowed me to gather data on the current status of basic needs stability and resource use, and the impact of COVID-19 on basic needs amongst the respondents.

Data analysis

The data I collected provided various student perspectives and experiences related to basic needs and the COVID-19 pandemic as a university student. The survey was kept to a shorter length to encourage more participation and survey questions were written to be as neutral as possible to avoid the influence of my personal biases. Because I received only 131 survey responses, there are limitations in my ability to extrapolate trends to the entire UC Berkeley undergraduate population. However, I received information on many meaningful personal experiences that will be valuable in identifying routes for strengthening basic needs support on the UC Berkeley campus and at other universities. My research approach that used a combination of both closed and open-ended

Qualtrics survey questions allowed me to both quantitatively measure the impact of basic needs resources and COVID-19 as well as qualitatively analyze student experiences through open-ended questioning. Open-ended questions were coded to identify common response themes.

RESULTS

Defining basic needs

I found that many undergraduate students shared similar definitions of basic needs, but there were some notable differences. For instance, students who grew up low-income were more likely to identify education (75%), financial stability (100%), and mental healthcare (100%) as topics associated with basic needs when compared with students who grew up with other income levels. Additionally, students who identified themselves as having a disability were more likely to identify sleep (100%) and transportation (70%) as topics associated with basic needs when compared with students who did not identify themselves as having a disability. There were various themes or words that emerged when students were asked to define basic needs with “survival” being the most common (32.29%), followed by “health” and “health maintenance” and “necessity” (16.90%), as well as other themes related to stability and life quality (Table 2).

Table 2. Common themes in response to the prompt “How would you define basic needs?”

Basic needs theme/word	% of students mentioned (n = 71)
Survival	32.39%
Health and health maintenance	16.90%
Necessity	16.90%
Well-being/wellness	9.86%
Comfort	7.04%
Essential	7.04%
Entitlement or right	5.63%
Security	5.63%
Happiness or enjoying life	4.23%
Sustainability	4.23%

Access, use, and barriers related to basic needs resources

This research evaluated basic needs security amongst survey respondents in both housing and food categories. To identify housing security, I asked participants “Do you have access to stable housing?” and 4.71% of respondents responded that they did not, indicating housing insecurity. To identify food insecurity, I used the two-item food security screening method from the US Household Food Security Survey. This method requires respondents to respond to two questions with “often true,” “sometimes true,” and “never true” within the last 12 months, for example, “I was worried whether my food would run out before I got more,” and “The food that I bought just didn’t last, and I didn’t have money to get more”. Most of the students who reported never having experienced food insecurity reported that their basic needs were being met (93.1%). However, a significant number of students who reported experiencing food insecurity also reported that their basic needs were being met: 54.5% of “Somewhat agree” and 13.7% of “Strongly agree” categories (Table 3).

Table 3. Self-identified basic needs security vs food security (based on the US Household Food Security Survey).

Two-item food security screening questions (n = 87)			
“My personal basic needs are being met.”	<i>Never true</i>	<i>Sometimes true</i>	<i>Often true</i>
Strongly disagree	50.0%	50.0%	0.0%
Somewhat disagree	12.5%	75.0%	12.5%
Neither agree nor disagree	50.0%	50.0%	0.0%
Somewhat agree	45.5%	50.0%	4.5%
Strongly agree	86.3%	13.7%	0.0%

Many students are aware of on-campus resources even if they do not actively use them; only one respondent of 84 total was not aware of any on-campus basic needs resources at all. This number was slightly higher for off-campus resources, with 7 of 78 respondents being unaware of any off-campus basic needs resources. The most well-known resources on campus were, in descending order, the Student Healthcare Insurance Program (SHIP), the Food Pantry, the work

study program, the Disabled Students’ Program (DSP), and the Basic Needs Center. The most well-known resources off campus were, in descending order, CalFresh EBT, any local food bank, and the Berkeley Rent Stabilization Board. Respondents were asked to identify their awareness of both on- and off-campus basic needs resources from a list of common resources and were given an option to write-in those not listed. These resources are listed below based on their corresponding basic needs category (Table 4).

Table 4. Specific resources and programs on and off campus by basic needs category.

Basic Needs Category	On-campus resources	Off-campus resources
Food	Berkeley Student Farms (BSF), Food Justice Project, Food Pantry	CalFresh EBT, Local food bank
Housing	Emergency Housing Program	Berkeley Rent Stabilization Board, Local shelter or emergency housing
Financial	Basic Needs Holistic Fund, University financial assistance, Work Study	Unemployment insurance, Utilities assistance (EBMUD, CARE/FERA)
Healthcare (mental)	Counseling and Psychological Services (CAPS), PATH to Care Center	
Healthcare (physical)	Student Healthcare Insurance Program (SHIP)	
Academic	Disabled Students’ Program (DSP), Educational Opportunity Program (EOP)	
Other or comprehensive	Basic Needs Center, Student Advocates Office (SAO), Student Legal Services (SLS)	Berkeley Mutual Aid Network

Use of both on- and off-campus basic needs resources were lower than awareness. Comprehensive resources were more likely to be used on-campus even though awareness was higher for off-campus resources. Students were both more aware of and more likely to use off-campus housing resources. Students were both more aware of and more likely to use on-campus food and financial resources. No healthcare (mental or physical) or academic resources were reported for off-campus locations (Figure 1).

