Lessons from the COVID-19 Pandemic

Examining the interrelationships between social isolation and loneliness and their correlates among older British adults before and during the COVID-19 lockdown: evidence from four British longitudinal studies

Dr Rosie Mansfield, Senior Research Fellow

30th April 2024

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UKRI Economic and Social Research Council

Overview

- Study background and research questions
- Rationale for using multiple data sources available via ESRC-funded data resources
- Data sources and access
- Design and methods
- Analysis strategy including dealing with missing data
- Results
- Conclusions and translational significance

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Examining the Interrelationships Between Social Isolation and Loneliness and Their Correlates Among Older British Adults Before and During the COVID-19 Lockdown: Evidence From Four British Longitudinal Studies

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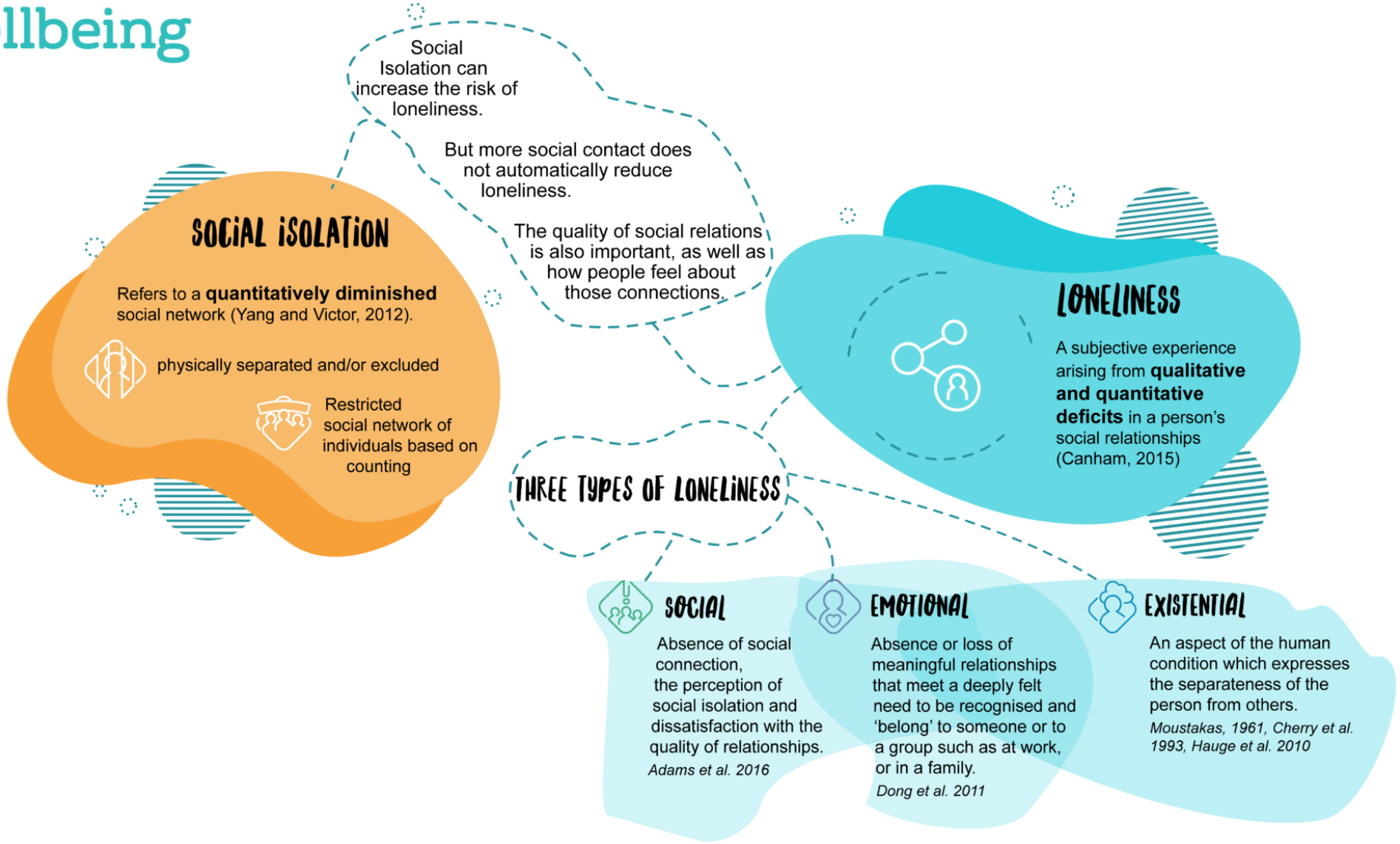

