The 2nd Annual Assessment of Food Security and Basic Needs at Santa Clara University 2021-2022



The Agroecology, Climate Resilience, and Food Justice Lab

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Executive Summary

Santa Clara University is a four-year Jesuit institution nestled within the heart of Silicon Valley. At this university, with an endowment of nearly \$1.5 billion, approximately 20 percent of students have experienced food insecurity, and 30% of students have experienced housing insecurity while in attendance. In Fall 2021, a student research team from the Agroecology. Climate Resilience and Food Security Lab conducted the second annual survey to determine the levels of food security and food insecurity among SCU undergraduates in the College of Arts and Sciences. The research presented in this report paints a troubling picture for Santa Clara's levels of basic needs security as well as the lack of resources the University provides students who are struggling with food and housing insecurity. Additionally, this study takes into consideration the impact of the COVID-19 pandemic on SCU students as well as the administration. Moreover, this report provides actionable recommendations for SCU's administration to take into consideration in order to develop programs that rectify basic needs issues. Although most private universities have not yet started responding to student basic needs challenges, after sharing this research, in 2023 Santa Clara University administration started to take significant action to address this challenge through the creation of a basic needs committee and a drafting of an action plan.

The student researchers of the Agroecology, Climate Resilience and Food Security Lab produced an anonymous survey with questions modeled off of the U.S. Department of Agriculture (USDA) adult module for food security and the set of field-test nationally comparable housing insecurity indicators through a campus basic needs survey. These surveys were sent out to the College of Arts and Sciences students and they received 161 responses. We then analyzed the results using RStudio and Excel to determine the rates of basic needs insecurity.

This report serves as a continuation of the comprehensive basic needs study conducted in 2020. Last year, the student research team administered 484 surveys, conducted numerous personal interviews, and organized focus group discussions to gain insight into how food insecurity impacts SCU students. After analyzing the data, they concluded that 1 in 5 SCU students have been food insecure at some point during their time at SCU. Of the respondents, 14% identified as being both food and housing insecure, with 32% indicating that this housing insecurity had occurred in the past 12 months. Moreover, these findings shed light on significant demographic disparities and inequities within the study outcomes. The 2020 survey revealed that African American or Black, Hispanic or Latinx, Middle Eastern or North African or Arab, and bi/multi-race students experience a disproportionately higher incidence of basic needs insecurity when compared to their White counterparts. These disparities can be attributed to structural racism, as the higher likelihood for social and economic disadvantage for racial and ethnic minorities, such as poverty, unemployment, incarceration, and disability exacerbate the likelihood of food insecurity.

In order for Santa Clara University to maintain its reputation as a high-performing Jesuit institution that cares for its students' wellbeing, comprehensive reform must take place in order for the university to rectify these issues. As members of this University community, it's important that students and faculty take proactive steps to address student basic needs insecurity and the inequities that exacerbate them. In the following report we provide several recommendations in response to our findings, such as setting up mutual aid programs for on-campus organizations to help students obtain necessary resources and support in a more accessible way, making public benefits more accessible to students who may need them, and increasing financial aid for those

who struggle with the high costs of tuition. By taking these steps, SCU can work towards reducing rates of basic needs insecurity and creating a more equitable community for all students.

Introduction

In 2020, the University of California system conducted a literature review of 51 studies that analyzed the prevalence of food insecurity among college students in the United States. While estimates varied between studies, the review determined a weighted estimate of student food insecurity across the studies to be 41% (Nikolaus et. al, 2020). This number is a far cry from the common stereotype of college students' diets often depicted in the pop culture media. The misconception that college students are surrounded by food, albeit junk food, dangerously neglects to recognize that experiences of food insecurity vary individually among college students all over the country.

While food insecurity has many influencing factors, the literature review further breaks down estimates by community colleges and four-year universities. Using data from the 51 studies, researchers identified that the respondents who attended community college had a weighted food insecurity estimate of 47% compared to 36% for students attending four-year universities. Although this breakdown is important, it fails to recognize the difference in four-year institutions, such as public schools versus private schools (Spaid, et. al 2021). As a result, the data collected on four-year institutions generalizes results that are likely not applicable to a smaller, private non-profit university like Santa Clara (SCU). Thus, our research team set out to conduct our own analysis of food insecurity among college students on the Santa Clara University campus.

Despite high levels of food insecurity on campus and increasing outreach from the Bronco Pantry, less than one-third of respondents were aware of Santa Clara University's Food Insecurity Program. As a result, our research team compiled a list of six suggested recommendations to guide the University on the next steps to better understand food insecurity while supporting students at Santa Clara. We also committed to conducting follow-up surveys to determine changes and continuities identified in the original study.

In this report, we share the findings from the second systematic, student-led survey study of student food security, housing security, and food sovereignty conducted at Santa Clara University from September 2021 to June 2022. Santa Clara University, a mid-sized, Jesuit institution, has yet to conduct a formally institutionalized campus-wide assessment of basic needs insecurity. This study conducted by our research team, however, aims to (1) assess the current levels of student food security and perceptions of food sovereignty; (2) assess the current levels of student housing security and how the COVID-19 pandemic impacted housing security; (3) explain how SCU's Food Insecurity Program, Financial Aid Office, and others have responded to these challenges; (4) identify what lessons can be learned in order to refine the recommendations made in the original report for addressing these challenges.

Context

Public benefits access for students

Nearly three years have passed since the first quarantine period of the COVID-19 pandemic. Being that SCU is a 4-year institution, the pandemic has characterized the college experience of all current undergraduate students. The challenges of basic needs insecurity have existed before the pandemic, but have become exacerbated by national trends in the publics access to benefits nationwide.

However, as the country struggles to adjust to a "new normal", college students continue to struggle to access public benefits. According to studies done on food security at the University of California public college campuses, "About 40 percent of students in the University of California system have been found to experience food insecurity— a proportion that is three times higher than for the US households on average" (Martinez et al., 2016, 2018). Although this analysis was based on UC schools, SCU is still quite similar in these aspects of food security.

Santa Clara is a private institution, therefore many state and federal benefits don't apply to students. The total cost of attending Santa Clara University for the 2022-2023 school year is \$82,125 if a student is living on campus. With the extremely high tuition, students are forced to find on-campus/off-campus jobs to help pay for their cost of living. In addition, there are a lot of out-of-state students who come to Santa Clara and need to find new ways to support themselves with food, etc. According to the SCU Financial Aid Office, 73% of students receive financial aid (Santa Clara University 2023). SCU University Grants and Federal Grants offer many different ways to help cover a student's cost of education: academic scholarships, university grants, federal grants, cal grants, merit scholarships, and outsider scholarships.

While there are many different scholarships and financial aid that students can receive during their time at Santa Clara, it is important to note that there are still many places for students to not get adequate support for their basic needs due to the high cost of living in Santa Clara County.

Physical and mental health

Santa Clara University grounds itself upon Jesuit values, including the idea of Cura Personalis, or "care for the whole person". This value implies that the institution prioritizes a dedication to promoting human dignity and supporting the health of the mind, body, and spirit of each person. In order to ensure such values, Santa Clara University must commit itself to providing equal access to healthy food options for all students. "About 40 percent of students in the University of California system have been found to experience food insecurity— a proportion that is three times higher than for the US households on average" (Martinez et al., 2016, 2018). Although this analysis was based on UC schools, SCU is still quite similar in these aspects of food security. Inconsistent access to healthy and culturally appropriate food options limits a student's ability to thrive in their academic, social, and spiritual lives and undermines the goals of Cura Personalis. Santa Clara University's administration is obligated to guarantee that all students have enough food to support their physical, mental, and spiritual well-being. No student should be denied access to nutritious and affordable food.

