A Multiple Case Study of the Commonalities that Influence People to do Food Justice Work and

How These Commonalities Relate to Food Insecurity

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ISEF Sample Abstract & Certification

A Multiple Case Study of the Commonalities that Influence People to do Food Category Justice Work and How These Commonalities Relate to Food Insecurity Pick one only-Mark an "X" in box at right Salma Ibrahim Animal Sciences Behavioral & Social Sciences M Taconic Hills High School, Craryville, NY, USA Biochemistry Biomedical & Health Sciences **Biomedical Engineering** Food insecurity has become a growing public health issue. Food insecurity is the limited or Cellular & Molecular Biology uncertain availability of nutritionally adequate, safe foods, or the inability to acquire personally Chemistry Computational Biology and acceptable food in socially acceptable ways. Black and Brown communities are Bioinformatics disproportionately affected by food insecurity due to systemic oppression. In response to this Earth & Environmental issue, the food justice movement has grown. Food justice work is described as an initiative in Sciences response to food insecurity. This is a multiple case study on the commonalities that influence Embedded Systems Energy: Sustainable people to do food justice work and how these commonalities relate to food insecurity. The Materials and Design semi-structured interview consisted of 17 questions. Some common themes included Engineering Technology: participants experiencing food insecurity at a young age, systemic racism at the root of food Statics and Dynamics Environmental Engineering insecurity and how it affects knowing how to cook healthy foods. All three participants Materials Science confirmed that food insecurity has negative psychological effects as well as physical. There Mathematics was an emphasis put on the importance of acknowledging cultural differences and white Microbiology Physics and Astronomy privilege when it comes to food justice work. All three participants confirmed experiencing food Plant Sciences insecurity at some point in their lives. Experiencing food insecurity is what influenced them to Robotics & Intelligent do food justice work. Machines Systems Software Translational Medical Science

- As a part of this research project, the student directly handled, manipulated, or interacted with (check all that apply):
 - human participants potentially hazardous biological agents
 - □ vertebrate animals □ microorganisms □ rDNA □ tissue
- This abstract describes only procedures performed by me/us, reflects my/our own independent research, and represents one year's work only.
 - 🗹 yes 🗌 no
- I/We worked or used equipment in a regulated research institution or industrial setting.
 □ yes □ no
- 4. This project is a continuation of previous research.
 - 🗆 yes 🗹 no
- My display board includes non-published photographs/visual depictions of humans (other than myself)
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- I/We hereby certify that the abstract and responses to the above statements are correct and properly reflect my/our own work.

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Introduction

Food insecurity is the limited or uncertain availability of nutritionally adequate, safe foods, or the inability to acquire personally acceptable food in socially acceptable ways (Coleman-Jenson, et. al., 2017). There are different levels of food insecurity, affecting people in different forms, such as food apartheid. Food insufficiency is the most extreme form of food insecurity.

Children with an incarcerated father are two times more likely to experience food insecurity (Turney, 2015). This has been shown to be a result of systemic oppression, which directly affects Black and Brown people. Food insecurity has been shown to have many psychological effects such as stress, anxiety, and depression (Meza, 2019). Food insecurity has been found to be a risk factor associated with chronic pain and prescription opioid use (Men, 2021).

Over the years and especially due to the Covid-19 pandemic, food insecurity has become a growing public health issue. In response to this, the food justice movement and food justice organizations have grown across the country. Food justice work is defined as an initiative in response to food insecurity. The food justice movement was started by the Black Panther Party, it has since then transformed in a variety of ways (Wood, 2017). Because food insecurity can have severe effects on mental and physical health it is important to study further the people that work in food justice. The purpose of my research is to find the commonalities between those that work in food justice and their experiences with food insecurity. Food justice organizations are often formed by community members joining together to address food insecurity that they too have

faced. Understanding and researching these commonalities can help to provide better resources for food justice workers and those who are facing food insecurity.

