

The Relationship between Social Cognition and Social Behaviour in patients with Neurodegenerative Diseases: a Systematic Review

F. Gelmers^{1,2}, A.E. Straatsma³, A. Reinhardt³, R.B. Huitema^{3,1}, M.E. Scheenen^{3,1}, B.C. van Munster^{2,1}, J.M. Spikman^{3,1}

¹ Alzheimer's Centre Groningen, University Medical Center Groningen, Groningen, The Netherlands

² Department of Internal Medicine, University Medical Center Groningen, Groningen, The Netherlands

³ Department of Neurology, Unit of Neuropsychology, University of Groningen, University Medical Center Groningen, Groningen, The Netherlands

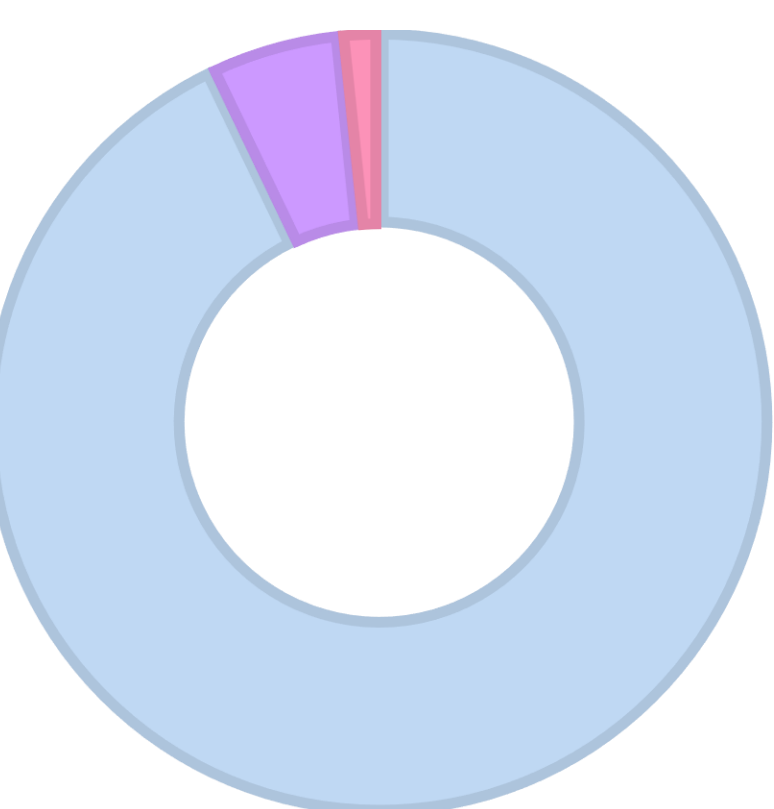
Introduction

- Changes in behaviour are often reported in neurodegenerative diseases.
- Relatively little is known about the impairments that may underlie and predict social behavioural changes.
- It is often assumed that impairments in social cognition (SC) underlie these behavioural changes.
- If someone is not able to correctly perceive someone's emotions or unable to experience emotions themselves, this might lead to inappropriate behaviour.

Aim of this study: systematically study associations between SC and social behaviour in patients with neurodegenerative diseases and provide a full overview.

Methods

In line with the PRISMA guidelines, a systematic search was conducted in the Pubmed and PsycINFO databases on September 5th, 2023. Main criteria for selection were that the participants were adult persons with a neurodegenerative disease, social cognition was assessed with a performance-based measure, social behaviour was assessed through a proxy report, and correlations between social cognition and social behaviour were reported.