Not only does Santa Clara University pride itself upon its commitment to the care of each individual within the community, but this institution aims to unite minds and hearts. Through the adoption of Jesuit values and the practice of unity of mind and heart, one is able to lead a happy,

healthy life while contributing to the betterment of the entire community. Without proper food and drink, students are unable to focus. Indeed, college students face a "higher than ever cost of attendance" at universities in the state of California (Ma et al., 2017). Students experiencing food insecurity usually lack the necessary skills to cope with limited resources. Shame and isolation are common emotions connected to food insecurity that can affect an individual's academic performance, as well as many other facets of one's life. (Martinez et al., 2016; Watson et al., 2017). Hunger can lead to a lack of control within an individual's body, including heightened emotions and increased stress levels. Over time, the side effects of food insecurity can raise concerns regarding delayed development in young people, the risk of chronic illness (asthma, anemia, etc.), and behavioral problems (hyperactivity, anxiety, aggression, etc.). The list is nearly endless when considering all of the repercussions that serve as a result of food insecurity (Bruening et al., 2016). Most importantly, one must recognize that college students are already facing hardship in many areas of their lives. With constant change and lasting side effects of the COVID-19 pandemic, students at SCU should not feel as though receiving proper nutrition is an added hardship. Food is a basic necessity that must be provided to all. Not only are college students less likely to address such concerns, but the combination of stress and poor nutrition can taint one's cognitive abilities. Without coherent thought processes and critical thinking abilities, how can one expect a student to succeed academically? How can one even expect such students to succeed socially, economically, or independently? The consequences of food insecurity are evidently detrimental to the individual, to the community, and to the world. Without meeting an individual's basic health needs, Santa Clara University cannot claim its practice of Cura Personalis. In order to truly fulfill such ideals, SCU must provide equal access to healthy food options that will ensure sufficient nutrition for all.

Stigma

Serious psychological distress can be attributed to those with inadequate access to food. The US Department of Agriculture conducted an assessment of national food security through the USDA Six-Item Short Form Food Security module (2012). There is an unfortunate stigma associated with those experiencing food insecurity, which is already a situation that can be taxing on one's mental and physical health. Having external pressure and judgment is bound to worsen the situation and such unfair stereotypes can be combated with effective support. Being able to come forward about a situation of food insecurity is a daunting task that requires a great amount of confidence. An individual who is honest about being in a place of food insecurity deserves to be heard and acknowledged. Santa Clara University is currently lacking the necessary resources to address these instances within the community. Students will not be able to handle this situation alone and the university is responsible for such hardships.

Although stigma may sound insignificant to one's situation, feelings of discomfort, worthiness, and comparison are extremely harmful to one's well-being. A 2022 study conducted by Benefits Data Trust, a nonprofit organization based in Philadelphia, found that "52% of adults over the age of 60 who are eligible for SNAP are not enrolled in it" (Food Bank News, 2022). Indeed, many people struggle with the embarrassment of asking for help when such actions should be normalized. A university is an environment where community and togetherness are embraced; albeit, Santa Clara University cannot claim to be committed to supporting its students while numerous cases of food insecurity continue to go unaddressed.

The University of California acknowledges that in order to provide an equitable and successful academic environment for students of all racial and economic backgrounds they must combat student basic needs insecurity. This is especially important to support students of color that are more likely to be food insecure and are more likely to drop out due to their disproportionately vulnerable economic backgrounds. To do this, the university has launched a comprehensive approach to provide insurance for students without resources or support. Each of the 10 UC campuses has on-site basic needs centers that provide a wide range of support services that are available to students of all campuses, not just the centers at their own campus. The UC system has long-term plans that outline its goals of reducing housing and food insecurity by 50% by 2025, producing more degrees, and increasing graduation rates (UC Basic Needs). They expect to achieve these goals through an approach that focuses on 4 important areas, Research, Prevention, Sustainability, and Advocacy. For research, they survey students every year to gauge the levels of food and housing insecurity on campus and have graphs and survey data available to the general public to compare. Their website shows a 1% increase in general food security between 2016 and 2022 (UC Basic Needs Information Center). For prevention, they have increased outreach to pre-college students about financial management and increased visibility to the basic resources available, to help them be prepared but more importantly to avoid basic needs insecurity altogether. For sustainability, they make an effort to find consistency in the existence and services they provide in order to continue being able to provide services to their students in the future. Finally, for advocacy, they also work to represent the student's interests to the government as well as the UC system administration.

These centers capture the essence of Basic Needs Assistance through their diverse services. For food support, all centers have on-campus food pantries that are available to all students, as well as staff, focused on helping students successfully apply to Calfresh. For Housing Support, the list is even longer. They partner with housing non-profits to provide emergency and transitional housing, bridge housing for students over breaks and holidays, as well as providing education on lease signing, roommates, and more. Most impressively, they are able to provide assistance with housing deposits and 1st month's rent to help students move into permanent housing (UC Santa Cruz Basic Needs Housing). In addition to these basic needs services, they have other services that help students prevent basic needs insecurity before it happens. They offer Life Skills seminars that include financial literacy and guidance on how to maximize financial resources to avoid insecurity. Lastly, they also offer a variety of services including nutrition counseling, Calfresh assistance, mental wellness help, and more.

The University of California Santa Cruz is a local university that shows the capacities of basic needs efforts when they are appropriately invested in. There are nine food pantries on campus, including ones at the Ethnic Resource Center, the Womxn's Center, and the Lionel Cantú Queer Center. These pantries are especially important because they allow specific support to marginalized communities who are more likely to be food insecure in places that are dedicated to their communities (UCSC Basic Needs). The basic needs center also offers Calfresh application assistance either at the center or with local non-profit partners as well as detailed information on how the program works. The university also provides significant housing support, providing a number for students to call in a housing insecurity emergency. They also have a University housing portal for students to find affordable listings, free housing-related legal consultations, disability-accommodated housing requests, and resources for transitional housing.

They also have extensive health support through a health center that provides free or low-cost safe sex supplies, free STD testing, and support for students impacted by addiction including a podcast and groups specific to veterans and victims of abuse. Finally, they also offer robust financial literacy and technological resources so students can learn how to manage their money and cover their needs as well as have the tech and internet access needed to succeed in their classes.

In conclusion, the UC system's basic needs support is robust and extends into many factors that impact students' abilities to succeed and graduate from college on time. Although it has not been successful at eliminating Food Insecurity on their campuses, this level of support is non-existent at Santa Clara University and many of its students would benefit highly from having access to these resources.

Literature Review

Student Basic Needs

Understanding the basic needs of college students, as well as how these needs affect the student, is necessary to ensure the student's success and well-being while pursuing higher education. "Basic needs" refers to the fundamental resources that students need in order to be successful: access to nutritious and sufficient food; safe, secure, and adequate housing—to sleep, study, cook, and shower; healthcare to promote sustained mental and physical well-being; affordable technology and transportation; resources for personal hygiene; and childcare and related needs. (U.C. Regents, 2020) In this report, our research team focused mainly on food and housing security, which were combined with an analysis of student mental health.

Experiencing consistent basic needs security is crucial for college-going students for many reasons. Reliable and consistent access to affordable food, housing, transportation, technology, familial care, and health care is a central condition for learning (Ilhan et al., 2019). As a result, when students' basic needs are not met, they can and do leave college in debt and without degrees (Bruening et al., 2018). Housing insecurity and homelessness have a particularly strong, statistically significant relationship with college completion rates, persistence, and credit attainment (Eisenberg et al., 2016). Basic needs insecurity is even associated with self-reports of poor physical health, symptoms of depression, and higher perceived stress (Bruening et al., 2018).

