

Household Food Security and Women, Infants, and Children WICs Influence on Depression Rates



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Introduction

- Food insecurity in the U.S. is more prevalent than ever as in 2021 there were 10.2% of households that were food insecure, accounting for nearly 5 million households (Martin).
- Research shows that food insecurity has caused individuals to become depressed and anxious (Wu et al.).
- There is WIC a program that was created to support families' food resources and education, aiding nearly 1 million participants a month (WIC).

Objective

To determine whether depression rates differ among households who received WIC or SNAP/food stamp benefits compared to those that did not.

Methods

We conducted a secondary analysis using the National Health and Nutrition Examination Survey (NHANES), using the following variables:

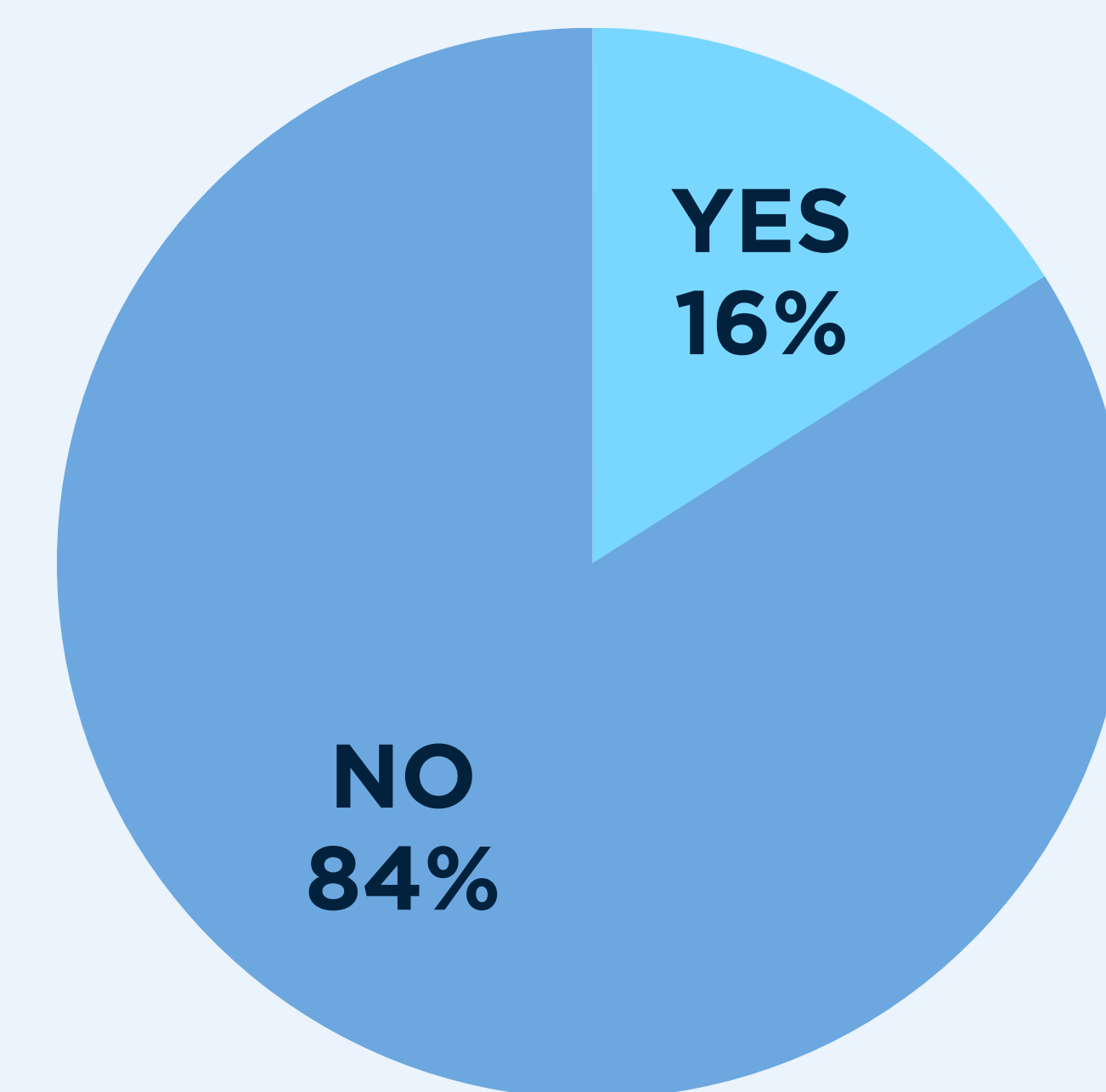
- Household WIC (HH WIC)
- Gender
- Race
- Household Food Security (HH FS)
- PHQ-9

The U.S. Food Security Model was used for data analysis.

