Household Composition, Resource Use, and the Resilience of Older Adults Living in the Community During COVID-19

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Presenter: Samara Scheckler
The research reported herein was performed pursuant to a grant from the U.S. Social Security Administration (SSA) funded as part of the Retirement and Disability Consortium. The opinions and conclusions expressed are solely those of the author(s) and do not represent the opinions or policy of SSA or any agency of the Federal Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of the contents of this report. Reference herein to any specific commercial product, process or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply endorsement, recommendation or favoring by the United States Government or any agency thereof.
Relationship Between Housing Composition Types and Older Resident Resilience

Resilience: Ability to adaptively meet basic health and welfare needs through a period of disruption

Household composition types
- Living alone
- Living with a spouse
- Living in a co-resident arrangement

Potential pathways of effect
- Financial resources
- Health care and assistance resources

Possible observable outcomes
- Physical and mental health metrics
- Rationing and signals of financial strain

Actionable policy
Social welfare programs can reduce risks associated with household type (Mudrazija et al. 2020, Tai & Treas 2009)
Factors that Increase Resilience May Systematically Differ by Household Composition Type

• Finances
  • SSI recipients living alone have higher poverty rates (Koenig & Rupp 2003) and older adults living alone experience greater precarity (Portacolone 2013).
  • Partner households are more economically efficient (Chevan 1996) as are co-resident households (Mutchler & Baker 2009, Waehrer & Crystak 1995).

• Physical and mental health
  • Older residents in partner households tend to have better physical and mental health (Warner & Adams 2012, Wong & Waite 2016)
  • Living alone is associated with higher mortality rates (Kandler et al. 2007, Staehelin et al. 2012) as well as social isolation and loneliness (Finlay & Kobayashi 2018)
    • Leading to higher rates of mobility decline, reduced cardiovascular health, and increased mortality (Holt-Lunstad et al. 2015, Pantell et al 2013)
  • Personal Assistance
    • Co-Resident households create more opportunities for care exchange (Keene & Baston 2010)
    • Health and care needs of one partner can impact the wellbeing of the co-residing partner (Shen, et al. 2015)
Household Composition and Resilience During COVID-19

THE HOUSEHOLD UNIT MAY HAVE PLAYED A PARTICULARLY PROMINENT ROLE DURING THE PANDEMIC

• Household size
  • Crowding increased transmission risk (Karmakar et al. 2021, Nafilyan et al. 2021).

• Composition of co-resident households: Disparate impacts by race and ethnicity
  • Black adults at high health risk were more likely to live with a health sector worker and
  • Hispanic adults at high risk of severe illness lived with residents less likely to work virtually (Selden & Berdahl 2020).

• Loneliness
  • Loneliness is associated with mortality for older adults living alone (O’Suilleabhain et al. 2019). Isolation was higher for older adults living alone during the pandemic. Though loneliness and isolation aren’t strictly linked, they are related experiences (Kasar & Karaman 2021).
Research Questions

1. Is household composition systematically associated with factors of resilience for older adults, such as resources that help them meet financial, health, mental health, and personal assistance needs?

2. How did the older adult pandemic experience, particularly related to health and welfare, differ by household type?

Hypothesis:
We expect that co-resident households will experience more disruptions during the pandemic and older adults living alone will have more unmet needs.

Policy implications:
Might social welfare policy target household composition types which are less resilient?
Project Methods
Data used in analysis

Health and Retirement Study

Description
- Panel study surveyed every 2 years
- Respondents 50 and older and their partners
- 20,000 respondents per wave
- New birth cohorts added every third waves (6 years)

HRS Core: waves 2010 - 2020

HRS: COVID-19 Survey Supplement
HRS added COVID-19-related questions to the 2020 core interview and to the psychosocial self-administered questionnaire. The survey included 3,266 respondents from a subsample of households who were originally assigned to enhanced face-to-face interviewing, in two random half groups, one starting in June 2020 and one in September 2020.
Measures of Resilience

DID THE ABILITY TO MEET HEALTH AND WELFARE NEEDS DURING THE PANDEMIC DIFFER BY HOUSEHOLD TYPE?

• Adequate and stable financial resources.
  • Household can meet food, medication, and housing costs.
  • Income remains relatively stable through the pandemic.