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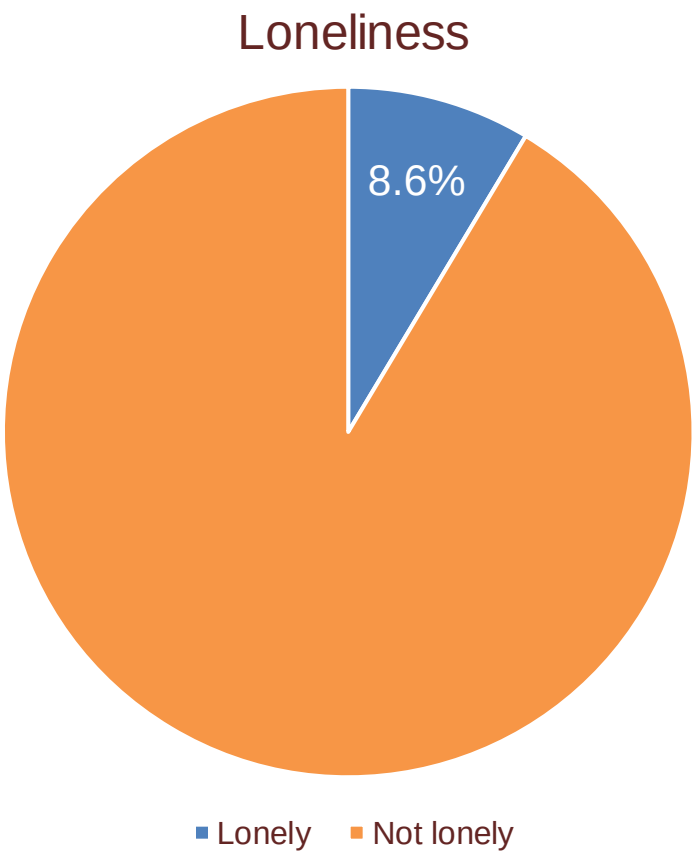
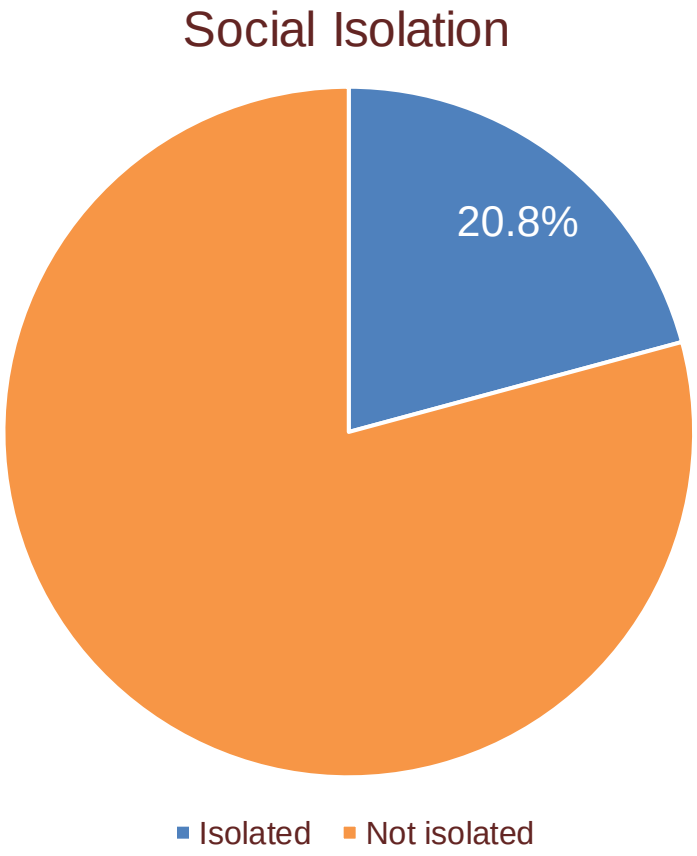
Why focus on social isolation?





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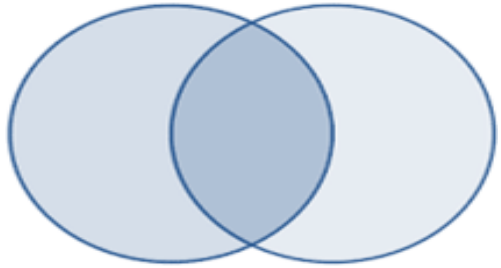

Coyle, C. E., & Dugan, E. (2012). Social isolation, loneliness and health among older adults. *Journal of Aging and Health, 24*(8), 1346–1363. https://doi.org/10.1177/0898264312460275
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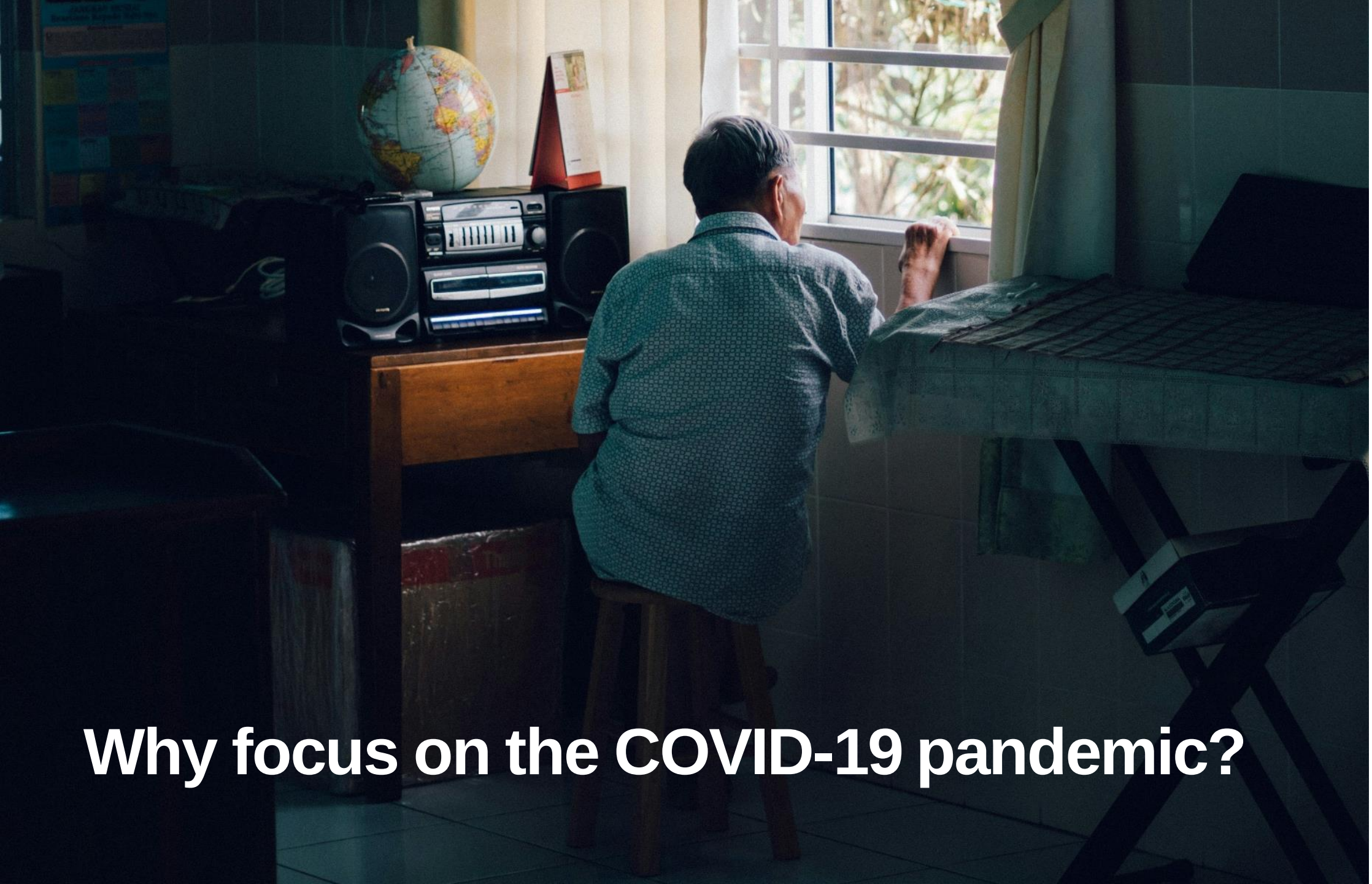

Why focus on the COVID-19 pandemic?

