

DR. NANCY SADKA

INVESTIGATING RELATIONSHIPS
BETWEEN ADHD TRAITS IN AUTISTIC
TODDLERS AND PRE-SCHOOLERS
USING NETWORK ANALYSIS

WHAT WE DID

70

autistic children with the average age 29 months

18

questions from the Behaviour Assessment system for children (BASC-3)

**These questions relate to ADHD behaviours in two areas:
Hyperactivity and Attention**

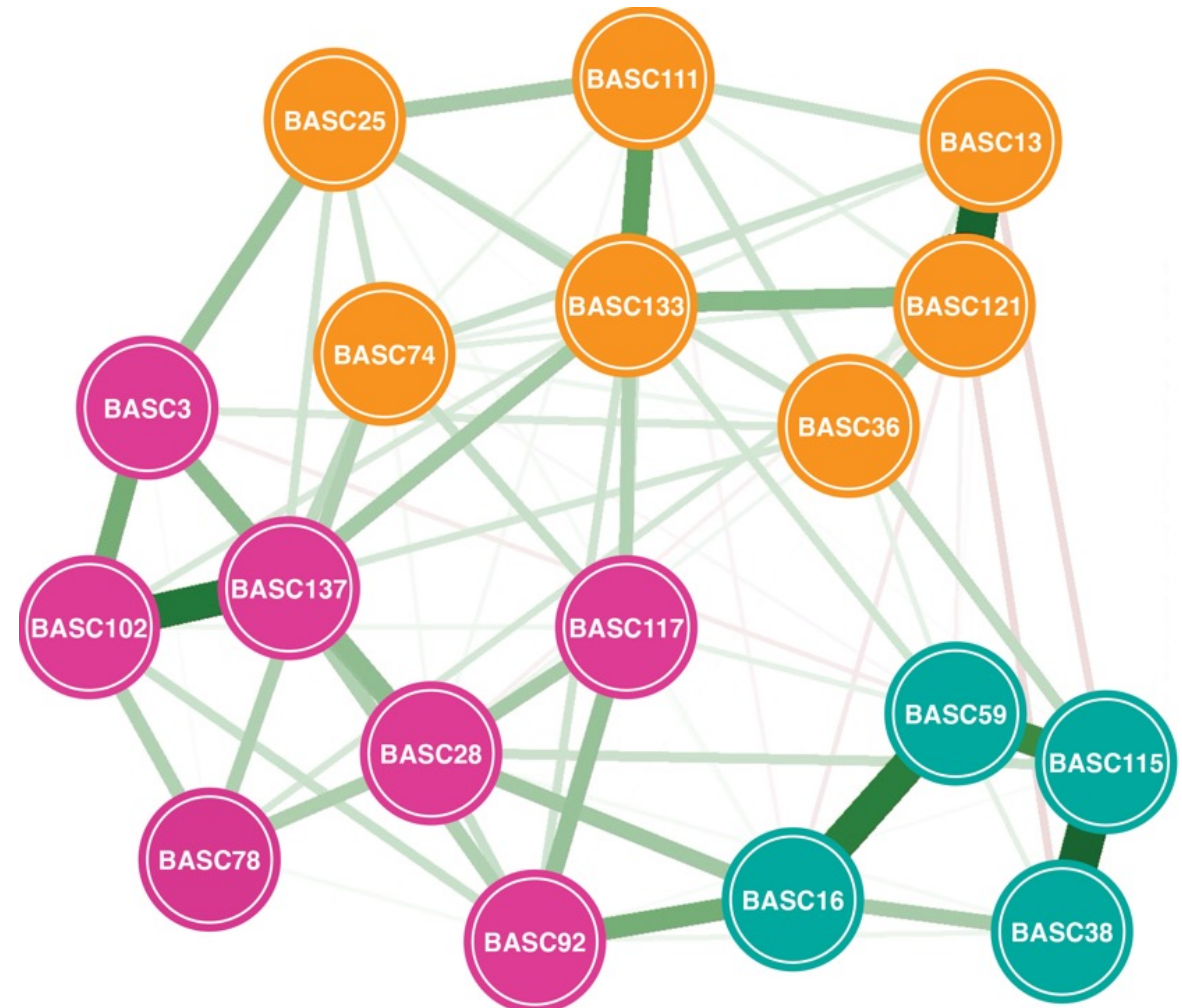
PRIMARY NETWORK VISUALIZATION

Attention Problems

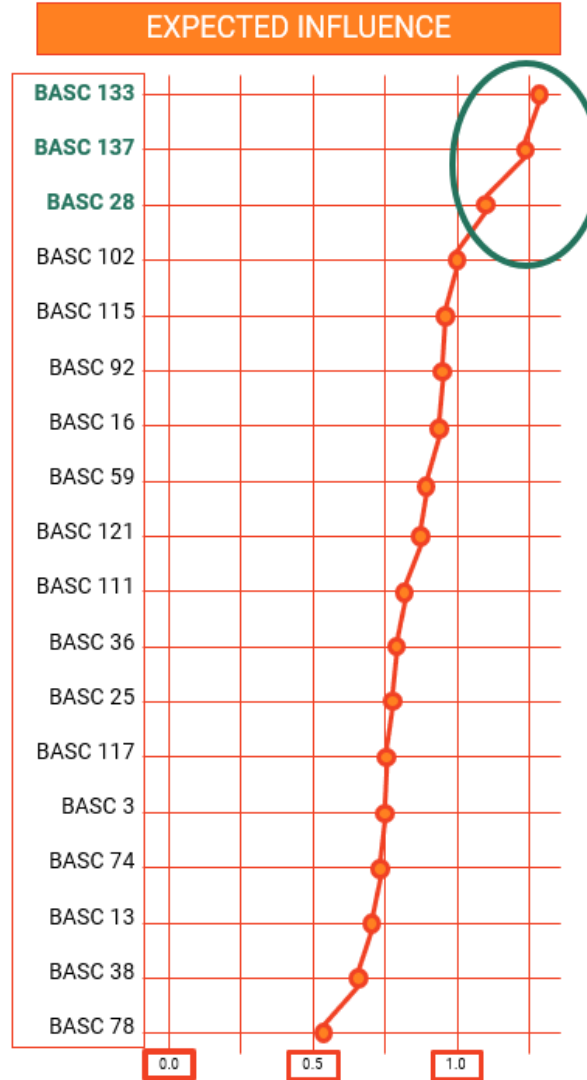
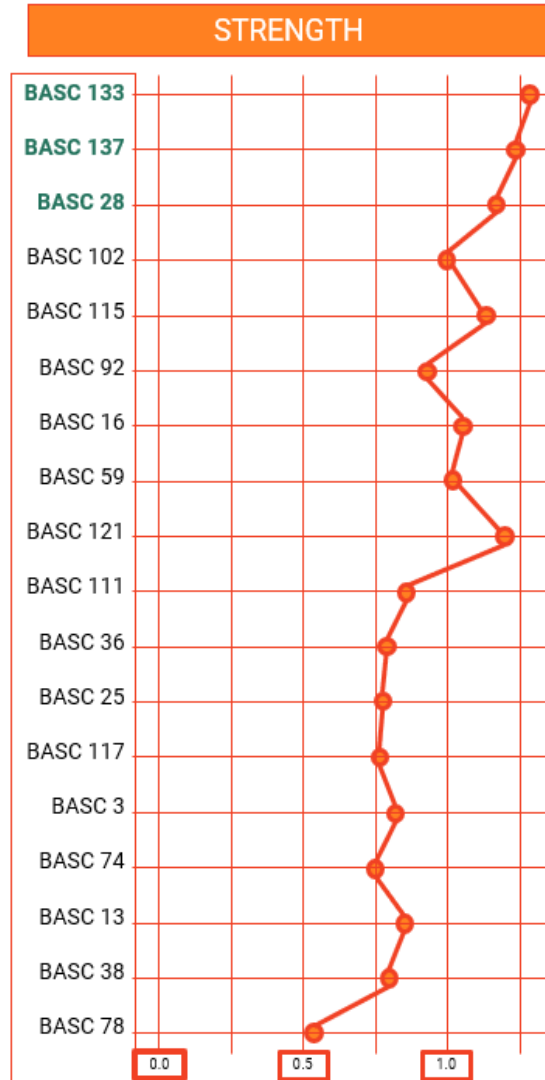
- 16. Pays Attention
- 28. Has a short attention span
- 38. Listens to directions
- 59. Pays attention when spoken to
- 78. Is easily distracted
- 92. Has trouble concentrating
- 115. Listens carefully

Hyperactivity

- 3. Is in constant motion
- 13. Interrupts parents when talking on phone
- 25. Acts without thinking
- 36. Cannot wait to take turn
- 74. Fiddles with things while at meals
- 102. Is overly active
- 111. Has poor self-control
- 117. Needs too much supervision
- 121. Interrupts others when they are speaking
- 133. Acts out of control.
- 137. Is unable to slow down.