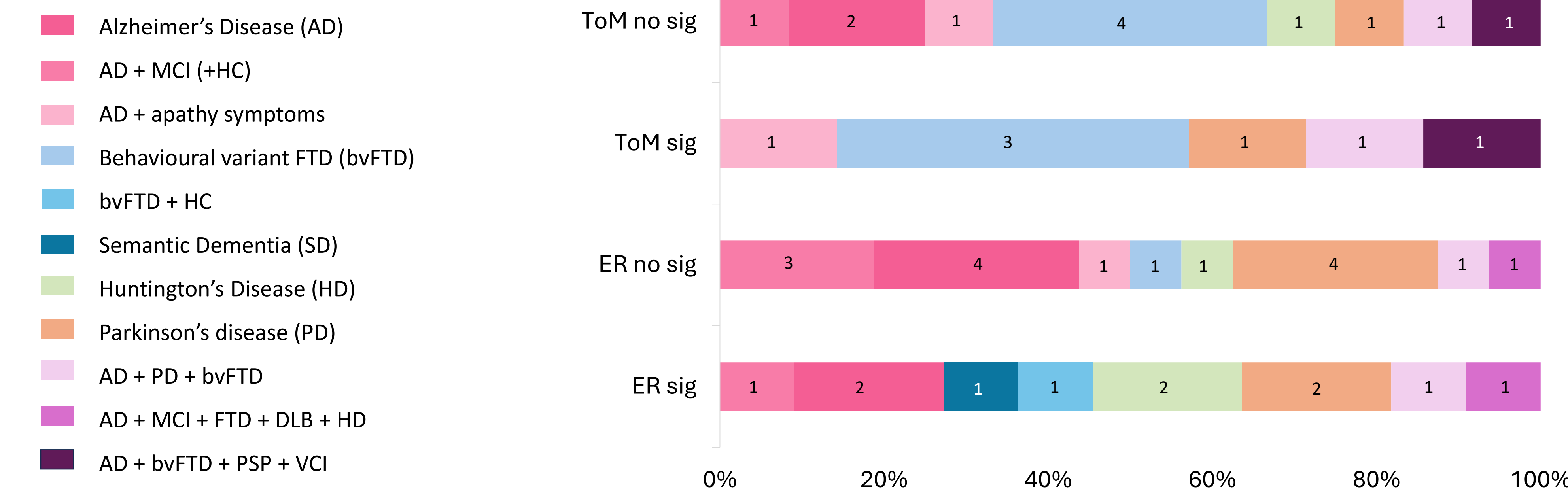


- 1538 records screened TIAB
- 91 papers for full-text review
- 27 papers included

Fig 1. Associations between Emotion Recognition and Social Behaviour; 19/27 papers

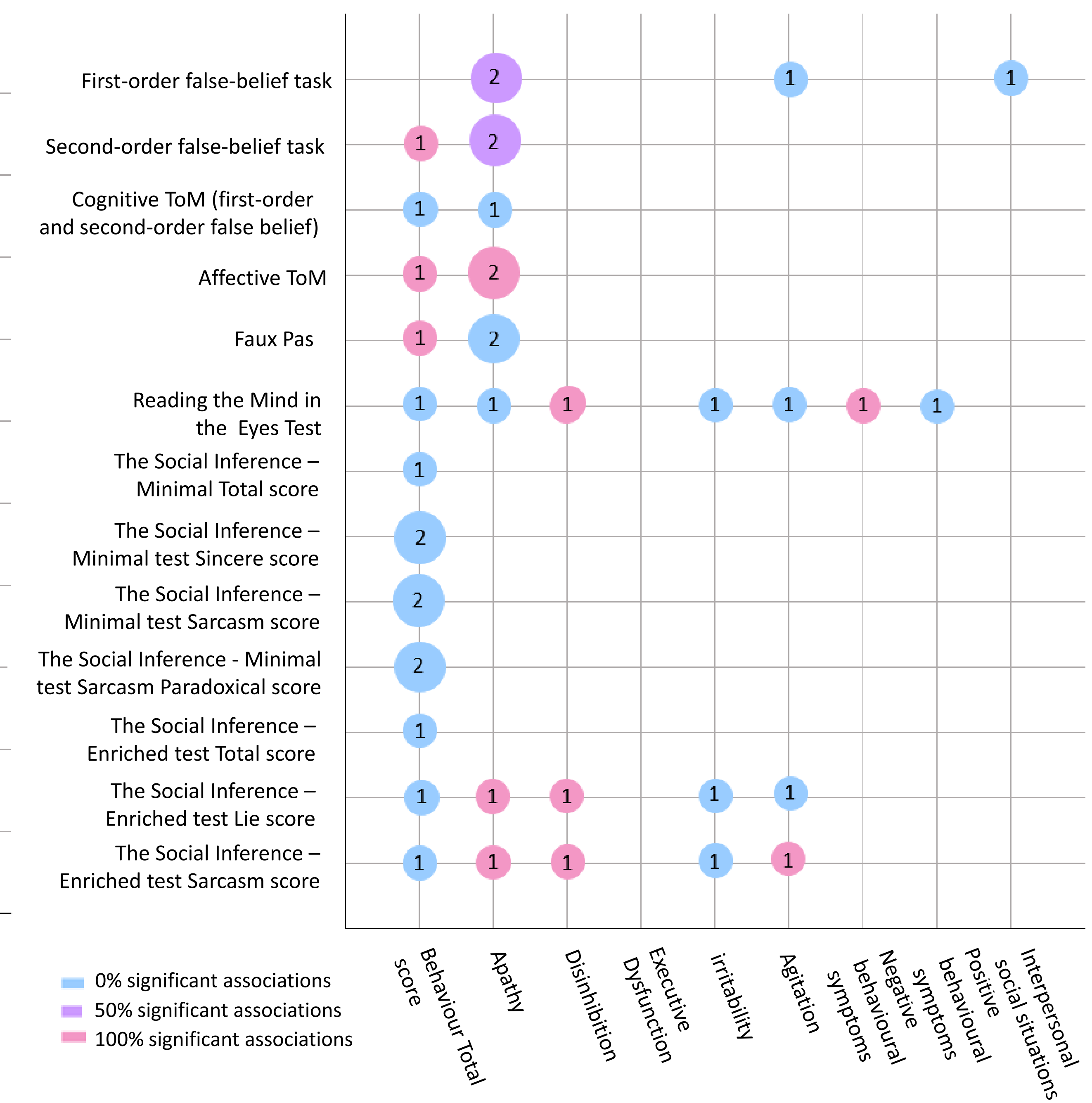


Fig 3. Percentage/amount of papers including the specific study group



Results

Fig 2. Associations between Theory of Mind and Social Behaviour; 11/27 papers



Conclusions

- Probable relationship between social cognition and social behavioural problems.
- However, in approximately half of the studies no association was found and variability between the publications is high, with different patient groups being included and different aspects of SC and social behaviour being measured with different instruments.
- It is imperative to create more unity in the instruments to measure SC and social behaviour, and to add to the literature on this association

