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The causal impact of SNAP-accepting stores on health-related quality of life in Tennessee
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# The causal impact of SNAP-accepting stores on health-related quality of life in Tennessee



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### Introduction

- Investigates the broader impacts of SNAP store participation on HRQoL in Tennessee.
- Expands focus beyond traditional outcomes like diet and obesity to include overall well-being.

# Significance

- SNAP federal expenditure increased from \$63 billion in 2019 to \$145 billion in 2023 (Edwards, 2023).
- Essential for understanding SNAP's potential benefits beyond food security, improving diet quality and obesity.

## **Related Literature**

- Previous studies focused on associative relationships between SNAP and health outcomes (Blumenthal et al., (2012; Rivera et al., 2019).
- Limited research using causal inference to explore SNAP's impact on broader health metrics (Gregory & Deb, 2015; Meyerhoefer & Pylypchuk, 2008).

### Data

- Utilizes USDA's SNAP Retailer Locator Dataset and HUD USPS Zip Code Crosswalk Files.
- Combines store locations with demographic data from American Community Surveys.

# **Key Results**

- SNAP Store Decline: Notable drop in SNAP-accepting convenience stores from 2010 to 2022, highlighting reduced accessibility.
- Health Improvements: Across all socioeconomic groups, there was a steady decrease in days reported with poor mental and physical health.
- Stability in Alternatives: Little to no change in the availability of farmers market and specialty stores accepting SNAP.

# Model (de Chaisemartin and D'Haultfoeuille, 2020)

$$Y_{it} = \alpha_i + \delta_t + \beta_1 D_{it} + \beta_{\gamma} X_{it} + \epsilon_{it}$$

 $Y_{it}$ :Summary of Health status measured by HRQoL.

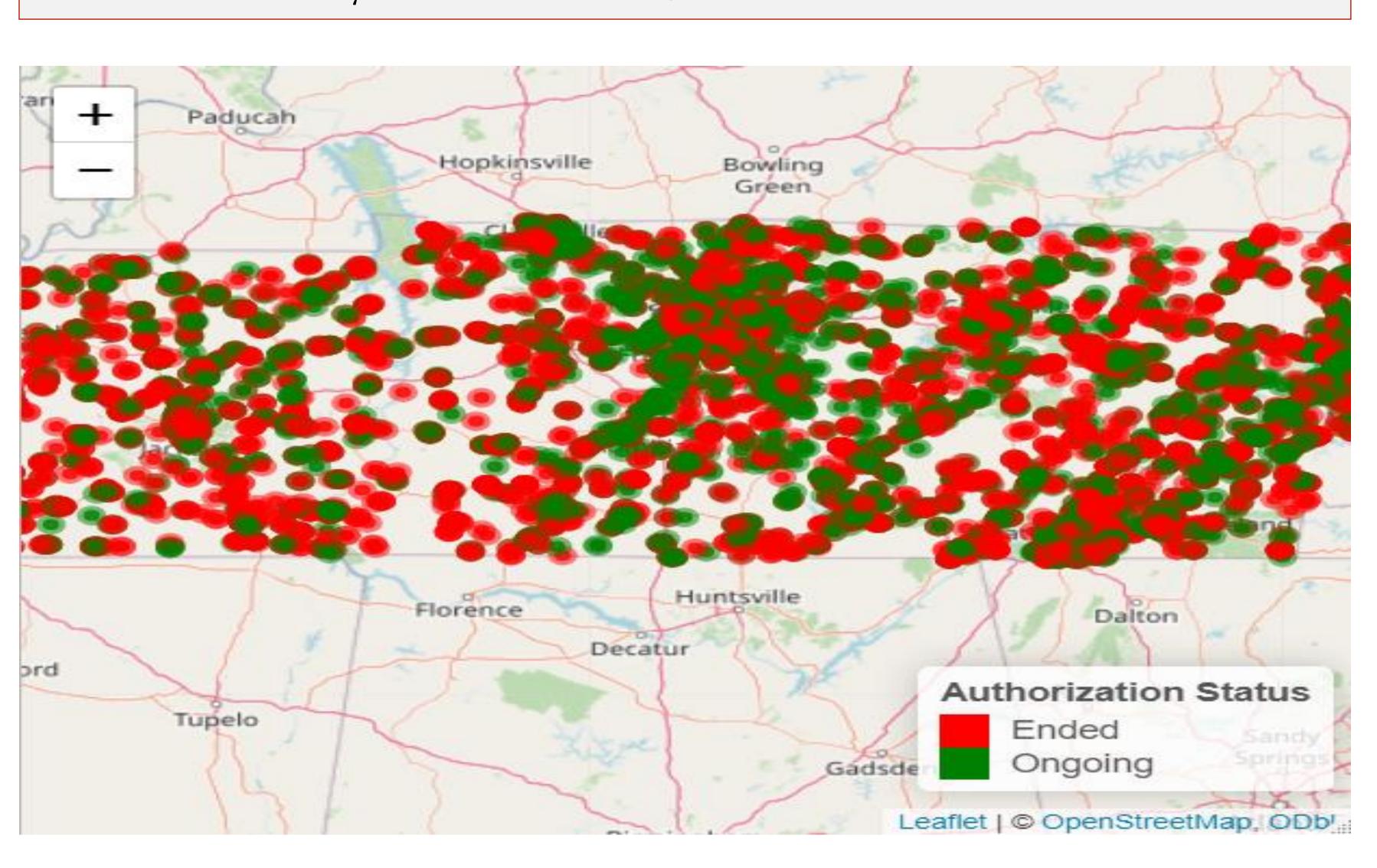
 $\alpha_i$ : Census tract fixed effects.