POTENTIAL FIRST PREDICTORS OF ADHD



Hyperactivity

133. Acts out of control.

137. Is unable to slow down.

Attention Problems

28. Has a short attention span

The strength and one-step expected influence were calculated for each node.

The correlational stability coefficient was 0.13

NETWORK COMMUNITIES

Inattention

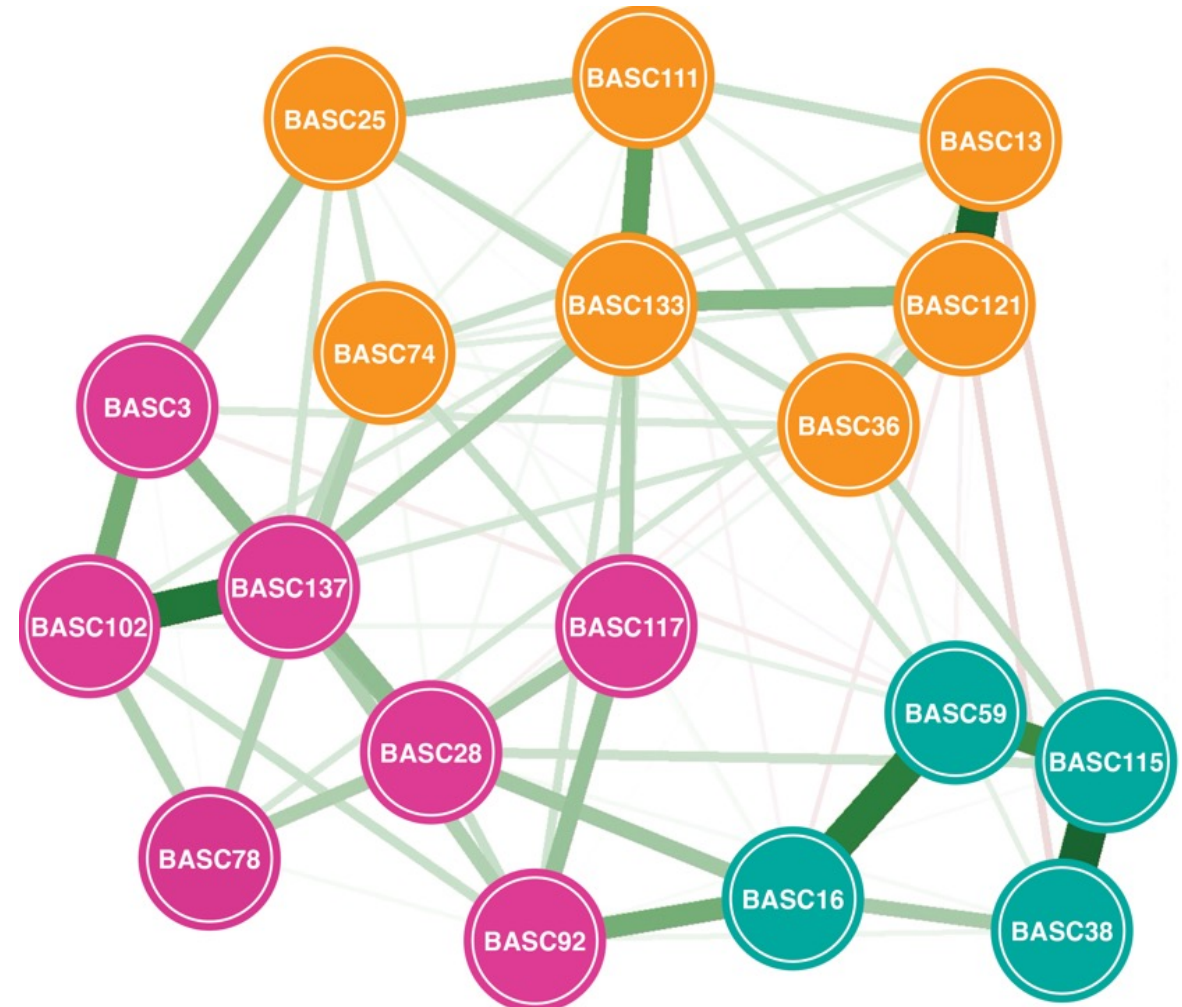
16. Pays Attention
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Overactivity