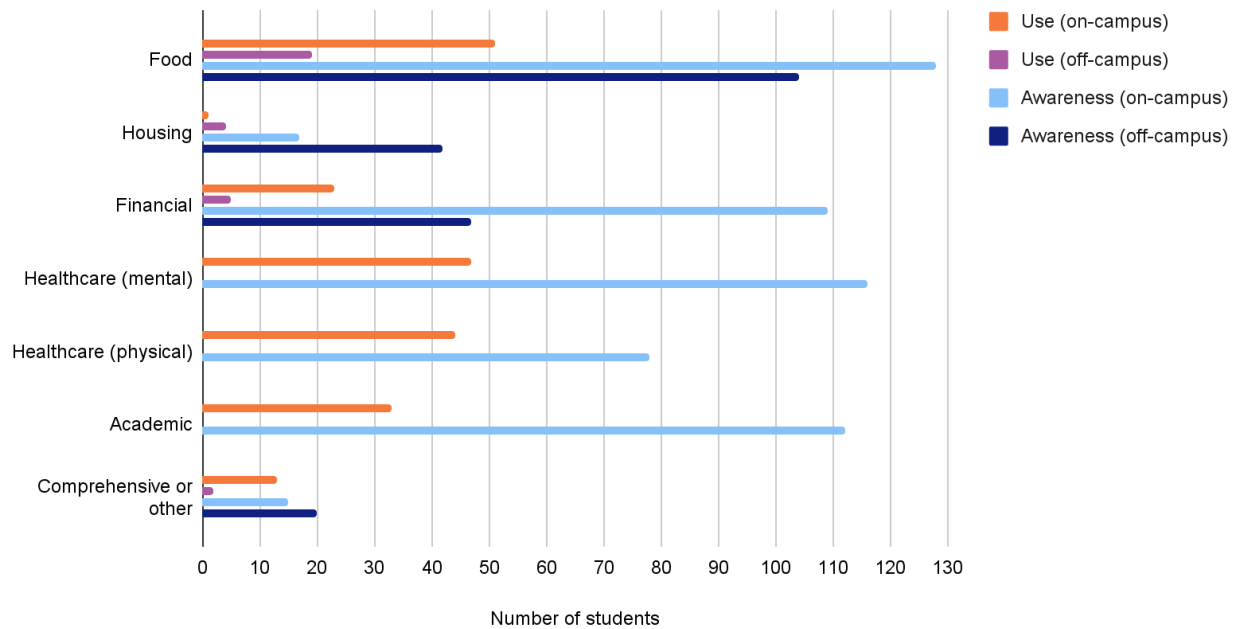


Figure 1. Use and awareness of common basic needs resources by on- or off-campus location.

There were several common barriers to accessing basic needs resources including resource sufficiency, resource specificity, money, transportation or distance to resources, and testing positive for COVID-19. The most reported barrier to accessing resources was testing positive for COVID-19 (38.10%) followed by money (32.91%) and transportation and distance to resources (31.65%) (Table 5.). The most used forms of transportation for those who reported transportation or distance to resources as a barrier to access were walking (94.59%), bus (78.38%), and train (40.54%). Of the 25 respondents who reported that transportation or distance to resources was a barrier, only one lived further than three miles from campus.

Table 5. Common barriers to accessing basic needs resources.

Barrier	% of students experiencing
UC Berkeley resource sufficiency	15.38%
UC Berkeley resource specificity	8.97%
Money	32.91%
Transportation or distance to resources	31.65%
Testing positive for COVID-19	38.10%

Basic needs and the impacts of COVID-19

The COVID-19 pandemic impacted both undergraduate students’ demand for and use of basic needs resources: 44.0% of respondents experienced increased demand and 41.3% of respondents experienced increased use. Only 6.7% of respondents experienced decreased demand and 5.3% of respondents experienced decreased use (Figure 2). Of the 75 undergraduate students who responded, 29.33% reported that they had tested positive for COVID-19 at some point during the pandemic. The most common impacts testing positive for COVID-19 had on respondents were on their ability to attend classes (70.59%), ability to work (52.94%), and ability to complete coursework (48.06%). Other impacts included ability to access food (29.41%), ability to access transportation (23.53%), ability to acquire financial support (5.88%), ability to access housing (5.88%), and increased need for medical services (5.88%).

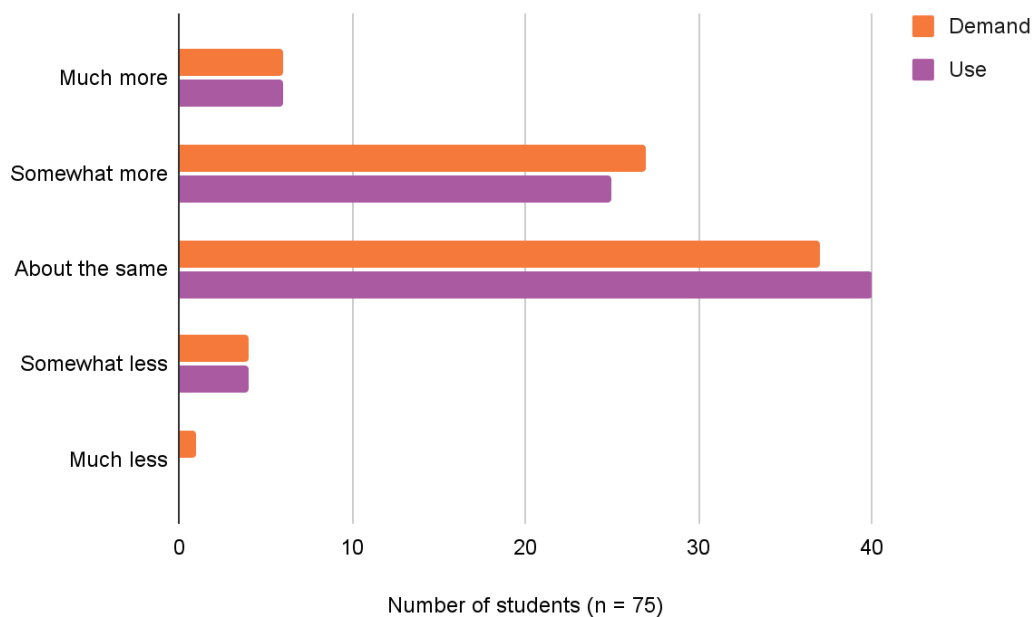


Figure 2. Demand for and use of basic needs resources before and during the COVID-19 pandemic.

Many students began accessing both on- and off-campus basic needs resources for the first time as a result of the COVID-19 pandemic. On-campus resources accessed for the first time included the Student Health Insurance Program (SHIP), Counseling and Psychological Services (CAPS), the Food Pantry, the Disabled Students' Program (DSP), the Berkeley Student Farms

(BSF), work study, the Educational Opportunity Program (EOP), the Basic Needs Center, the PATH to Care Center, the Emergency Housing Program, Student Legal Services (SLS), the Student Advocates Office (SAO), and University financial assistance. The portion of all-time users of these basic needs resources that began use as a result of the pandemic can be seen below (Figure 3).

