

Synopsis no.: <i>S2.29</i>
Preliminary title: Social and cultural distance as an explanation of higher rates of psychotic disorders in minority groups
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Objectives (scientific background, hypothesis, methods, and expected results): <u>Background</u> Rates of psychotic disorders are consistently higher in ethnic minority groups ¹ but different ethnic groups appear to be affected in different host countries, such as those of Moroccan ancestry in the Netherlands ² , and Black African and Black Caribbean groups in the UK ³ . This risk appears to be specific to individuals who have migrated to Western countries as rates in the general population in for instance Jamaica ⁴ and Surinam ⁵ appear to be similar to rates in the general population in Western Europe. Furthermore, within the same ethnic groups, first, second and even third generations can have differential risks ⁶ . This is perhaps unsurprising when considering the sociological argument that ethnicity is not a discreet variable: it doesn't have the same meaning to everyone ⁷ . This points to a more complex explanation for the higher rates of disorder in ethnic minority groups ⁸ . As psychotic disorders are a disorder of social functioning, including the loss of social-cognitive skills and alienation of the self from the social world ⁹ , we propose to look at the position minorities hold in society. Initially, this exploration will focus on ethnic minority groups, but we will also tentatively examine religious minority groups. We suggest that minority groups experience higher levels of what Michael Marmot names psychosocial disempowerment: having control over your life ¹⁰ . Minority populations tend to be lower down the social ladder, and social hierarchy in itself is a stressor ¹¹ , but we suggest the effects of psychosocial disempowerment are additive to this. This theory differs from the social defeat theory ⁸ as the focus is on social and cultural distance from the majority, as a continual underlying stressor, and not the more direct notion of defeat. We arrive at this theory employing a more economic argument, in the following steps: <ol style="list-style-type: none"> 1. Choosing and being able to express one's identity is of fundamental importance to maximising utility or well-being¹². 2. Minorities experience more restrictions on being able to do this, for two reasons:

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- a. Boundaries of the identity are more externally determined: set by the majority population¹²¹³, and
 - b. Forming and expressing an identity is a very social process and is largely facilitated by complex forms of imitation¹⁴; it is less clear which group minority groups should look to imitate for forming a distinct identity.
3. Empathy in society comes from a shared sense of identity. This empathy leads to mutual regard or trust, and this extends to fellow citizens¹⁵.
 4. It is proposed that the difficulties minorities experience in forming and expressing their identity places them to an extent outside the group of 'fellow citizens', and that it is this distance from the majority population that increases psychosocial disempowerment, which in turn increases the risk of psychotic disorders.

We will investigate this using the following key concepts (how this is measured within EU-GEI can be found under the 'methods' and 'data needed' sections):

- Psychosocial disempowerment: the feeling of not having control over one's life
- Social distance: Essentially an elaboration of social disadvantage, also looking at educational attainment and social isolation. This will increase daily life stresses for minority groups, and places them outside society. The distance is from those who hold the most economic and political resources (least disadvantaged). The concept is different from psychosocial disempowerment in that it looks at material and social factors, not at the subjective experience of the consequences of these.
- Cultural distance: The extent to which ethnic minority groups come from cultural backgrounds that are different from the majority's background. This only applies to ethnic minorities, and not to religious minorities.

The argument means that higher rates of psychotic disorders are not necessarily limited to ethnic minorities, but in Western societies these currently occupy a position of high psychosocial disempowerment. As identities are fluid and subject to change over time, it is possible that other groups will occupy this position in the future. We will also examine this argument more broadly, looking at religious minorities.

Aims

The overall aim of this synopsis is to disentangle the effects of psychosocial disempowerment and cultural and social distance on the higher rates of psychotic disorders in minority groups. In order to investigate this, we will test the following concrete hypotheses:

- a. Cases are more likely to be of ethnic minority status than controls
- b. Cases are more likely to be from more culturally distant ethnic minority groups than controls.
- c. Increased cultural distance is positively associated with increased risk of developing psychotic disorders.
- d. Cases report higher levels of psychosocial disempowerment than controls.
- e. Those of ethnic minority status report higher levels of psychosocial disempowerment.
- f. The larger the cultural and social distance, the higher the levels of psychosocial disempowerment.
- g. Cumulative social and cultural distance has a similar relationship to higher rates of disorder in minority groups as cultural distance alone, but explains a higher proportion of the variance.
- h. The relationship between ethnic minority status and higher risk of developing a psychotic disorder is mediated by cultural and social distance.