Impact on Student Health

Students who experience food insecurity may experience long-term negative health impacts (Leung, 2019). Additionally, students who experience food insecurity are less likely to perform well in school, potentially reducing their ability to complete a college degree (Broton and Goldrick-Rab, 2018). This is especially concerning given that social groups already underrepresented in academic settings (e.g. low-income students, Black students, and other students of color) are most likely to be impacted by a lack of food security (Odoms-Young, 2018). Food insecurity is an issue of food justice, or the right of *everyone* to have access to good quality nutritious foods (Institute for Agriculture and Trade Policy, 2012 Horst, et. al., 2017).

Some college students' basic needs are not being met. It is important that colleges and universities secure distributive and procedural food justice for all students in order to foster academic achievement and degree completion. "Food Justice happens when in community we exercise our right to grow, sell, and eat culturally appropriate, fresh, nutritious, and accessible food; cultivated locally while caring for the well-being of the earth, workers, and animals" (La Mesa Verde, 2019). Santa Clara University is a long way from providing this for its students, and additional investments are needed to develop programs that ensure food security as more low-income and students of color are accepted into the University. Students at SCU will continue to be underserved until they have access to a robust food assistance program through the school that is able to support all students in need. Low-income students as well as international students are disproportionately impacted by this reality, raising concerns of environmental and food injustice as financial decision-makers often overlook them due to the popular notion that most of Santa Clara's student body is affluent.

SCU's Student Food Security Program

The SCU Food Insecurity Program is run by staff within the Office of Student Life. Students are able to request food assistance via an anonymous survey link on their website and are not required to provide any proof of need in the interest of reducing stigma. Once connected with the program, students gain access to a small campus food pantry (Bronco Food Pantry). They may additionally be provided with gift cards in order to supplement Pantry items with refrigerated products such as meat and dairy, which the pantry is currently unable to provide due to insufficient spacing, refrigeration, and staffing. The Food Insecurity Program is also able to assist students applying for SNAP so they can meet their longer-term food needs. The Bronco Pantry itself is a small room located on campus that is stocked with many nonperishable food items, as well as fresh produce provided weekly by SCU's Forge Garden. There is a promising additional conversation emerging that could lead to an expanded supply of fresh fruits and vegetables from the Forge to pantry clients. The Bronco Pantry is considered a short-term solution for students experiencing food insecurity, as a diet consisting of pantry items alone is not sustainable.

Food Insecurity Defined

Food insecurity rates among college campuses range between 20% and 50% depending on the methods and definitions of food security used in each calculation (Freudenberg et. al., 2019). It is important to note that this number has likely increased due to the impacts of the COVID-19 pandemic. Feeding America predicts that during COVID-19, food insecurity rates "could reach up to 1 in 3 adults and 1 in 2 children" (Feeding America, 2020). A survey conducted throughout Feeding America's network of food banks during December 2020 revealed that food bank demand had risen 60% since December 2019. This can be directly attributed to the economic stress initiated by the pandemic. (Feeding America, 2020)

In this report, we define food insecurity as "the limited or uncertain availability of nutritionally adequate and safe foods, or the ability to acquire such foods in a socially acceptable manner" (Broton and Goldrick-Rab, 2017, p. 121). To this definition, we add an understanding that food security requires access to healthy and culturally relevant foods. Additionally, "food security is defined as a condition that exists when all people, at all times, have physical and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences for an active and healthy life" (Vahabi and Dahnva, 2013, p. 2). This second definition highlights the importance of food preferences, including culturally relevant foods, in discussions of food security that seek to ensure adequate and healthy relationships with food.

The USDA provides standardized modules and procedures for surveys to be applied across various contexts that measure the presence of food insecurity in the US (Survey Tools, 2021). Surveys provided are intended for different target audiences including but not limited to US households, US adults, and US youth. By utilizing a standardized survey, researchers are able to compare and contrast various findings with higher degrees of certainty in the results.

Housing Insecurity Defined

Housing insecurity is a type of basic needs insecurity that "encompasses a broad set of challenges that prevent someone from having a safe, affordable, and consistent place to live" (Hope Center, 2021). Homelessness is the most severe form of housing insecurity that can refer

to "not having a place to sleep at night, being informally thrown out of the home, staying in an abandoned building or car, and being formally evicted from a home" (Bronton and Goldrick-Rab 2018, p.126). In a 2019 study on basic needs insecurity at universities, 35% of respondents at four-year universities reported experiencing housing insecurity (Hope Center 2020), with the percentage increasing to 43% in 2020 (Hope Center, 2021). Housing insecurity especially impacts university students as, "they often lack a rental history, enough savings for a security deposit or someone who can act as a guarantor" (Bronton and Goldrick-Rab, 2016, p.19). In 2020, the Hope Center reported an increased risk of housing insecurity among college students due to on-campus housing closures during the COVID-19 pandemic (Goldrick-Rab et al., 2020a). Some universities, like U.C. campuses, have begun to prioritize their limited housing to students with the most significant risk of experiencing housing insecurity (U.C. Regents, 2020), however, Santa Clara University has yet to make a commitment to providing affordable housing for students.

Food Sovereignty Defined

The right of all humans to have access to culturally relevant foods ties into the Five A's of Food Security: availability, accessibility, adequacy, acceptability, and agency (Rocha, 2007 & Diekman et. al., 2018). Not only should people have access to nutritious foods, but they should be able to feel represented in the foods that they eat. Furthermore, they should have the ability to take part in making decisions about how their food is grown, processed, and prepared. Foods should be culturally acceptable in the sense that students have access to diverse foods that align with their individual food values (Diekman, et. al., 2018). We approach Santa Clara University's food insecurity problem with this framework in mind because we believe that all students should be able to feel entirely food secure and capable of making positive dietary choices for themselves.

Understanding food sovereignty is the first step in making it a reality for all people. (Epting, 2018) In the case of Santa Clara University, it is necessary to create an environment that allows our student community to achieve food sovereignty. Strategies for attaining food sovereignty vary on a case-by-case basis because each scenario is different and requires unique tactics. For instance, British Columbia, Canada does not have a universal school feeding program, but there are various forms of farm-to-school initiatives, involving actors such as civil society, public health, and education sectors. (Powell and Wittman, 2018, p. 198). There is a range of diverse ways in which food is procured in order to supply food to schools that encourage nutritious food consumption while also supporting local farming practices (Powell and Wittman, 2018, p. 200). An example is that certain schools allow students to be involved in the harvesting of their food. These farm-to-school initiatives can function as a mechanism toward food sovereignty (Powell and Wittman, 2018). Understanding these mechanisms of promoting food sovereignty allows us to determine the best way to facilitate and achieve food sovereignty at SCU. Food sovereignty is a multi-dimensional issue, but its socio-economic implications cannot be ignored, despite the high cost of SCU's private Jesuit education. Even though Santa Clara University outsources campus food services from Bon Appetit, they should include specific social goals in their contract as a means to promote food sovereignty across all student populations.

Self Sufficiency

Another issue related to food insecurity at Santa Clara University is self-sufficiency in food preparation. The inability to prepare healthy, sufficient, and affordable food directly contributes to lower levels of food security on college campuses (Knol, 2019). Even if students have the capacity to buy food, they often use it to buy fast food or take-out because preparing their own meals is daunting, time consuming, and overwhelming. Students living far away from sources of healthful and affordable food—in other words, food deserts—are further challenged to prepare and consume a well-balanced diet at home (Medical News, 2021). However, even if students do not live within a food desert, a knowledge gap in food preparation can cause students to live at lower levels of food security than expected for their respective levels of food access. Many students that move out of their family homes to attend college are expected to teach themselves how to prepare nutritious meals for the first time. However, food preparation skills among college students are poor because of perceptual and conceptual challenges (Harris, 2017, p. 36). Perceptual challenges involve a lack of understanding of food properties like taste, color, and texture, while conceptual challenges relate to adjusting recipes, reducing food waste, and using creativity (Harris, 2017, pp. 36-38).