This study uses a semi-structured interview. The questions are based on the following constructs of food insecurity that were developed by Johnson et al. (2021): 1) the quantitative construct of having enough food 2) the qualitative construct concerning the quality and diversity of accessible foods 3) the psychological construct that includes feelings of anxiety and restricted choice about the amount and quality of accessible food 4) social constructs of food practices and food sources. This study is a qualitative case study. While most scientific experiments require a large sample size, a case study requires a much smaller one. A smaller sample is necessary because it allows the researcher to look at each case deeper and to look at each variable. A qualitative sample size's purpose is to provide insight into the specific situation of specific individuals (Schoch, 2018).

The purpose: The purpose of this study is to find the commonalities between those who work in food justice and how these commonalities relate to food insecurity.

Hypothesis: People who work in the food justice arena often have faced food insecurity themselves. There are multiple intersections that contribute to the choice to work in the food justice arena.

Methods

Materials: Audacity app (computer recording app)

Study Population: For my study I interviewed three people who work in food justice. I identified three people who were eligible for my interview because of their work in food justice. Before the structured interview could be done I contacted them, requesting their participation and

emailing a copy of the consent form. I did a screening, asking them the following study eligibility questions, which were done over the phone.

- 1. Does your work involve an initiative in response to food insecurity?
 - a. Yes- continue to next question
 - b. No- excluded from study
- 2. How many years have you worked in food justice?
 - a. If 3 or more years included in study
 - b. If less than 3 years excluded from study
- 3. Are you willing to discuss your experiences with food insecurity?

Informed Participant Consent Form: All participants were given a consent form before the interview so they knew the purpose of this study, study procedures, risks, and benefits of this study. See Appendix A.

Interview: The interviews were done over Zoom. The interview consisted of 17 questions, see Appendix B. To develop my questions for the interview I based them around the 4 constructs of food insecurity (Wicks, 2006). These constructs are essential to understanding the issue of food insecurity and also in understanding the importance of food justice. Understanding the first construct of food insecurity helps to figure out the issues people are facing with food insecurity in regards to the amount of food that is accessible. Understanding the second construct of food insecurity addresses the quality of the food people had access to.

The third construct helps to understand the feelings that people have surrounding their experience with food insecurity. The fourth construct helps to understand social experiences and relationships people have with food and their food resources. Exploring these aspects will help in finding the commonalities between food insecurity and food justice work. See Table 1 for the interview questions and the construct they are associated with. See Appendix B for the entire interview.

Constructs	Interview Questions
Construct 1: The quantitative construct of having enough food.	 Describe what a "food insecure fridge" looks like to you. Describe what a "food secure fridge" looks like to you. Has the quantity of food you consume changed as an adult? If so, how ?
Construct 2: The qualitative construct concerning the quality and diversity of accessible foods.	 What kinds of foods were accessible to you growing up? Has the quality of food you consume changed as an adult? If so, how ?
Construct 3: The psychological construct that includes feelings of anxiety and restricted choice about the amount and quality of accessible food.	 Do you have an early memory of experiencing food insecurity? What made you recognize the lack of accessibility and affordability of fresh and healthy food?
Construct 4: Social constructs of food practices and food sources.	 Please describe your current work in food justice. When did you start doing food justice work? What's the most significant reason that motivated you to do food justice work? How does being actively engaged with your community as part of food justice work help to make food accessible and affordable? What are the top 3 most valuable components of food justice work?
Combined Constructs:	• What are some things you think perpetuates food insecurity the most?
Demographics	 Thank you for participating in this interview, I now have a few demographic questions. Feel free to tell me that you prefer not to answer. How old are you? How do you identify your race and gender? How would you describe your current economic status?

Table 1: Interview Questions and their associated concepts

Test Interview: Before I began the actual experiment I did a test interview on someone to see if there are any revisions I needed to make to the structured pre-interview and the semi-structured interview. The questions were then modified for clarity.

Data Analysis: Each interview was recorded for data analysis. I transcribed each recording myself by listening carefully to each one and then writing down what I heard word for word. Using a different colored highlighter for each construct I read through each interview and identified which parts of their responses aligned with which construct. If a response aligned with more than one construct it was highlighted in each color it aligned with. Using the highlighted sections I evaluated how the responses related to the construct and the commonalities and differences I found.

Results

Construct 1: The quantitative construct of having enough food.