I also aim to explore the risk of developing a psychotic disorder in religious minority groups, and to test

¹ NB: this is not a main publishable output, as this will be covered by Jean-Paul Selten and colleagues in more detail, but must be included here to allow testing of subsequent hypotheses.

if this is also mediated by psychosocial disempowerment.

Methods

The following variables will be included (for a list of precise data items, see below)

Outcome variable: case/control/sibling status

Predictor variables: ethnic minority status, cultural distance, and psychosocial disempowerment.

- Ethnic minority status
- Cultural distance is closely correlated with linguistic distance¹⁵, and I will use language trees to approximate this.
- Social distance will consist of socio-economic status, years of education, cognitive distance and social isolation. Cognitive distance will be approximated using performance on the Wechsler Adult Intelligence Scale (WAIS) by taking account of standard deviations away from the country's mean.
- Psychosocial disempowerment will be measured using self-perceived discrimination, and generalised neighbourhood trust. When looking at ethnic minorities, perceptions of ethnic diversity and cooperation in the neighbourhood are also taken into account.
- An individual is considered a religious minority if they're any religion other than Christian.

Confounding will be appropriately allowed for by including age, sex, family history of psychosis and other mental illness, cannabis use, childhood trauma, and paternal age.

Expected results

The expected results can be found in the aims of the study. Overall, we expect that social and cultural distance and psychosocial disempowerment mediate the relationship between (ethnic) minority status and risk of psychotic disorders.

When looking at religious minorities, it is expected that the role of cultural distance diminishes, but the role of social distance and psychosocial disempowerment remains similar.

Data needed for the study:

The data needed for this study is summarised in Table 1 below.

Table 1: Data items needed

	<i>Description</i>	<i>EU-GEI variables</i>	
<i>Outcome</i>	Case/control/sibling status	Mrc1_socde01a	Subject status
<i>Predictors</i>	OPCRIT diagnosis	Icd10_dichot_b	ICD10 dichotomised diagnoses
	Ethnic minority status	Mrc1_socde03	Ethnicity, all sites
		Mrc1_socde04	Ethnicity, site-specific
		Mrc1_socde05	Place of birth
		Mrc1_socde08	Fathers place of birth
		Mrc1_socde10	Mothers place of birth
	Religious affiliation	Mrc2, question 12	What is your religious affiliation?
		Mrc2, question 13	How often do you attend services
	Cultural distance	Mrc1_socde12	First language
		Mrc1_socde13	Language other, specify
Mrc2 – question 14		Fluency in majority language	
Social distance	Mrc1_socde21	Social class subject C 10 class model	
	Mrc1_socde22	Social class subject M 10 class	

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Confounders		Mrc1_socde36	model Social class subject C 5 class model
		Mrc1_socde37	Social class subject M 5 class model
		Mrc2, question 8	What is the highest level of education you have achieved?
		Mrc2, question 9	How many years have you been in education?
		??	Social isolation
	Cognitive distance	Totsomgs	Tot. som gehaalde scores
	Psychosocial disempowerment	??	Discrimination questionnaire
	<i>Ethnic minority specific</i>	Soenast08a	I trust my neighbours
		Soenast06a	Most people are White British
		Soenast06b	People come from many different backgrounds
		Soenast06c	People from different ethnic groups generally get on well with each other
		Soenast06d	People from minority ethnic groups often suffer physical or verbal abuse
	Age	Mrc1_socdebd Mrc1_socde02 Nos_dup002	Birth date Age Date of first contact (cases only)
	Sex	Mrc1_socde01	Sex
Family history of psychosis			
Family history of other mental illness			
Cannabis use			
Childhood trauma	Ctq001 – ct2025	Childhood trauma questionnaire	
Paternal age	Mrc1_socde32	Fathers age at birth	
Plan for statistical analysis (overall strategy):			
Data will be cleaned in cooperation with Charlotte Gayer-Anderson and Marta di Forti (IoPPN).			
Univariate associations will be tested using univariate logistic regression. This will subsequently be expanded into a multivariate model, and into a regression model allowing for the mediating effect of cultural and social distance			
Methods will be further developed in cooperation with James Kirkbride and Peter Jones.			
Other analyses/methods: Not applicable			
Involvement of external Parties (non EU-GEI): Not applicable			
IPR check:			

Timeframe:

We aim to have all the data cleaned and variables created by 1 September, and to have the analyses completed by 1 October. An initial draft of results will be available by 1 January 2017.

Additional comments:

This synopsis is part of a PhD-project looking at an explanatory framework for higher rates of psychotic disorders in minorities using EU-GEI data, under supervision of James Kirkbride and Peter Jones.

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