Socio-economic factors

It is difficult to discuss food insecurity without a clear connection to socio-economic factors. Food security and income level are positively related (Knol, 2018). This relationship can be exacerbated in times of economic stress. An established root cause of food insecurity is poverty (Bacon and Baker, 2017). The number of individuals relying on private food assistance in the United States has been on a steady incline recently due to nationally increased rates of poverty (Bacon and Baker, 2017). The COVID-19 pandemic has created even harsher economic conditions than in previous years, leaving students at a greater risk of experiencing food insecurity. Students with more than \$10,000 in student debt were far more likely to be food insecure than those without student debt (Knol, 2018). Due to the persistent and increasing wealth gap in the US, BIPOC and first-generation college students are likely to be of lower socio-economic status (Knol, 2018).

The majority of students at Santa Clara University are of middle to high socio-economic status and thus are assumed to be less likely to experience food insecurity. The median family income of a student from Santa Clara is \$193,100, and 71% of students come from the top 20 percent (New York Times, 2017). This creates a problem because food insecurity can go easily unaddressed in campus policy as the needs of marginalized students are not at the forefront. SCU has stated that it plans to increase its diversity and inclusion efforts on campus, meaning that more low-income and BIPOC students are being recruited to a campus that may not have the resources in place to support them (Santa Clara University, 2020). Students on campus with lower socio-economic status are at higher risk of experiencing food insecurity.

COVID-19 Pandemic, College Students, and Food Insecurity

Beginning in the U.S. in March of 2020 and enduring in the years that have followed, the COVID-19 pandemic has impacted students in higher education in significant ways. College students have been required to adapt to a virtual learning environment, to make behavioral changes (ex. social distancing, quarantining or isolating upon suspected COVID-19 exposure, etc.) and to deal with socio-economic uncertainties, all of which have exacerbated students'

mental health challenges (Salimi et al., 2021). When the Center for Disease Control (CDC) recommended that schools shut down in-person operations, college students throughout the US had to deal with the stress of going back home for various reasons (Centers for Disease Control and Prevention, 2021). Some students could not return home because of threats of abuse or violence, and inadequate access to online learning technology (Centers for Disease Control and Prevention, 2021) (Salimi et al., 2021). International students also had to deal with the uncertainty of not knowing if or when they could return to their home countries due to travel restrictions. By the end of March, over 14 million U.S. college students were impacted by campus closures as a result of COVID-19 (Dennon, 2020). With the order for campus closures, universities had to move most of their course offerings to an online format in the middle of the academic year. This caused significant displacement, interruption of learning, and uncertainty about the course of the following semesters and school year. The Fall of 2021 marked the official return to in-person classes and activities at SCU, yet COVID-19 continued to flare up, causing the cancellation of events, in-person classes, and even the 2021 graduation ceremony. These disruptions to daily life also resulted in short-term and long-term impacts on mental health, such as anxiety, depression, and physiological stress (Hu et. al., 2022).

The lasting impacts of the pandemic reached beyond students' mental health and wellbeing, however. The pandemic was very disruptive to the US economy, resulting in short-term and long-term inflation. Inflation and disruptions to the global food supply chain, which were exacerbated by the pandemic, resulted in a sharp increase in food prices (Nationwide Economics, 2023). As seen in Figure 1, the CPI index of all foods increased from a 3.9 percent change in 2021 to a 9.9 percent change in 2022 (USDA). The CPI index for fresh fruits and vegetables increased from a 3.3 percent change to a 7.5 percent change (USDA). This pattern is consistent across many food groups, such as eggs, dairy products, poultry, fish and seafood, cereals and bakery products, etc. The only sector that is not consistent with this inflation trend is beef and veal products, which had a negative percent change (USDA).

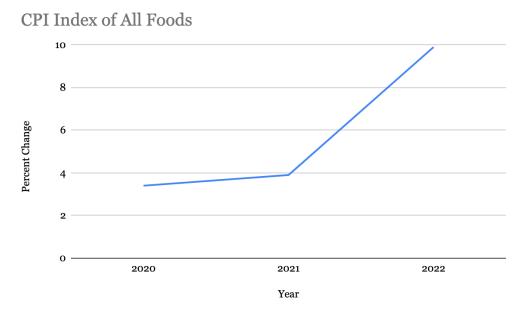


Figure 1. Post-Pandemic Food Inflation: CPI Index of All Foods in USA Food Retail" via USDA Economic Research Service Food Price Outlook.

A study conducted amongst college students at an Appalachian university between late March to early April 2020 found that students were 58 percent more likely to be newly food insecure if the amount of money they've spent on groceries has increased since COVID-19. Students who were food insecure prior to the pandemic reported that they had been eating less since the start of the pandemic. (Hagedorn et. al, 2022). Almost 2 years after the pandemic began, a study conducted at a large public university in Michigan found that there was still significant stress and fear associated with COVID-19. Out of the 151 students surveyed, nearly 96% of these students experienced moderate to severe levels of anxiety, depression, sleep problems, hostility, and/or other mood disorders (Hu et. al., 2022). Clearly, the impacts of the pandemic are still present, only further exacerbating the invisible epidemic that is food insecurity.

Methods and Study Design

Methods

We conducted a survey within the College of Arts and Sciences and received 161 student responses. We aimed to triangulate the data in order to understand how students experience food and housing insecurity at the University and what can be done to best support them. We also sought to better understand different elements, such as socio-economic status, as they relate to food sovereignty as a conceptual approach to help generate and assess potential solutions to the expanding food and housing challenges in higher education at large.

Questions were modeled off of the U.S. Department of Agriculture (USDA) adult module for food security (U.S. Department of Agriculture, 2020) and the Hope Lab campus-wide basic needs surveys (Goldrick-Rab, 2020a and 2020b). The research team analyzed surveys using RStudio in order to assess any relationships or disparities between food and housing secure and insecure students. To analyze for disparities, we ran independent tests on gender, race and ethnicity, school, and Bronco Food Pantry awareness against self-reported food insecurity. We ran Fisher's tests for independence on the race and gender data, and we ran chi-square tests for independence on the school and ethnic data in order to determine significance. Interviews and focus groups were coded for themes, and each had a frequency count to identify patterns. Information on student demographics was pulled from the SCU "Diversity Dashboard", which includes race categories that do not perfectly align with those used in our survey. No information could be found on the percentage of SCU students that identify as Middle Eastern or North African. There was an unknown category included on the "Diversity Dashboard" that was omitted from our analysis. The categories American Indian or Alaskan Native and Nonresident Alien were also omitted due to a very small sample.

Results and Findings

Demographics

The survey conducted in this study aimed to be broadly representative of the University's demographics, which were last updated for the public in 2017/2019 according to the SCU Office for Diversity and Inclusion. The survey captured responses from 63.82% of female respondents compared to 35.37% of male respondents. It is worth noting that the SCU student body is generally split evenly between males and females (50% vs. 50%), indicating that either females were more accessible or more willing to participate in the survey. Regarding racial and ethnic representation, individuals identifying as white comprised 41.6% of the survey population, indicating that the remaining 58.4% identified with one or more different races or ethnicities. This finding aligns with the University's data, which states that 52.9% of students self-identify as a race or ethnicity "other than white." It is important to acknowledge that while efforts were made to ensure a broad representation, there may still be limitations in capturing the full diversity of the SCU student population. The demographic information obtained from the survey provides a snapshot of the respondents but may not fully reflect the entire university population.