This was the most common construct among all responses. All three of the participants had experienced food insecurity at a young age. When asked about what they think perpetuates food insecurity the most, both participants B and C said they feel it is the lack of knowledge and resources. These two responses connect to participant A's response that systemic racism is the root of food insecurity. Participants B and C went on to say how systemic racism affects the knowledge about how to prepare and cook food as well as having the resources to get a plethora of healthy food. Participants A and B talked about struggles in their lives that made the struggle to get afford the least priority. Participant A noted, "When I was 14 that was a really rough year of my life. I was just on the streets. I went to a facility and they did serve 3 meals a day. That was a really rough time in my life. I didn't know where food was coming from. I had only gotten into

the streets because my cousin was doing it. The last thing we were worrying about was food." Participant B talked about how growing up with parents who were artists and being one of eight children was a factor in their experiences with food insecurity. Another commonality I found related to this construct was how lack of knowledge on how to prepare and cook healthy foods is a part of food insecurity.

Construct 2: The qualitative construct concerning the quality and diversity of accessible foods.

A commonality between all three participants regarding this construct was that the food that is often most accessible when you're food insecure is unhealthy, more of a "filler food." Participant A defined a food insecure fridge containing old milk, baking soda, and condiments. Participant B named canned foods and microwavable foods. Participant C said leftovers from takeout could also be found in a food insecure fridge. Participant B elaborated on their response saying that because of food insecurity sometimes people have to compromise their beliefs and food practices. She recounted memories of her parents who were vegetarians having to mix canned foods with vegetables. Participant C had a striking response to a question regarding the quality and diversity of food. They recounted memories of family members having strong ownership of one's food. It was a big deal if one family member ate another family member's food, "A distinctive, distinctive air of if you touch my food, you're dead to me, essentially. There would be some punishment involved." I found this to be significant compared to previous responses by the other participants who because of their food insecurity had to share the food they had access to.

Construct 3: The psychological construct that includes feelings of anxiety and restricted choice about the amount of and quality of accessible foods.

All participants confirmed that food insecurity has negative psychological effects as well as physical. Participant C talked about the shame they felt around their experiences with food insecurity as a child. These feelings pertained to what other students felt about them and what their parents thought about them. They went on to explain avoiding acknowledging these experiences, "it being a time when I didn't want to know or recognize it. Or see anyone else in a comparative state. I remember for several years not bringing lunch to school but instead reading in the library." Participant C also talked about how the deprivation of food for breakfast and lunch led to overeating at dinner time. This led to a binge-eating disorder. The following quote illustrates their response: "I would just eat and eat without control. I felt like I couldn't stop. It felt very disharmonious." Participants A and B both reflected on their memories of anxiety about being able to afford food. Participant B talked about hearing conversations between her parents and other adults in her community about struggling to afford food. Both participants A and B had traumatic events that impacted their ability to afford food. When asking questions regarding the participants' food justice work I found that part of their work is not only helping people have access to healthy foods but also healing themselves and their relationship to food. Participant B said that she was able to find her own personal healing with the Earth by being in the garden and growing plants.

Construct 4: Social constructs of food practices and food sources.

Participants B and C put an emphasis on the importance of acknowledging cultural differences and white privilege when it comes to food justice work. In response to question twelve, Participant B elaborates on the impact of white privilege on food insecurity, "...there's a

lot of whiteness that likes to keep it amongst themselves so they can stay in that supremacist state. There's definitely culture in this world where that has a very strong presence to the point where other people are seeing it and believing it. It's just the whiteness being superior." The concept that Black and Brown communities often face food insecurity because of systemic oppression was frequently referred to by participants. Participant A pointed out the presence of food apartheid in Newburgh where they grew up. Participant B pointed out the importance of knowledge on healthy foods and how to prepare it. In response to question five, she said, "it's an education space and they don't have gardens. There's a lot of things where you can see the disconnect and where their priorities are. It's government funded but there should be funds that support that. The more you learn the more you are able to apply it." In response to question nine, Participant B talked about how an important piece of her food justice work is that it is community based. She describes her work as a "heart to heart movement," where she works closely with people from her community, people she's grown up with to share her knowledge around food justice and build on it. Participant B also talked about not only wanting to physically nourish people but to nourish peoples' minds as well. In response to question eleven she said, "the need to help people heal is super big for me... to be like there is actual knowledge that I hold to be able to be home and still grow and still do my thing."