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Limitations of existing research

- Some studies only focused on loneliness – no conceptual contribution on the interrelationship between social isolation and loneliness
- Lack of longitudinal data - difficult to infer causality in the absence of pre-pandemic scores
- Limited to the unique experience of lockdown, few studies could tell us much about the stability of demographic, socioeconomic, and health characteristics associated with social isolation and loneliness before and during the pandemic and the strength of these associations
- Some studies compared different cohorts before and after the pandemic
- Did not disentangle age/cohort differences

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Research questions

- What were the levels of social isolation and loneliness, and what proportion of the sample was classified into different groups, for example, isolated, and/or lonely prior to and during the COVID-19 restrictions?

- What were the interrelationships between social isolation and loneliness indicators prior to and during the COVID-19 restrictions?

- To what extent were demographic, socioeconomic factors, and physical and mental health associated with social isolation and loneliness prior to and during the COVID-19 restrictions?

The data

- 1970 Birth Cohort Study
- 1958 National Child Development Study
- 1946 MRC National Survey of Health and Development
- English Longitudinal Study of Ageing

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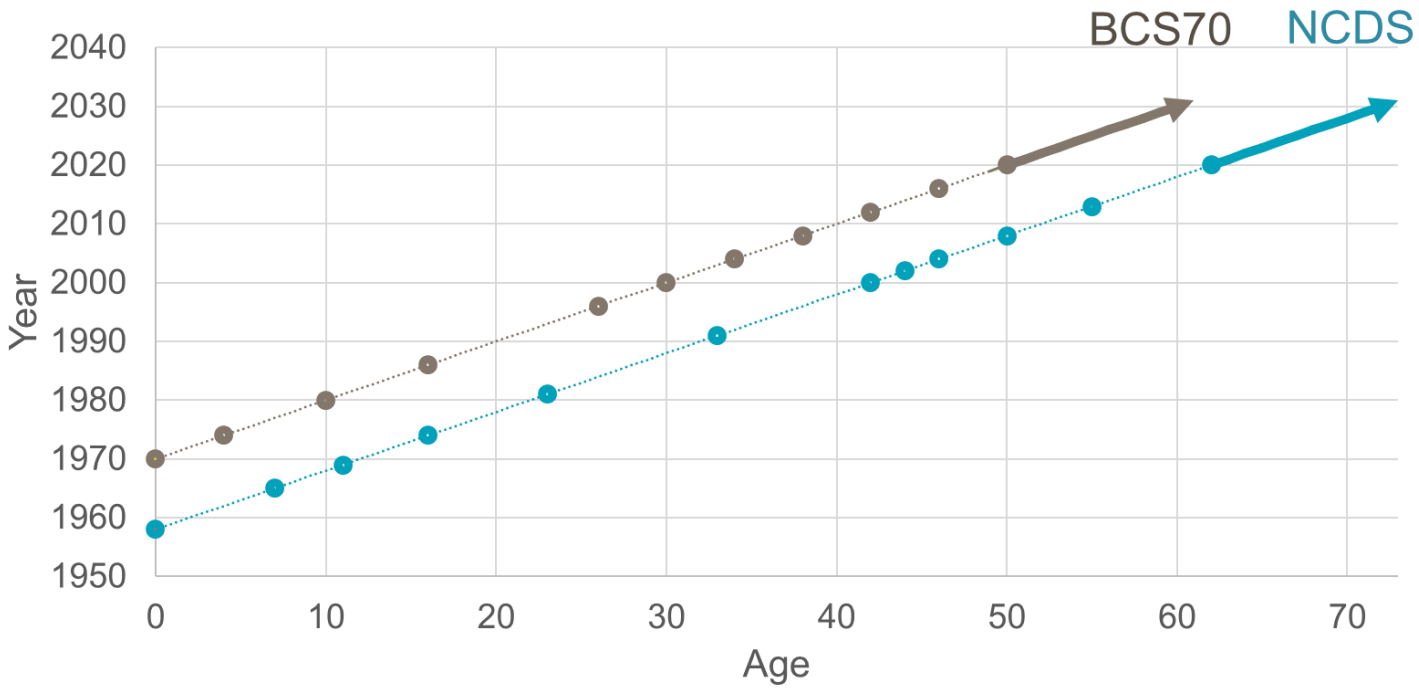
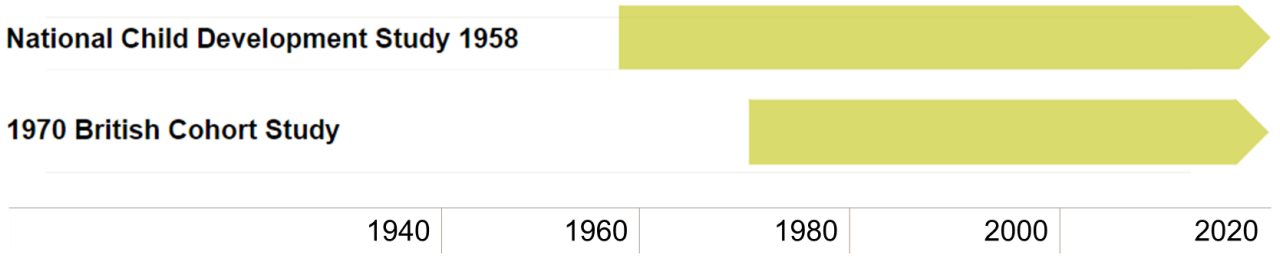
CLS cohorts





