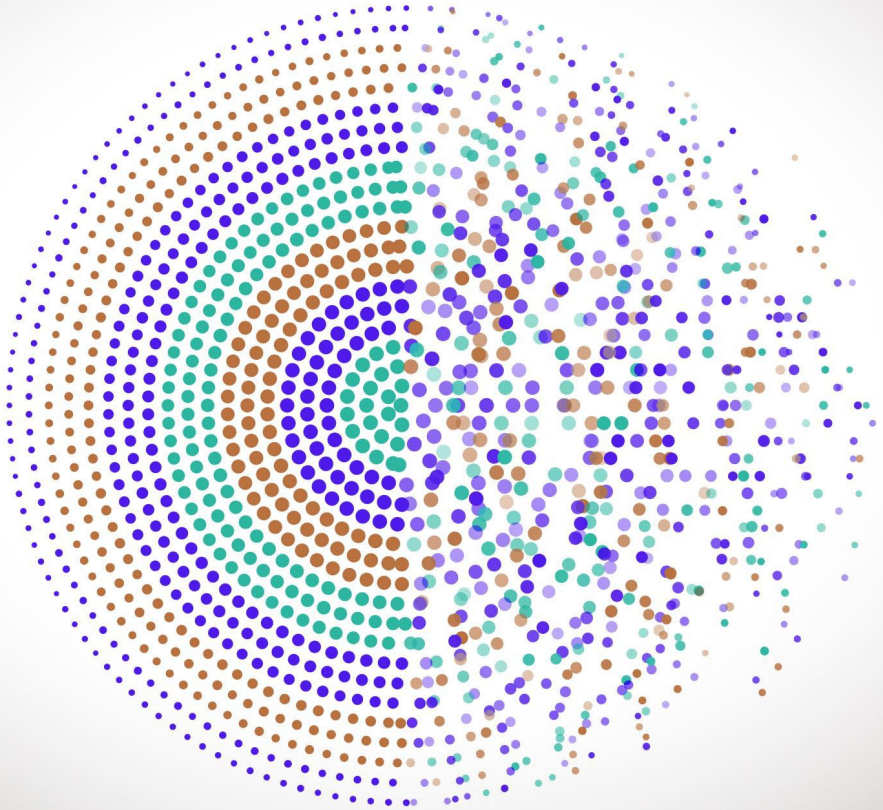

A Feminist Methodological Approach to Developing a Multidimensional Poverty Index for the Westside of Chicago

2023 ACS DATA USERS CONFERENCE

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WE IDENTIFY AS POOR BECAUSE OF THE MONEY WE EARN NOT BECAUSE OF THE WAY WE LIVE

– MONICA

INTERVIEW CONDUCTED 2017

QUESTIONS

- **Earning-** Quantitative Methods
- **Living-** Qualitative Methods

1. How does the triangulation of qualitative and quantitative data provide a more expansive understanding of poverty in general?
2. How does a mixed methods approach explain poverty in the West Side of Chicago in new ways?
3. How can a feminist mixed methods project about poverty help in creating anti-poverty policies?

ARGUMENT

- Both qualitative and quantitative approaches are useful in creating a holistic perspective on poverty in the United States (US). However, little research has been conducted that applies both qualitative and quantitative methods simultaneously.

