Specialized Demographic Group Weighting Codebook Cooperative Election Study (CES)

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Overview

This codebook documents specialized demographic weights for five specific subpopulations in the Cooperative Election Study (CES) from 2016-2024. While the CES employs sophisticated weighting to ensure national representativeness, subpopulations within the sample may not accurately reflect their true demographic composition. These specialized weights address this limitation by calibrating specific demographic subgroups to match known population parameters.

The weights were created using a raking (iterative proportional fitting) procedure that maintains the CES's overall design while adjusting for demographic imbalances within each subgroup. The specialized weights should be used when analyzing the following populations:

- Blood donors
- Crime victims
- Military personnel
- Federal employees
- College students

Methodology

The specialized weights were created using the following process:

1. The original CES weights were used as the starting point
2. External benchmark data was obtained for each subpopulation
3. A raking procedure was implemented to adjust weights on key demographic dimensions
4. Convergence criteria of 0.2% deviation from targets was established
5. A weight cap of 15 was applied to prevent extreme weights
6. Final weights were normalized to have a mean of 1.0

The raking procedure iteratively adjusted weights across multiple demographic dimensions simultaneously until sample proportions matched target populations within the specified tolerance. This preserves the political and demographic balancing of the original CES weights while making targeted adjustments for these specialized populations.

Variable Documentation

Variable Name	Type	Description
case_id	Character	Unique respondent identifier that matches the CES case_id variable
year	Numeric	Survey year (2016-2024)
blood_donor_weight	Numeric	Specialized weight for blood donors. Available for 2018-2024. Weight is only non-missing for respondents who reported donating blood.
crime_victim_weight	Numeric	Specialized weight for crime victims. Available for 2016-2024. Weight is only non-missing for respondents who reported being crime victims.
military_weight	Numeric	Specialized weight for military personnel. Available for 2016-2024. Weight is only non-missing for respondents who reported military status (milstat_1 = 1).
fed_employee_weight	Numeric	Specialized weight for federal employees. Available for 2022-2024 only. Weight is only non-missing for respondents who reported working in the federal government (industry = 16).
student_weight	Numeric	Specialized weight for college students. Available for 2020-2024 only. Weight is only non-missing for respondents who reported being a student (employ = 8) or enrolled in education (student = 1 or 2).

Target Dimensions by Group

Blood Donors

- **Years available:** 2018-2024
- **Target dimensions:**
  - Gender: Men, Women
  - Race: White, Black, Hispanic, Asian, Other
  - Age: 18-24, 25-64, 65+
- **Data source:** America's Blood Centers

Crime Victims

- **Years available:** 2016-2024
- **Target dimensions:**

  - Gender: Male, Female
  - Race: White, Black, Asian, Other
  - Age: 18-20, 21-25, 26-30, 31-35, 36-40, 41-45, 46-50, 51-55, 56-60, 61-65, 65+
- **Data source:** FBI Uniform Crime Report

Military Personnel

- **Years available:** 2016-2024
- **Target dimensions:**
  - Gender: Man, Woman
  - Race: White, Black, Asian, Other
  - Hispanic ethnicity: Hispanic, Non-Hispanic
  - Age: 18-25, 26-30, 31-35, 36-40, 41+
  - Education: Less than HS, HS or some college, Associates, Bachelors, Post-graduate
- **Data source:** Military OneSource statistics

Federal Employees

- **Years available:** 2022-2024 only
- **Target dimensions:**
  - Gender: Man, Woman
  - Education: No HS, HS, Some college, College+
  - Race/ethnicity: White, Black, Hispanic, Other
  - Age: Under 30, 30-49, 50+
  - Region: DMV (DC, Maryland, Virginia), Other
- **Data source:** FedScope/OPM data

College Students

- **Years available:** 2020-2024 only
- **Target dimensions:**
  - Gender: Men, Women
  - Race: White, Black, Hispanic, Asian, Other
  - Age: 18-22, 23-29, 30-39, 40+
- **Data source:** American Community Survey (ACS) 2023

Usage Instructions

To properly use these specialized weights:

1. Merge the weights file with your CES dataset using `case_id` and `year`
2. Filter to the specific subpopulation of interest
3. Use the corresponding specialized weight variable instead of the standard CES weight

Important: Apply specialized weights only when analyzing their corresponding subpopulations. For example, use `blood_donor_weight` only when analyzing blood donors, not when analyzing the full sample or other subgroups.