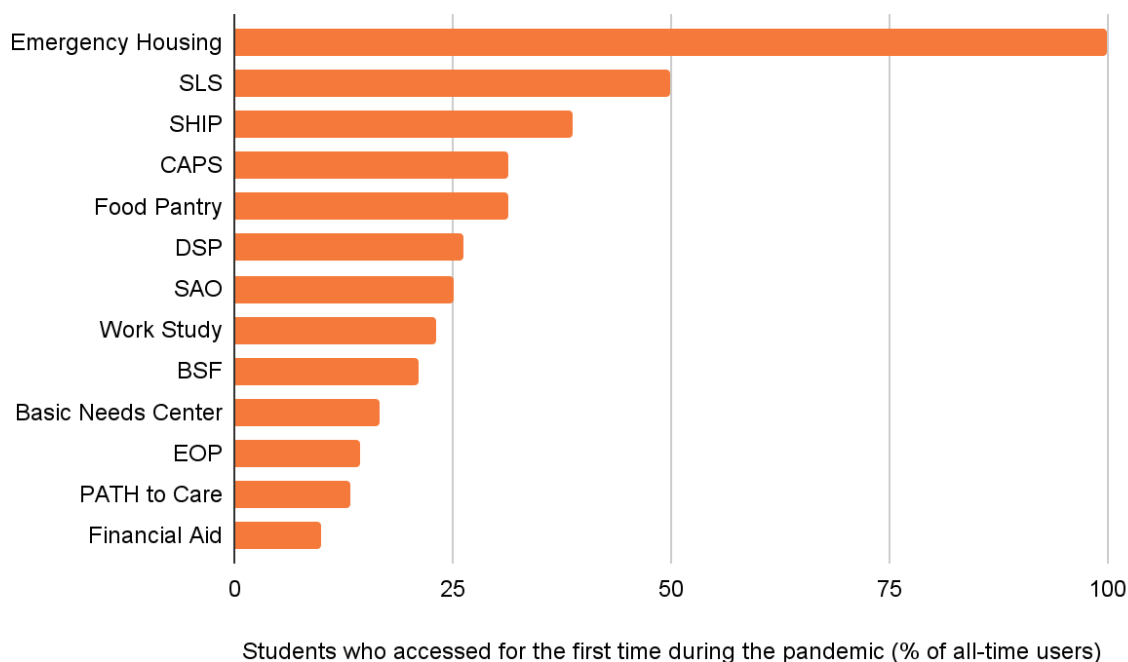


Figure 3. Percentage of all-time users who accessed common on-campus basic needs resources as a result of the COVID-19 pandemic.

Off-campus resources accessed for the first time during the pandemic included CalFresh EBT, unemployment insurance, the Berkeley Mutual Aid Network, the Berkeley Rent Stabilization Board, local shelters or emergency housing, and local food banks. The portion of all-time users of these basic needs resources that began use as a result of the pandemic can be seen below (Figure 4).

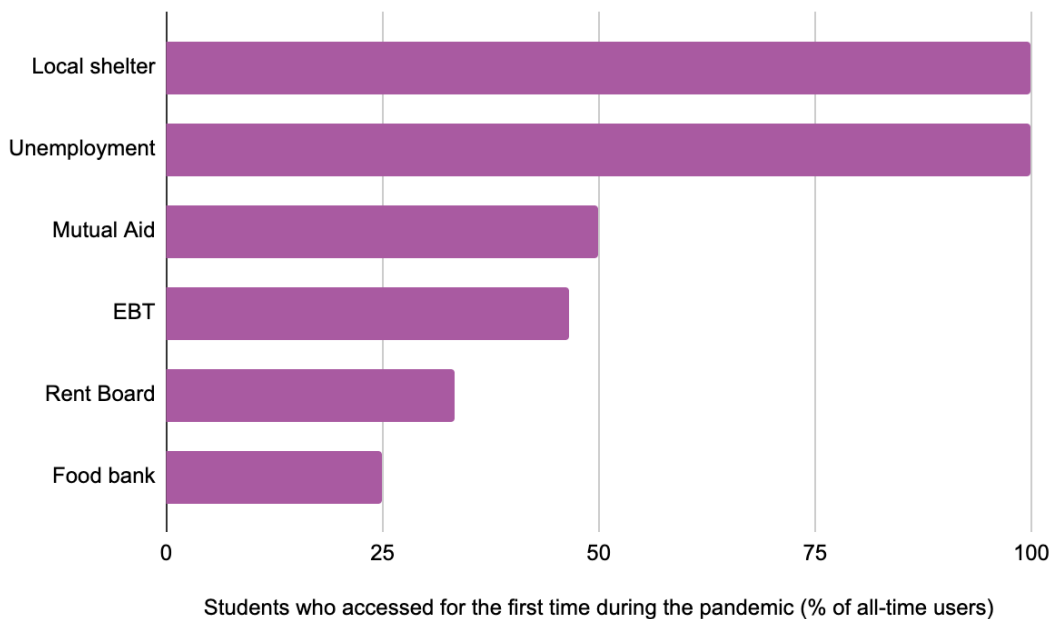


Figure 4. Percentage of all-time users who accessed common off-campus basic needs resources as a result of the COVID-19 pandemic.

Student suggestions for improvement

There were some basic needs categories that undergraduate students would like more support in, primarily mental healthcare (60.00%), housing (48.33%), and financial areas (38.33%) (Figure 5). Although some of these areas see high demand for additional support and low use of existing resources (e.g., housing), other areas have both high demand for additional support and use of existing resources (e.g., mental healthcare). Finally, food was one basic needs area that saw both low demand for additional support and high use of existing resources.