Table 1: Demographic Data for SCU from 2017 and Demographics from 2021 Survey Sample

	Survey respondents Fall '21		SCU Population 2017	
Gender Identity	n	%	n	%
Female	157	63.82	433	50
Male	87	35.37	434	50
Nonbinary	2	0.81	N/A	N/A
Race				
American Indian or Alaska Native	2	0.81	9	0.1
Asian	61	24.80	1450	16.8
Black or African American	8	3.25	242	2.8
Hispanic or Latinx	31	12.60	1415	16.4
Middle Eastern/North African	5	2.03	NOT IN SCHO	OOL DATA
Native Hawaiian or Pacific Islander	0	0	17	0.2
Two or more races	25	10.16	491	5.7
White or caucasian, not Hispanic	112	45.53	3590	41.6
Unknown/other	2	0.81	302	3.5

Sources: SCU Student Food Security Study, The Hope Center #RealCollege 2021 Basic Needs Insecurity During the Ongoing Pandemic; The Hope Center #RealCollege Survey 2020. *National data from the Hope Center separates "Other Asian or Asian American" (53%) and "Southeast Asian" (57%), thus the two values were averaged for comparison to SCU Student Food Security Study's single "Asian" National Average category (55%).

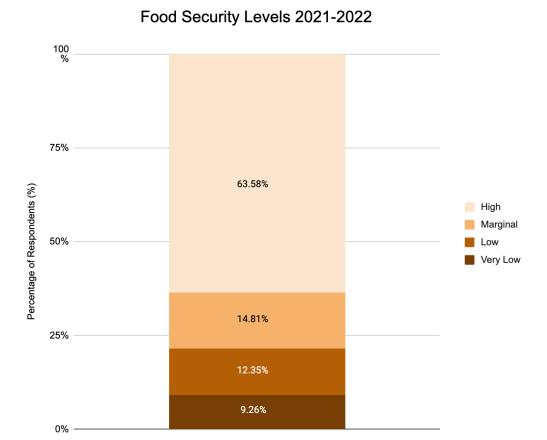


Figure 2. Food Security Level of Santa Clara University College of Arts and Sciences 2021-2022. n=166. High n=103; Marginal n=24; Low n=20; Very Low n=21.

The campus-wide assessment of food security and basic needs was conducted via a survey of undergraduate and graduate students at SCU (n=162). We found that about 1 in 5 students self-reported having experienced food insecurity while attending SCU. Additionally, food security scores were created using the USDA and Hope question guides, labeling students as either experiencing very low food security, low food security, marginal food security, and high food security. Based on those categorizations, 21.6% (35 of 162) of respondents were considered food insecure (low and very low food security), an additional 14.81% (24 of 162) were at risk of becoming food insecure (marginal food security), while the remaining 78.4% experienced high food security (103 of 162, Figure 2). Despite these levels of food insecurity, less than 25% of respondents were aware of the SCU Food Insecurity Program, posing a risk for students that may experience food insecurity and feel as though they lack adequate support.

Gender, Race and Food Insecurity Patterns

Figure 3 illustrates the food security levels among students in the College of Arts and Sciences at Santa Clara University (SCU) categorized by gender. The data presented in this figure is based on a sample size of 161 students. Among female students (n=84), the majority demonstrated high food security, with 84 individuals falling into this category. A smaller proportion of female students experienced marginal food security (n=14) or low food security (n=13). Additionally, there were two female students classified as having very low food security. For male students (n=40), the distribution of food security levels was somewhat different. The largest group consisted of individuals with high food security (n=40). A smaller number of male students fell into the categories of marginal food security (n=2), low food security (n=2), and very low food security (n=1). Among nonbinary students (n=2), both individuals were classified as having high food security. These findings provide insights into the distribution of food security levels among students in the College of Arts and Sciences at SCU based on their gender. The data suggests that a higher proportion of female students experience lower levels of food security compared to male and nonbinary students in this specific population. However, it's important to note that the sample size for nonbinary students is relatively small, limiting the generalizability of these findings to the wider student population.

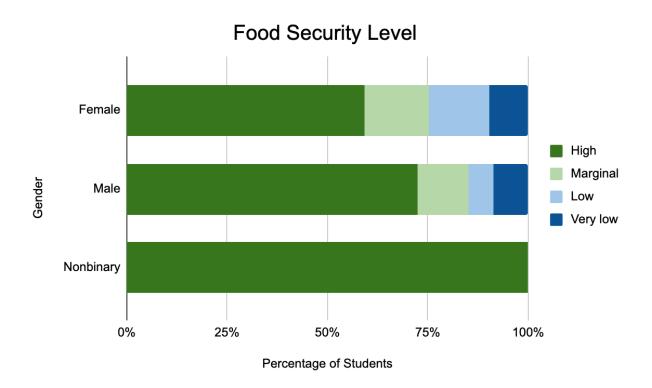


Figure 3. Food Security Level of Santa Clara University College of Arts and Sciences by Gender. n=161. Female High Food Security n=84; Female Marginal Food Security n=14; Female Low Food Security n=13; Female Very Low Food Security n=2; Male High Food Security n=40; Male Marginal Food Security n=2, Male Low Food Security n=2; Male Very Low Food Security n=1; Nonbinary High Food Security n=2.

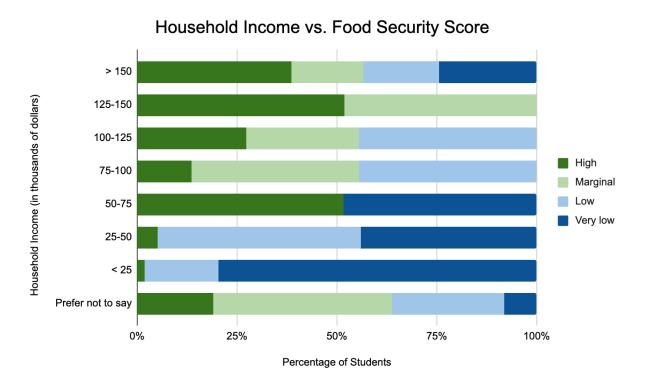


Figure 4. Food Security Score of Santa Clara University College of Arts and Sciences by Household Income. n=133. >150 High Food Security Score n=40; >150 Marginal Food Security Score n=4; >150 Low Food Security Score n=2; >150 Very Low Food Security Score n=3; 125-150 High Food Security Score n=10; 125-150 Low Food Security Score n=1; 100-125 High Food Security Score n=9; 100-125 Marginal Food Security Score n=3; 100-125 Low Food Security Score n=1; 75-100 High Food Security Score n=3; 75-100 Marginal Food Security Score n=9; 50-75 Very Low Food Security Score n=1; 25-50 High Food Security Score n=1; 25-50 Low Food Security Score n=2; 25-50 Very Low Food Security Score n=1; <25 High Food Security Score n=5.

Figure 4 depicts the distribution of food security scores among students in the College of Arts and Sciences at Santa Clara University (SCU), categorized by household income. The data presented in this figure is based on a sample size of 133 students. Among students with a household income greater than 150% of the federal poverty level (n=49), the majority had a high food security score (n=40). Additionally, a small number of students fell into the categories of marginal food security score (n=4), low food security score (n=2), and very low food security score (n=3). For students with a household income between 125% and 150% of the federal poverty level (n=11), the distribution of food security scores was as follows: 10 students had a high food security score, while 1 student had a low food security score. Among students with a household income between 100% and 125% of the federal poverty level (n=13), 9 students had a high food security score, 3 students had a marginal food security score, and 1 student had a low food security score. For students with a household income between 75% and 100% of the federal

poverty level (n=7), 3 students had a high food security score, 3 students had a marginal food security score, and 1 student had a low food security score. Among students with a household income between 50% and 75% of the federal poverty level (n=10), 9 students had a high food security score, and 1 student had a very low food security score. For students with a household income between 25% and 50% of the federal poverty level (n=4), 1 student had a high food security score, 2 students had a low food security score, and 1 student had a very low food security score. Among students with a household income less than 25% of the federal poverty level (n=8), 1 student had a high food security score, 2 students had a low food security score, and 5 students had a very low food security score. These findings provide insights into the relationship between household income and food security scores among students in the College of Arts and Sciences at SCU. The data suggests that students from higher-income households generally have higher food security scores, while students from lower-income households tend to have lower food security scores. However, it's important to note that the sample sizes for some income categories are small, which may limit the generalizability of these findings to the wider student population.