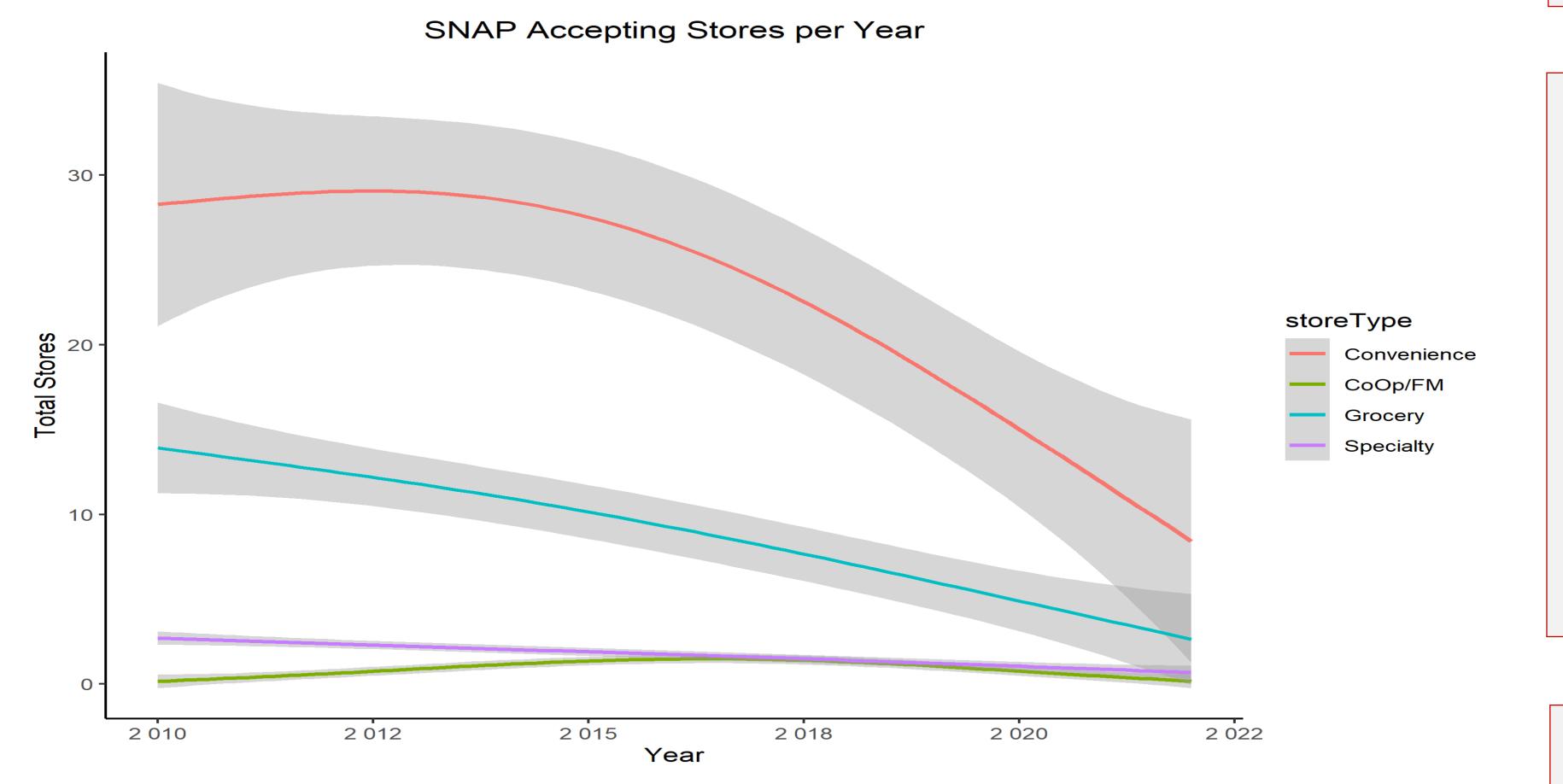
 $\delta_t$ : Time fixed effects.