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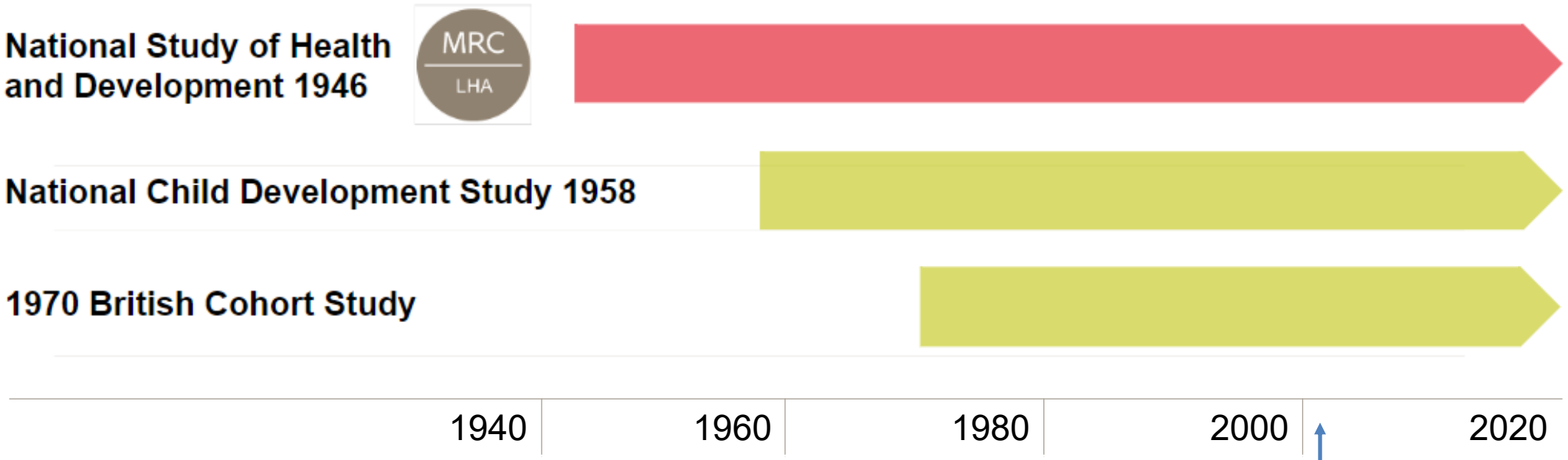
NSHD and ELSA



elsa English Longitudinal Study of Ageing

English Longitudinal Study of Ageing (ELSA) is a panel study following individuals aged ≥50 years biennially since 2002

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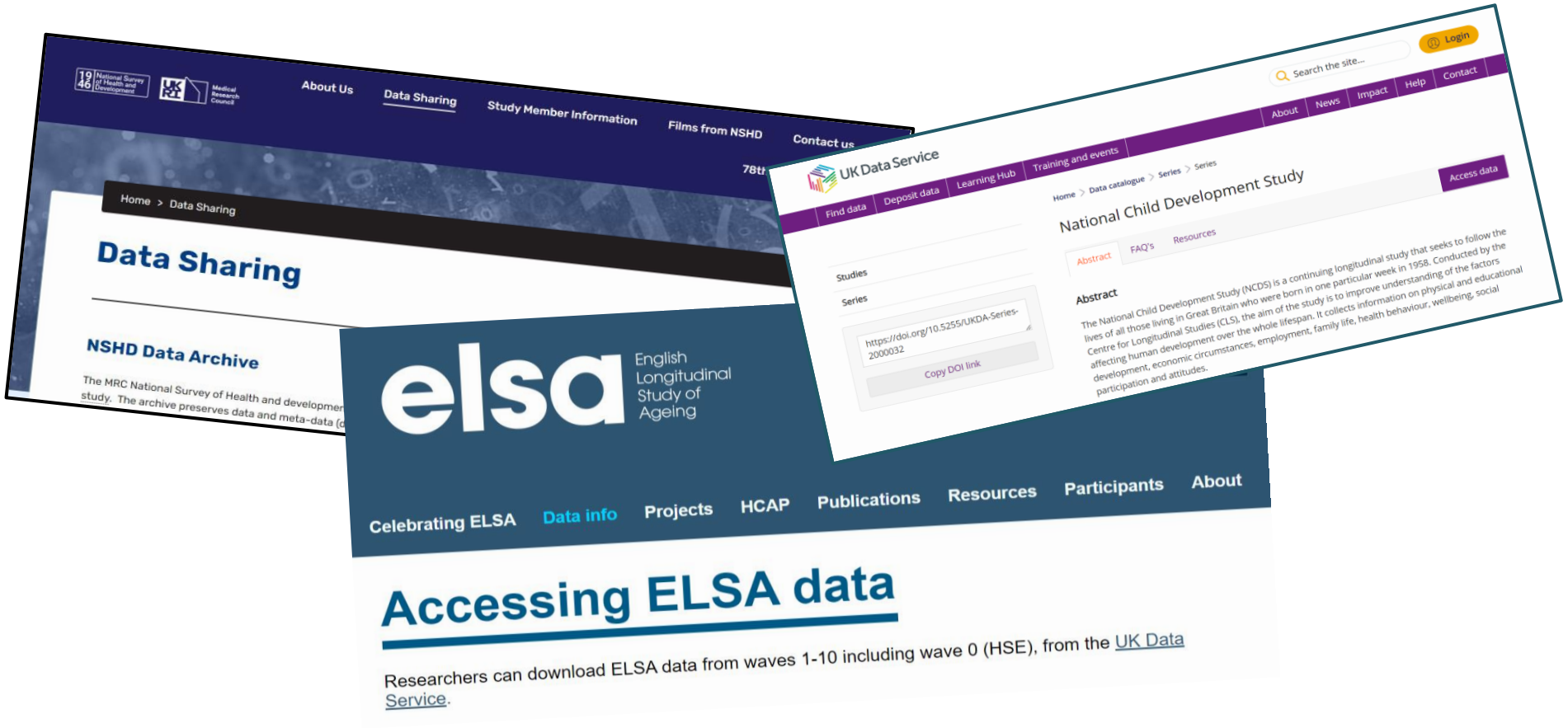
Data access



http://discover.ukdataservice.ac.uk/series/?sn=2000032
http://discover.ukdataservice.ac.uk/series/?sn=200001
https://nshd.mrc.ac.uk/data-sharing/
https://beta.ukdataservice.ac.uk/datacatalogue/series/series?id=200011

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Multiple clocks – age, cohort, period

Birth cohort studies		Age heterogeneous study	
Cohort	Age in 2020	Cohort	Age in 2020
BCS 1970	50	ELSA	50–59
NCDS 1958	62		60–69
NSHD 1946	74		70–79
-	-		80+

Age effect – effect of aging independent of time period

Cohort effect – characterised by being born at a particular time, independent from aging

Period effect – change at a particular time e.g., COVID-19, affecting everyone

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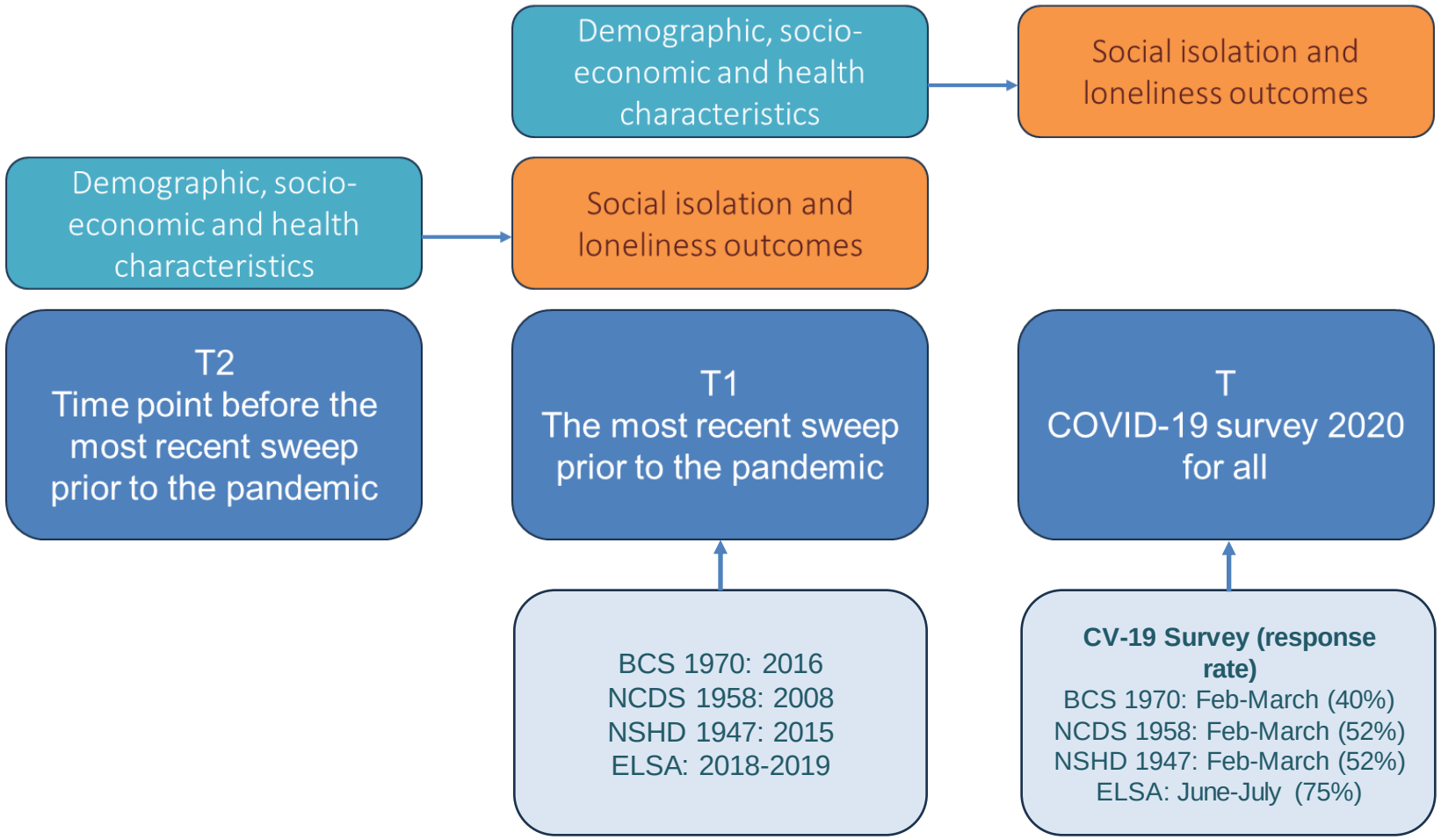
Timing of data collection



Measurement and harmonisation

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Demographic, socio-economic and health characteristics:

- Sex
- Age
- Ethnicity (ELSA only)
- Education level
- Self-reported financial difficulties homeownership
- Occupational social class
- General health
- Limiting long standing illness
- Psychological distress
- Life satisfaction

Social isolation:

- Living alone
- No partner
- No children
- Lack of frequent contact with friends and relatives outside the household
- Being out of education and employment
- Lack of community engagement e.g., attending community groups and volunteering

Overall score generated out of 6, recoded as binary (>3 = isolated)

Loneliness:

- Across all four cohorts, the UCLA Loneliness scale was included in the COVID-19 survey
- For cohorts that did not include the UCLA Loneliness scale prior to the COVID-19 pandemic, the best-matched item was selected during COVID-19 to generate the loneliness indicator.

To make variables comparable across cohorts, items were recoded as binary to indicate those that were lonely

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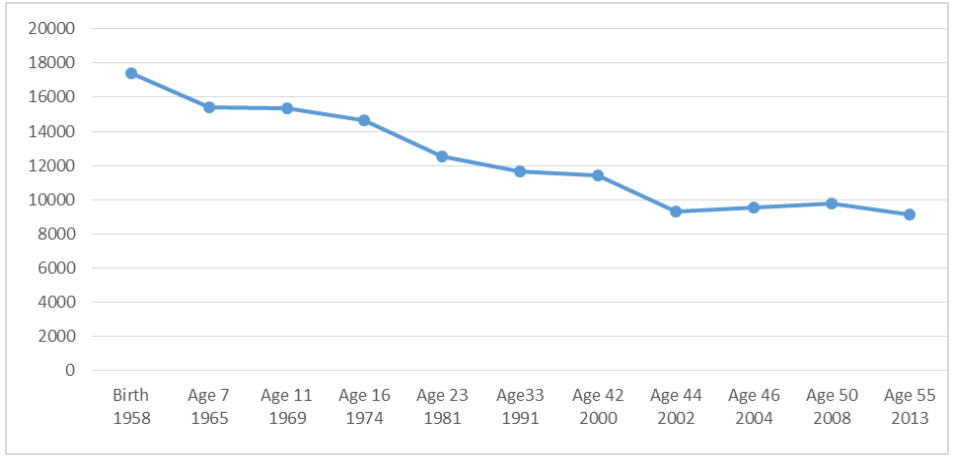
Design and non-response weights

- Certain groups of individuals are more likely to discontinue participation in longitudinal surveys (e.g., males and those disadvantaged and less healthy)
- Accounting for nonresponse in analyses ensures that data from these participants are given more weight, resulting in a more representative sample.
- Weights were applied to studies to improve representativeness of their target populations, that is, the general population of mid to older age adults in Great Britain/England



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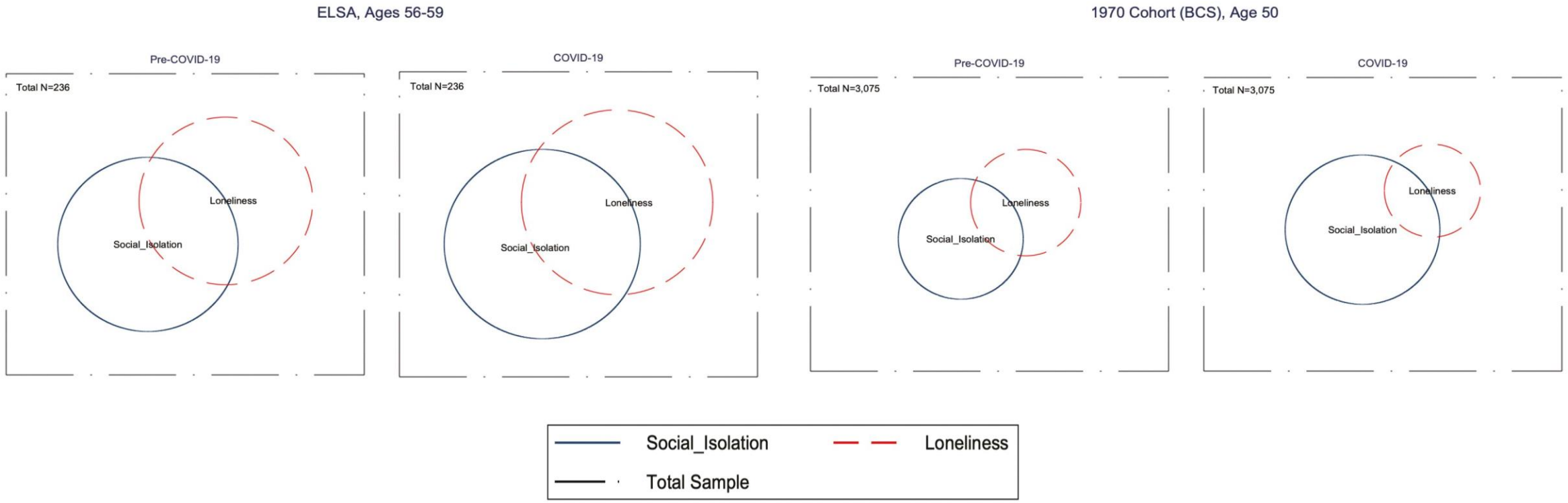
Analysis strategy

- Calculated the proportion of the cohort experiencing social isolation and loneliness prior to and during the pandemic and the extent of overlap between these experiences
- Examined the associations between individual indicators of social isolation and loneliness prior to and during the first COVID-19 lockdown using tetrachoric correlations and visualised using network analysis
- The extent to which demographic, socio-economic, and health characteristics (added in blocks) were associated with social isolation and loneliness prior to and during the COVID-19 pandemic was examined using two modified Poisson regression models.

Analyses were stratified using age bands that mapped onto the other cohorts during the COVID-19 pandemic for ELSA (50–59, 60–69, 70–79, 80+)

Results



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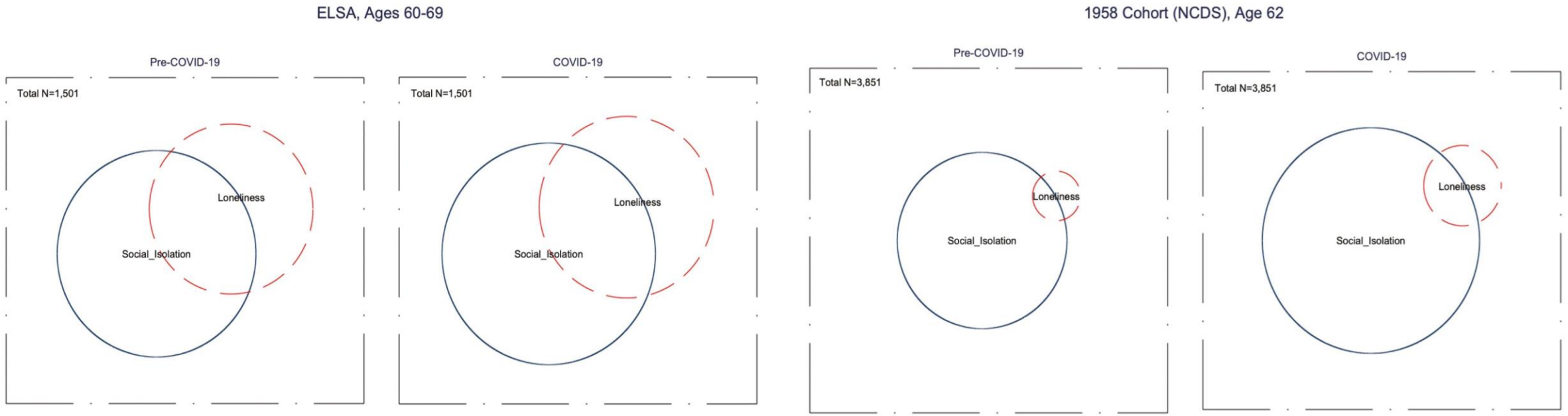

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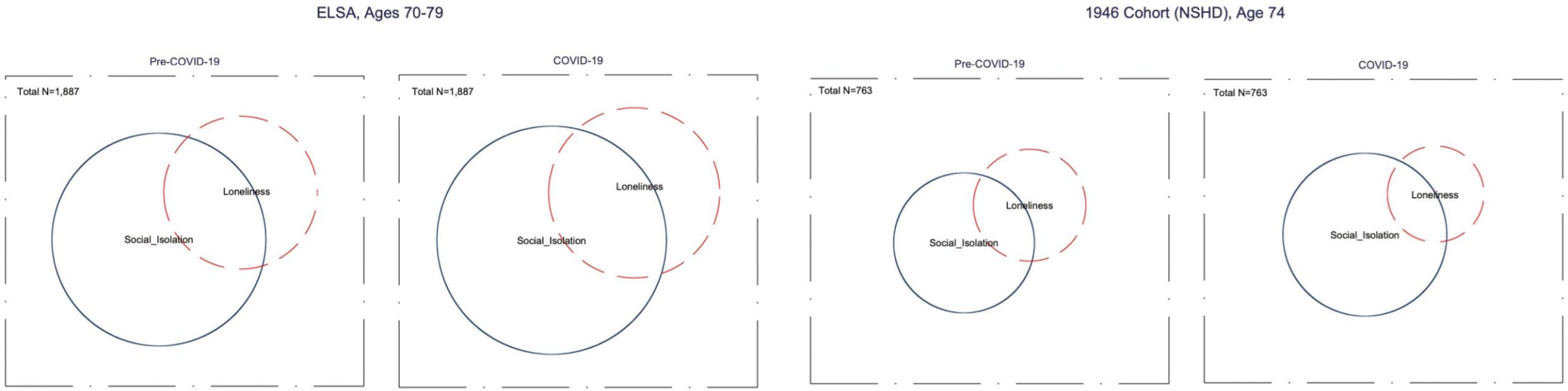

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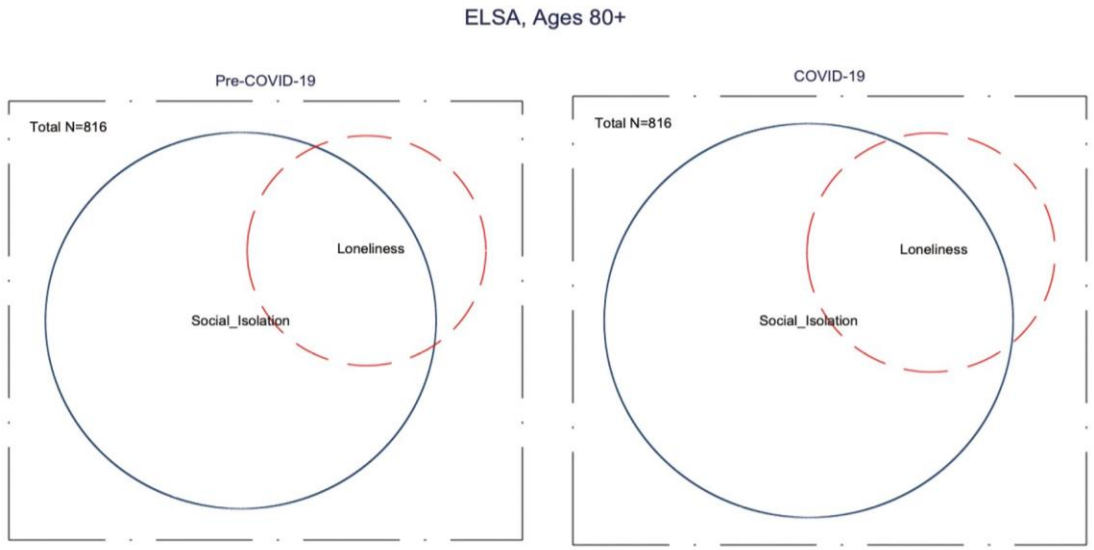