• Adequate health and mental health resources.
  • Assistance received commensurate with health functional ability.
  • Stable mental health trends.
Household Type Categories

Major Household Type Categories

- Single-Person Household
- Spouse/Partner Only
- Co-Residence

2018 Sample Distribution by Category

<table>
<thead>
<tr>
<th></th>
<th>Single</th>
<th>Partner</th>
<th>Co-Residence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Number Households</td>
<td>3948</td>
<td>3391</td>
<td>4094</td>
</tr>
<tr>
<td>Percent</td>
<td>35</td>
<td>30</td>
<td>36</td>
</tr>
</tbody>
</table>

2010-2018 Sample Distribution by Category

<table>
<thead>
<tr>
<th>Household Composition (Number)</th>
<th>Age 50-64</th>
<th>Age 65-74</th>
<th>Age 75 and Over</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Live Alone</td>
<td>Partner</td>
<td>Co-Resident</td>
</tr>
<tr>
<td>Live Alone</td>
<td>5,408</td>
<td>6,988</td>
<td>10,426</td>
</tr>
<tr>
<td>Partner</td>
<td>23</td>
<td>36</td>
<td>41</td>
</tr>
<tr>
<td>Co-Resident</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Demographics: Race and Ethnicity

WITH ADVANCED AGE, A LARGER SHARE OF BLACK OLDER ADULTS LIVE ALONE

JCHS tabulations of Health and Retirement Study Data 2010-2018.
Demographics: Home Ownership Rates

PARTNER HOUSEHOLDS WERE MOST LIKELY TO OWN THEIR HOMES; MORE SINGLE-PERSON HOUSEHOLDS WERE RENTERS

Source: JCHS tabulation of 2010-2018 Health and Retirement Study data.
Finances: Income and Social Security Program Benefits

PARTNER HOUSEHOLDS WERE HIGHEST EARNING & BIGGEST SOCIAL SECURITY BENEFICIARIES

JCHS tabulations of Health and Retirement Study Data 2010-2018.
## Health: Functional Ability

A significant share living alone experienced functional difficulties.

### Share Needs/Receives

<table>
<thead>
<tr>
<th></th>
<th>Needs Help with At Least One ADL</th>
<th>Receives Help with at Least One ADL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Live Alone</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Co-Resident</td>
<td></td>
<td></td>
</tr>
<tr>
<td>65-74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Live Alone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Co-Resident</td>
<td></td>
<td></td>
</tr>
<tr>
<td>75 and Over</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Live Alone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Co-Resident</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: JCHS tabulation of 2010-2018 Health and Retirement Study Data.
Takeaway: Baseline Experience by Household Type

Singe-Person Households
- Lower income
- More likely to rent
- Least likely to receive functional assistance; more reliant on professional supports

Spouse or Partner Households
- Highest household income, more likely to be employed
- More likely to live in single-family home; be a homeowner
- Fewer functional difficulties

Co-Resident Households
- Proportionally more Black and Hispanic residents
- More likely to rent
- Most likely to receive assistance; more reliant on adult children for support
Pandemic Period Income and Finances Experiences
Pandemic Period Finances: Hardship

CO-RESIDENT AND SINGLE-PERSON HOUSEHOLDS EXPERIENCED HIGHER RATES OF FINANCIAL HARDSHIP IN 2020

Hardship in 2020 (Share)

Source: JCHS tabulation of 2020 Health and Retirement Study data.

Share Households with No Pandemic Hardship

<table>
<thead>
<tr>
<th>Living Alone</th>
<th>Living with Spouse/Partner Only</th>
<th>Living with Co-Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>76</td>
<td>61</td>
</tr>
</tbody>
</table>
CO-RESIDENT HOUSEHOLDS EXPERIENCED HIGHER RATES OF INCOME LOSS AND SPENDING INCREASE IN 2020, PRIMARILY DUE TO LOSS OF EARNINGS FROM WORK

Source: JCHS tabulation of 2020 Health and Retirement Study data.
Model Pandemic Period Income Change

*Since the start of the coronavirus pandemic, has your income gone up or down or stayed about the same because of the pandemic?*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Constant</th>
<th>By Wave</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household Composition</td>
<td>1- Alone, 2-Partner, 3-Co-Residence</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Age</td>
<td>Individual age, squared</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Race or Ethnicity</td>
<td>Individual is Black or Hispanic (indicator)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Tenure</td>
<td>1-Owner, 2-Renter, 3-Lives with another</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>Categorical: Quintiles</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Base Wealth Liquid</td>
<td>Sum of liquid assets at first wave observed</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Base Wealth Illiquid</td>
<td>Sum of illiquid assets at first wave observed</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Health Insurance</td>
<td>Indicator for Medicare, Medicaid, or Veteran’s Administration</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Paid Help</td>
<td>Indicator for any professional helpers</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>ADL</td>
<td>Count: needs help walking, bathing, eating, toileting, transferring</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>IADL</td>
<td>Count: needs help meal prep, grocery shopping, phone, medication management, financial management</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
## Model 1: Pandemic-Related Income Change

INCOME WAS MORE STABLE IN PARTNER HOUSEHOLDS THAN CO-RESIDENT HOUSEHOLDS

Since the start of the coronavirus pandemic, has your income gone up or down or stayed about the same because of the pandemic?