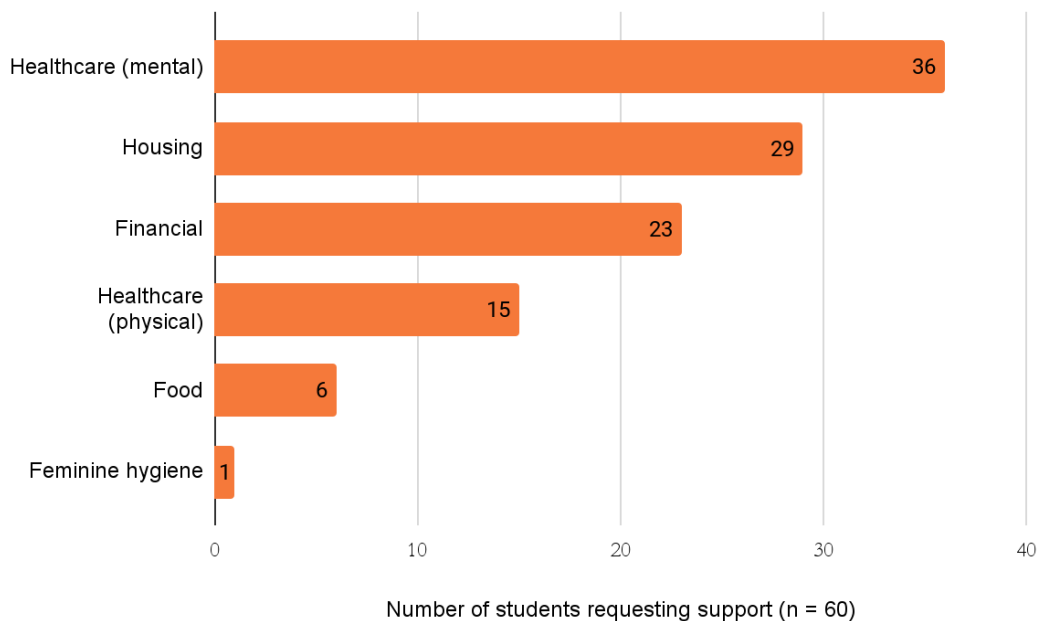


Figure 5. Requested support for common basic needs categories.

When students were asked how they believe support in these categories could be improved, many provided specific examples of programs or proposed changes to existing programs that they felt would make them feel more supported and comfortable in these primary basic needs categories. Several themes emerged for each basic needs category: financial aid and educational material costs for financial basic needs, guaranteed housing for students and price inaccessibility for housing basic needs, insurance or price barrier and frequency and number of appointments and counselors for mental healthcare, and insurance or price barrier for physical healthcare (Table 6). Many students expressed frustration with the university and its allocation of resources and money and requested this be focused more towards improving financial aid, housing, and healthcare for undergraduate students.

Table 6. Student suggestions for improvement in various basic needs categories.

Basic needs category	Theme	Example
Financial	Financial aid	<ul style="list-style-type: none"> ● “Improvement in the financial aid office.” ● “More” or “better” financial aid (4)
	Educational material costs	<ul style="list-style-type: none"> ● “Books are expensive, why are we paying for green/blue books it should be provided by the school to the teachers.” ● “Not charging so much for books or school supplies.”
	Other program suggestions	<ul style="list-style-type: none"> ● “Provide a list of resources I can use, or even help with managing expenses.” ● “Increased awareness and education in personal finance management and financial aid opportunities.” ● “More programs / workshops that break down budgeting, more money allocated to students and student needs in general.”
Food	Program suggestions	<ul style="list-style-type: none"> ● “Reminders to renew EBT.” ● “Free access to cafeterias for all students.”
Housing	Guaranteed housing for students	<ul style="list-style-type: none"> ● “4 year housing for students.” ● “Ensured housing through the college for returning students is essential.” ● “Berkeley needs to be able to provide housing for its students; the housing crisis is ridiculous and now I'm not sure if I'll be able to return for next semester.”
	Price inaccessibility	<ul style="list-style-type: none"> ● “Too expensive dorms, it should be more affordable, more options to be able to have a room without paying +\$1000.” ● “Affordable” or “cheaper” housing (8)
	Other program suggestions	<ul style="list-style-type: none"> ● “Administration could stop over-enrolling students and do more to support current housing programs, such as the Berkeley Student Co-ops.”
Healthcare (mental)	Insurance or price barrier	<ul style="list-style-type: none"> ● Improved access for students without a Student Health Insurance Plan or SHIP (5) ● Cheaper options (3)
	Frequency of appointments and staffing or resource inadequacies	<ul style="list-style-type: none"> ● More counselors (8) ● More appointments (2) ● Decrease the time between appointments (2) ● “Make it so you can receive long term counseling through UHS.” ● “It is almost impossible to get an initial appointment for counseling at Berkeley.”

	Other program suggestions	<ul style="list-style-type: none"> ● “Expanding the range of services covered under CAPS.” ● “Not having referrals required to get a therapist.” ● “Perform routine check-ins with students who use CAPS services to assess the quality of the CAPS workers and plan seminars to train them to improve.” ● “Create more support and wellness group options so students have more scheduling options.” ● “Promote community! Berkeley desperately needs a stronger sense of community”
Healthcare (physical)	Insurance or price barrier	<ul style="list-style-type: none"> ● Lower out-of-pocket costs (2) ● Improved access for students without a Student Health Insurance Plan or SHIP (2)
	Other program suggestions	<ul style="list-style-type: none"> ● “In-person doctor appointments.” ● “Not needing a referral to see specialist doctors.” ● “Making the advice nurse wait times shorter.” ● “More support groups for eating disorders and physically disabled students' that help with mental, behavioural, and physical therapy. Also, exercise groups with a major sense of community and acceptance.” ● “Everything should be wheelchair accessible (and students with physical disabilities should get support in creative schedule and attendance accommodations).”

When asked if the university should be doing more to meet students’ basic needs 85.14% of undergraduate students responded yes, 6.76% responded no, 4.05% responded that they were unsure or needed more information, and 4.05% responded that they could do more to spread awareness and to help students take advantage of existing resources. Additionally, when asked who was responsible for meeting a student’s basic needs, the university was the most selected answer at 88.12% of respondents, followed by the state (86.84%), the country (81.58%), and the community (67.11%). All of these groups were chosen more often than the student themselves at 60.53% of respondents. The majority of respondents reported finding out about basic needs resources from their friends (61.64%), highlighting the opportunity for the university to improve their communication with students surrounding basic needs. Student suggestions for improvement in university communication included various forms of in-person outreach, virtual outreach, time-

specific outreach, class-based outreach, outreach to specific populations of students, and more (Table 7). One of the most mentioned avenues for improving university communication about basic needs was through emails, and many students are already becoming aware of basic needs resources through university emails (56.16%).

