

# Amplifying Voices: A Need to Address Racial and Social Justice in the U.S. Food System

Fiona Doherty, MSW and Michelle Kaiser, MSW, MPH, PhD  
The Ohio State University



Introduction

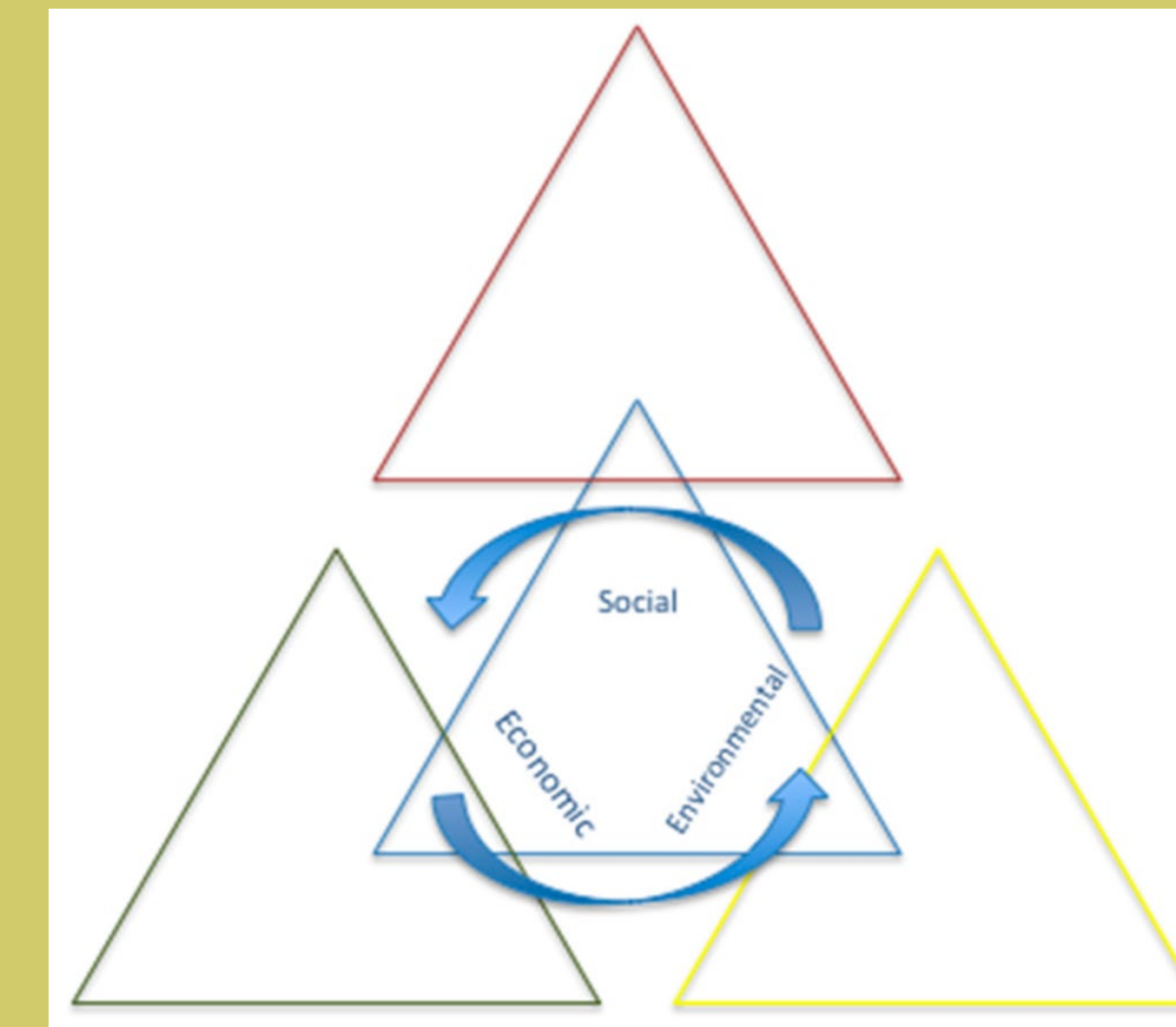
Methods

Results

Discussion

## Background

- **Social sustainability** is an under-researched area of sustainable development (Boström, 2012; Boyer et al., 2016) that refers to the equitable, viable and quality standards of living that encompass the social well-being of a geographic community or profession (e.g., farming).
- Farmers are critical stewards of the U.S. food system, yet they face systemic and environmental stressors that endanger their social sustainability. Beginning farmers face additional challenges of procuring technical skills, farmland, and capital; however, few studies have focused on the well-being of beginning farmers, specifically. This new generation of farmers is more diverse (i.e. more women & BIPOC) than those before it (USDA, 2017).
- This work is part of a community-engaged, explanatory sequential mixed-methods research project in partnership with a non-profit organization that provides technical assistance to farmers throughout the Midwest. Staff were concerned about beginning farmers who were experiencing high levels of distress, which was exacerbated during COVID-19. This poster focuses only on the quantitative survey data.



**Figure 1:** Social, economic, and environmental sustainability are overlapping concepts that are place-centered and based on local experiences. Diverse voices and local perspectives must be prioritized and included in all sustainability pursuits.  
(Boyer et al., 2016)

### Research Aim:

To explore the systemic stressors that contribute to beginning farmers' mental health.





# Amplifying Voices: A Need to Address Racial and Social Justice in the U.S. Food System

Fiona Doherty, MSW and Michelle Kaiser, MSW, MPH, PhD  
The Ohio State University



Introduction

Methods

Results

Discussion

## Data & Sample

Online survey questionnaire (Administered Oct 2020)

- Purposive sampling through OEFFA's list of 632 contacts
- Inclusion criteria: Beginning farmers in Ohio, 18 years or older, able to read and understand basic English
- 64 respondents, two did not complete the survey and were excluded (n=62)