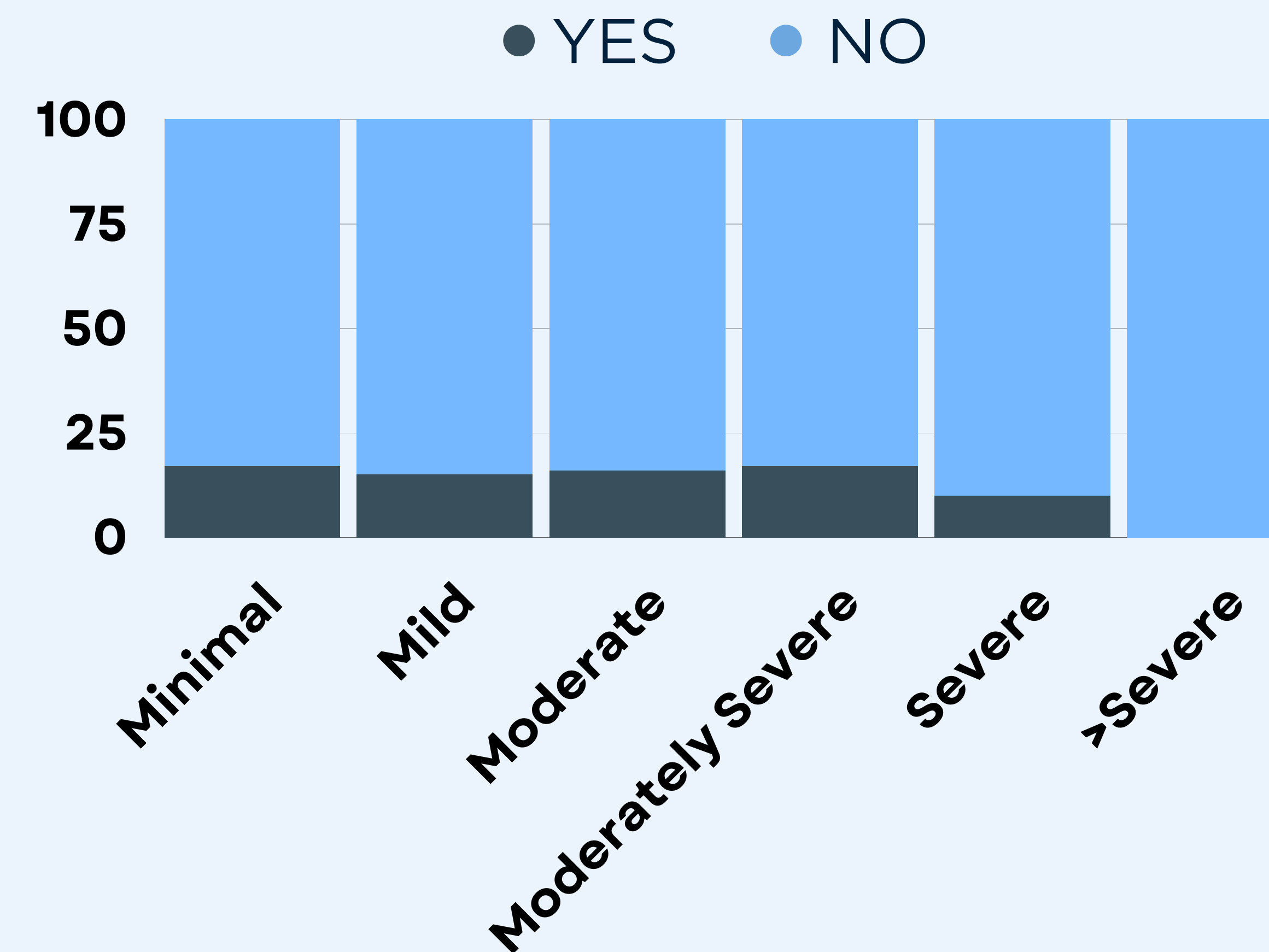
We used adjusted/unadjusted linear regression along with an ANOVA test to determine the difference of depression rates in HH receiving WIC or SNAP/ food stamp benefits compared to those that did not