\[ y_{it} = \alpha + \beta_1 \text{Household Comp}_i + \beta_2 X_{it} + \varepsilon_{it} \]

<table>
<thead>
<tr>
<th></th>
<th>Single-Person</th>
<th></th>
<th>Partner</th>
<th></th>
<th>Co-Resident</th>
</tr>
</thead>
<tbody>
<tr>
<td>No restrictions</td>
<td>(n=5,625)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Same</td>
<td>0.023</td>
<td>Increased</td>
<td>-0.006</td>
<td>Same</td>
<td>0.036*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fell</td>
<td>-0.016</td>
<td>Increased</td>
<td>-0.004</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Fell</td>
<td>-0.032*</td>
</tr>
</tbody>
</table>

* p<0.05, ** p<0.01, *** p<0.001

Source: Marginal effects of multinomial logistic regression of 2020 Health and Retirement Study data assessing whether income increased, fell, or stayed the same due to pandemic-conditions.
Pandemic Period Support and Assistance
Pandemic Period Support and Assistance

OLDER ADULTS LIVING ALONE RECEIVED FEWER HOURS OF ASSISTANCE IN 2020

MONTHLY ASSISTANCE (HOURS)

Model 2: Pandemic-Related Chore Support from Outside the Household

SINGLE-PERSON AND PARTNER HOUSEHOLDS WERE MORE LIKELY TO GET NEW SUPPORT

Because of the coronavirus pandemic, did anyone living outside your household, such as a parent, adult child, other relatives, or friends, help you [and your spouse/partner] with shopping for groceries, errands, rides, or chores?

\[ y_{it} = \alpha + \beta_1 \text{Household Comp}_i + \beta_2 X_{it} + \varepsilon_{it} \]

<table>
<thead>
<tr>
<th>Single-Person</th>
<th>Partner</th>
<th>Co-Resident</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=877</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.222*** (5.47)</td>
<td>-0.0167 (-0.37)</td>
</tr>
</tbody>
</table>

* p<0.05, ** p<0.01, *** p<0.001

Source: JCHS tabulations of 2020 Health and Retirement Study data.
# Model 3: Changes in Total Hours of Help Over Time

**BLACK OR HISPANIC OLDER ADULTS LIVING ALONE IN 2020 RECEIVED MANY FEWER HOURS OF ASSISTANCE COMPARED TO THOSE LIVING IN CO-RESIDENCE**

\[ y_{it} = \alpha + \beta_1(\text{Household Comp}_i \times \text{Year}_t) + \beta_2\text{Household Comp}_i + \beta_3\text{Year}_t + \beta_4X_{it} + \varepsilon_{it} \]

Analysis restricted to respondents who received any help, who had an income in the bottom 3 quintiles, and who identified as either Black or Hispanic.

Baseline category: Co-residents and the year 2010

<table>
<thead>
<tr>
<th></th>
<th>hours help</th>
<th>t statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lives Alone 2012</td>
<td>-8.931</td>
<td>(-0.35)</td>
</tr>
<tr>
<td>Lives Alone 2014</td>
<td>-28.64</td>
<td>(-1.19)</td>
</tr>
<tr>
<td>Lives Alone 2016</td>
<td>-17.58</td>
<td>(0.68)</td>
</tr>
<tr>
<td>Lives Alone 2018</td>
<td>-21.74</td>
<td>(0.85)</td>
</tr>
<tr>
<td><strong>Lives Alone 2020</strong></td>
<td><strong>-62.92</strong>*</td>
<td><strong>(2.43)</strong></td>
</tr>
<tr>
<td>Spouse/Partner 2012</td>
<td>-33.27</td>
<td>(1.00)</td>
</tr>
<tr>
<td>Spouse/Partner 2014</td>
<td>-32.31</td>
<td>(0.85)</td>
</tr>
<tr>
<td>Spouse/Partner 2016</td>
<td>-42.48</td>
<td>(1.16)</td>
</tr>
<tr>
<td>Spouse/Partner 2018</td>
<td>-25.28</td>
<td>(0.66)</td>
</tr>
<tr>
<td>Spouse/Partner 2020</td>
<td>-17.13</td>
<td>(0.39)</td>
</tr>
<tr>
<td>N</td>
<td>6735</td>
<td></td>
</tr>
</tbody>
</table>

\* p<0.05, ** p<0.01, *** p<0.001

\( t \) statistics in parentheses
Pandemic-Period Health & Financial Overview

Singe-Person Households

- More likely to get pandemic support and assistance from outside the home.
  - More reliant on professional caregivers and non-relatives for functional assistance.
  - Black or Hispanic residents received fewer hours of assistance during the pandemic.
- Struggled with loneliness as well as depression and sadness.
- Lower COVID-19 infection rates, both by number and share.