**Beginning farmers** are defined as individuals who have been farming for ten years or less; they are categorized as “historically underserved producers” by the United States Department of Agriculture (USDA, 2019).

## Measures

### Patient Health Questionnaire (PHQ-4)

- Four-item measurement of anxiety and depression symptom burden in the past two-weeks (Kroenke et al., 2009). Likert-scale responses (0 = Not at all, 1 = Several days, 2 = More than half the days, and 3 = Nearly every day).
- Summed for a total PHQ-4 score ranging from 0 to 12 and categorized into minimal (0-2), mild (3-5), moderate (6-8), and severe (9-12) symptom burden.

### Farm Stress Survey

- Modified from Eberhardt and Pooyan's (1990) and Rudolphi et al.'s (2019) Farm Stress Surveys. With input from our community partner, language was revised to be inclusive of the diversity of farmers (i.e., women or BIPOC) and type of farm operations (i.e., small farms or ecologically-oriented farms).
- Fifty-two items in seven subcategories (working conditions, social and geographical factors, personal finances, time pressure, environmental conditions, current events and policy, and employee relations). Likert-scale responses (0 = None, 1 = Very little, 2 = Some, 3 = Quite a bit, and 4 = A great deal).
- Mean calculated for each of the 52 items to see which items contributed the most stress.

### Sociodemographic Measures

- Gender identity (male, female, non-binary, prefer to self-describe [where respondents could write in their preference]).
- Race/ethnicity (white, Hispanic/Latino/Spanish origin, Black/African American, Asian, American Indian/Alaska Native, Middle Eastern/ North African, Native Hawaiian/Pacific Islander, or Other).

## Statistical Analysis

- Descriptive statistics to examine mean, frequencies, and percentages of variables
- Data divided into subgroups to examine farm stressors by gender identity and race/ethnicity
- SPSS used to clean and manage the data



# Amplifying Voices: A Need to Address Racial and Social Justice in the U.S. Food System

Fiona Doherty, MSW and Michelle Kaiser, MSW, MPH, PhD  
The Ohio State University



Introduction

Methods

Results

Discussion

Table 1. Demographic Information

Characteristic	Percentage (N)	Compare to Ohio USDA Census (%)
Gender identity (n= 62)		
Male	38.7% (24)	61.2%
Female	51.6% (32)	38.8%
Non-binary or Transgender	9.7% (6)	N/A*
Race/ethnicity (n= 62)		
White	91.9% (57)	98.8%
Hispanic, Latino, or Spanish	1.6% (1)	1.1%
Black, African American	3.2% (2)	0.17%
Asian	1.6% (1)	0.24%
American Indian/Alaska Native	0% (0)	0.16%
Middle Eastern/ North African	0% (0)	N/A
Native Hawaiian/Pacific Islander	0% (0)	0.04%
Other	1.6% (1)	N/A

\*Note: USDA Census does not include gender identity response types beyond male and female.