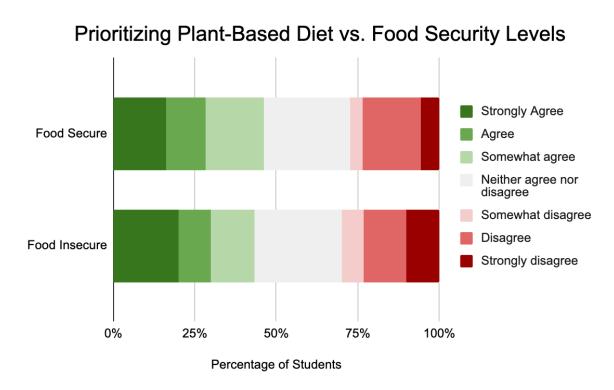


Figure 5. Correlation between Plant-Based Diets and Food Security Levels at Santa Clara University's College of Arts and Sciences. n=162.iFood Secure Strongly Agree n=17; Food Secure Agree n=13; Food Secure Somewhat agree n=19; Food Secure Neither Agree nor Disagree n=28; Food Secure Somewhat disagree n=4; Food Secure Disagree n=19; Food Secure Strongly Disagree n=6; Food Insecure Agree n=3; Food Insecure Somewhat agree n=4; Food Insecure Neither Agree nor Disagree n=8; Food Insecure Somewhat disagree n=2; Food Insecure Disagree n=4; Food Insecure Strongly Disagree n=3.

Figure 5 presents the correlation between plant-based diets and food security levels among students in the College of Arts and Sciences at Santa Clara University (SCU). The data included in this figure is based on a sample size of 162 students. For students who reported being food secure (n=94), the distribution of responses regarding plant-based diets was as follows: 17 students strongly agreed that they follow a plant-based diet, 13 students agreed, 19 students somewhat agreed, 28 students neither agreed nor disagreed, 4 students somewhat disagreed, 19 students disagreed, and 6 students strongly disagreed. Among students who reported being food insecure (n=30), the distribution of responses regarding plant-based diets was as follows: 6 students strongly agreed that they follow a plant-based diet, 3 students agreed, 4 students somewhat agreed, 8 students neither agreed nor disagreed, 2 students somewhat disagreed, 4 students disagreed, and 3 students strongly disagreed. The data suggests that among food secure students, there is a range of opinions and practices regarding plant-based diets, with varying degrees of agreement or disagreement. Similarly, among food-insecure students, there is also a diversity of opinions and practices regarding plant-based diets. These findings indicate that there is no clear-cut correlation between food security levels and adherence to plant-based diets among students in the College of Arts and Sciences at SCU. Additional factors may influence dietary choices and patterns, and it is important to consider the individual circumstances and preferences of each student when examining the relationship between food security and plant-based diets. It is essential to note that the results presented in Figure 4 are specific to the surveyed population within the College of Arts and Sciences at SCU and may not be representative of the broader student body or other institutions.

Basic Needs Insecurity and Equity Gaps

We also assessed basic needs insecurity disparities at SCU compared to national averages. The national averages displayed in **Table 2** come from the Hope Lab's "#RealCollege 2021: Basic Needs Insecurity During the Ongoing Pandemic" report. These rates were compared to national rates. We found that disparities were evident across gender identity and racial or ethnic background. Notably, SCU students self-identifying as male or female experience rates of recent housing insecurity at rates below the national average (Table 2). HOPE Lab did not include comparable data on national average rates of basic needs insecurity for students self-identifying as "Non-binary", "Other", or "Prefer not to say". Basic needs disparities along racial or ethnic background were more prominent compared to national averages. Most respondents experienced rates of basic needs insecurity lower than national averages (Table 2). These include students self-identifying as Asian, Black or African American, MENA, and White (Table 2). Note that 35.9% of White SCU students experience any basic needs insecurity, compared to the considerably higher rate of 54% for White students nationally (**Table 2**). Latinx students at SCU experience higher levels of basic needs insecurity (71.88%) than the national average for Latinx students (64%) (Table 2). HOPE Lab did not include comparable data on national average rates of basic needs insecurity for students self-identifying as "Biracial" or "Multiracial".

Table 2: Comparison of SCU Food, Housing, and Basic Needs Insecurity by Race or Ethnicity, 2021

	Total # of Students	% Food Insecure past month	% Housing Insecure past month	SCU % Any Basic Needs Insecurity	National Average Any Basic Needs Insecurity
Racial/Ethnic Background	n	%	%	%	%
Asian	88	9.09	25	26.14	55*
Biracial	59	28.81	28.81	42.37	-
Black or African American	14	50.00	50.00	64.29	70
Latinx	64	46.88	68.75	71.88	64
Middle Eastern/North African	10	40.00	50.00	60.00	62
Multiracial	9	33.33	66.67	66.67	-
Pacific Islander	2	100.00	50.00	100.00	66
White	195	9.74	33.33	35.90	54
Other - Racial or Ethnic	11	45.45	54.54	63.64	64

Sources: SCU Student Food Security Study, The Hope Center #RealCollege 2021 Basic Needs Insecurity During the Ongoing Pandemic; The Hope Center #RealCollege Survey 2020. *National data from the Hope Center separates "Other Asian or Asian American" (53%) and "Southeast Asian" (57%), thus the two values were averaged for comparison to SCU Student Food Security Study's single "Asian" National Average category (55%).

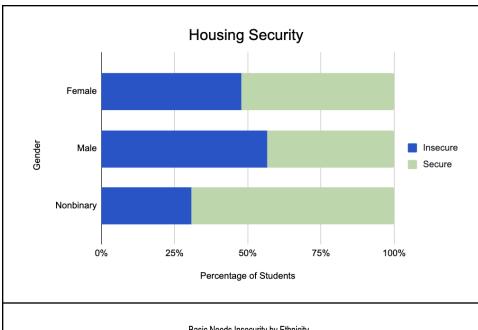


Figure 6A. Housing Security Level of Santa Clara University College of Arts and Sciences by Gender. n=162. Female Housing Secure n=76; Female Housing Insecure n=37; Male Housing Secure n=35; Male Housing Insecure n=12; Nonbinary Housing Secure n=1; Nonbinary Housing Insecure n=1.

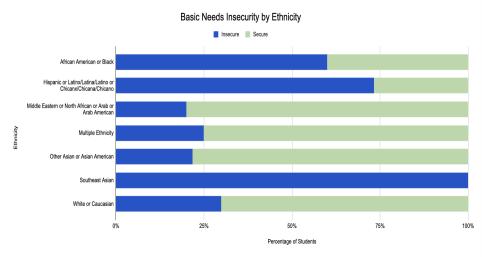


Figure 6B. Basic Needs Security of Santa Clara University College of Arts and Sciences by Ethnicity. n=161. African American or Black n= 5; Hispanic or Latinx n=15; Middle Eastern or North African or Arab n=5; Multiple Ethnicity n=32; Other Asian or Asian American n=23; Southeast Asian n=4; White or Caucasian n=77.

Lastly, Figures 6A and 6B provide insights into housing security levels by gender and basic needs security by ethnicity among students in the College of Arts and Sciences at Santa Clara University (SCU). In Figure 6A, which focuses on housing security levels by gender, the data includes a sample size of 162 students. Among female students (n=113), 76 students were classified as housing secure, while 37 students were categorized as housing insecure. For male students (n=47), 35 were housing secure, and 12 were housing insecure. The data for nonbinary students (n=2) indicates that one student was housing secure, while the other student was housing insecure. Figure 6B examines basic needs security by ethnicity, with a sample size of 161 students. The breakdown of basic needs security is as follows: 5 African American or Black students, 15 Hispanic or Latinx students, 5 Middle Eastern or North African or Arab students, 32 students with multiple ethnicities, 23 students identified as Other Asian or Asian American, 4 Southeast Asian students, and 77 White or Caucasian students. These figures highlight the disparities in housing security by gender and basic needs security by ethnicity among students in the College of Arts and Sciences at SCU. Female students appear to have a higher proportion of

housing insecurity compared to their male counterparts. Meanwhile, there is a diverse distribution of basic needs security among students from different ethnic backgrounds. It is important to note that the sample sizes for nonbinary students and some ethnic categories may be relatively small, which could limit the generalizability of these findings to the broader student population. Further analysis and additional data may be necessary to gain a more comprehensive understanding of the relationship between gender, ethnicity, and housing or basic needs security among students at SCU.

Comparative analysis of student basic needs in 2020 vs. 2021

In order to understand the impact of Santa Clara University's basic needs initiatives, as well as to track the progress of these initiatives; one must analyze the differences between our initial Student Food Security Survey, completed in Fall 2020, as well as this one. Our first report, from Fall 2020, was completed during peak COVID-19 pandemic times, where basic needs insecurity was at an all time high. This first report uncovered that 1 in 5 students were considered to have low or very low food security. However, out of the students who participated in the survey, only 30% were aware of the Bronco Food Pantry on campus—one of the only resources for students experiencing any form of food insecurity. Unfortunately, the results from the Fall 2021 report are not promising—as 1 in 5 survey respondents self-reported food insecurity, and the number of students aware of SCU Food Insecurity Programs (like the Bronco Food Pantry), dropped to 25%. In both the 2021 and 2020 surveys, the racial group that experienced the most food insecurity in the past month was Black students, in which 50% of the fourteen Black respondents reported food insecurity in both studies.

Another important metric to consider is the rates of food insecurity by gender. In both 2020 and 2021, most of the respondents considered food insecure are female. However, in 2020, out of the four non-binary survey respondents, three self-reported food insecurity, whereas in 2021, out of the two non-binary respondents, both report high food security. In Fall 2020, out of the 341 female respondents, 22.87% reported experiencing food insecurity in the month preceding the survey date. However, this number increased in 2021– with only about 60% of female students having high food security, and the other 40% experiencing either marginal, low, or very low food security. To add on, in 2020, only about 10% of male respondents (n= 103) experienced food insecurity in the month preceding the survey, whereas in the 2021 survey, more than 30% of male respondents experienced some sort of food insecurity as well. Although the mode of the survey is different, and the survey in 2020 only dealt with food insecurity experienced in the past month, whereas the survey of 2021 is much more comprehensive, one must note that the large increase in food insecurity experienced as a whole is concerning for the future of food security at Santa Clara University.

Covid-19 pandemic, as well as the university resources on students' basic needs security. In Fall 2020, 38% of students reported some form of housing insecurity in the past 12 months. As aforementioned, this high number is probably due to the high displacement of students following Santa Clara's closure due to the COVID-19 pandemic in Spring 2020. In the fall 2021 report, it can be seen that housing insecurity rates decreased from the previous year. About 33% of female respondents, 26% of male respondents and 50% of non-binary respondents reported experiencing some form of housing insecurity in the past year, totalling at about 30% of total respondents. Although this is still a concerningly high number, it can be suggested that the decrease in

housing insecurity rates may come from the Santa Clara University campus opening back up for student housing in Spring 2021. Spring Quarter 2021, less than one thousand undergraduate students (mostly first-year students) were provided an opportunity to live on campus, and SCU opened its residential learning communities to all students during Fall Quarter 2021. In order to understand these differences, one should look at the COVID-19 status of the university at the time.

Concluding our comparative analysis of both reports, some may believe that the basic needs insecurity status of undergraduate students at Santa Clara University prove to be optimistic from 2020 to 2021. However, whatever increase in student basic needs security that occurred over the twelve months between the conduction of the surveys is not a high enough margin to conclude that SCU is making much progress when it comes to basic needs resources for students. Although the COVID-19 pandemic has undoubtedly impacted both cohorts of student respondents, it is ignorant to not contextualize the state of the university during Fall 2020, as well as the state of the COVID-19 pandemic.

Discussion and Next Steps

Looking forward to years to come, Santa Clara University has much progress that is necessary to be made regarding basic needs security. Santa Clara prides itself on its integral Jesuit values. Cura Personalis, or care for the whole person, is a cornerstone of Jesuit education. This includes the prioritization of both physical and mental health. However, as rates of basic needs insecurity continue to club, SCU is not reflecting the mission of Cura Personalis that the school strives for. Some of the next strides the University should take in order to reduce rates of basic needs insecurity include setting up mutual aid for on-campus organizations as a medium of obtaining resources for students, as well as greater public access to benefits for students and an increase in financial aid, as our data show that high costs of tuition cause a financial burden which influences rates of basic needs insecurity.

It is worth noting that the COVID-19 pandemic influenced rates of basic needs insecurity on campus. Food insecurity, specifically, increased due to the pandemic as many people were out of work as well as no longer had access to meals provided by their place of work or their school (Impact of COVID-19 on Food Insecurity). It is important to be critical of Santa Clara's response to the COVID-19 pandemic, as it exacerbated housing and food insecurity on campus. As SCU canceled in-person classes six weeks before the start of the academic school year in August 2020, many students were left without a home and either resorted to finding an off-campus living arrangement, applying for emergency housing, or staying home. For many students who rely on on-campus dorms and residence halls to ensure they are housing secure, the University's last-minute decision was detrimental. Moreover, International students who depended on their on-campus jobs were unable to work (Personal Communication, 2022). Classes remained online for the Winter Quarter, while the COVID-19 death toll hit record highs. During the spring quarter, a few in-person education and job opportunities became available on campus.

Although pandemic-era reforms provided external assistance for students struggling with basic needs, they have not provided a permanent solution for rectifying basic needs insecurity on campus. As per federal government legislation with the establishment of Higher Education Emergency Relief Fund (HEERF), SCU provided three financial assistance programs, including the American Rescue Plan (ARP- HEERF III), the Coronavirus Response and Relief Supplemental Appropriations Act (CRRSA- HEERF II), and the Coronavirus Aid, Relief, and

Economic Security Act (CARES- HEERF). Santa Clara University received \$4,603,451 for ARP funds, which were to be allocated to students who experienced financial hardship due to the pandemic, however, this does not provide a solution for students who have basic needs insecure external from the pandemic. Moreover, these allocations were fully dispersed on December 16, 2020 (CARES- HEERF), May 18, 2021 (CRRSA- HEERF II) and January 31, 2022 (ARP-HEERF III), and are not recurring aid programs (Prepared SCU).

This report revealed the overwhelming amount of basic needs insecurity at Santa Clara University. As basic needs programs continue to expand at other higher education institutions and other four-year colleges, Santa Clara University should follow suit and establish more permanent and comprehensive programs.

