

State of Aging, Disability, and Family Caregiving in Allegheny County Detailed Survey Methods

Overview and sponsorship

The *State of Aging, Disability, and Family Caregiving in Allegheny County* study involved telephone interviews with nearly 1,300 adults age 55 and older in Allegheny County. It was sponsored by the Henry L. Hillman Foundation. The survey was conducted by the University Center for Social & Urban Research (UCSUR) at the University of Pittsburgh in collaboration with the Health Policy Institute (also at the University of Pittsburgh).

Target population

The target population for the survey was non-institutionalized English-speaking adults age 55 and older living in Allegheny County.

Field operations

Data were collected between November 10, 2021 and May 1, 2022 using computer-assisted telephone interviewing (CATI) by trained UCSUR interviewers. Interviewers were monitored continuously for quality control by field supervisors. Up to 6 attempts were made on different days at varying times of the day on each phone number before classifying the sample point as a non-contact. The survey took an average of 60 minutes to complete and was approved by the Institutional Review Board of the University of Pittsburgh. Participants were paid \$15 for completing the survey.

Survey instrument

The survey covered a variety of topics including income, work and retirement; neighborhoods and housing, transportation, physical health, functional status and disability, health care access, health behaviors, mental health, social support / health, elder mistreatment, family caregiving, senior service use, internet and technology use, and socio-demographic variables. The survey also includes some dimensions of the impact of the recent COVID-19 pandemic on the lives of older adults.

Sample design and outcomes

A total of 1,299 adults age 55 and older in Allegheny County completed telephone surveys lasting approximately 60 minutes. The sample for the survey came primarily from the UCSUR research registry, which consists of approximately 8,000 local residents who have agreed to be contacted for surveys and research studies. Registry members were recruited from local population-based telephone surveys conducted by UCSUR over the past 11 years. The studies used to recruit registry members included random sample surveys, surveys using community-based demographic targeting, and volunteer samples. For this survey, we sampled those age 55 and older according to the registry database. We oversampled registry members with the following characteristics to ensure adequate representation: (1) minority (non-White) race, (2) high school education or less, (3) family caregivers, and (4) males. To supplement the registry sample, we also surveyed older adults using randomly selected telephone numbers from the County likely to reach older adults. The age-targeted community samples, purchased from Dynata, Inc., included roughly equal numbers of landline and cell numbers.

Of the 1,299 completed surveys, 1,131 (87%) were from the registry, and 168 (13%) were from the random community calls. In order to obtain the 1,131 completed registry surveys, UCSUR staff called 3,277 total phone numbers. We discovered that 322 numbers were ineligible / out of service. Among the remaining 2,955, only 210 directly refused to complete the survey. However, the remaining 1,614 were never contacted. Thus, the overall registry response rate was $1131 / 2,955 = 38.3\%$, with most

non-response due to inability to contact. The age-targeted community sample is much less efficient than registry sample, as it consists of telephone numbers simply more likely to belong to those age 55 and older who had not been previously contacted. In order to obtain the 168 age-targeted completes, UCSUR staff called a total of 5,800 numbers. We found that 964 numbers were ineligible / out of service. Among the remaining 4,836, refusals to participate were obtained from 882. The remaining 3,630 were never contacted, and thus eligibility (age 55 or older) was not clearly established. In sum, the overall age-targeted cooperation rate was $168 / (168 + 882 \text{ refusals}) = 16\%$. The overall response rate assuming all non-contacted were age-eligible (i.e., the minimum response rate) was $168 / (168 + 882 + 3630) = 3.5\%$. Assuming only half of the non-contacted were age-eligible, the overall age-targeted sample response rate was $168 / (168 + 882 + 1815) = 5.9\%$. Comparisons on all key survey variables revealed very few significant differences between the registry sample and the age-targeted sample, increasing confidence in their combination for analyses.

Sample description

The sample (total n = 1,299) included 320 disabled older adults (defined below), 364 family caregivers age 55 and older (also defined below), and 247 Black older adults. Survey respondents ranged in age from 55 to 97. Thus, we have representation from four age cohorts. We surveyed 71 adults age 55-57, who represent “generation X”; 884 adults age 58-75, the “baby boomers”; 332 adults age 76-93, the “silent generation”; and 9 age 94-97, surviving members of the “greatest generation”. The survey estimates presented in this report are weighted using age, sex, race, and education level to match Allegheny County population figures for those age 55 and older (see below). Table 1 shows survey sample socio-demographic characteristics, including unweighted sample sizes and percentages, and weighted percentages. The survey sample over-represented females, those over 65, the Black population, those with higher education levels, and those not currently employed.