Discussion

The purpose of this case study was to find the commonalities between those who work in food justice and food insecurity itself. Throughout the experiment I found important observations and trends.

General Observations: In transcribing the interviews and then later analyzing them I noticed that several of the responses fit into a construct different from the construct the question belonged to. Many responses also connected to more than one construct. Another thing I observed through analyzing the data was how often social food practices affect one's access to affordable and healthy foods. Knowledge around preserving and preparing the foods you have access to affects one's food security. Something I found to be especially significant in the analysis was in participant C's responses about how their experience of food insecurity caused them to have an eating disorder. The lack of food this person had caused them to over eat. There is often a link between deprivation and overconsumption. Prior research shows that individuals with food insecurity engaged in more objective binge eating and overeating, nighttime eating, purging and other compensatory behaviors (like exercising harder than usual and using laxatives/water pills), food restriction (like skipping meals), and dietary restraint compared to people who regularly have access to food. Furthermore, significant food insecurity was linked to an increase in concerns about weight and body shape because of the stigma associated with obesity. Compared to less than 3% of participants in the non-food insecure group, researchers discovered that 17% of those in the child hungry food insecurity group displayed a clinically severe eating disorder (Uri, 2022).

Trends: Themes found in the interviews were accessibility, love, respect, land justice, knowledge, and "Centering Blackness." Participant A felt that the willingness to learn how to grow and cook healthy foods as well as accessibility to healthy food are the most important components. Participant B's elaboration on why respect is such an important aspect of food justice work stood out to me the most. She talked about how lack of respect is often tied to

subconscious biases, that sometimes it is assumed that people who experience food insecurity don't know what healthy food is or are averse to it. She went on to say how this stems from Centering Whiteness (cultural decisions based in a white person perspective) and the assumption that white people are inherently healthy eaters. Her observation shows how critical it is to understand the impact of Centering Whiteness on the reasons for why Black and Brown people are more likely to experience food insecurity. Attempts to alleviate food insecurity that are based in Centering Whiteness perspectives ignore how food has become such an important part of these cultures because food is their way to keep their culture alive. It is time to start making a serious, long-term effort to put Blackness and the Black experience at the center of American politics as a critical step toward ensuring economic freedom for all citizens. Alicia Walters, a social justice facilitator and artist says that, "anti-blackness is both the core wound and the organizing principle of this country, a through-line that permeates all of our institutions and cultures. Seeing and understanding the world through the Black experience is the basis for our individual and collective healing" (Dirshe, 2020).

It was stressed multiple times throughout the interviews and in my analysis that food insecurity is linked to systemic oppression. Black and Brown people are put into neighborhoods with a major lack of economic resources and opportunities. Farmer and food justice activist, Karen Washington, coined the term "food apartheid" because she felt "food desert" isn't the appropriate term for why food insecurity is occurring (Sevilla, 2021). "Food desert" is a misleading term because it implies that food insecurity naturally occurs. Washington's definition of "food apartheid" is "a system of segregation that divides those with access to an abundance of nutritious food and those who have been denied that access due to systemic injustice" (Sevilla,

2021). All three of participants reported living in an area where food apartheid was present. Food apartheid looks like not having a grocery store where you live, having to rely on a convenience store or bodega for food. Food apartheid looks like not having access to healthy food let alone a variety of food.

Conclusion

The purpose of this experiment was to find the commonalities between those who work in food justice and how these commonalities might relate to food insecurity. My hypothesis was that those who work in food justice have often experienced food insecurity. My hypothesis was supported, all three of the participants reported experiencing food insecurity throughout their lives. Experiencing food insecurity is what influenced them to do food justice work. This research is significant because it gives a closer look at the importance of food justice and what causes food insecurity, specifically the role systemic racism and Centering Whiteness plays in perpetuating the problem.