Spouse or Partner Households

- Experienced more financial stability.
- Lowest rates of mental health challenges.
- Low COVID-19 infection rates.

Co-Resident Households

- Reported more economic hardship.
  - Higher rates of income loss primarily attributable to loss of earnings plus spending increases.
  - More rationing of food, medication, and medical care.
- Highest rates of COVID-19 infection.
- More likely to receive functional assistance from children, grandchildren, and other relatives.
Policy Implications

Disparate impacts:
• Co-resident households had higher rates of Black and Hispanic residents and experienced more economic hardship during the pandemic.

Support needs:
• Older adults of color who lived alone struggled to meet needs for support and assistance during the pandemic.

How can policy increase support for older adults living alone or increase the financial stability of older adults living in co-resident households?
Thank You

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Appendix
Household Types and Social Security Benefits

IMPACTS OF HOUSEHOLD COMPOSITION DIFFER BY PROGRAM

Spouse and children can receive additional “auxiliary benefits” based on a worker’s earnings up to the “family maximum,” or the most that can be paid on a worker’s earnings record. Auxiliary benefits will be reduced once the family maximum is reached.

Retirement and Survivor Benefits (OASI)
- Family maximum is calculated based on the basic benefit amount (PIA – primary insurance amount) before adjustments for retirement age, earnings, etc.
- Falls between 150 and 188 percent of the worker's PIA.

Disability Insurance Benefits (SSDI)
- Family maximum is 85 percent of the worker’s average indexed monthly earnings (AIME)
- For a disabled worker, family maximum falls between 100 and 150 percent of PIA.

Supplemental Security Income (SSI)
- Married couples can receive a federal income guarantee of 150 percent of the federal benefit rate (FBR) for individuals.
- Nonmarried co-resident recipients can each receive the full FBR.
Method: Two distinct components

Descriptive Work: Exploratory Tabulations

- **2018** – Assessed “baseline” differences between household composition types in one year.
- **2020** – Identified pandemic experiences by household composition type in that year.
- **2010-2020** – Noted health and finance trends over time by household composition type.

Statistical Analysis

- Assess specific measures of resilience by household composition type, modeling both cross-sectional and panel differences.
  - Pandemic period income changes.
  - Help and assistance received from outside the home.
Pandemic Period Finances: Hardship

2020 HARDSHIPS EXPERIENCED BY ADULTS 50-64 LIVING ALONE OR IN CO-RESIDENCE

Source: JCHS tabulations of 2020 Health and Retirement Study data.
Income Effects: Income Stability did not Vary by Income Level

INCOME CHANGE BY HOUSEHOLD COMPOSITION TYPE WAS SIMILAR ACROSS INCOMES

Pandemic Income Change by Household Composition Type

Effects on Probability

INCOME CHANGE BY HOUSEHOLD COMPOSITION TYPE WAS SIMILAR ACROSS INCOMES

Source: JCHS tabulations of 2020 Health and Retirement Study data.
Age Effects: Older Adults Experienced Less Difference

DIFFERENCES BETWEEN HOUSEHOLD TYPES WERE MORE PRONOUNCED AT YOUNGER AGES

Pandemic Income Change by Household Composition Type

<table>
<thead>
<tr>
<th>Respondent Age</th>
<th>Single, Same</th>
<th>Single, Increased</th>
<th>Single, Fell</th>
<th>Partner, Same</th>
<th>Partner, Increased</th>
<th>Partner, Fell</th>
</tr>
</thead>
<tbody>
<tr>
<td>55</td>
<td>-0.04</td>
<td>-0.02</td>
<td>0.02</td>
<td>-0.04</td>
<td>-0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>65</td>
<td>-0.04</td>
<td>-0.02</td>
<td>0.02</td>
<td>-0.04</td>
<td>-0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>75</td>
<td>-0.04</td>
<td>-0.02</td>
<td>0.02</td>
<td>-0.04</td>
<td>-0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>85</td>
<td>-0.04</td>
<td>-0.02</td>
<td>0.02</td>
<td>-0.04</td>
<td>-0.02</td>
<td>0.02</td>
</tr>
</tbody>
</table>

Source: JCHS tabulations of 2020 Health and Retirement Study data.
Pandemic Period Health Experiences
Pandemic Period Health: COVID-19 Infection Rates

CO-RESIDENT HOUSEHOLDS HAD HIGHER RATE OF COVID-19 INFECTION; HIGHEST RISK IN HOUSEHOLDS WITH MINORS

Source: JCHS tabulation of 2020 Health and Retirement Study data.
Pandemic Period Mental Health

OLDER ADULTS LIVING ALONE PARTICULARLY STRUGGLED WITH MENTAL WELLNESS IN 2020

Source: JCHS tabulations of 2020 Health and Retirement Study.