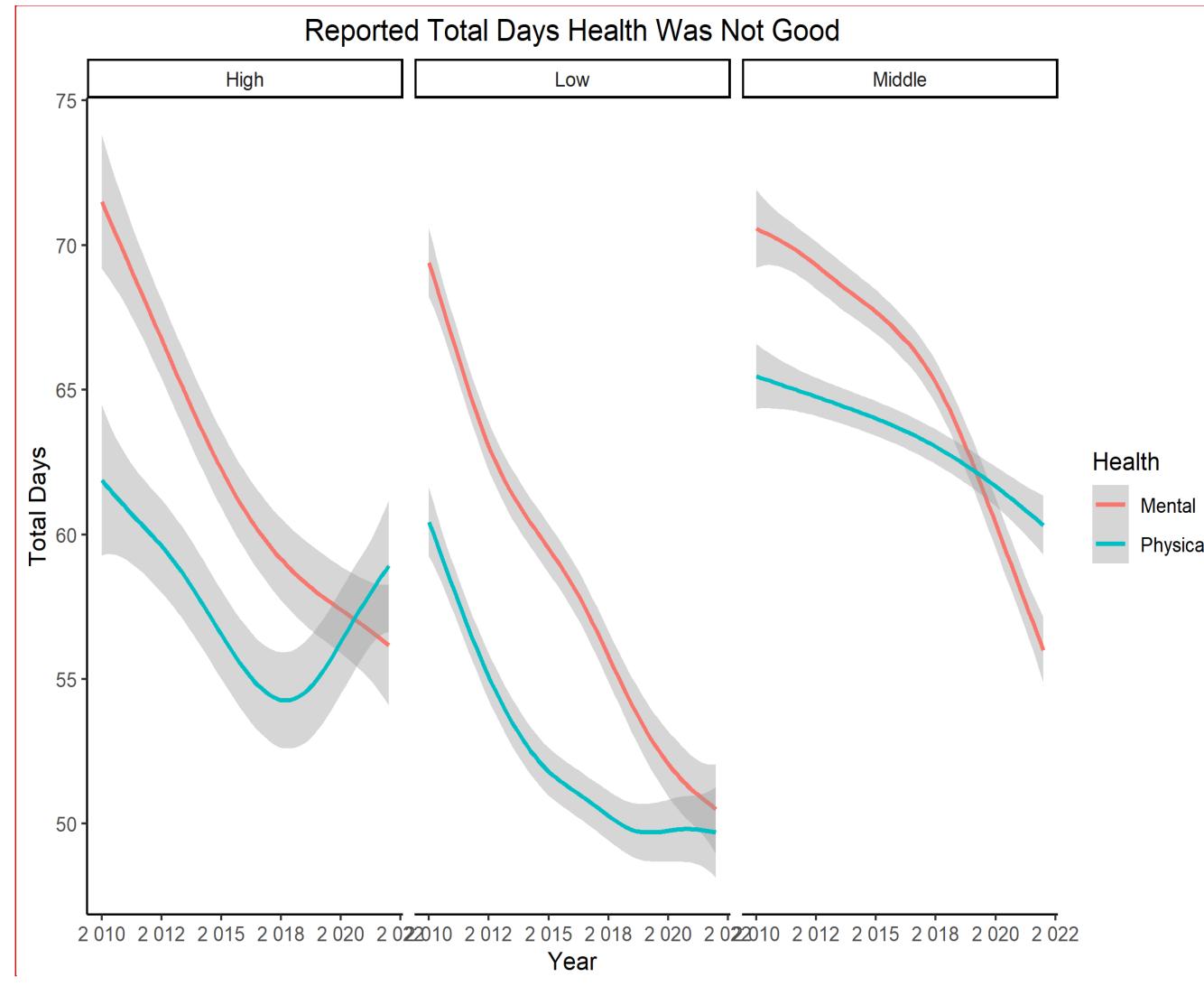
 $D_{it}$ : Binary treatment indicator (1 if census tract experienced an increase in stores accepting SNAP, 0 otherwise).

 $X_{it}$ : Control covariates.

 $\beta_{\gamma}$ : SNAP participatory causal ATE on HRQoL.







# **Conclusions and Policy Implications**

- Resilient Health Outcomes: Despite fewer SNAP stores, health improvements could suggest shifts in consumer behavior or increased use of alternative health resources.
- Access Challenges: The sharp drop in SNAP-accepting convenience stores could highlight food access concerns for low-income groups, requiring policy action.
- Strategic Health Promotion: Enhanced health education and support for varied food sources are crucial to sustain health gains amid declining traditional SNAP venues.

# Further Analysis: Difference-in-Differences (DiD)

- Policy Impact Assessment: Use DiD to evaluate how changes in SNAP store availability affect health outcomes, accounting for other policies and economic factors.
- Regional Comparisons: Analyze how health impacts vary across Tennessee regions with different trends in SNAP store declines.
- Long-term Effects Study: Explore the delayed effects of reduced SNAP accessibility on health outcomes..

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