

CULTIVATING A LANDSCAPE FOR FOOD JUSTICE: AN EXPLORATORY STUDY OF  
COMMUNITY FOOD SECURITY MEASUREMENT TO INFORM COMMUNITY-BASED  
INTERVENTION STRATEGIES

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ABSTRACT

This study extends the knowledge of food security beyond socio-demographic predictors to include the food environment. A method for measuring community food security and identifying protective and risk factors was developed.

Secondary data for 114 counties and one city in a Midwest state was analyzed. County-level food insecurity was estimated using a validated modeling technique. A Principal Components Analysis reduced the food environment data from 46 to 22 indicators. Six components were retained.

Component scores in a regression model showed that availability and affordability contributed the most, followed by program usage, access, and agricultural production. Transportation limitations and distance to food stores were risk factors. Housing affordability protected communities. Low community food insecure counties distributed more emergency food and had more Community Supported Agriculture (CSA) programs. A regression equation was then used to produce an estimate of the percentage of community food insecure households.

This method for measuring community food security allows a way to conceptualize systems components that can be manipulated through interventions. Since food insecurity exists in vulnerable populations, social workers can use this knowledge to cultivate a landscape for community food security.