

Identifying Autism-Related Behaviours Most Strongly Associated with ADHD

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Background

Autism and ADHD often occur together (40-70%).¹

Many children show behaviours associated with **both** conditions.

This behavioural overlap may make diagnosis **difficult**.²

Identifying this overlap can inform more **personalized approaches to support**.



Research Question

Which autism-related behaviours measured by the Social Communication Questionnaire (SCQ) are most strongly associated with ADHD?

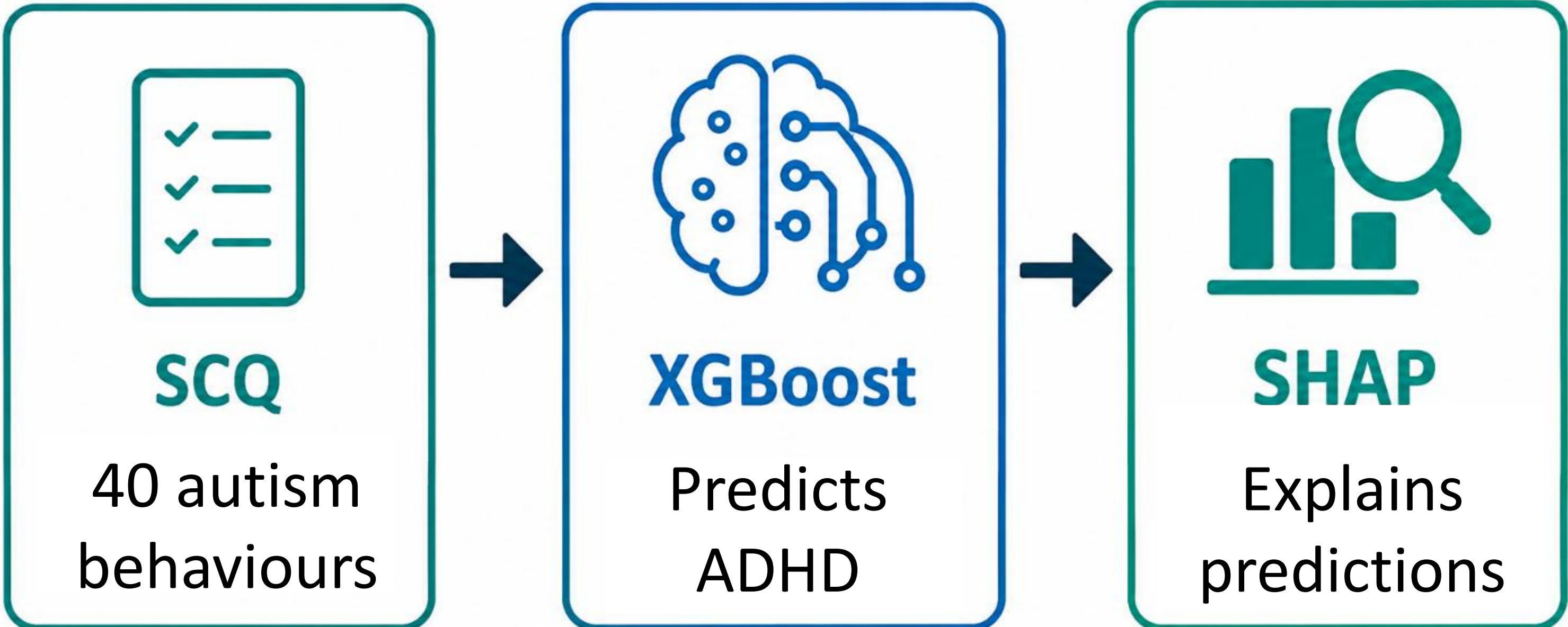


Methods



2,280 POND participants
Ages 4 – 22 years old
70% male
33% autism
45% ADHD

How the AI Works



Autism-related behaviours involving social communication, reciprocal interaction, and peer relationships showed the strongest association with ADHD.



Results

Top autism-related behaviours associated with ADHD

- 1 Making socially inappropriate comments
- 2 Difficulty noticing when others begin speaking
- 3 Difficulty participating in cooperative group play

Model Performance
AUC = 0.70 ± 0.05
Accuracy = 0.65 ± 0.04



Relevance to Holland Bloorview

These findings may help clinicians:



- Better understand the **autism–ADHD overlap**
- Develop **personalized approaches** to support

Conclusion & Next Steps

1. Behaviours involving **social communication, reciprocal interaction, and peer relationships** contribute to the behavioural overlap between autism and ADHD.
2. Future research should investigate **why** these behaviours are shared across autism and ADHD to inform more personalized supports.

Acknowledgements

Thank you to the WARD Family for funding this summer student program. Thank you to the POND Network and participants and families for their contribution to this research. Funding for this work was provided by the Canada Research Chairs Program.

References:

1. <https://www.frontiersin.org/journals/psychiatry/articles/10.3389/fpsy.2024.1387179/full>
2. <https://link.springer.com/article/10.1007/s11920-019-1020-5>