Appendix A

Informed Participant Consent Form

Research Study Title: A Multiple Case Study of the Commonalities That Influence People to do Food Justice Work and How These Commonalities Relate to Food Insecurity.
Student Researcher: Salma Ibrahim
Research Institution: Taconic Hills High School
Faculty Advisors: Dr. Sandra Gardner, Linda Hopkins, Jalal Sabur

PURPOSE OF STUDY

You are being asked to take part in a research study. Before you decide to participate in this study, it is important that you understand why the research is being done and what it will involve. Please read the following information carefully. Please ask the researcher if there is anything that is not clear or if you need more information.

The purpose of this study is to find and identify the gaps in what is known about food insecurity and how it relates to people who work in food justice.

STUDY PROCEDURES

The participant will complete a structured and semi-structured interview about the influences that impact people to work in the food justice arena.

RISKS

There are no risks to participating in this study other than providing your information. However, we will protect your information. I will record interviews. The recording will be transcribed by me, the student researcher, and the recording will be deleted when the transcription is completed. Any data you provide will be coded so people who are not the researcher cannot link your information to you. Any name or identifying information you give will be kept securely via electronic encryption on my password protected computer and phone. The transcript will be deleted as soon as I am finished using it for my research purposes.

CONFIDENTIALITY

Your responses will be confidential and you will not be asked to reveal your name at any point during the survey. Your answers will not be shared with anyone and will not only be part of group data analysis. No one set of responses will ever be made public.

BENEFITS

There will be no direct benefit to you for your participation in this study. However, we hope that the information obtained from this study may help identify important commonalities in food justice work and food insecurity.

CONTACT INFORMATION

You will receive a copy of this consent form. If you have questions you can talk to or write to the student researcher, Salma Ibrahim at email <u>sibra.sci.res@gmail.com</u>. You can also contact her teacher Linda Hopkins@taconichillsk12.ny.us.

VOLUNTARY PARTICIPATION

Your participation in this study is voluntary. It is up to you to decide whether or not to take part in this study. If you decide to take part in this study, you will be asked to sign a consent form. After you sign the consent form, you are still free to withdraw at any time and without giving a reason. If you withdraw from the study before data collection is completed, your data will be returned to you or destroyed.

CONSENT

I have read and I understand the provided information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without cost. I understand that I will be given a copy of this consent form. I voluntarily agree to take part in this study.

Participant Name:

Participant Signature:

Date:

Student Researcher Name : _____

Student Researcher Signature:

Date:

Appendix B

Interview

- 1. Do you have an early memory of experiencing food insecurity?
 - a. [Could you please elaborate on that]
- 2. What made you recognize the lack of access and affordability to food?
- 3. What are some things you think perpetuates food insecurity the most?
- 4. Tell me some of the most defining moments of food insecurity in your life.
- 5. Describe what a "food insecure" fridge looks like to you.
- 6. Describe what a "food secure" fridge looks like to you.
- 7. Has the quality of the food you consume changed as an adult?
- 8. Has the quantity of the food you consume changed as an adult?
- 9. Can you describe your current work in food justice?
- 10. When did you start doing food justice work?
- 11. What's the most significant reason that motivated you to do food justice work?
- 12. How does being actively engaged with your community as part of food justice work help to make food accessible and affordable?
- 13. What are the top 3 most valuable components of food justice work?
- 14. Thank you for participating in this interview, I now have a few demographic questions.Feel free to tell me you prefer not to answer.
- 15. How old are you?
- 16. How do you identify your race and gender?
- 17. How would you describe your current economic status?

Appendix C

Sample Email to Possible Participants:

Dear (insert name),

Hello! My name is Salma Ibrahim and I'm a student researcher from Taconic Hills High School in Craryville, New York. I've been working with Jalal Sabur and he referred me to you. For my research project I will be doing a multiple case study of the commonalities between those who work in food justice (like yourself) and how those commonalities connect to food insecurity. I'm impressed by your work in food justice and was wondering if you would be interested in participating in my study. If you're interested and have any questions I would like to set up a time to talk with you. My phone number is 518-567-5090, let me know of a time and date that works for you. I have my research proposal and a consent form below.

Thank you for your time, Salma

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