

Synopsis for EU-GEI Publication

Synopsis no.: S2.45
Preliminary title: Dimensions of attenuated psychosis (schizotypy/ psychotic experiences) by migrant status and ethnicity
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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): <i>1. Scientific Background/ objectives</i> There is growing evidence that attenuated psychosis (schizotypy, psychotic experiences) and schizophrenia share common risk factors, such as childhood trauma, cannabis use, obstetric complications, and maternal viral infections (Barrantes-Vital and Kwapil, 2015). Several authors advocated the use of continuous, dimensional constructs (Bentall et al. 1989, Stefanis et al. 2002) of attenuated psychosis as an alternative approach to case-control studies, to deepen our understanding of the aetiology, expression and development of the entire schizophrenia spectrum disorders (Nelson et al. 2013; Barrantes-Vidal et al. 2015; Debbané et al. 2015). Research using the schizotypy/attenuated psychosis paradigm benefits from the stability of traits over time (Venables and Raine 2015) and from the absence of some of the confounding factors present in clinical populations of schizophrenic patients (e.g. the effect of pharmacological treatments and hospitalisation) (Schürhoff et al. 2005).

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The association between psychosis and migration and/or ethnic minority status is well established and a variation of this risk across countries and ethnic groups has been observed (Bourque, van der Ven, & Malla, 2011; Cantor-Graae & Selten, 2005).

However, only a few studies have explored migrant/ethnic status as a risk of schizotypy so far. These studies were conducted mainly among college students, which limit the generalizability of the results. Moreover, they used different methods/ instruments making the comparison between studies difficult (Zhang and Brenner, 2016). As a whole these studies found a tendency for lower scores among white/western subjects (which for most, but not all, studies represent the majority) suggesting that culture and social norms (beliefs, emotion expression and behaviours) may influence schizotypy scores (Cohen et al, 2015).

The context of EU-GEI makes possible to overcome these limitations by conducting a cross-cultural research investigating the factors that influence attenuated psychosis dimensions in migrant and minority ethnic groups.

Objectives:

To conduct a cross cultural study on attenuated psychosis dimensions in subjects from the general population, using a homogeneous methodology.

To compare the impact of demographic and psycho-social risk factors on these dimensions across the different ethnic groups and different national contexts.

2. Hypotheses

1. Consistent with the hypothesis of a similar etiology for schizophrenia and attenuated psychosis we expect migrant status and ethnic minority position to be associated with an increase in scores of attenuated psychosis (especially the positive dimension). Furthermore, we expect this increase to be proportional with the relative risk for psychosis (as calculated in other, previous, analyses - e.g. S2.3)
2. We expect this association to be influenced by an origin/ethnic group factor (similar for a given group across several host countries), a country specific factor (similar across several ethnic groups in the same country) and an interaction factor (group x country)
3. We also expect that (part of) the differences in scores of attenuated psychosis between groups to be the result of differences in the prevalence of different psycho-social risk factors known to influence (attenuated) psychosis e.g. socio-economic level, childhood trauma, discrimination etc.

3. Methods

3.1. Centres included

All centres participating in WP2

3.2. Subjects included

All non-psychotic subjects (i.e. controls and sibs) for which measures of attenuated psychosis (derived from CAPE and/or SIS) on one hand and birth place and ethnicity on the other are available.

3.3. Variables

Dependent variables (measures of schizotypy)

Data from SIS-R and CAPE (the best variables to be used will be selected based on the analyses from another synopsis (S.2.23)).

Explanatory variables and potential confounders

Explanatory variables of interest: country of birth and ethnicity/origin. Different ethnic/country of birth groups will be defined based on similarities of minority groups across countries involved. To this aim we will consult with other groups working on the influence of migration/ethnicity, researchers from each country involved in WP2 and researchers with experience in the field of demographic studies across European countries.

Environmental factors that could explain the association of migrant status/ ethnicity with measures of attenuated psychosis include (but are not necessarily limited to): psycho-social stress (early and current stress, discrimination), cannabis, socio-economic status (of subject and father) etc.

Potential confounding variables: mainly demographic data (gender, age, education, marital status)

Data needed for the study:

1. SIS-R, CAPE data
2. Country of birth (of subject and parents), ethnicity
3. Data from CTQ, LTE, discrimination questionnaire, BCSS, cannabis experience questionnaire, MRC ...
4. Socio-demographic data (i.e. age, gender, education, marital status...).

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Plan for statistical analysis (overall strategy):

We will proceed in several successive steps:

1. general analyses to confirm the influence of migrant status (first generation/ second generation) or minority status on dimensions of attenuated psychosis (both for positive and negative dimensions);
2. detailed analyses to assess the influence of specific origin (ethnicity) and of the host country while adjusting for different confounding factors;
3. build a general model linking migrant status and/or ethnicity to the presence of attenuated psychosis

Statistical analyses

Generalized linear models will be used (Stata 14, R) to assess the association between migrant status or ethnicity and measures of attenuated psychosis.

Structural Equation Modelling (SEM) will be used to propose a global picture of the relationship between migrant status/ ethnicity, different demographic and psycho-social factors and attenuated psychosis dimensions.

Other analyses/methods:

Involvement of external Parties (non EU-GEI): No

IPR check:

Timeframe:

- The analyses will be done as soon as data for the environmental factors are available (checked/ cleaned) and the data for the schizotypy measures defined (S2. 23)
- According to the publication rules of EU-GEI a first version of the manuscript(s) will be available in the 6 months following availability of data.

Additional comments:

The present proposal expands and specifies a previous, more general, proposal (synopsis S2. 24)