

EXPLORING BARRIERS AND FACILITATORS ACCOMPANIED BY SOLUTIONS SUGGESTED ON LEVERAGING FOOD ASSISTANCE PROGRAMS TO ADDRESS FOOD INSECURITY AMONG INTERNATIONAL STUDENTS

Major Take Aways

- Food pantries could be an important potential source for international students facing Food insecurity as most students do not meet citizenship criteria for state or federal food assistance programs.
- The purpose of this study was to identify hindrances and solutions concerning the use of university food resources among international students and learn about their suggestions to the university administration for improvement.
- Participants proposed having culture-specific foods available in the campus food pantry and dining outlets. Many international students may experience covert food insecurity, and several barriers to seek assistance.
- This finding can help close the gap in understanding the barriers and needed solutions to challenges to food security among international students.

Introduction

- One in five undergraduates (22%) and graduate and professional students (19%) reported experiencing Food Insecurity.¹⁻²
- International students are found to be prone to Food insecurity compared to students within the country because they tend to develop a hybrid diet switching between the new and previous dietary culture.³
- Food Assistance programs within University were found to be increased and aiding most international students during and after the COVID-19 pandemic. However, specific barriers and facilitators are critical factors to learn in leveraging the use of such important facilities on campus.

Methods

- This study aims to explore the utilization of various university food security resources that helps to address Food insecurity, and the significant barriers and facilitators among international students.
- The constructivist paradigm guided this study to gain an in-depth understanding of the lived experience of the study participants via semi-structured interviews.⁴
- The survey was cross-sectionally distributed across the campus using purposeful sampling technique. (Figure 1)
- Semi-structured interviews were conducted via Zoom in the span of four months (Oct22-Jan23) among the participants (n=30).
- The inclusion criteria were set during recruitment to get the desired group of participants. All students enrolled as international students until Fall 2022, 18 years or older, and residing in the United States for at least the last six months were eligible to participate in the study.
- Ethical approval was obtained from LSU AgCenter Institutional Review Board (IRBAG-22-0068)

Data Analysis

- All interviews were audio-recorded via Zoom and later were transcribed verbatim via Zoom business transcription service for accuracy. Qualitative data analysis tool called Dedoose Version 9.0.17.
- Inductive theoretical thematic analysis method, in which coding was done without trying to fit it into a pre-structured coding framework.

- A codebook was created and tested among three researchers. A coding team used the codebook to independently code survey responses.
- The research team utilized the Consolidated Criteria for Reporting Qualitative research (COREQ) checklist to report study results.⁵
- The salient themes stated by most participants in several interviews also aided the code development. Prominent themes were categorized and analyzed by the data visualization provided by the Dedoose analytic tool.

Results



Figure 1. A survey was distributed across students from various diverse countries: Brazil, China, Colombia, Ecuador, El Salvador, Honduras, México, Nepal, Panamá and Uganda

- All meaning units were categorized into one of the three major themes proposed.
- We found qualitative results to be similar between all participants, showing similar themes, which is presented below based on the prominence or the number of times described including supporting direct quotes.
- Almost all the student participants described barriers to using food resources on campus alongside either facilitator or solutions in similar context.

| Three Themes | Supporting Quotes |
|--------------|--|
| Barriers | "From international students' perspective , it always comes back to the lack of outreach program. A lot of my friends they didn't even know, including me that there was such program in college as it is rare. That limited the use of pantry, from student's perspective." |
| Facilitators | "Food pantry is important because it is kind of security for us. If something happens with our stipend or anything, then we know that we have, like some food source that we can rely on" |
| Solutions | "... you know stigma is social. Since you are the one who is thinking about what people think, rather than thinking that you think like, that's nice that you're supposed to use. That's also good for the environment as well you are saving money. Maybe they can be advertised that way." |

Table 1: Propose three major themes inducted to use as codes, with project-specific definitions.