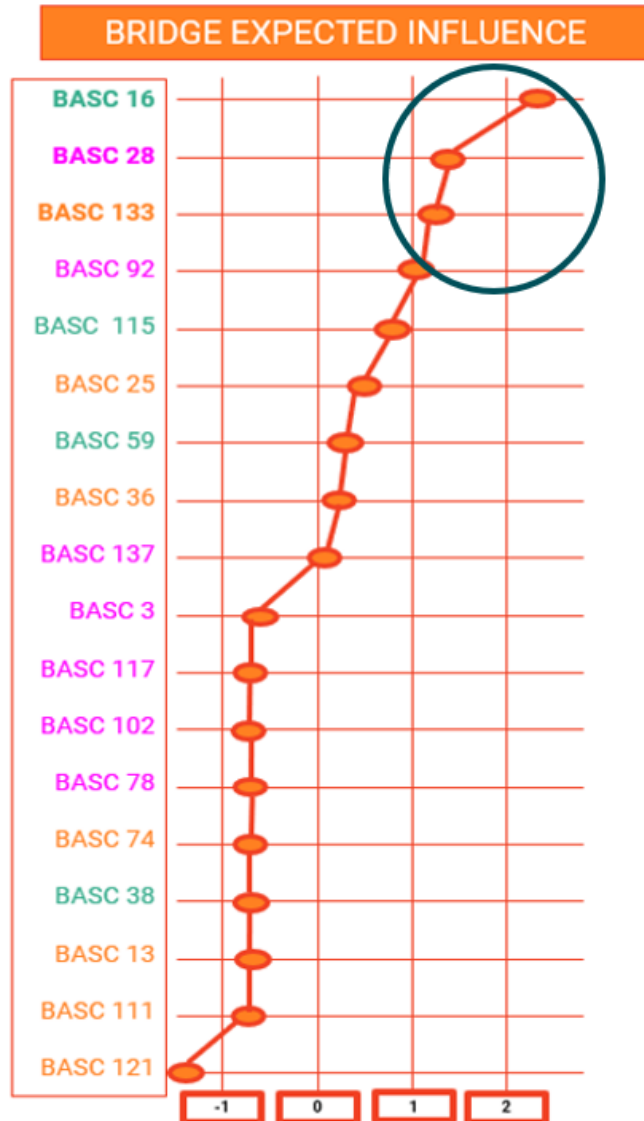
3. Is in constant motion
28. Has a short attention span
78. Is easily distracted
92. Has trouble concentrating
102. Is overly active
117. Needs too much supervision
137. Is unable to slow down.

Self-regulation

13. Interrupts parents when talking on phone
25. Acts without thinking
36. Cannot wait to take turn
74. Fiddles with things while at meals
111. Has poor self-control
121. Interrupts others when they're speaking
133. Acts out of control.