Table 7. Student suggestions for improvement in university communication with students.

Theme	Example
In-person outreach	<ul style="list-style-type: none"> ● Open houses ● Tabling ● Flyers (3) ● More events specific to basic needs categories
Virtual outreach	<ul style="list-style-type: none"> ● Social media (2) ● Emails: more emails (2), clearer emails, emails in general (2) ● CalCentral reminder or task to learn about campus resources ● Required basic needs orientation in addition to others
Time-specific outreach	<ul style="list-style-type: none"> ● Regular weekly or monthly reminders ● Routine check-ins with every student and routing to resources ● Monthly or semesterly list of resources over email ● Advertising and outreach at the beginning of semesters
Class-based outreach	<ul style="list-style-type: none"> ● Resource mentions in classes (2) ● Teachers/classes required to give list of resources (2) ● Resource list in every class syllabus
Specific populations	<ul style="list-style-type: none"> ● Residence hall outreach ● Support service providers financially ● New students: mention during GBO (2), updates to incoming students, emphasize that it is okay to struggle during orientation ● Outreach to community colleges
Other	<ul style="list-style-type: none"> ● Less bureaucracy ● More visibility/announcements ● Create comprehensive list of resources

DISCUSSION

These analyses sought to explore the current state of basic needs stability in the undergraduate population at UC Berkeley as well as the impacts of the COVID-19 pandemic and any student suggestions for future improvements to programming. To that end, the data illustrates several key findings. First, that undergraduate students from diverse populations must be included

in basic needs program planning to achieve comprehensive and inclusive basic needs resources. Second, that food insecurity is a major concern amongst the undergraduate population that must be addressed. Third, that the COVID-19 pandemic has almost universally increased the need for basic needs support amongst undergraduate students and that these basic needs categories frequently exacerbate each other. There is an enormous opportunity for the university to include student suggestions and incorporate student voices into program improvements and additions as they plan for future health and climate change-induced catastrophes.

Defining basic needs

Commonly shared as well as population-level definitions for “basic needs” suggest that undergraduate students at UC Berkeley hold similar yet varying expectations regarding how their basic needs will be met, and further that they have varying demands for basic needs resources from the university and the broader community. A large percentage of undergraduate students identified basic needs as something they needed for survival (32.39%) and health (16.90%) and that these are necessities (16.90%). However, far fewer students connected basic needs to comfort (7.04%) and happiness or enjoying life (4.23%) or mentioned that they believed they were a right or entitlement (5.63%). This is notable especially when considering that college students are some of the most food and housing insecure populations in the United States (Owens et al. 2020).

If students view the topic of basic needs as being more focused on survival, and less on sustainability of long-term happiness and comfort, they will presumably be less likely to demand more comprehensive resources from their university. Undergraduate students may be “surviving” while still experiencing stress, frustration, and other negative emotions that can impact their well-being as well as their academic motivation and success (Müller et al. 2021). They may also be less likely to reach out for resources if they do not believe that their problem is severe enough to warrant support.

The findings that different populations of undergraduate students identify varying categories as relating to basic needs may indicate that demographics have an influence over student definition of and demand for various basic needs resources. For instance, students who identified themselves as having a disability were more likely to associate sleep (100%) and transportation (70%) as topics associated with basic needs when compared to students who did not. This

highlights the importance of active outreach to these populations and consultation with them when designing new and modifying existing basic needs programs. If basic needs programs are designed without these voices involved in the conversation, resulting basic needs initiatives may completely disregard essential basic needs categories that are essential for these student populations.

Access, use, and barriers related to basic needs resources

Similarly to nationwide trends, undergraduate students at UC Berkeley are experiencing exceptionally high levels of food insecurity when compared to US households overall. In 2019, 10.5% of U.S. households experienced food insecurity (Soldavini et al. 2021), but 33.33% of undergraduate students who responded to the survey indicated signs of food insecurity. Rates of food insecurity measured in this survey were also similar to UC system-wide levels where 33.33% of this study's respondents marked "sometimes true" or "always true" within in the last 12 months in response to the statement "I was worried whether my food would run out before I got more," while 36% of UC students responded similarly in the 2020 UC Undergraduate Experience Survey ("University of California Undergraduate Experience Survey (UCUES) Data Tables, 2020" 2020). This indicates a need for additional food security support programs on the university campus, especially considering that many university students do not qualify for federal food support programs such as SNAP (Owens et al. 2020).

The observation that a large group of undergraduate students – 19 of the 29 total students experiencing food insecurity – who believe their needs are being met are still experiencing food insecurity, suggests that undergraduate students may not understand the concept of food insecurity or believe that a lower level of food security than has been set by the United States Department of Agriculture is acceptable. More educational support and destigmatization is needed and the support provided through the university-body must be comprehensive, accessible, and widespread as it may be the only support these students are able to access.

The survey showed high overall awareness of on-campus basic needs resources, with especially high awareness of food, mental healthcare, and academic resources, and slightly lower awareness of off-campus basic needs resources. This may imply that students are less aware of non-university affiliated programs that could help them in supplementing the campus programs they are using to meet their basic needs. As the university works to build more effective and

comprehensive basic needs programming on campus, there could be an opportunity to better communicate the existence of these off-campus resources to students who are experiencing urgent basic needs emergencies, especially when considering the slower time scale that institutions change on when compared to more community-based organizations (Carman 2007). The only basic needs category that saw higher awareness and use off-campus was housing, which suggests that existing programs for housing support on campus are not sufficient nor widespread enough to meet undergraduate student demand. This is especially dire considering that the San Francisco Bay Area has some of the highest rent prices in the country (Barton 2011). Access to adequate, affordable, and safe housing is a public health issue, as overcrowding and poor-quality housing are directly related to poor mental health outcomes, heart disease, and more (Bashir 2002). This is only intensified during the time of COVID-19 when crowded housing increases the chance of spreading and contracting COVID-19.