Table 1: Survey sample demographics, unweighted and weighted

Demographic	Unweighted Sample Size	Unweighted %	Weighted %
Sex			
Male	464	35.7	44.5
Female	835	64.3	55.5
Age			
55-64	324	25.0	43.2
65-74	571	44.1	31.6
75 or older	401	30.9	25.2
Race			
Black	247	19.0	13.3
Non-Black	1052	81.0	86.7
Education			
High school graduate or less	254	19.6	42.6
Some college	449	34.6	25.2
Bachelor's degree or more	595	45.8	32.2
Annual Income			
\$24,999 or less	218	18.9	22.0
\$25,000 - \$49,999	303	26.2	24.2
\$50,000 - \$74,999	243	21.0	21.1

\$75,000 - \$99,999	162	14.0	12.6
\$100,000 or more	229	19.8	20.2
Employment Status			
Currently employed	363	28.0	33.7
Not currently employed	935	72.0	66.3

Survey Analysis.

As noted above, all estimates provided in the reports (unless otherwise noted) are weighted for age, sex, race, and education using population statistics obtained from the Census Bureau’s American Community Survey Five-year (2016-2020) Public use Microdata (PUMS) for Allegheny County (the latest available). The STATA statistical package iterative proportional fitting “raking” algorithm was used to construct the weights. Raking involves an attempt to adjust the weights in order to make the survey distributions on the included variables “mirror” the population to the greatest extent possible. That is, the final weighted marginal distributions on age, sex, race and education closely match the marginal distributions from the 2016-2020 Allegheny County ACS estimates for the 55 and older non-institutionalized population (see Table 1). This standard survey methodology is a way to statistically adjust survey estimates in order to increase accuracy and reduce bias due to differential non-response across demographic sub-groups.

Survey analyses in this report focus on descriptive statistics to provide overall estimates for the population of adults age 55 and over in Allegheny County. In addition, results are broken down by socio-demographic characteristics including sex, age (55-64, 65-74, 75 and older), race (Black, non-Black [primarily White]), education (high school or less, some college, bachelor’s degree or higher), and household income (<25K, 25K-50K, 50K-75K, 75K-100K, 100K or more). In addition, survey variables are examined by whether the older adult lives alone, disability status, and family caregiving status. We also focus on sub-groups most at risk (i.e., scoring significantly higher / lower) on key survey indicators as a way to potentially target policy and interventions. Many of the key variables are individual survey items. Others are multi-item scales or indicators derived by combining individual items. These scales are described in the relevant sections of the report. Where available and informative, we also compare older adults in Allegheny County with those from Pennsylvania and / or the U.S. Where questions were repeated from 2014, we examine changes over time in the overall sample and, separately, for the Black and non-Black populations.

Given their importance as sub-groups in this project, there are expanded analyses of the older adults with disability and family caregiver populations. In addition to providing more in-depth analyses, these sections provide overviews of where the disabled and family caregivers differ significantly (i.e., stand out) from the non-disabled and non-caregivers. In addition, disabled and family caregiver sub-groups most at risk for negative outcomes are identified.

Three factors were used to define “**disability**” in this report: (1) report needing the help of other persons with personal care activities (eating, bathing, dressing, toileting, mobility); (2) report needing the help of other persons with routine home activities (shopping, laundry, housework, money management, taking medications, transportation outside the home); and (3) report “a lot of difficulty,” or “cannot do at all” on any of the following (World Health Organization Washington Group measure): seeing, even if wearing glasses; hearing, even if using a hearing aid; walking or climbing steps; remembering or concentrating; self-care such as washing all over or dressing; and communicating, understanding or being understood. The “disabled” were respondents **meeting any of the three criteria**.

“Family caregivers” were defined as those answering yes to the following question (caregiver screener from the Behavioral Risk factor Surveillance System [BRFSS] caregiver module): *During the past 30 days, did you provide regular care or assistance to a friend or family member who has a health problem or disability?* Note that “family caregiving” is broadly defined to include care to individuals with health problems or disability of all ages, including non-relatives. While we assume that the majority of the caregivers are unpaid, some may be receiving compensation for their efforts, but this was not a focus of this study.