POTENTIAL BEHAVIOURS FOR EARLY SUPPORT AND THERAPY



INATTENTION

BASC 16: Pays attention

OVERACTIVITY

BASC 28: Has a short attention span

SELF-REGULATION

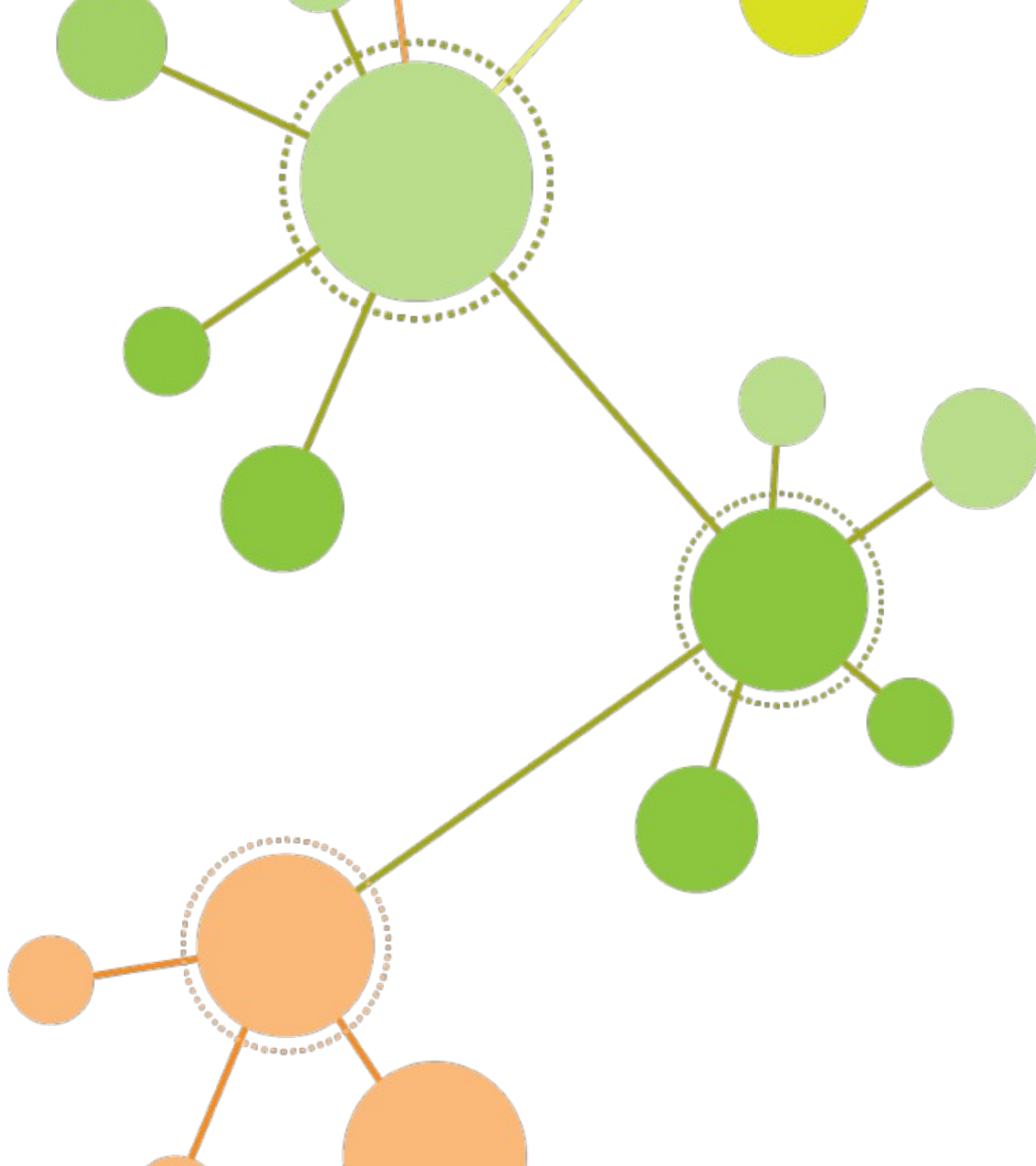
BASC 133: Acts out of control

1-Step Bridge EI were calculated for each node.

EARLY IDENTIFICATION



AUTISM AND ADHD



ADHD IN AUSTRALIA

6-10% of children

~ **800,000** diagnosed

> **80%** of autistic children have ADHD

Increased impact across lifespan for dual diagnoses

\$20 Billion annually

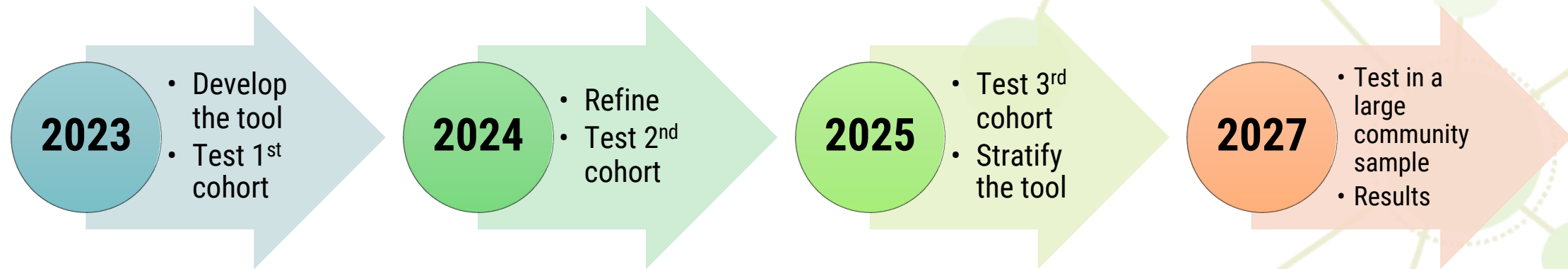
ADHD IN AUSTRALIA

Current tools **are not suitable** for children <4 years.

In 2023, I developed a tool to identify “high likelihood” of ADHD in **toddlers** (18-30 months).

Pilot testing resulted in **78% accuracy**.

DEVELOPING AND TESTING THE ADHDISCOVERY TOOL



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THANK YOU

DR. NANCY SADKA
n.sadka@latrobe.edu.au



**Professor
Amanda Richdale**



**Assoc. Professor
Josie Barbaro**



Dr Xia Li



Alex Haschek



Perrin Date