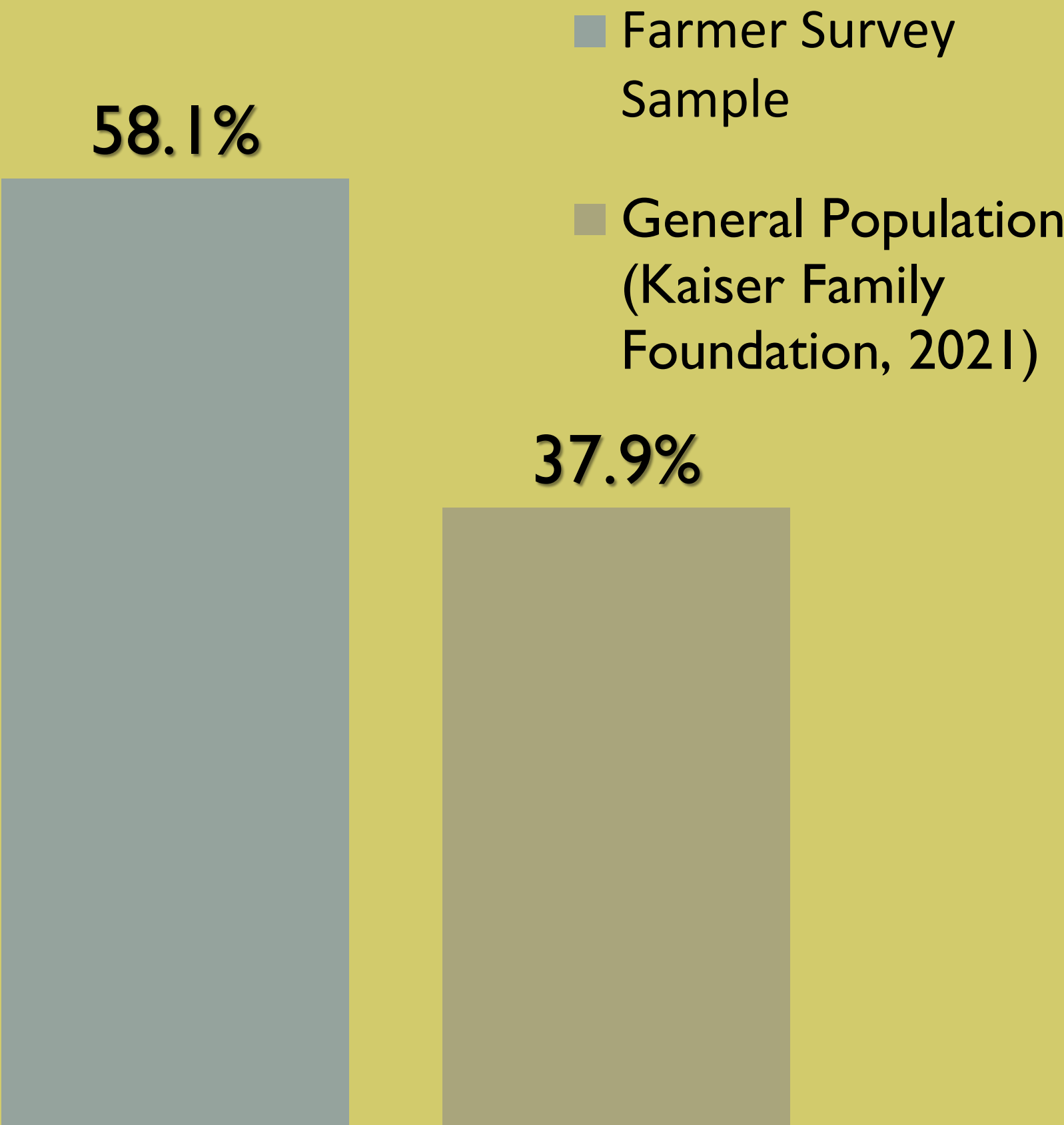


Figure 2. Anxiety and Depression Symptom Burden Compared to Ohio General Population

Table 2. Top Five Systemic Stressors

Stressor (n= 62)	Mean	Percentage (N)
Having too much to do & too little time	3	88.7% (55)
Covid-19	2.6	83.8% (52)
Not having enough person-power	2.5	79% (49)
Climate change	2.3	79% (49)
Social justice	2.2	72.6% (45)

### Stressors by Subgroups

- 100% of non-binary & transgender and 100% of BIPOC respondents noted **social justice** as a source of stress.
- 60% of BIPOC and 33% of non-binary & transgender participants noted **discrimination in the agricultural community** as a source of stress.



