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Preliminary title:

Analysis of schizotypy measures in EU-GEI

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Work Packages involved:

WP2

Partners involved from whom candidate co-authors (*additional to working and writing group*) should be nominated:
All partners/sites involved in WP2

Objectives (scientific background, hypothesis, methods, and expected results):

1. Scientific Background/ objectives

The schizotypy concept has its historical roots in observations, in non-clinical populations, of psychological traits similar to symptoms of schizophrenia but in an attenuated form. Such traits have been observed more frequently in relatives of schizophrenic subjects. Thus schizotypy has been linked at the phenomenological and aetiological level to schizophrenia.

The study of schizotypy, especially psychometric schizotypy (i.e. a quantitative, dimensional approach), has been advocated as a convenient means to advance our understanding of schizophrenia (more frequent and less influenced by confounding factors associated with schizophrenia, e.g. long-term and usually on-going treatment, multiple hospitalisations, functional impairment secondary to chronic disease and diminished social interactions, etc.).

However, schizotypy has been associated with psychiatric comorbidity (anxiety, depression – Lewandowski et al, 2009), handicap (Pulay et al, 2009) and altered quality of life (Cohen and Davis, 2009). Thus, schizotypy is a subject worth studying for itself.

Several (types of) measures have been developed to assess schizotypy: auto-questionnaires, hetero-questionnaires, clinical evaluation. In EU-GEI we used all these sources: an auto-questionnaire (CAPE), a hetero-questionnaire (most of the SIS-R) and (based in part on the hetero-questionnaire and in part on observation) a clinical evaluation (the SIS-R summary).

Before these measures could be usefully analysed there are several points that need to be clarified.

First, some of the instruments have been translated and used for the first time in languages other than English. Preliminary analyses have to assess the validity of these (translated) instruments. This means that the global structure of the data (the dimensions of schizotypy) has to be similar across centres and confounding factors (e.g. demographic variables) have to have similar influence on the schizotypy measures.

Second, further analyses will be needed to choose the most useful measure(s) for further analyses. The choice of the best measure(s) to be used will be informed by the previous analyses (i.e. similarity of measures across centres) and assessment of the:

- relationship between scores from the different instruments intended to measure the same dimensions (e.g. positive, negative);
- psychometric properties of different measures (e.g. score distribution etc.);

Based on these analyses the final aim of the study is to propose the most reliable and valid measures to be used in subsequent studies.

2. Hypotheses[1]

The results will be similar and will show a similar structure for the instruments (Positive/ Negative/ Depressive dimensions for CAPE; Positive/Negative/ Disorganized for SIS-R) across centres.
Conceptually similar dimensions will be more correlated across instruments (i.e. Positive CAPE/Positive SIS-R and Negative CAPE/Negative SIS-R) than different dimension intra- and inter-instruments.

3. Methods

3.1. Centres included

All centres participating in WP2[2]

3.2. Subjects included

All subjects for which measures of schizotypy and of potential confounding factors are available.
The main analyses will involve controls; if samples of siblings of sufficient size are available, separate analyses, similar to those in controls, will be run in the sibs sample.

3.3. Dependent variables (measures of schizotypy)

Results from SIS and CAPE.

3.4. Explanatory variables

Centre related variables (country, rural/urban) and potential confounding variables (socio-demographic etc.).

[1] part of the proposed study is exploratory i.e. not hypothesis driven
[2] centres in WP6 will be approached and if possible data from these centres will be included in the analyses; alternatively findings from this proposal could be tested/replicated in independent samples included in WP6

3.5. Statistical analyses

Descriptive statistics (mean, SD, distribution)
Correlation, regression analysis.
Confirmatory factor analysis

Data needed for the study:

For each case (from partners): SIS and CAPE data and data on potential confounding factors e.g. centre variables, basic demographics (age/ gender etc.)

Plan for statistical analysis (overall strategy):

To test the theoretical structure of the instruments CAPE and SIS-R we will use correlation matrix and loadings on dimensional scores (individual items will have higher correlations with items from the same dimensions and will significantly load on the dimension they theoretically belong to)

The distribution of the different scores will be analysed (graphically, normality tests etc.)

Correlations between measures of schizotypy dimensions from the two instruments will be tested (matrix correlation) - we expect conceptually similar variables to be more correlated

The influence of confounding factors (age, gender etc.) will be studied using multiple regression analyses.

All analysis will be done by country (language) and globally. Also, as mentioned before, when samples of siblings of sufficient size are available confirmatory analyses of the results in controls will be run in these samples.

Other analyses/methods:

Involvement of external Parties (non EU-GEI):

No

IPR check:

Timeframe:

- The study could be done as soon as data from SIS and CAPE are available in the database

Additional comments: