



Teaching students quantitative methods using resources from the British Birth Cohorts

Measuring behaviour difficulties of children and teenagers

Resources

This document summarises the set of resources based on the Rutter Behaviour Scale (Rutter 1970) for teaching students quantitative methods using the British Birth Cohorts. The Rutter Behaviour Scale is an established scale to measure signs of behaviour disorders in children and teenagers. Additional resources that could be used are also outlined.

Data files: two SPSS data files have been prepared.

1. The *b016rutter.sav* data file based on information provided by the 1970 British Cohort Study or BCS70.
2. The *n016rutter.sav* data file based on the 1958 National Child Development Study or NCDS.

Each data file contains overall Rutter Behaviour scores (an indicator of challenging behaviour in childhood) for cohort members at various ages in childhood up to age 16. Socio-economic information from childhood and adult life are also included along with the individual Rutter behaviour questions that were used to make the overall score at each age.

Word Documents: five word documents accompany the two SPSS datasets

1. **RutterBehaviourSummary.doc:** this document summarises the available resources
2. **RutterBehaviourQuestions.doc:** this document includes:

- a) A table specifying the questions asked at each age, allowing users of the data to see which questions are consistently asked across sweeps and across cohorts.
- b) The different answer categories used to answer the questions at each age and in each cohort.
- c) Examples of how the questions were presented to the cohort members in the questionnaires.

3. RutterBehaviourVariables.doc: this document includes

- a) A list of all the variables in the *b016rutter.sav* and the *n016rutter.sav* SPSS data files. (The original variable name that was assigned to a question and found in the full dataset and documentation of a particular survey is also included.)
- b) *b016rutter.sav* contains all individual Rutter Behaviour Scale questions asked in BCS70 at age 5, 10 and 16, overall summary Behaviour scores at age 5, 10 and 16, together with a variety socio-economic measures from the cohort members childhood and adult years.
- c) *n016rutter.sav* contains all individual Rutter Behaviour Scale questions asked in NCDS at age 7, 11 and 16, overall summary Rutter Behaviour Scale scores at age 7, 11 and 16, together with a variety socio-economic measures from the cohort members childhood and adult years.
- d) SPSS syntax for constructing summary Rutter Behaviour scores

4. RutterBehaviourExercises.doc: this document includes

- a) This document provides a few step-by-step exercises for students to work through and additional exercises are suggested. **MalaiseExercises.doc** contains a complete set of step-by-step exercises ranging from introductory descriptive statistics to multiple and logistic regression. By replacing the malaise score variables with the Rutter behaviour score variables these exercises could be easily adapted for students using either the *b016rutter.sav* or *n016rutter.sav* data files.

5. RutterBehaviourReferences.doc: this document includes

- a) References and further reading on the Rutter Behaviour Scales, including research based on the Rutter Behaviour Scales using BCS70 and NCDS data.

Additional resources

Data files: there are two additional SPSS data files

1. *b034KeyVariables.sav* contains a selection of key variables from all sweeps of data collection in BCS70 that have taken place between birth to age 34. These variables are included in the *b016malaise.sav* data file, but the information included in *b034KeyVariables.sav* data file can be analysed by students in its own right.

2. *n042KeyVariables.sav* contains a selection of key variables from all sweeps of data collection in NCDS that have taken place between birth to age 42. These variables are included in the *n016rutter.sav* data file, but the information included in *n042KeyVariables.sav* data file can be analysed by students in its own right.

Word documents: there are two additional word documents

1. *Openingdata_SPSS.doc*: both *b016rutter.sav* and *n016rutter.sav* are large data files. To make the data files a more manageable size for less experienced students, this document includes

- a) A step-by-step exercise on how to drop variables from an SPSS data file (the example uses the data file *b034malaise.sav*). The exercise can be easily replicated for use with other BCS70 or NCDS data files.
- b) A step-by-step exercise on merging two SPSS data files. The example uses data files based on the *Malaise Inventory* (*b034malaise.sav* and *b016MotherMalaise.sav*) but the exercise can be easily replicated for use with other BCS70 or NCDS data files.

2. KeyVariables.doc: this document contains

- a) A list of all the variables in the *b034KeyVariables.sav* and the *n042KeyVariables.sav* SPSS data files. (The original variable name that was assigned to a question and found in the full dataset and documentation of a particular survey is also included.) In summary *b034KeyVariables.sav* and *n042KeyVariables.sav* each contain a variety socio-economic measures from the cohort members childhood and adult years including parental education, social class in childhood, own highest qualification, employment status and occupation.