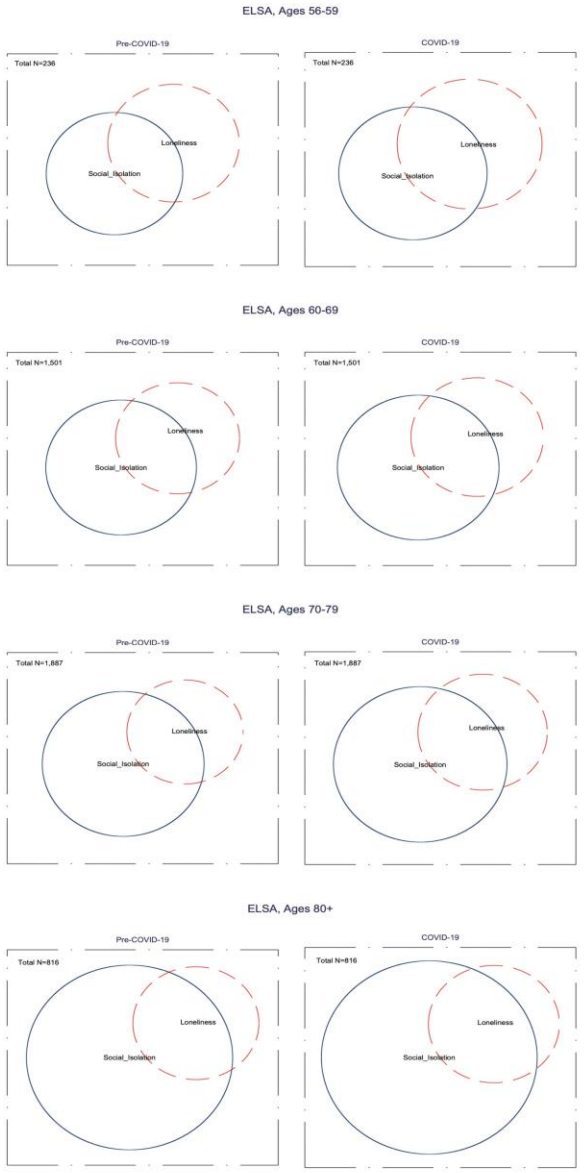

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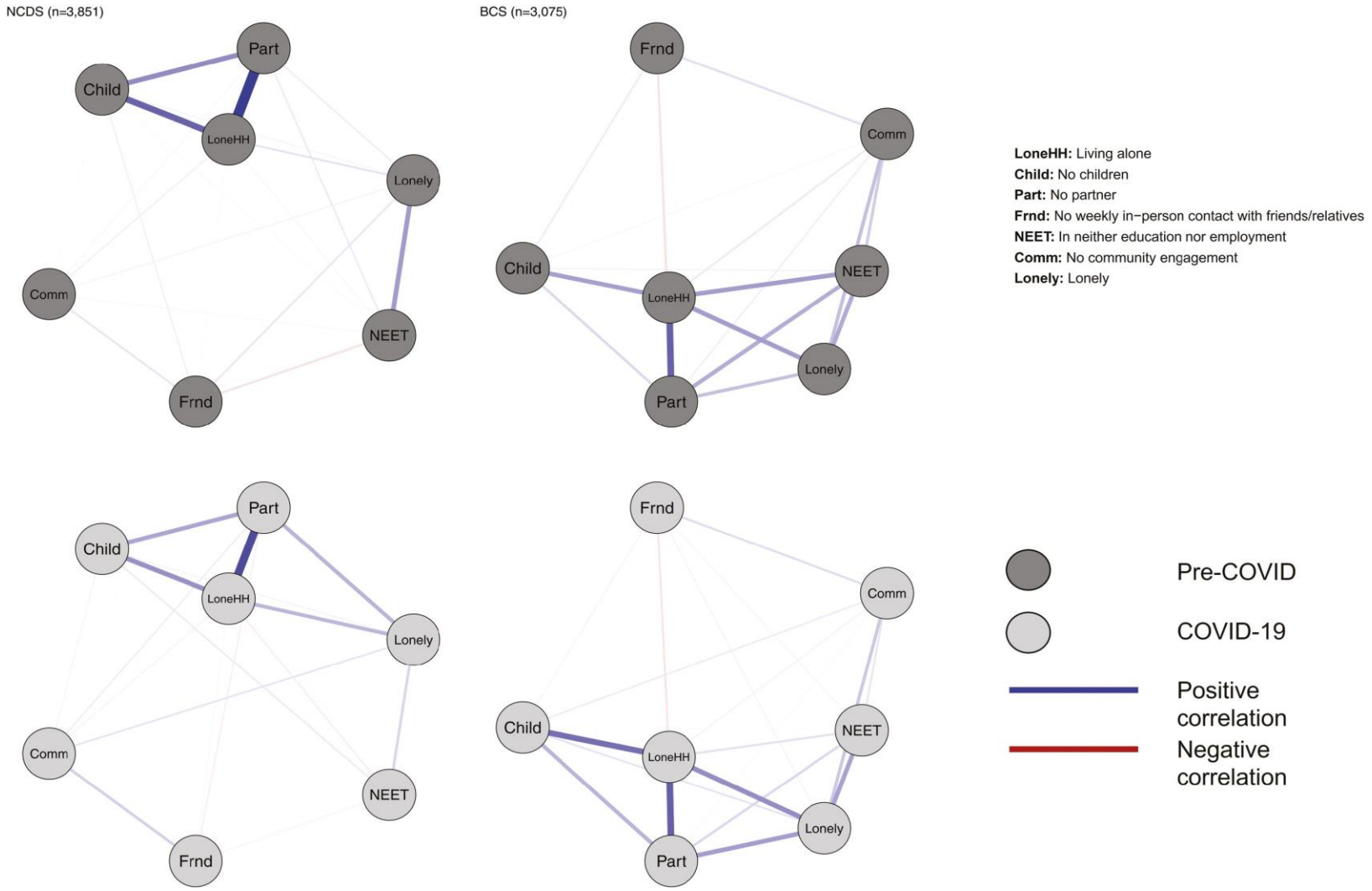

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Results

- Correlates of both greater social isolation and loneliness included **female** gender, **manual occupational social class**, self-reported **financial difficulties**, **not being a homeowner**, **longstanding illness**, and **lower life satisfaction**
- In addition, not having degree-level education and greater psychological distress were associated with greater loneliness
- No notable differences in the effect sizes of these associations in the pre-pandemic and lockdown periods.

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Conclusions

- Pre-pandemic proportions reporting **social isolation** ranged from 15% to 54%, with **higher rates in older ages** (e.g., 32% of individuals aged 70–79 years and 54% of those more than 80)
- **During the pandemic**, the percentage of older people reporting **both social isolation and loneliness and isolation only slightly increased**
- The **interrelationship between social isolation and loneliness did not change**
- Associations between sociodemographic and health characteristics and social isolation and loneliness also remained consistent, with **greater burden among those with higher economic precarity** (females, nonhomeowners, unemployed, illness, and greater financial stress)

Implications

- There were already large inequalities in experiences of social isolation and loneliness and the pandemic had a small impact on worsening extent and inequalities
- The concepts of loneliness and social isolation are not interchangeable, and clarity is needed in how they are conceptualized, operationalized, and interpreted
- There should be greater emphasis on reducing social isolation in older adults and inequalities in experiences

Study outputs

- Mansfield, R., Di Gessa, G., Patel, K., McElroy, E., Wels, J., Henderson, M., Maddock, J., Stafford, J., Steptoe, A., Richards, M & Patalay, P. (2023). Examining the inter-relationships between social isolation and loneliness and their correlates among older British adults before and during the COVID-19 lockdown: evidence from four British longitudinal studies. *Innovations in Aging*, igad126. https://doi.org/10.1093/geroni/igad126
- What Works Centre for Wellbeing (2023). *Social isolation and loneliness in later life: learnings from the pandemic*. Available from https://whatworkswellbeing.org/blog/social-isolation-and-loneliness-in-later-life-learnings-from-the-pandemic/

https://whatworkswellbeing.org/projects/loneliness-across-the-life-course/

Thank you!

Any questions?

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