Testing positive for COVID-19 was the most common barrier amongst undergraduate students to accessing basic needs resources, even more so than money and transportation or distance to resources, which suggests that COVID-19 and other public health and environmental catastrophes pose unique challenges to students who need to access basic needs resources. Creative outlets to provide undergraduate students with these resources despite their physical distance from campus and inability to interact with others must be taken into consideration as students continue to experience existing basic needs instability in combination with increased economic stress from an inability to work, increased need for food, increased psychological stress, and decreased access to healthcare (Ahmed et al. 2022, Higashi et al. 2021).

Basic needs and the impacts of COVID-19

The COVID-19 pandemic has increased demand for basic needs resources amongst undergraduate students at UC Berkeley by 44.0% and use by 41.3%, consistent with the increased basic needs instability many undergraduate students reported, which suggests that students require more basic needs resources because of this public health and environmental catastrophe than they did before. As environmental issues continue to destabilize basic needs, especially amongst vulnerable and often BIPOC communities (DeBate et al. 2021), university institutions must do more to prepare for these events and to strengthen the safety net that they provide for students to

avoid these environmental and public health injustices. Of those student respondents who had contracted COVID-19 at some point during the pandemic, over half reported experiencing work insecurity, over a quarter food insecurity, and around one sixteenth housing insecurity because of their diagnosis. These basic needs categories are not only disruptful on their own but may also exacerbate one another, as studies have shown that when students do not have enough money, they may begin to prioritize housing over food (Martinez et al. 2021). Targeted interventions in these areas should be pursued to ensure that these individuals are able to continue to dedicate themselves to their university education, as opposed to it being disrupted entirely as they must increasingly focus on and prioritize their survival (Holzer et al. 2021). Many students accessing basic needs resources for the very first time because of the pandemic not only reveals the severity of the impact that the COVID-19 pandemic has had on students at UC Berkeley, but also the opportunity for the institution to provide adequate resources to the students who are actively seeking them in times of crisis.

Student suggestions for improvement

Student requests for additional support alongside current use of existing resources can provide insight into how the university may best allocate resources to benefit undergraduate students; for example, the high use of mental healthcare resources alongside the high demand for additional support suggests that mental healthcare support for students at UC Berkeley is not sufficient and may be overburdened. This is also reflected in students' suggestions for improvement in mental health resources, where eight students recommended that the university hire more counselors for students, and five suggested the schoolwork to make mental healthcare more accessible to students who are not enrolled in the Student Healthcare Insurance Plan (SHIP). This demand for mental healthcare resources is especially important during the COVID-19 pandemic and other highly life-disrupting environmental catastrophes, with studies showing that the COVID-19 pandemic has heightened anxious and depressive symptoms amongst college students, especially if those students are experiencing food and housing insecurity or are caring for members of a vulnerable population (Jones et al. 2021). Students experiencing distressing mental health issues will likely also experience interruptions to their education but providing counseling may be extremely effective in improving this public health issue, since it has been

shown that college students who receive counseling experienced positive changes in their grade point average over time (Kivlighan et al. 2021). Contrastingly to mental health, students reported very high use of food-related resources on campus, and it was the least selected when indicating demand for additional support. This may suggest that these programs have been successful, and there are opportunities for programs in other basic needs areas to be modeled after them specifically in terms of outreach, accessibility, and resource adequacy.

Undergraduate students were incredibly outspoken about their ideas for improvements to the university's treatment of basic needs support on campus, and the university may consider implementing concepts of Community Based Participatory Research (CBPR) when modifying existing and creating new basic needs programs on campus. This would not only help marginalized students to actualize their visions for a more equitable basic needs support system on campus but would also contribute to effective implementation and community empowerment (Sánchez et al. 2021). Students not only provided detailed ideas for improving basic needs programs themselves, but also ideas for how to improve university communication of existing basic needs resources through avenues such as social media, emails, and required mentions of basic needs resources in classes. Adopting these forms of outreach to students has the potential to not only increase awareness and use of resources amongst the undergraduate population, but also to decrease stigmatization of basic needs as well as the shame that many students feel when attempting to meet their personal needs (Crutchfield et al. 2020).

Limitations & future directions

The scope of this project is by no means comprehensive, and many essential opinions and voices were likely not included, primarily due to my relatively small sample size. Only 131 undergraduate students completed the survey in a university with an undergraduate population of over 30,000. Some respondents did not complete the survey in full, leading to some questions having less than half this original number of responses. Additionally, this survey was primarily circulated within the campus groups I am a part of, leading to convenience sampling bias in my results. Thus, it is unlikely that my data is representative of the entire UC Berkeley undergraduate population, and this data can also not be extrapolated to other universities in California or the

United States. Additionally, because basic needs are frequently a sensitive and personal topic, some respondents may not have answered truthfully which may have biased my results.

To improve the breadth of this study, a far greater number of undergraduate students at UC Berkeley should be surveyed. Ideally, the survey would be distributed more randomly to various students to ensure that the resulting demographics are more representative of the campus population. Notably, the percentage of respondents from underrepresented groups was much lower than the campus wide percentage. Future research would be more comprehensive if it included direct interviews with students, as surveys only provide a limited amount of information. Finally, it would be more thorough for interviews or surveys to be completed with other stakeholders besides undergraduate students such as campus staff, campus administration, and resource providers both on- and off-campus. This may give more insight into how these other stakeholders can feasibly contribute to improving the basic needs status of students.