Results

% of People Receiving Household WIC In the Last 12 Months

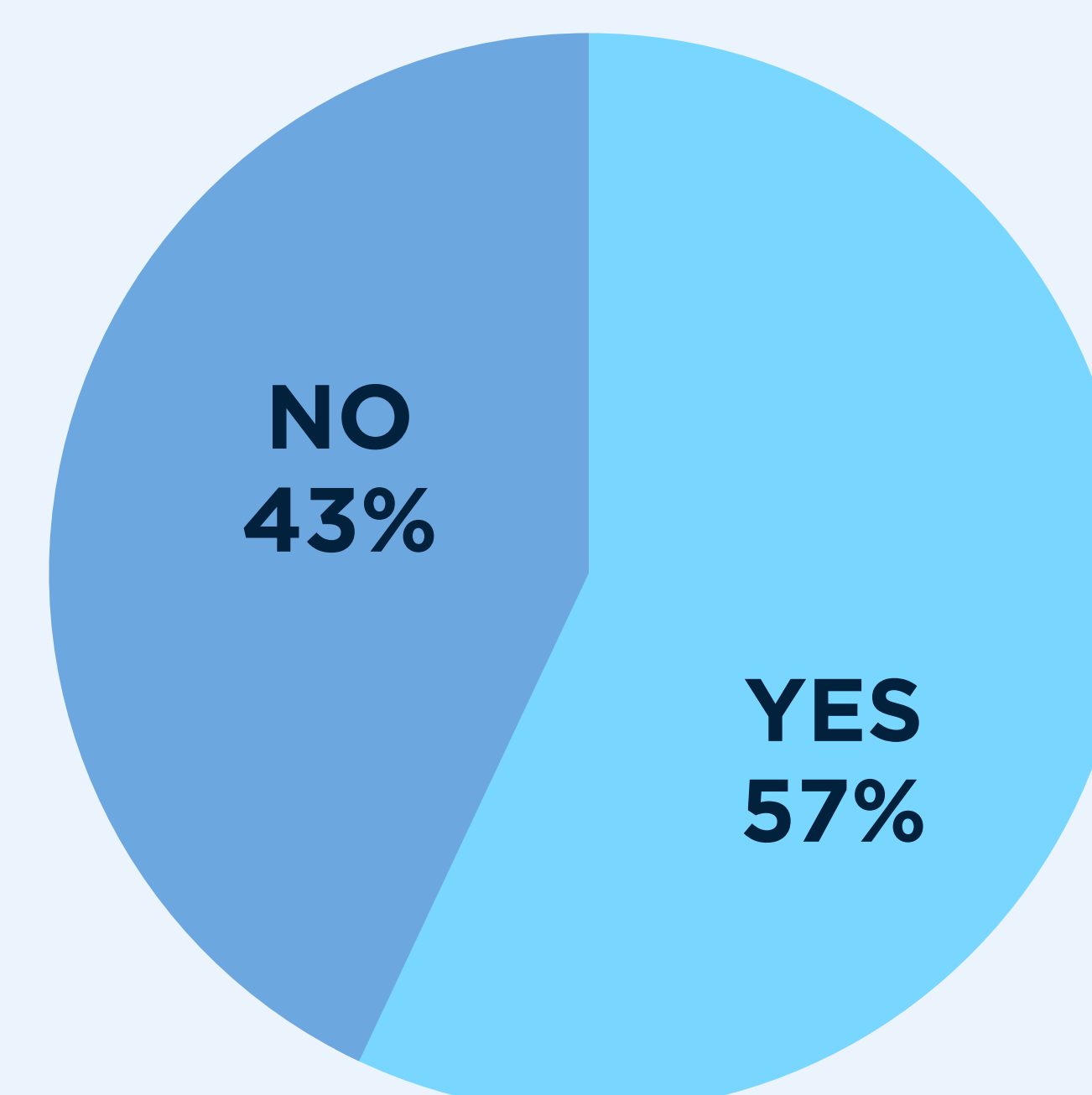


PHQ-9 Depression Scale Results for WIC Recipient's in the Last 12 Months

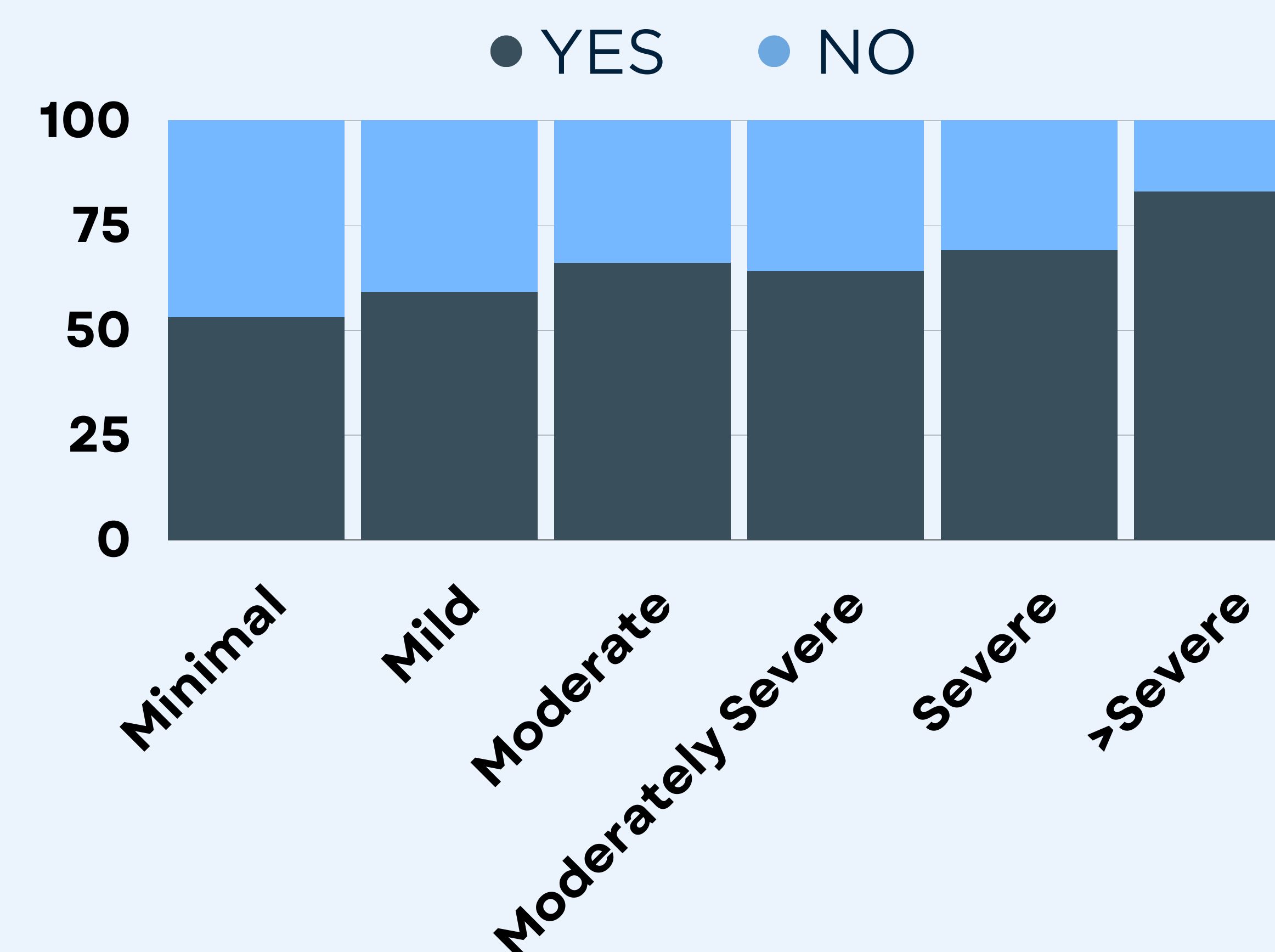


Statistical evidence was set at $P = 0.05$. Note, after controlling for socio-demographics and gender WIC was marginally significant at $P = 0.0517$.

% of People Receiving Household Food Security Benefits in the Last 12 Months



PHQ-9 Depression Scale Results for Food Security Benefit Recipient's in the Last 12 Months



Statistical evidence was set at $P = 0.05$. Note, after controlling for socio-demographics and gender food security resources were significant at $P = 1.43E-7$

Conclusion

The results show that households making use of resources to combat food insecurity experience depression at lower levels.

- Use of HH food security benefits like Supplemental Nutrition Assistance Program (SNAP) or food stamps had a significant effect on depression rates, more so than WIC.
- Race and gender accounted for very little difference in depression rates in households.
- We recommend more research be done with adolescents and how facing food insecurity affects their emotional wellbeing.

Implications

- More advertisement (billboards, flyers, mail ads, social media) for nutritional services/benefits around at-risk communities and where to find these resources.
- Implementing free mental health counseling sessions or support groups usage to households in low socioeconomic communities.

References

Martin, A. Food Security and Nutrition Assistance. U.S. Department of Agriculture. 2022, Economic Research Service. <https://www.ers.usda.gov/data-products/ag-and-food-statistics-charting-the-essentials/food-security-and-nutrition-assistance/#:~:text=In%202021%2C%2089.8%20percent%20of,had%20very%20low%20food%20security.>

Wu, Zheng; Schimmele, Christoph M. Food Insecurity and Depression. *Sociological Perspectives*. 2006; Vol. 48(4). DOI:10.1525/sop.2005.48.4.481.

Women, Infants & Children (WIC). California Department of Public Health. 2022. <https://www.cdph.ca.gov/Programs/CFH/DWICSN/Pages/AboutWIC/ProgramOverview.aspx#:~:text=Contact%20Us-,WIC%20Program%20Overview,million%20participants%20statewide%20each%20month.>