

Using the Current Population Survey (CPS-ASEC) to Estimate the Ill or Disabled U.S. Population

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Introduction

In 2017, approximately 15 million U.S. adults were recorded as having an illness or disability ¹. Of those individuals, 23.5 % were poor according to the supplemental poverty measure (SPM). Comparatively, 10.1 % of non-disabled individuals fell below the same poverty threshold.²

There continues to be a disproportionate number of disabled adults in poverty. Adults with a disability are more susceptible to income poverty than those without a disability, and have additional expenses when ill and unable to work.

Objective

Create an indicator that identifies ill or disabled individuals between the ages of 18 to 64 to analyze the differences in SPM rates by family type.

Use the SPM to determine the most influential government aid programs for families with an identified ill or disabled adult.

Method

Why use the SPM?

The SPM is an extension of the OPM that accounts for governmental aid received in both cash and non-cash form, including taxes and major nondiscretionary expenses.³

I used the SPM family definition to create three unit categories; (i) single person, (ii) families without children and (iii) families with children. The SPM definition of family is broader than the OPM's definition thus, I use the former to capture a greater range of family structures and types.

Creating an Indicator

My indicator categorizes any adult with a disability or limiting health condition that may have an economically consequential impact. Using variables from the CPS ASEC ⁴, I identify adults who either (i) self-reported a disability, (ii) were receiving benefits for their health condition, or (iii) noted being out of the workforce, unemployed or missing work due to an illness or disability.

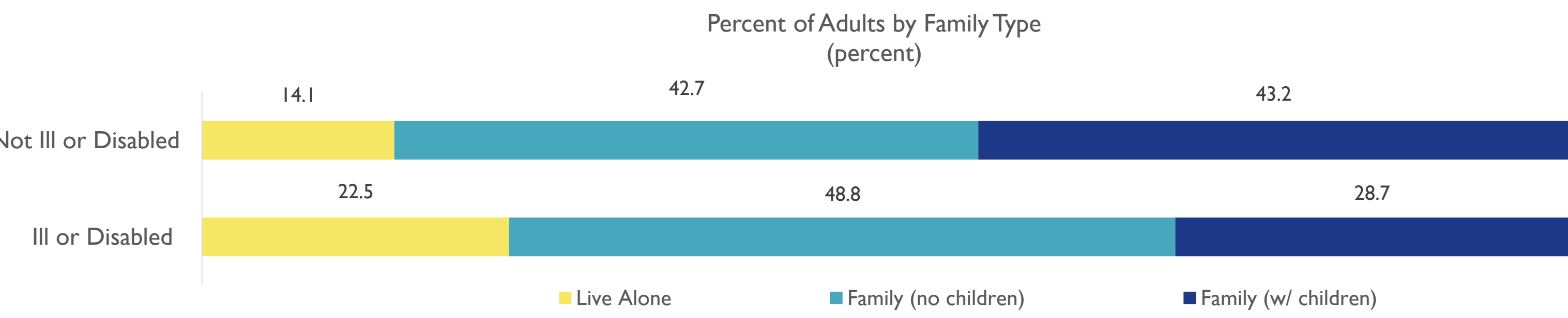
Results

Analyzing the poverty rates of ill or disabled adults by family type allows us to compare the susceptibility of those who live on their own, and thus are unable to share resources, to those who live in families.

Characterizing Ill or Disabled Adults by Family Type

Figure 1 illustrates the percentage of ill or disabled adults who live in each of the three family types. Like adults without an illness or disability, most with either condition live in families without children (48.8 percent). However, compared to adults without either condition, more adults with an illness or disability live alone and fewer live in families with children.

Figure 1
Comparing the Supplemental Poverty Rates of Ill or Disabled Adults: 2017