Broader implications

This project has the potential to begin to influence how basic needs and basic needs resources are treated and provided on a university campus, especially during times of crisis and uncertainty like the COVID-19 pandemic. Global pandemics have been increasing in frequency over the past several decades (Ross et al. 2015), and so large-scale institutions must start planning for crisis now. As climate change becomes more dire, leading to increasingly intense weather events such as excessive heat, droughts, flooding, hurricanes, and wildfires (Konisky et al. 2015), universities must adapt to the often-unpredictable impacts these events have on their undergraduate populations. The climate crisis is increasingly decimating crops and crop diversity, populations are increasing, and global catastrophic events like pandemics are destabilizing communities, which is drastically increasing rates of food insecurity (Spring et al. 2021). During the 2018 California Camp Fire, one of the deadliest wildfires in California's history, college students were surveyed, and researchers found that sleep, emotional support, and sense of community were all indicators of well-being (Kornbluh et al. 2022). University students living in areas especially vulnerable to climate and health-related disasters will require social support from their communities and their university during these times of need, especially in basic needs categories like food, housing, mental healthcare, physical healthcare, and more. Universities must proactively respond to

catastrophic events that destabilize the basic needs of students to protect and support an already vulnerable portion of the population.

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APPENDIX A: Survey Questions

Defining Basic Needs

Q1 How would you define basic needs?

Q2 Which of the following topics do you associate with the term "basic needs"? (Select all that apply.)

- Food (1)
- Housing (2)
- Hygiene (3)
- Healthcare (Physical) (4)
- Healthcare (Mental) (5)
- Transportation (6)
- Financial Stability (7)
- Sleep (8)
- Education (9)
- Security (10)
- Other (please elaborate) (11)

Basic Needs Stability

Q3 My personal basic needs are being met.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q4 For the following statements, please say whether the statement was often true, sometimes true, or never true for you in the last 12 months.

	Never True (1)	Sometimes True (2)	Often True (3)
I was worried whether my food would run out before I got more. (1)	o	o	o

The food that I bought just didn't last, and I didn't have money to get more. (2)

Housing Stability

Q5 Do you have access to stable housing?

- Yes (1)
- No (2)
- Other (3) _____

Q6 How far do you live from campus this semester?

- On campus or (1)
- 1 to 2 miles (2)
- 3 to 10 miles (3)
- 11 to 20 miles (4)
- 21 miles or more (5)

Q7 With whom do you live? Please select the option that best describes your living situation this semester.

- I live alone (1)
- I share an apartment, house, or residence hall room with at least one other person. (2)
- I live with at least one family member (3)
- I am a single parent living with children (4)
- I live with my spouse or domestic partner and children (5)
- I live with my spouse or domestic partner without children (6)
- Other (please elaborate) (7) _____

On-Campus Resource Awareness

Q8 Which of these on-campus basic needs resources have you heard of? (Select all that apply.)

- Food Pantry (1)
- Food Justice Project (2)
- Berkeley Student Farms (BSF) (3)
- Emergency Housing Program (4)
- Basic Needs Center (5)
- Basic Needs Holistic Fund (6)
- Student Legal Services (SLS) (7)
- Student Advocates Office (SAO) (8)
- Educational Opportunity Program (EOP) (9)
- Disabled Students Program (DSP) (10)
- Work Study (11)
- PATH to Care Center (12)
- Counseling and Psychological Services (CAPS) (13)
- University Financial Assistance (14)
- Student Healthcare (SHIP) (15)

- Other (please list) (16) _____
- None (17)

On-Campus Resource Use

Q9 Of the on-campus resources you have heard of, please indicate the frequency with which you have used them during your time at UC Berkeley.

	Once (1)	2-5 times (2)	5-10 times (3)	10+ times (4)	Never (5)
Food Pantry (1)	o	o	o	o	o
Food Justice Project (2)	o	o	o	o	o
Berkeley Student Farms (BSF) (3)	o	o	o	o	o
Emergency Housing Program (4)	o	o	o	o	o
Basic Needs Center (5)	o	o	o	o	o
Basic Needs Holistic Fund (6)	o	o	o	o	o
Student Legal Services (SLS) (7)	o	o	o	o	o
Student Advocates Office (SAO) (8)	o	o	o	o	o
Educational Opportunity Program (EOP) (9)	o	o	o	o	o

Disabled Students Program (DSP) (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Work Study (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PATH to Care Center (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Counseling and Psychological Services (CAPS) (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
University Financial Assistance (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student Healthcare (SHIP) (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please list) (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input checked="" type="radio"/> None (17)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Off-Campus Resource Awareness

Q10 Which of these off-campus basic needs resources have you heard of? (Select all that apply.)

- Local Food Bank (1)
- Local Shelter or Emergency Housing (2)
- Berkeley Rent Stabilization Board (3)
- Unemployment Insurance (4)
- Utilities Assistance (EBMUD, CARE/FERA) (5)
- Berkeley Mutual Aid Network (6)
- CalFresh EBT (7)
- Other (please list) (8) _____
- None (9)

Off-Campus Resource Use

Q11 Of the off-campus resources you have heard of, please indicate the frequency with which you have used them during your time at UC Berkeley.

	Once (1)	2-5 times (2)	5-10 times (3)	10+ times (4)	Never (5)
Local Food Bank (1)	0	0	0	0	0
Local Shelter or Emergency Housing (2)	0	0	0	0	0
Berkeley Rent Stabilization Board (3)	0	0	0	0	0
Unemployment Insurance (4)	0	0	0	0	0
Utilities Assistance (EBMUD, CARE/FERA) (5)	0	0	0	0	0
Berkeley Mutual Aid Network (6)	0	0	0	0	0
CalFresh EBT (7)	0	0	0	0	0
Other (please list) (8)	0	0	0	0	0
⊗None (9)	0	0	0	0	0

Adequacy of Resources

Q12 UC Berkeley resources are sufficient to meet my basic needs.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q13 UC Berkeley resources are specific enough to meet my basic needs.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q14 Which basic needs category(ies) would you like to have more support in? (Select all that apply.)

- Food (1)
- Housing (2)
- Financial (3)
- Healthcare (physical) (4)
- Healthcare (mental) (5)
- Other (please specify) (6) _____
- ☉N/A (7)

Q15 How do you think basic needs support for this category could be improved? For example, suggest a specific basic needs resource or program.

