Investigating the relationship between bilingualism and perspective taking skills in adulthood

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Introduction

Perspective taking (PT) development is stimulated by social interactions and linguistic inputs1.

Bilingualism seems to influence the development of visual PT2, but findings in adults are inconsistent3:
- previous studies relied on a non-naturalistic non-standardised binary approach of bilingualism
- bilingualism seems to impact differently different forms of PT.

Objectives

Identify the bilingualism features influencing Level 1 and Level 2 Visual Perspective Taking processes.

Methods

- 96 adults, aged 16-60, knowing more than 1 language
- Demographics & Language history Questionnaire
- Test of Everyday Attention, test 2, 3, 5
- WASI II – Non-verbal IQ
- Visual Perspective Taking task1, outcome measures:
  - Altercentric bias = Self Inconsistent
    - Self consistent (RT in ms)
  - Egocentric bias = Avatar Inconsistent
    - Avatar consistent (RT in ms)

Predictors for regression models:
- Number of languages reported (nlang)
- Number of languages known at a medium / high proficiency (nlang_pro)
- Age of acquisition of L2 (L2 age)
- L2 proficiency (L2 prof)
- Language switching habits (L switch)
- TEA 3 score (TEA 3)
- Age
- Non verbal IQ (IQ)

Discussion

In a bilingual and multilingual adult population, altercentric and egocentric biases in visual PT seem to be only minimally influenced by bilingualism features (all adjusted R² < 0.2).

Altercentric bias is influenced by switching abilities (TEA 3), as well as the age of acquisition of L2 (level 1) and the number of languages known (level 2).

Egocentric bias in level 1 is influenced by switching abilities only, while egocentric bias in level 2 is influenced by the language switching habits and the number of languages known.

As the number of languages known seems to consistently influence level 2 biases, future analysis will investigate the role of bilingualism features in a multilingual (3+ languages) sample.