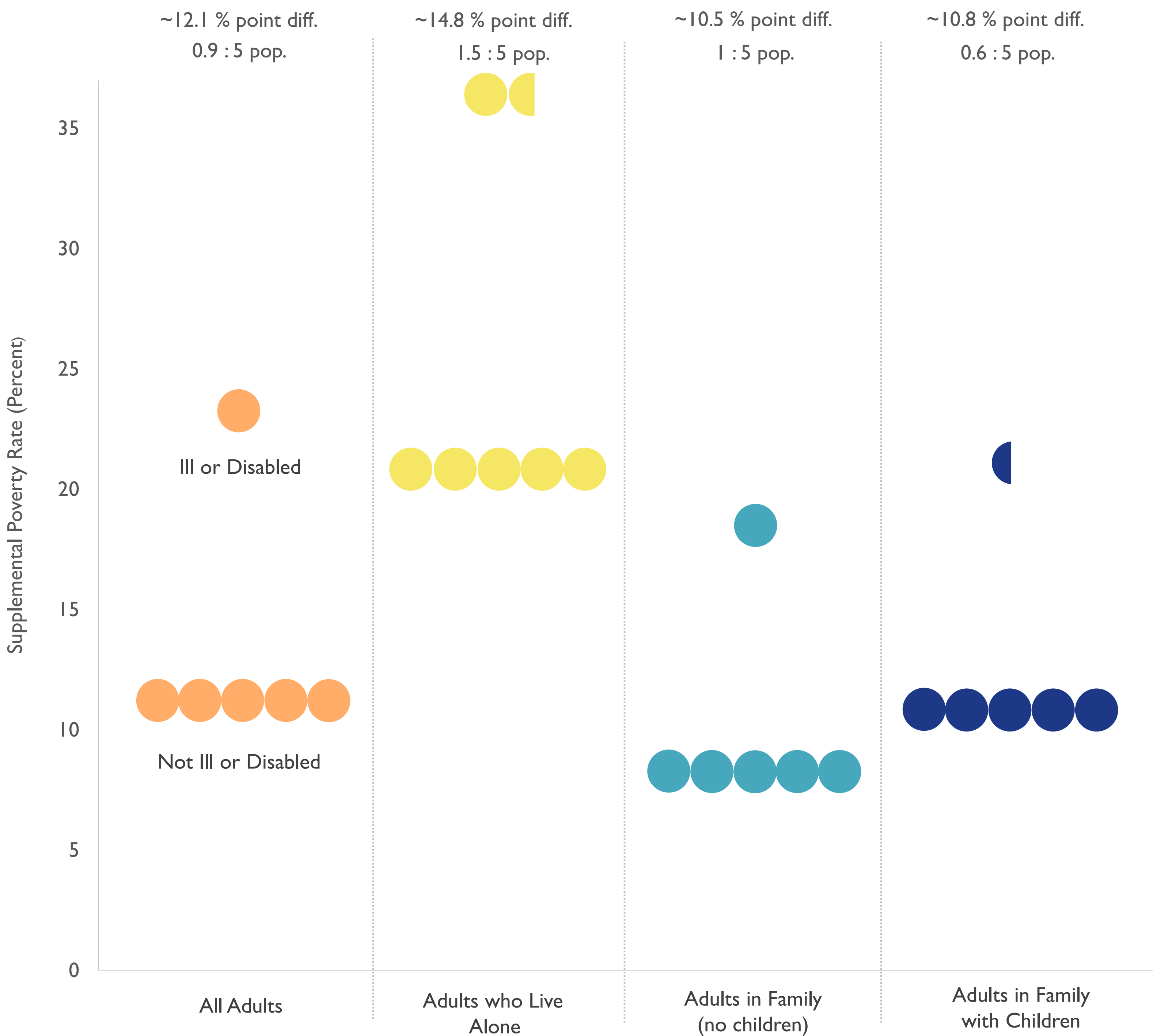
Data Source: Current Population Survey, 2017, IMPUS-CPS, University of Minnesota, www.ipums.org

References

1. Semega J.L, Fonenot K. R. & Kollar, M.A. (2018). *Income and Poverty in the United States: 2017*. U.S. Census Bureau. September.
2. Fox L. (2017). *The Supplemental Poverty Measure: 2017*. U.S. Census Bureau. September
3. Provencher A. (2011). *Unit of Analysis for Poverty Measurement: A Comparison of the Supplemental Poverty Measure and the Official Poverty Measure*. U.S. Census Bureau. March.
4. Flood S., King M., Rodgers R., Ruggles S. & Warren J.R. *Integrated Public Use Microdata Series, Current Population Survey: Version 6.0* [Revision of (Ill&Disabled)]. Minneapolis, MN: IPUMS, 2018. <https://doi.org/10.18128/D030.V65.0>

Figure 2
Comparing the Supplemental Poverty Rates of Adults by Family Type: 2017

Sample only includes adults between the ages of 18 to 64.



Data Source: Current Population Survey, 2017, IMPUS-CPS, University of Minnesota, www.ipums.org

The graph above illustrates the differences in poverty rates of adults with and without an illness or disability. The last three columns illustrate the comparison of SPM rates by family type. Within each column, the circles serve as representations of the ratio of adults with an illness or disability to those without an illness or disability.

Figure 2 provides an overall comparison of the SPM rates between adults with and without an illness or disability. Overall, regardless of family type, a greater percentage of ill or disabled adults fell below the SPM's threshold.