- Food (1) _____
- Housing (2) _____
- Financial (3) _____
- Healthcare (physical) (4) _____
- Healthcare (mental) (5) _____
- Other (please specify) (6) _____
- ☉N/A (7) _____

Barriers to Access

Q16 Money is a barrier to meeting my basic needs.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q17 Transportation or distance to resources is a barrier to meeting my basic needs.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)

- Somewhat agree (4)
- Strongly agree (5)

Q18 What kind(s) of transportation do you use regularly? (Select all that apply.)

- Walking (1)
- Biking (2)
- Bus (3)
- Train (4)
- Personal Vehicle (5)
- Carpool Vehicle (6)
- Other (please elaborate) (7) _____

Q19 Have you ever or are you currently taking out student loans to meet college expenses?

- Yes (1)
- No (2)
- Other (3) _____
- Decline to state (4)

Q20 Have you or are you currently financially supporting dependents and/or family members while in college?

- Yes (1)
- No (2)
- Other (3) _____
- Decline to state (4)

Basic Needs Communication

Q21 If you are aware of on-campus basic needs resources, how did you find out about them? (Select all that apply.)

- From a friend (1)
- From a class (2)
- From a University email (3)
- From a University event (4)
- From the Basic Needs Center (5)
- From another campus organization (6)
- Other (please elaborate) (7) _____
- ⊗N/A (8)

Q22 How can the University better communicate with students to aid in access to resources?

Basic Needs Responsibility

Q23 Should the University be doing more to meet student basic needs?

- Yes (1)
- No (2)
- Other (please elaborate) (3) _____

Q24 Who do you believe is responsible for meeting a student's basic needs? (Select all that apply.)

- Student themselves (1)
- Other students (2)
- Community (3)
- University (4)
- State (5)
- Country (6)
- Other (please elaborate) (7) _____

Basic Needs During the COVID-19 Pandemic

Q25 How has your demand for basic needs support changed during the COVID-19 pandemic?

- Much more (1)
- Somewhat more (2)
- About the same (3)
- Somewhat less (4)
- Much less (5)

Q26 How has your use of basic needs resources changed during the COVID-19 pandemic?

- Much more (1)
- Somewhat more (2)
- About the same (3)
- Somewhat less (4)
- Much less (5)

Q27 Have you tested positive for COVID-19 at any point during the COVID-19 pandemic?

- Yes (1)
- No (2)
- Other (please elaborate) (3) _____
- Decline to state (4)

Q28 Testing positive for COVID-19 impacted my ability to support my basic needs.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q29 Which impacts has testing positive for COVID-19 had on your basic needs? (Check all that apply.)

- Ability to work (1)
- Ability to acquire financial support (2)
- Ability to access food (3)

- Ability to access housing (4)
- Ability to access transportation (5)
- Ability to access healthcare (6)
- Ability to attend classes (7)
- Ability to complete coursework (8)
- Other (please list) (9) _____
- N/A (10)

Q30 Which of the following on-campus basic needs resources have you started accessing as a result of the COVID-19 pandemic? (Select all that apply.)

- Food Pantry (1)
- Food Justice Project (2)
- Berkeley Student Farms (BSF) (3)
- Emergency Housing Program (4)
- Basic Needs Center (5)
- Basic Needs Holistic Fund (6)
- Student Legal Services (SLS) (7)
- Student Advocates Office (SAO) (8)
- Educational Opportunity Program (EOP) (9)
- Disabled Students Program (DSP) (10)
- Work Study (11)
- PATH to Care Center (12)
- Counseling and Psychological Services (CAPS) (13)
- University Financial Assistance (14)
- Student Healthcare (SHIP) (15)
- Other (please list) (16) _____
- ☒None (17)

Q31 Which of the following off-campus basic needs resources have you started accessing as a result of the COVID-19 pandemic? (Select all that apply.)

- Local Food Bank (1)
- Local Shelter or Emergency Housing (2)
- Berkeley Rent Stabilization Board (3)
- Unemployment Insurance (4)
- Utilities Assistance (EBMUD, CARE/FERA) (5)
- Berkeley Mutual Aid Network (6)
- CalFresh EBT (7)
- Other (please list) (8) _____
- ☒None (9)

Demographic Information

Q32 What is your gender/gender identity?

- Male (1)
- Female (2)
- Non-binary (3)

- o Other (4) _____
- o Decline to state (5)

Q33 With which race(s)/ethnicity(ies) do you identify? (Check all that apply.)

- African American / African / Black (1)
- Asian / Asian American (2)
- Hispanic / Latino (3)
- Middle Eastern / Southwest Asian / North African (4)
- Native American / Alaska Native (5)
- Pacific Islander (6)
- White (7)
- Not listed (please specify) (8)

-
- Decline to state (9)

Q34 Would you consider yourself to have a disability?

- o Yes (1)
- o No (2)
- o Prefer not to say (3)

Q35 Which of the following best describes your socioeconomic class when you were growing up?

- o Low-income or poor (1)
- o Working class (2)
- o Middle class (3)
- o Upper-middle class (4)
- o Upper class (5)
- o Other (6) _____
- o Decline to state (7)

Q36 What is the highest level of education attained by any of your parents/guardians?

- o Did not complete high school (1)
- o High school (2)
- o Associate's degree (3)
- o Bachelor's degree (4)
- o Graduate degree (masters, doctoral degree, MD, law degree, or other) (5)
- o Other (6) _____
- o Decline to state (7)

Q37 What is your approximate year level at UC Berkeley?

- o Year 1 Undergraduate (1)
- o Year 2 Undergraduate (2)
- o Year 3 Undergraduate (3)
- o Year 4 Undergraduate (4)
- o Year 5+ Undergraduate (5)
- o Graduate Student (6)
- o Other (please specify) (7) _____

Q38 Are you a transfer student?

- Yes (1)
- No (2)
- Other (please elaborate) (3) _____

Q39 What best describes your employment status over the last three months? (Select all that apply.)

- Working full time (1)
- Working part time (2)
- Work study participant (3)
- Unemployed (4)
- Unable to work (5)
- Student (6)
- Other (please elaborate) (7) _____
- Decline to state (8)

Q40 How many dependents do you have?

- No dependents (1)
- 1-2 (2)
- More than 2 (3)
- Decline to state (4)

Q41 Is there anything else you would like to share on the topic of basic needs?

End of Survey.