Conclusion and Recommendations

In this report, we share the findings from the second systematic, student-led survey study of student food security, housing security, and food sovereignty conducted at Santa Clara University from September 2021 to June 2022. Santa Clara University, a mid-sized, Jesuit institution, has yet to conduct a formally institutionalized campus-wide assessment of basic needs insecurity. This study conducted by our research team, however, aimed to (1) assess the current levels of student food security and perceptions of food sovereignty; (2) assess the current levels of student housing security and how the COVID-19 pandemic impacted housing security; (3) explain how SCU's Food Insecurity Program, Financial Aid Office, and others have responded to these challenges; (4) identify what lessons can be learned in order to refine the recommendations made in the original report for addressing these challenges.

This study sought to gain a better understanding of the presence of basic needs insecurity at a small, private non-profit university such as SCU. Despite the growing number of studies on student food security on college campuses, very few studies have conducted research on these issues at private universities. This gap in literature may be a result of the stigma that students at private institutions don't experience food, housing, and/or basic needs insecurity. However, this is clearly not the case, as 1 in 5 students have self-reported experiences of food insecurity during their time at SCU. This number is slightly higher than our 2020 report, with a 1.4% increase in self-reported food insecure students in Arts and Sciences school. The sample size of this report was also significantly smaller than the 2020 study, which can be attributed to the campus climate at the time the study was conducted: over a year into the pandemic, remote classes, lack of campus presence, etc.

Demographic disparities between the 2020 and 2021 studies were consistent. African American or Black, Hispanic or Latinx, Middle Eastern or North African or Arab, and bi/multi-race students have significantly more basic-needs students than their White counterparts (Table 2). These disparities can be attributed to structural racism, as the higher likelihood for social and economic disadvantage for racial and ethnic minorities, such as poverty, unemployment, incarceration, and disability exacerbate the risk of food insecurity (Odoms-Young et. al., 2018). As we continue identifying solutions to solve this issue, we must first address these demographic disparities and approach solutions with a holistic, intersectional framework.

In order to inspire both incremental and transformational change, we provide SCU with the following recommendations:

1. Continue and grow SCU's recently created basic needs committee

- 2. Support existing student mutual aid efforts for on-campus organizations to help students obtain necessary resources and support in a more accessible way
- 3. Make public benefits, like SNAP, more accessible to students who may need them.
- 4. Set up a basic needs emergency fund in collaboration with the financial aid.
- 5. Increase fundings to the SCU Food Security Program
- 6. Include food security statements and resource information on all SCU syllabi
- 7. Increase funding towards mental health & dietary education
 We hope that this study will inform the SCU community and administration of not only
 the prevalence of such a complicated issue such as basic needs insecurity, but also the existing
 inequalities within the SCU community that exacerbate this issue.

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Appendix A - Figures & Tables

Female Nonbinary Percentage of Students Experiencing Food Insecurity Nonbinary Nonbinary Percentage of Students Experiencing Food Insecurity

Figure 6. Percentage of Gender Experiencing Food Insecurity in the Last 30 Days. n=157. Food Insecure and Female n=46; Food Insecure and Male n=13; Food Insecure and Nonbinary n=0; Food Secure and Female n=63; Food Secure and Male n=33; Food Insecure and Nonbinary n=2.

Table 3: Ethnicity Data of Students Food Security at SCU 2020

Ethnicity	Secure	Insecure	% Insecure
African American or Black	2	3	60%
Hispanic or Latinx/Latina/Latino or Chicanx/Chicana/Chicano	4	11	73%
Middle Eastern or North African or Arab or Arab American	4	1	20%
Multiple Ethnicity	24	8	33%
Other Asian or Asian American	18	5	22%
Southeast Asian	0	4	100%
White or Caucasian	54	23	30%

Sources: SCU Student Food Security Study

Sustainably Produced Foods vs. Food Security Levels

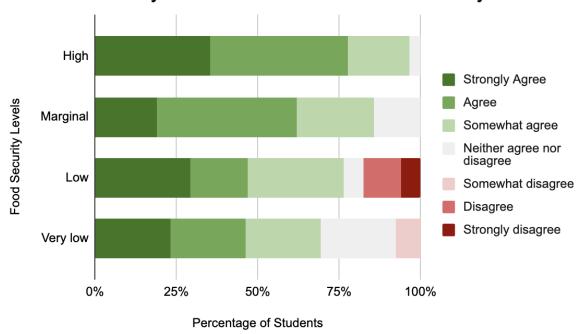


Figure 7. Food Security Levels by Santa Clara University Students Preference of Sustainability Produced Foods n=162. High Food Security and Strongly Agree n=30; High Food Security and Agree n=36; High Food Security and Somewhat Disagree n=16; High Food Security and Neither Agree nor Disagree n=3; Marginal Food Security and Strongly Agree n=4; Marginal Food Security and Agree n=9; Marginal Food Security and Somewhat Agree n=3; Marginal Food Security and Neither Agree nor Disagree n=3; Low Food Security and Strongly Agree n=5; Low Food Security and Neither Agree nor Disagree n=1; Low Food Security and Somewhat Disagree n=0; Low Food Security and Disagree n=2; Low Food Security and Strongly Disagree n=1; Very Low Food Security and Somewhat Agree n=3; Very Low Food Security and Neither Agree nor Disagree n=3; Very Low Food Security and Neither Agree nor Disagree n=3; Very Low Food Security and Somewhat Agree n=3; Very Low Food Security and Neither Agree nor Disagree n=3; Very Low Food Security and Neither Agree nor Disagree n=3; Very Low Food Security and Somewhat Disagree n=1.

Awareness of Bronco Food Security Program vs. Food Insecurity

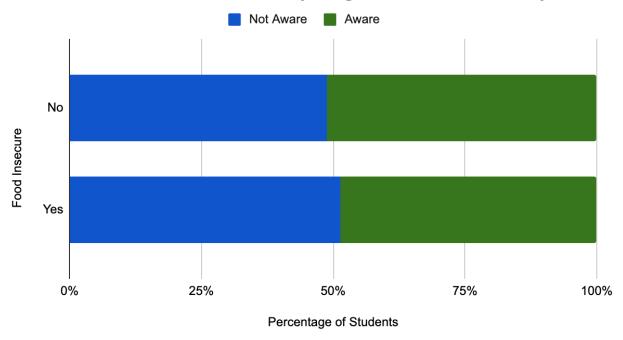


Figure 8. Awareness of Santa Clara University's Bronco Food Security Program by percentage of College of Arts and Sciences students who are food insecure, n= 161. Food Secure and Unaware n=62; Food Secure and Aware n=65; Food Insecure and Unaware n=18; Food Insecure and Aware n=17.

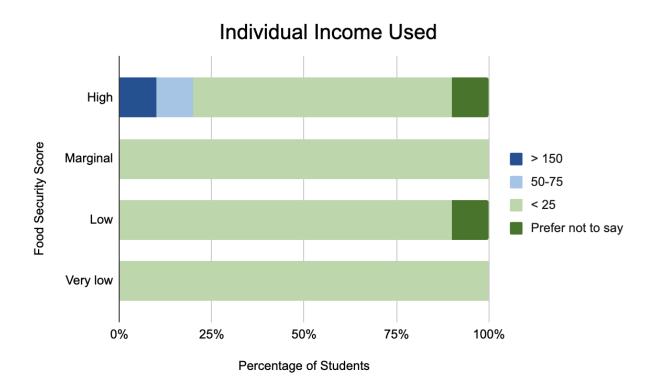


Figure 9. Food Security Level of Santa Clara University College of Arts and Sciences by Individual Income. n=29. >150 High Food Security n=1; 50-75 High Food Security n=1; <25 High Food Security n=7; <25 Low Food Security n=9; <25 Very Low Food Security n=4.