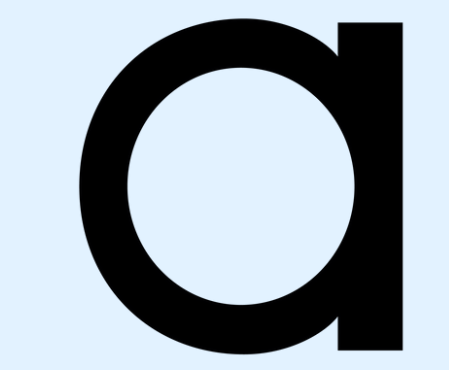


THE INFLUENCE OF CULTURAL BACKGROUND ON SOCIAL COGNITION IN GENETIC FTD

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alzheimer nederland



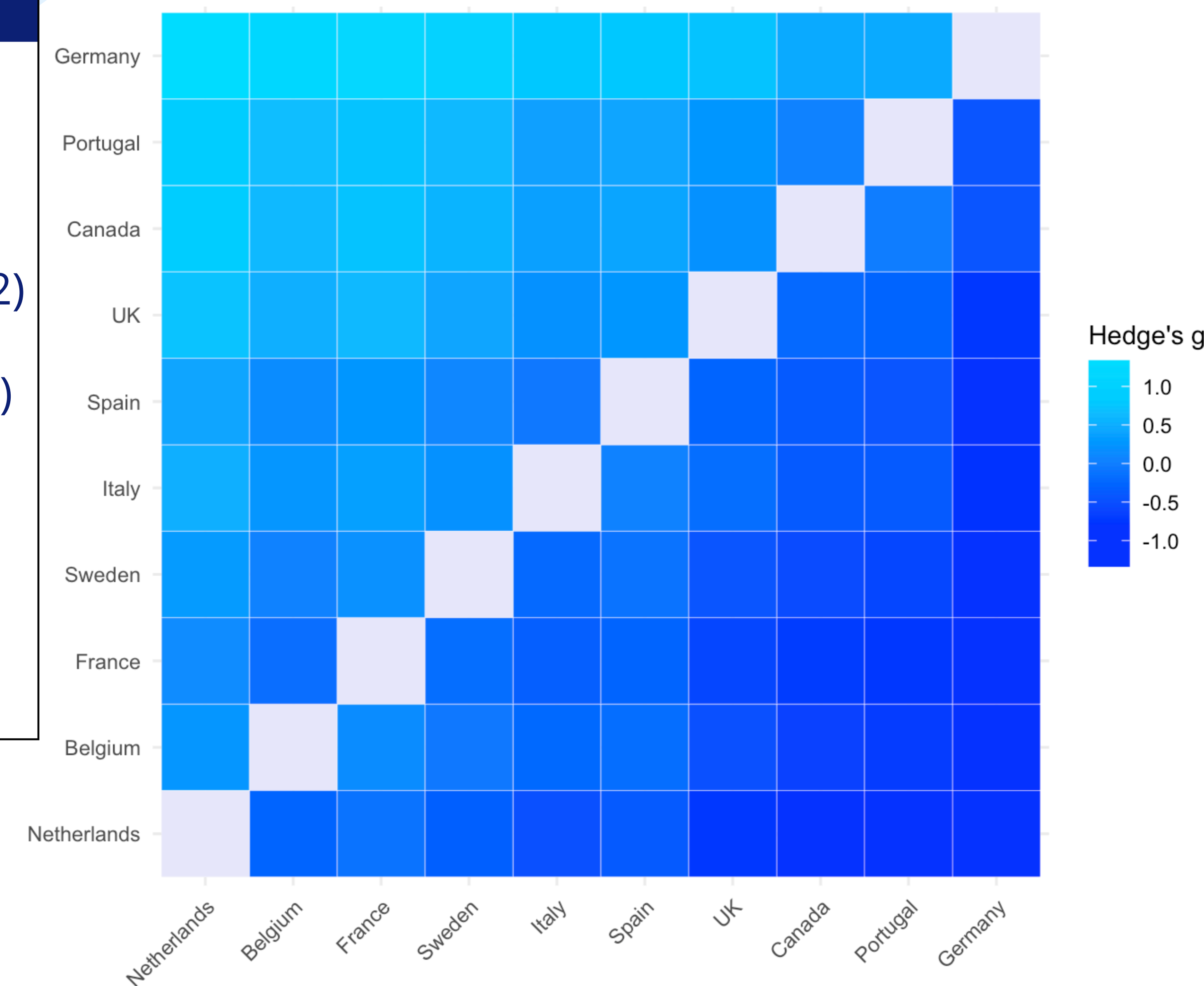
INTRODUCTION

- Based on clinical observations and informant history, **social cognition** is a key impairment in frontotemporal dementia (FTD), even in early (presymptomatic and prodromal) disease stages.
- However, no significant decline in **social cognition** has been found in **global multicenter cohort studies** focussing on these early stages.
- One reason might be that the **cross-cultural validity** of traditional tests prevents reliable differentiation. Research has shown that facial expressions are not shown similarly across cultures.
- We examined the influence of cultural background on **Facial Emotion Recognition (FER)** in presymptomatic and symptomatic genetic FTD.

RESULTS

	Symptomatic	Presymptomatic	Controls
n	174	421	356
Sex (M/F)	107/67	173/248	151/204
Age (y)	61.99 (8.77)	44.30 (11.66)	45.37 (12.72)
Education (y)	12.80 (3.50)	14.73 (3.36)	14.77 (3.28)
Gene (C9/GRN/MAPT)	95/45/30	182/166/66	NA
VPC country*	0.7%	19%	15%

*after controlling for age, sex and education



METHODS

- Linear mixed models (FER as outcome variable) with age, sex, education, gene as fixed effects and country as random effect.
- **Variance Partitioning Coefficient (VPC):** proportion of observed variation that is attributable to the effect of clustering by country, after controlling for all fixed effects.
- Explore differences in effect sized between countries with **Hedge's g**.
- *Voxel-based morphometry with T1 weighted MRI scans to investigate underlying neural correlates.*

DISCUSSION

- **Cultural background** does significantly contribute to **variation** in performance on a social cognition task in presymptomatic individuals and controls, but this variation decreases in symptomatic individuals.
- **Disease severity** could attenuate the effect of country in the symptomatic group.
- This study highlights the necessity to take **cultural variability** into consideration in FTD research, particularly within **international study cohorts**.
- We hope initiatives will foster the development of more representative social cognitive tests in all its **diversity**.



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