# Amplifying Voices: A Need to Address Racial and Social Justice in the U.S. Food System

Fiona Doherty, MSW and Michelle Kaiser, MSW, MPH, PhD  
The Ohio State University



Introduction

Methods

Results

Discussion

## Discussion

The stressors of farmers are multi-layered; interventions must be approached at multiple system levels, including 1) amplifying diverse voices & local perspectives in decision-making, 2) funding anti-oppressive approaches, and 3) educating helping professions to understand the unique needs of food system workers.

Our sample includes underrepresented transgender or non-binary farmers, and farmers of color. We worked with our community partner to re-word measurements and include more options for gender identity to amplify the voices often excluded from food systems research.

Discrimination and social justice were identified as sources of stress. Historical trauma (e.g., land dispossession, institutionalized racism) challenges the social sustainability of farmers.

\$95 million is appropriated for the USDA's beginning farmer development program (USDA, 2020), yet little to none of the funds support efforts to address mental health, current discrimination, and impacts of historical exclusionary practices (e.g., financial capital, labor, land access).

Systemic issues facing farmers threaten food security, food access, and sustainable community-based food systems and should be a concern to social workers.



# Amplifying Voices: A Need to Address Racial and Social Justice in the U.S. Food System

Fiona Doherty, MSW and Michelle Kaiser, MSW, MPH, PhD  
The Ohio State University



## References

Boström, M. (2012). A missing pillar? Challenges in theorizing and practicing social sustainability: Introduction to the special issue. *Sustainability: Science, Practice and Policy*, 8(1), 3-14. <https://doi.org/10.1080/15487733.2012.11908080>

Boyer, R. H., Peterson, N. D., Arora, P., & Caldwell, K. (2016). Five approaches to social sustainability and an integrated way forward. *Sustainability*, 8(9), 878. <https://doi.org/10.3390/su8090878>

Eberhardt, B., & Pooyan, A. (1990). Development of the farm stress survey: Factorial structure, reliability, and validity. *Educational and Psychological Measurement*, 50, 393–402. <https://doi.org/10.1177%2F0013164490502018>

Kaiser Family Foundation. (2021). Mental health in Ohio. <https://www.kff.org/statedata/mental-health-and-substance-use-state-fact-sheets/ohio/>

Kroenke, K., Spitzer, R. L., Williams, J. B., & Löwe, B. (2009). An ultra-brief screening scale for anxiety and depression: The PHQ–4. *Psychosomatics*, 50(6), 613-621. [https://doi.org/10.1016/S0033-3182\(09\)70864-3](https://doi.org/10.1016/S0033-3182(09)70864-3)

Rudolphi, J. M., Berg, R. L., & Parsaik, A. (2020). Depression, anxiety and stress among young farmers and ranchers: A pilot study. *Community Mental Health Journal*, 56(1), 126-134. <https://doi.org/10.1007/s10597-019-00480-y>

United States Department of Agriculture (USDA) (2017). *Selected producer characteristics: 2017 and 2012*. National Agricultural Statistics Service. [https://www.nass.usda.gov/Publications/AgCensus/2017/Full\\_Report/Volume\\_1,\\_Chapter\\_1\\_State\\_Level/Ohio/st39\\_1\\_0052\\_0052.pdf](https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_1_State_Level/Ohio/st39_1_0052_0052.pdf)

United States Department of Agriculture (USDA). (2019). *Beginning, limited resource, socially disadvantaged, and female farmers*. Economic Research Service. <https://www.ers.usda.gov/topics/farm-economy/beginning-limited-resource-socially-disadvantaged-and-female-farmers/>

United States Department of Agriculture (USDA). (2020). *Beginning farmer and rancher development program (BFRDP)*. National Institute of Food and Agriculture. <https://nifa.usda.gov/funding-opportunity/beginning-farmer-and-rancher-development-program-bfrdp>