Synopsis no.: *S2.32*

Preliminary title: **Does variation in the prevalence of minor psychotic symptoms in control populations across Europe have a non-genetic origin?**

Contact info for the person(s) proposing the synopsis

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Publication category: Following from core incidence paper

Working and writing group: Incidence group: Craig Morgan, James Kirbride, Robin Murray, Giada Tripoli, Andrei Szoke, Franck Schurhoff, Marta Di Forti, Charlotte Gayer-Anderson, plus Mick O'Donovan and Alex Richards,

Work Packages involved: WP2 and the Cardiff team

Partners involved from whom candidate co-authors (*additional to working and writing group*) should be nominated:

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

Data concerning the prevalence of minor psychotic symptoms in the control subjects are already being examined to assess any variation across the 5 EU countries. Information on the polygenic risk score for schizophrenia (PRS) will also be available. We will test the following hypotheses:-

1.The PRS will predict the occurrence of minor psychotic symptoms in controls across the sample as a whole.
2.The mean PRS among control subjects from Mediterranean countries will not differ significantly from that from Northern countries.
3 The mean PRS among control subjects from urban verses rural centres (overall) will not differ significantly.
4.The relationship between PRS and minor psychotic symptoms will be strongest in those from Mediterranean countries, and weakest in those from Northern countries.
5.The relationship between PRS and minor psychotic symptoms will be stronger in those from rural than urban centres.

Should these hypotheses be supported, this would imply that differences in the prevalence of minor psychotic symptoms in

different centres have an environmental origin.

Data needed for the study: 1. CAPE data from controls for each of the sites. 3. Polygenic Risk Schizophrenia score data for controls; 2.WP2 main MRC1 and MRC2 data for controls

Plan for statistical analysis (overall strategy):

- CAPE scores for minor psychotic symptoms in controls will be obtained from Dr Szoke and colleages, and examined across the different countries and by urban/rural residence.
- We will require access to the Polygenic scores for Schizophrenia calculated by Alexander Richards for control subjects in each country and by urban/rural residence.
- Data analyses will be carried out using STATA and R

Other analyses/methods: not yet planned

Involvement of external Parties (non EU-GEI): Paul O'Reilly, Evangelos Vassos, Cathryn Lewis, all from SGDP, KCL.

IPR check:

Timeframe: 6 months from the completion of the cleaning of the CAPE data.

Additional comments: