



NORTHERN IRELAND LONGITUDINAL STUDY

NILS 2021 BETA TEST SUMMARY REPORT

MARCH 2024

Introduction

Alpha testing of the NILS 2021 database was carried out by NILS-Research Support Unit (RSU) staff in September and October 2023. Following the Alpha testing phase, the data was released to researchers for Beta testing via specific short projects.

Objectives

The objectives of the Beta testing phase were to test the NILS 2021 data for accuracy, comparability and consistency through active analytical use and to gain feedback from testers to inform the decision on whether to release the updated NILS database to the wider research community.

Beta Test Process

To meet user demand for quick general access to the Census 2021 link, a streamlined and focussed Beta testing process was adopted for this census round. In contrast to the process carried out for the 2011 link, an open call for Beta projects was not made, rather experienced research teams drawn from the NILS research community and NISRA were engaged to take part in the Beta testing.

A revised NILS Beta Project Application Form was produced by RSU with research teams invited to submit applications to RSU by the end of July 2023. Applications were reviewed by NILS-RSU and Census Office against agreed criteria (see Annex A) rather than requiring full RAG approval.

A summary of Beta test projects was shared with RAG at the meeting on 28 September 2023.

Beta Test Timeline

An initial meeting was held on 22 August 2023 between NILS-RSU and Beta test research teams to inform them of the objectives and timelines of the Beta testing phase. It was agreed that all projects should test the linkage of the Census 2021 data to the NILS, while specific projects would test the novel features of Census 2021 such as the new Super Data Zone output geography and newly available variables (e.g. sexual orientation). Transitions between Census 2011 and Census 2021 and the linkage of vital events would also be examined.

Project specific data extracts were released to all five Beta research teams on 9 October 2023. The data was available for a nine-week period wherein researchers were encouraged to make use of an Issues Log to feedback any issues or questions they had. Work was initially carried out on five projects however feedback was ultimately provided by four research teams, due to a workplace transfer of one lead researcher.

A progress review meeting between RSU, Census Office and Beta researchers was held on 25 October 2023 in Colby House to discuss the Beta application process, NILS 2021 variables and early findings of the Beta testing.

Following feedback of the Beta test application process RSU have introduced project subgroup meetings between the research teams, RSU and the data providers prior to RAG to streamline the application process. These meetings provide a platform for any issues or queries to be discussed and resolved more efficiently and have proven to save a lot of time in preparing a project application for RAG.

Summary of Items Logged

In total 18 items were logged in the Beta test Issues Log, some of these were duplicate items and some related to the specific project data extract provided rather than issues with the NILS 2021 data. The key issues which arose fell into the following areas:

- Confusion around missing and non-response values in the data - concerns were raised that researchers may not be able to differentiate between missing values and those

that didn't require a response. Researchers need to be fully aware of the use of '-8' values in the data when recoding their data extract.

Data Dictionary updated prior to final NILS 2021 launch to provide further clarity on the '-8' category for variables where it features.

- Differential coding labels between Census 2011 and Census 2021 Census variables (e.g. same categories of disability and Irish/Ulster Scots language skills coded differently in each census year).

The Data Dictionary has been fully updated to explain new coding labels.

- Queries regarding religion variables in Census 2011 and Census 2021 and how responses were coded.

Guidance on the coding of religion variables will be supplied by the data providers prior to the final launch of the NILS 2021 database.

- Missing AgeAtApr21 values – age not always provided at every download for each NILS member.

RSU can rectify this on a project-by-project basis by searching previous BSO downloads for a supplied age and calculating age based on that time point.

- AgeAt values inconsistent with census age

Researchers will need to determine which Age variable is most appropriate for their research.

- A small number of NILS members with a date of death prior to 2021 appear in the Census 2021 data.

Matching methodologies allow for small differences in the data, there are cases where these differences are compounded because the census data to deaths data linkage is carried out via a secondary dataset, the health dataset. This is a known issue that has previously been noted in NILS.

NILS 2021 Soft Launch Event

An informal NILS 2021 soft launch event, open to NILS-RSU, NILS data providers, NILS RAG members and researchers, was held in QUB on 13 December 2023. RSU provided a summary of the NILS 2021 project so far, including the Alpha and Beta testing phases, the project application process and plans for future updates. The event allowed for discussion of any issues logged in the Beta testing phase and gave the research teams a platform to share preliminary results and to make suggestions on potential improvements.

Recommendation

Given the results of the Beta testing and the progress against the items logged it was agreed at the NILS soft launch event to recommend the release of the NILS 2021 database to the wider research community.

Further work was then undertaken to resolve outstanding issues found in the Alpha and Beta testing phases. Further routine updates and additional vital events data were also added to the database. It is planned to formally launch the NILS 2021 database as part of the UKLS conference in Belfast in April 2024.

ANNEX A: CRITERIA USED TO ASSESS THE BETA TEST PROJECTS

Essential RAG criteria

- 1. Is the project feasible?**
- 2. Is there a longitudinal aspect to the research? (essential criterion)**
- 3. Is the sample size of any subgroup targeted sufficient?**
- 4. Has justification been provided for all variables, in particular sensitive variables? Does the variables list match the objectives of the project?**
- 5. Are the main aims of the project feasible using the NILS data?**
- 6. Does the project relate to Health & Social Care Research? (essential criterion)**

Additional Beta Test Constraints

Essential criteria to be met by each individual Beta project

- 7. All project teams should include at least one member with previous experience of using the NILS**
- 8. All researchers named on the project must have attained, or be in the process of applying for, ONS Researcher Accreditation**
- 9. All researchers named on the project who wish to access data in the NISRA secure environment must have, or be in the process of applying for, a valid AccessNI Basic disclosure certificate**

Essential criteria to be met by the portfolio of selected Beta projects

- 10. A number of specific variables and topics should be tested by the portfolio of selected projects. These variables and topics are as follows:**

Comparable over time (testing consistency)

- I. Geography: comparability and usability of the new geography codes
- II. Qualifications, Occupation coding and NS-SEC classifications
- III. Household composition and relationships within the household
- IV. Community Background, Ethnicity and National Identity
- V. Health

New in 2021 (testing questions usefulness, this can be an alpha test if required)

- VI. Sexual Orientation
- VII. Renewable Energy Systems