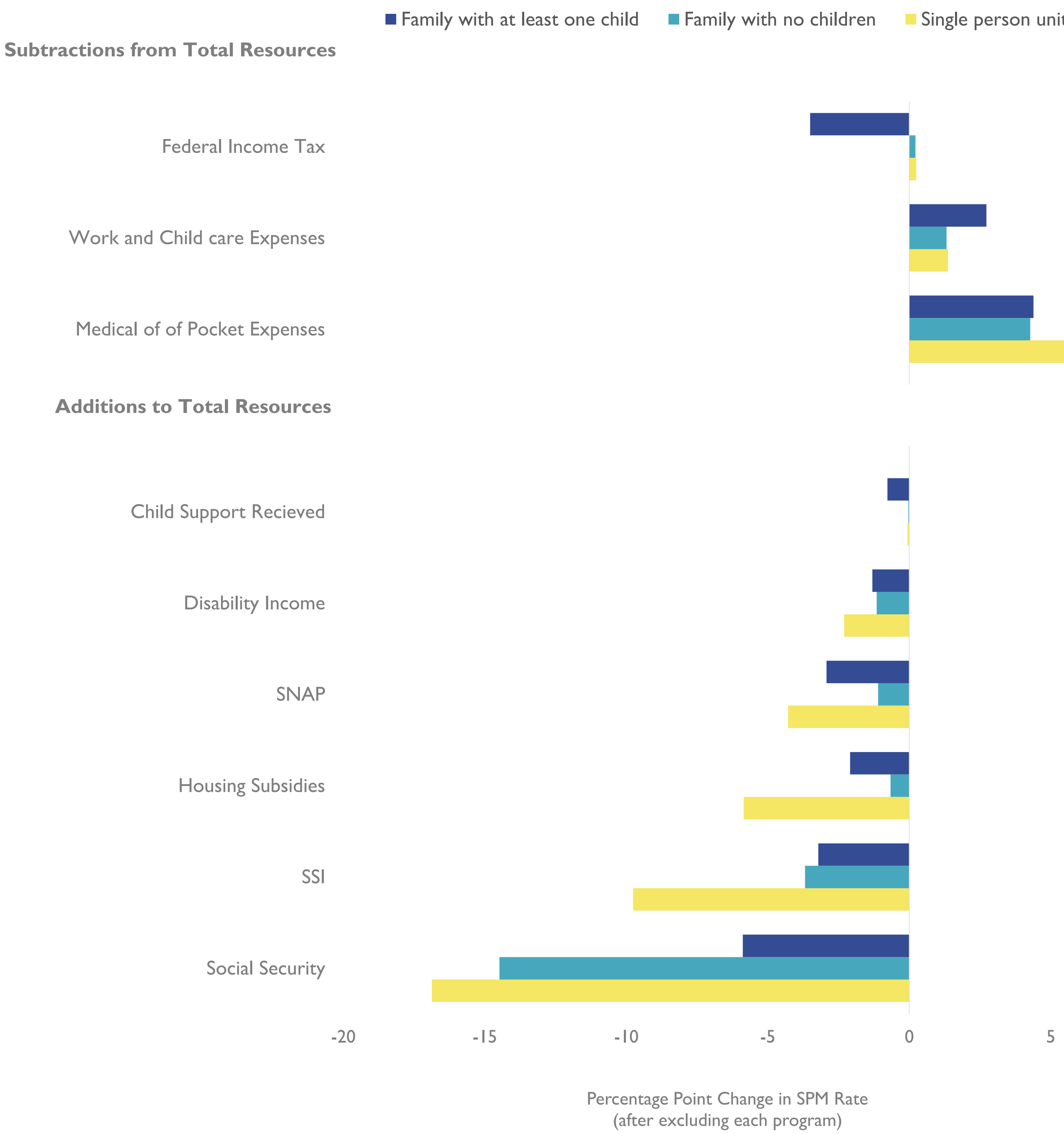
Analysis on Ill or Disabled Adults Using the SPM

Replicating an analysis from the Supplemental Poverty Report, I examine the most consequential additions and subtractions to total resources. ²

I calculated changes in the SPM by comparing the original rate to a recalculated rate, which excludes an element from each family's total resources. The difference in the SPM rate after each exclusion is illustrated in Figure 3. Social security had the largest effect, alleviating poverty for ill or disabled adults regardless of family type.

Figure 3
Effect of Individual Programs on the Supplemental Poverty Rate: 2017

Sample only includes family units who have an ill/disabled adult.



Data Source: Current Population Survey, 2017, IMPUS-CPS, University of Minnesota, www.ipums.org

Federal income tax is the only program whose direction differs by family type. This is due to the inclusion of refundable tax credits in this category.

Conclusion

Adults with an illness or disability are more likely to fall into poverty than those who are not. And, among those who are ill or disabled, a greater percentage who live alone fall below the poverty threshold.

In my analysis, I determine the most influential additions and subtractions to total resources that affect the SPM status of ill or disabled adults. My results shed light on which governmental programs are most influential and where additional aid may be needed.

I would like to sincerely thank Liana Fox at the U.S. Census Bureau for her guidance on this analysis.



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