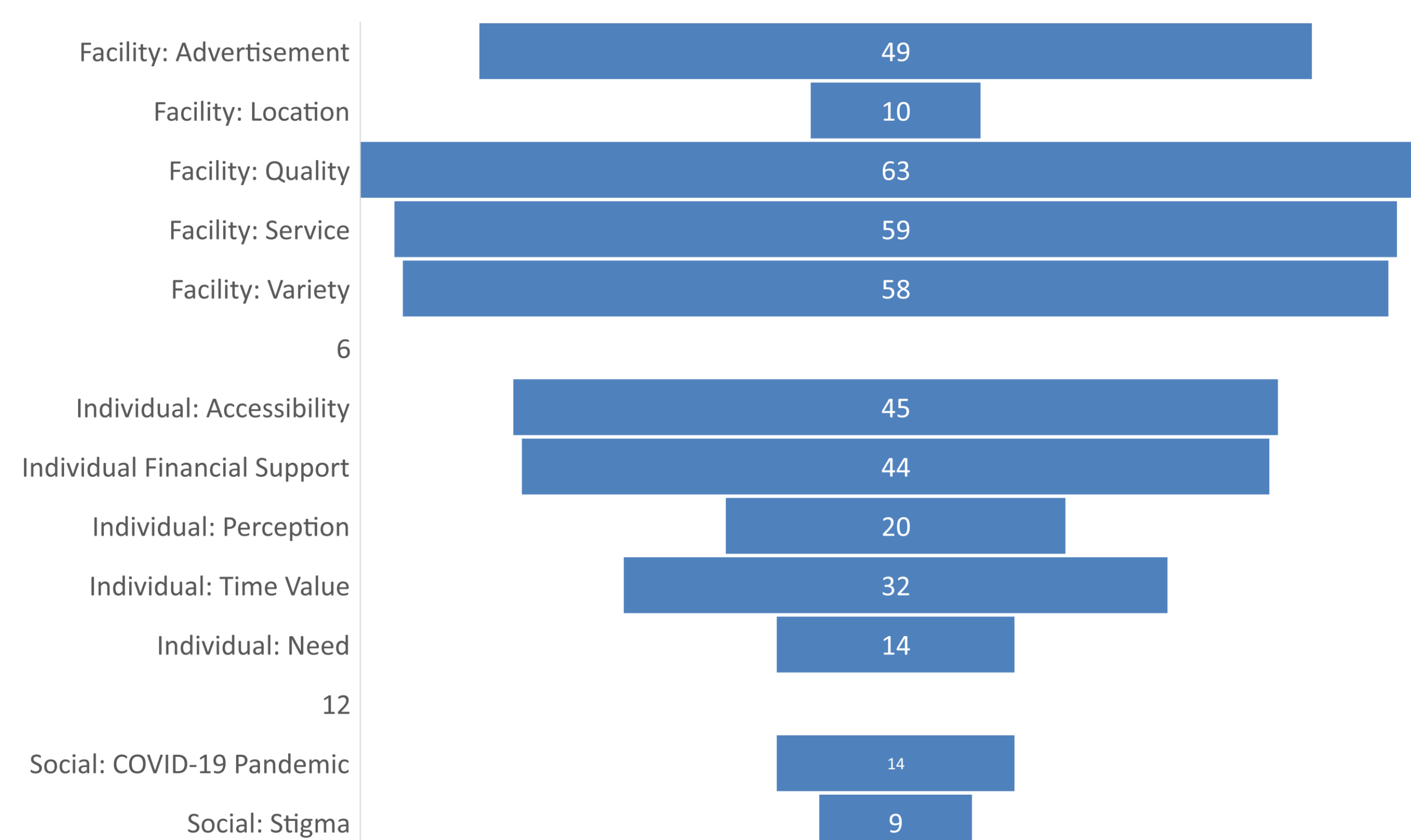


Figure 2. A Funnel chart representing the number of times the themes emerged in a meaning units either as barrier, or facilitator or solution or the combination of all the themes.

| Domains | Sub-domains | Definitions |
|-----------------------|--------------------------|--|
| I. Facility Domain | Facility | Facility is defined as Food resources on campus that are helping students with Food insecurity issues, Food pantries, Church free foods, Food banks, Card exchange programs, ICC food recipe programs etc. |
| | I.A. Advertisement | Advertisement is process or medium promoting the facility service or publicizing and reaching international students. |
| | I.B. Location | The physical space where the Food resources facilities are on campus. |
| | I.C. Quality | The Standard of the food available at the facilities. |
| | I.D. Quantity | The amount of the food available at the facilities. |
| | I.E. Service | The way how the facility delivers its services compared to the expectations of students. |
| II. Individual Domain | I.F. Variety | The diversity of Food available at the Facilities |
| | Individual | Individual or group of people, who are the students or the family who use the food resources facilities related to food security on campus. |
| | II.A. Accessibility | The quality of the students to be able to reach the needed facilities. |
| | II. B. Culture | The customs related to food of a particular nation, people, or other social group. |
| | II. C. Financial Support | The financial assistance may be in the form of food availability for free or low costs. |
| | II. D. Knowledge | The information, and skills acquired by the students through experience or education. |
| III. Social Domain | II. E. Need | The requirement or essential want of the students. |
| | II. F. Transportation | The personal ability to move from one place to another withier via public or private vehicles to reach the facilities. |
| | Other | The other outer factors that are relating to human society, the interaction of the individual and the group. |
| | III. A. COVID | The coronavirus pandemic which is an ongoing global pandemic of coronavirus disease. |
| | III. B. Stigma | The discrimination or negative emotions that encompasses a wide range of behaviors related to the use of food resources. |

Table 2: [Code book] Propose inducted codes, Domains, and Sub-domains with project specific definitions.

- Barriers mentioned were lower (n=76), than Facilitators (n=88) and solutions (n=85) were also linked with either barrier and/or facilitators in multiple cases.
- Multiple students mentioned stigma as one of the barriers to using food pantries as international students. They also provided some great practical solutions later in the result section of the solution. Stigma here is discrimination or negative emotions that encompass a wide range of behaviors related to the use of food help resources.

Conclusion

- Many college students may experience covert food insecurity, and unwillingness to seek assistance. This finding can help close the gap in understanding the barriers and needed solutions to challenges to food security among international students.
- The solutions being paired with the barriers mentioned could be beneficial if reported to the Food pantry and university administration to plan updating the programs and develop new policies.

References

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