



# Discrimination and risk of psychosis among ethnic minorities

Supriya Misra<sup>1</sup>, Bizu Gelaye<sup>1</sup>, David R. Williams<sup>1</sup>, Karestan C. Koenen<sup>1</sup>, Craig Morgan<sup>2</sup>

<sup>1</sup>Harvard T.H. Chan School of Public Health, Boston, MA; <sup>2</sup>King's College, London, UK



## Background

- Ethnic minority status is consistently associated with greater risk of psychosis in global meta-analyses.
- Underlying mechanisms for this association are not known but a potential pathway is higher rates of perceived discrimination.
- Limited studies of whether discrimination is associated with greater risk of psychosis, and if discrimination partially explains the association between ethnic minority status and psychosis.

## Objectives

- Determine the association between any major experience of discrimination and risk of psychosis.
- Determine the association between multiple unique types of major experiences of discrimination and risk of psychosis.
- Explore if major experiences of discrimination partially explain the association between ethnic minority status and psychosis.

## Methods

**Data Set:** European Network of National Schizophrenia Networks Studying Gene-Environment Interactions (EU-GEI)

**Sample:** 1,130 cases of first-episode psychosis (36.7% ethnic minorities) and 1,498 controls (21.2% ethnic minorities) from Brazil, France, Italy, Netherlands, Spain, and United Kingdom

### Measures:

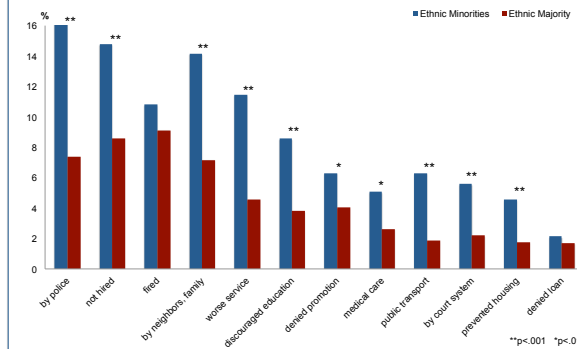
- Minority Status:** Individuals who self-reported any ethnicity other than the White ethnic majority
- Major Experience of Discrimination Scale:** 12 items on being treated unfairly in employment, education, housing, medical care, public transport, and interactions with police and courts
- Psychosis:** Individuals age 18-64 years contacting specialist mental health services for first time (ICD-10 codes F20-F33)
- Covariates:** Age, sex, parent social class (4 categories), parent history of psychosis, cannabis use (never/past/current)

### Data Analysis:

- Multilevel mixed effects logistic regression models with catchment site as the level-2 variable and sampling weights to account for the oversampling of ethnic minorities

## Results

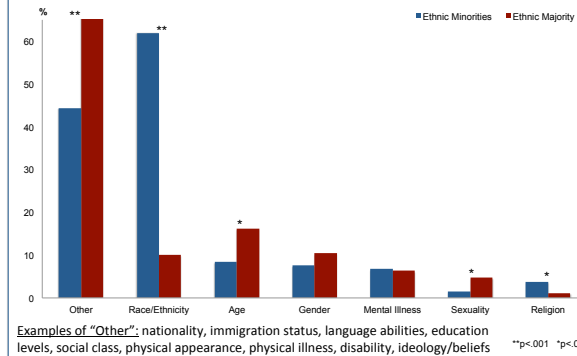
**Figure 1. Prevalence of Discrimination by Type**



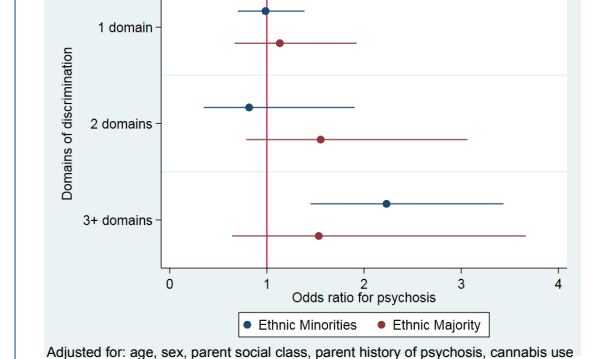
**Table 1. Discrimination by Case and Minority**

Description	Cases		Controls		Minority		Majority	
	N	%	N	%	N	%	N	%
None	691	61.2	1007	67.2	390	53.2	1308	69.0
Any	439	38.9	491	32.8	343	46.8	587	31.0
1 Type	209	18.5	295	19.7	154	21.0	350	18.5
2 Types	115	10.2	121	8.1	88	12.0	148	7.8
3+ Types	115	10.2	75	5.0	101	13.8	89	4.7

**Figure 2. Prevalence of Reasons for Discrimination**



**Figure 3. Psychosis in Relation to Discrimination**



## Conclusions

- Over a third (35.4%) reported at least one major experience of discrimination, higher in cases ( $p < .001$ ) and minorities ( $p < .001$ ).
- Only 7.2% reported 3+ unique types of major discrimination, higher in cases ( $p < .001$ ) and minorities ( $p < .001$ ).
- No association with psychosis and any, one or two types of major discrimination (vs. no reported discrimination).
- Two-fold greater odds of psychosis for 3+ unique types of major discrimination (vs. no reported discrimination). In stratified analyses, this association holds for ethnic minorities (OR 2.23,  $p < .001$ ) but not the ethnic majority (OR 1.53,  $p = .335$ ).
- Exploratory causal mediation did not find that any major experience of discrimination or 3+ unique types of major discrimination helped explain the association between ethnic minority status and psychosis.