MULTIDIMENSIONAL DEPRIVATION INDEX (MPI) RESEARCH DESIGN

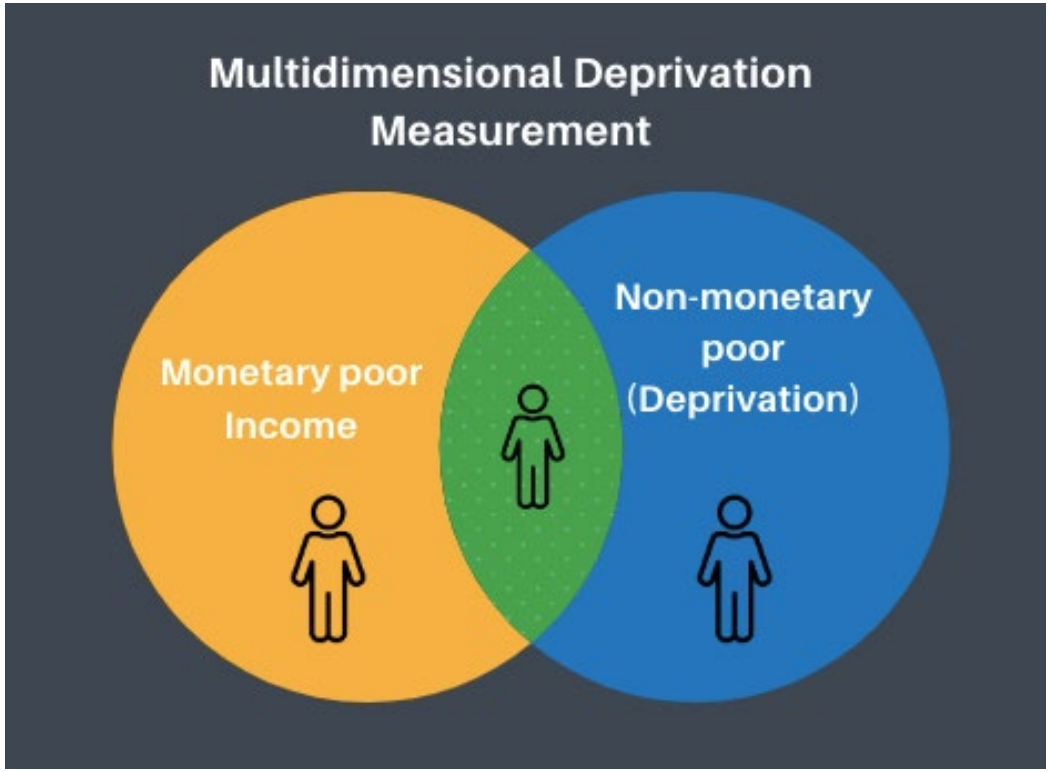
Review of Literature

Methodology

Methods

The Multidimensional Poverty Index (MPI) is a measurement that reflects relevant non-monetary aspects of poverty, including food insecurity, unemployment, dilapidated housing, lack of healthcare, and limited educational levels. In other words, MDPI is a comprehensive method for understanding poverty because individuals may have income above the poverty threshold but are still deprived in other dimensions, such as education, housing, or health."

RETHINKING POVERTY MEASUREMENTS

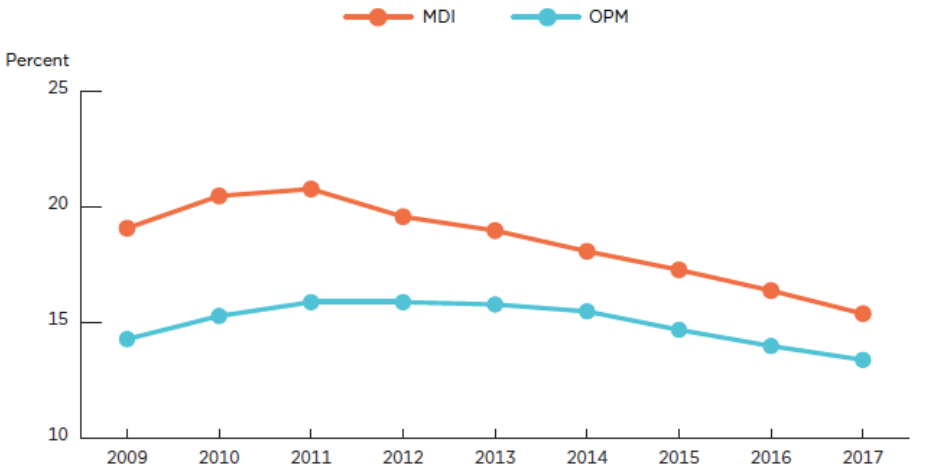


- Alkire, S. & Foster, J. (2007, revised in 2008). Counting and multidimensional poverty measurement. *OPHI Working Paper* 7, University of Oxford.
- Dhongde, S., & Haveman, R. (2022). Spatial and temporal trends in multidimensional poverty in the United States over the last decade. *Social Indicators Research, 163*(1), 447.
- Glassman, B. (2019). Multidimensional deprivation in the United States: 2017. *American Community Survey Reports, ACS-40,* U.S. Census Bureau, Washington, DC.

Let's depart from concentrating on the *means* of living to the actual *opportunities* of living- (Sen 2009)

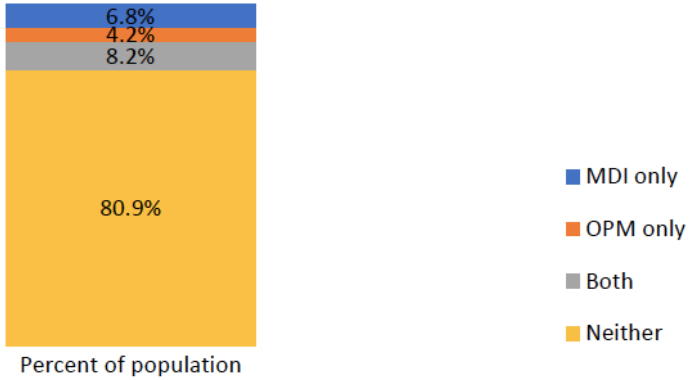
WHO IS LEFT BEHIND?

Figure 2.
Deprivation and Poverty Rates Over Time: 2009-2017



Note: For information on confidentiality protection, sampling error, nonsampling error, and definitions, see <www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.
Source: U.S. Census Bureau, 2009 to 2017 American Community Surveys and 2010 to 2018 County Health Rankings.

Figure 3: Percent of Total Population in Each Poverty-Deprivation Group: 2019



Source: U.S. Census Bureau, 2019 American Community Survey 1-year data. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see https://www.census.gov/programs-surveys/acs/technical-documentation.html.

HOW ARE DEPRIVATIONS MEASURED?

Alkire-Foster Method: Dual cut-off point method. There are three main areas of consideration: headcount ratio, weighting, and dimensional decomposition.

Determining who is considered in multidimensional deprivation involves the following six steps:

- Determine the MDI dimensions.
- Set cut-off points for each dimension (i.e., thresholds between people deprived in the dimension and those not deprived in the dimension).
- Sum the dimensions each person is deprived in and decide on how to weight each dimension.
- Set a second cut-off point that determines what share of weighted dimensions a person must be deprived of in order to be in multidimensional deprivation.
- Sum the individuals who fall into this definition of deprivation, q.
- Divide this value by the total population:

Example

Task Find the **uncensored** headcount ratios

$g^0 =$

Assets	Years of Schooling	Sanitation (Improved?)	Access to Electricity	
0	0	0	0	**Person 1**
1	0	0	**1**	**Person 2**
1	**1**	**1**	**1**	**Person 3**
0	**1**	0	0	**Person 4**
2/4	2/4	1/4	2/4	

HOW ARE DEPRIVATIONS MEASURED?

- **Headcount Ratio** is the count of people in multidimensional deprivation divided by the total population. Percentage of people who are multidimensionally poor.
- Critique of headcount ratio is if there is an additional deprivation for one person the headcount doesn't change– violates dimensional monotonicity.

$$H = \frac{q}{n}$$

H = count of people in multidimensional deprivation

q = number of deprived people

n = total population

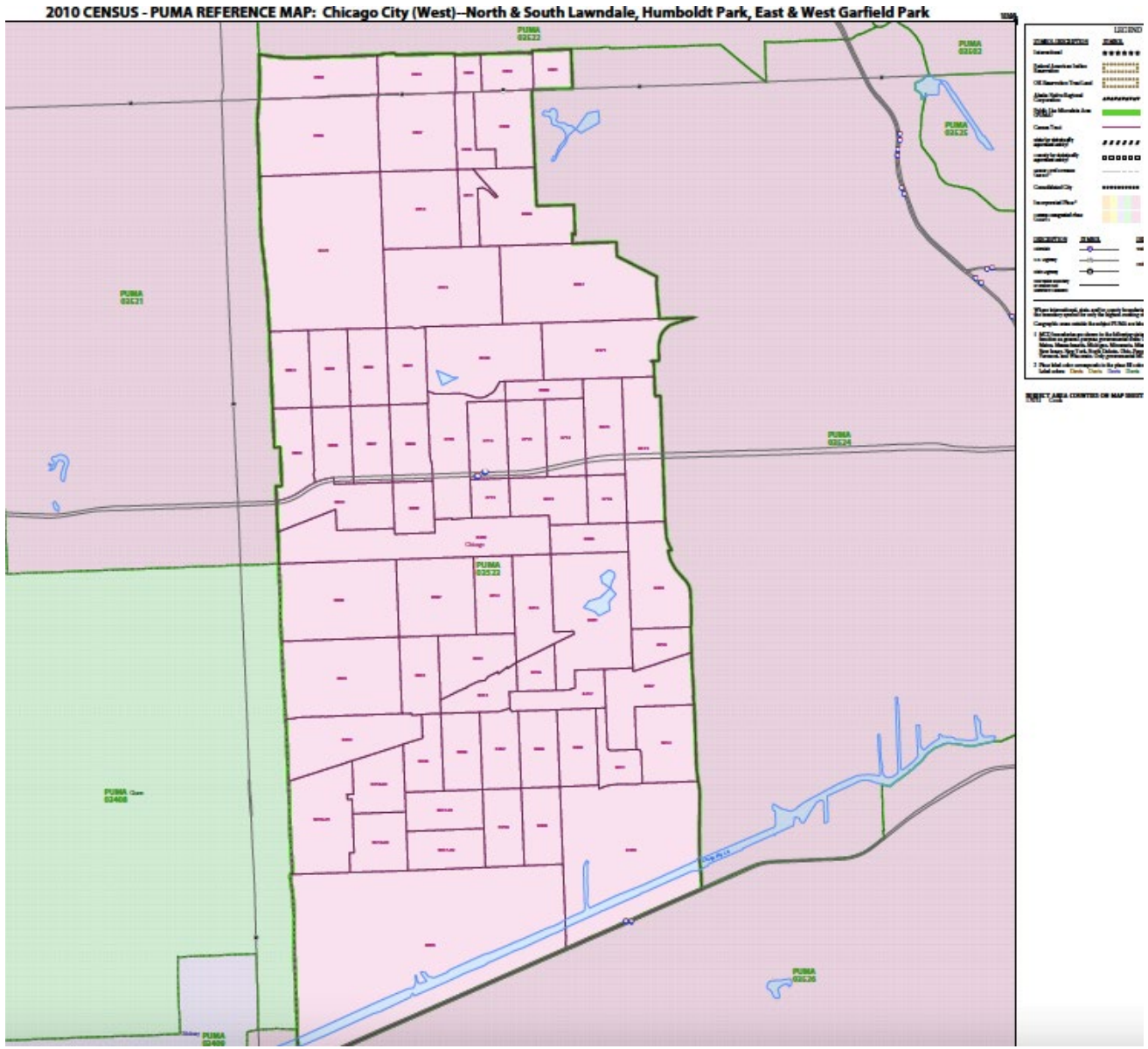
MPI

MPI= Adjusted Headcount Ratio: share of possible deprivations that poor people are experiencing. In words, the adjusted headcount ratio is the **total number of deprivations experienced** by the poor, divided by the maximum number of deprivations that could possibly be experienced by all people.

$$M_0 = \mathbf{HA}$$

H = percent of people that are deprived (how many people are deprived)

A = average deprivation shared among the poor (total number of deprivations divided by the number of deprived people)



2010 CENSUS PUMA REFERENCE MAP: CHICAGO CITY (WEST) 03523

CHICAGO, IL POVERTY RATE 2021 (17.1%)

ACS INDICATORS

DIMENSIONS

Health

Disability

Education

High school educaiton

Economic Security

Health insurance

Standard of Living

Housing costs as a percentage of household income

Social Connections

English fluency

Housing Quality

Number of persons per room in a housing unit

Table 2 Indicators used to measure multidimensional poverty in the United States

Dimensions Stiglitz et al. (2009)	Indicators	Thresholds
Health	Disabilities	Two or more out of six disabilities: hearing, vision, cognition, ambulation, serious difficulty with self-care (e.g., bathing and dressing), or performing independent tasks (e.g., shopping)
Education	High school education	Not having received at least a high school diploma
Economic Security	Health insurance	Lack of any type of health insurance; public or private
Std. of Living	Housing costs as a percentage of household income	Severe housing burden: monthly owner costs or gross rent in excess of 50% of household income
Social Connections	English fluency	Lives in a household where no person, 14 and over, speaks English only or speaks a language other than English at home and speaks English very well
Housing Quality	Number of persons per room in a housing unit	Overcrowding: unit has more than one occupant per room

WHAT THE ACS IS MISSING…

- ACS missing data – Qualitative methods
- Lack of political voice and governance
- Personal activities
- Household assets or material possessions
- Membership in organizations and relationship with neighbors