Autism Detection in Early Childhood (ADEC) 2nd Edition eManual

Robyn Young, PhD

Neil Brewer, PhD

Yong-Hwee Nah, PhD

Alliyza Lim, PhD

First published 2022
by ACER Press, an imprint of
Australian Council for Educational Research Ltd
19 Prospect Hill Road, Camberwell, Victoria, 3124, Australia

Re-released in 2025

By Dr Robyn Young of Flinders University

In the spirit of reconciliation, the authors acknowledge the Traditional Custodians of country throughout Australia and their connections to land, sea and community. We pay our respect to their elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples today.

Copyright © Dr Robyn Young of Flinders University

Edited by Shaneen Goodwin

ISBN: 9780864314468

A catalogue record for this book is available from the National Library of Australia

Part 5: Administration and Report Interpretation

Overview

Details for administering the ADEC and instructions for scoring can be found in this section, providing easy reference when assessing the child. The test administrator should read through the ADEC manual and have all the materials prepared before the start of the session.

There are a total of 16 behaviours to be observed. Each behaviour is given a rating of 0, 1 or 2, with 0 indicating normal behaviour and 2 reflective of possible autistic behaviour. Specific scoring guidelines have been provided for each item. Scores are then totalled to provide an overall score, which indicates the likelihood of autism in the assessed child and suggested follow-up.

During the administration, general observations of behaviour and scores should be recorded on a scoresheet. One scoresheet is required for each individual assessed. The scoresheets provide information on specific areas of concern and possible foci for support; on what the overall ADEC score means; and on suggested follow-up.

Interpretations of the overall ADEC score are as follows:

Table 1

Interpretations of the overall ADEC score

Score	Likelihood of autism	Possible follow-up
0–10	Low likelihood	No immediate action required
11–13	Moderate likelihood	Child should be reviewed
14–19	High likelihood	Further testing required
>19	Very high likelihood	A formal autism assessment is strongly recommended

Test Materials

- Device with speakers, camera, and microphone (e.g., desktop/laptop computer, mobile tablet)
- Box in which materials are stored, 50 litres
- Plastic building blocks, 10–12 cm in length
- Bowl, hard plastic, approximately 10cm in diameter
- Cup, hard plastic, approximately 6cm in diameter

- Plastic utensils
- Small soft toy
- Toy to elicit excited behaviour (e.g., a toy that moves and talks such as a Bouncing Tigger, or a pop-up toy such as a jack-in-the-box)
- Face flannel/handkerchief, dark and plain
- Toy phone shaped like a car (with wheels), or other multi-use toy phone
- Rectangular object (such as a piece of foam, dish sponge, or block) to use as a pretend phone

Administration of the ADEC

The presentation of items in the order given is not mandatory. It is recommended that the order of items, and the time allowed between items, be flexible to accommodate the child's needs. For younger children, it is important to move quickly through the items before they lose interest. Alternatively, the child may require some time to themself between items, in which case the toys used for the "Adaptation Period" may be used. However, two items measuring the same behaviour should not be presented consecutively. Further, the final item, waving goodbye, fits conveniently at the end of the session. If behaviours are not elicited when required or prompted but occur spontaneously, then a score of '1' should be given.

The ADEC can be administered in one of two ways: (a) in person by a clinician (ADEC), or (b) by the child's caregiver as directed by a clinician through a live video conference (ADEC-V).

ADEC

If more than one caregiver is present, one is selected as the caregiver who will interact with the child during testing. In the event that a child will not participate in the activities when guided by the tester, the caregiver's assistance may be solicited.

Caregivers are explicitly instructed that it is crucial that they do not prompt the child or comment in any way. This can be done via a standard statement that is read to the caregiver during the Adaptation Period.

ADEC-V

The ADEC can also be administered virtually via telehealth. In the ADEC-V, a live video conference is set up between the child's caregiver and the clinician. The clinician then directs the caregiver to administer each of the ADEC items, while observing and scoring the child's behaviour through the video feed. The caregiver-administered ADEC provides an ideal

solution when there is limited access to local clinicians, such as for clients in rural and remote areas. It also allows the child to be observed in a familiar environment and with a familiar adult, which may improve their willingness to cooperate.

The Testing Room

The testing room will be prepared prior to the entrance of the child. Ideally, it should:

- be an area that minimises the chance of interruption (e.g., telephone ringing, or other people entering the room)
- be cleared of any distracting items (e.g., TV switched off, toys cleared away)
- contain a table, out of the child's reach, for the ADEC materials
- with younger children, the administration may be done at a highchair

These conditions should be adhered to as closely as possible, but as the testing may occur in the child's home, variations may be unavoidable. However, it is important that only the child, the caregiver, and the tester should be present during the testing session.

In addition:

- The toys for the Adaptation Period are placed on the floor.
- The materials for the ADEC should remain in the box until required, to avoid the child seeing the items.

Scoring

Scoring of the items takes place as the items are presented. Therefore, it is essential that the tester be thoroughly familiar with the items of the ADEC and the scoring protocol for each item. The scoring protocol for each item is included underneath the description of each item. Items are scored on the checklist for ADEC items.

What Do I Do if the Child is Unwilling to Cooperate?

The Adaptation Period is included to allow the child to relax; if, however, the child is unwilling to play with the toys independently, or is crying or clinging to the caregiver, extend the Adaptation Period and ask the caregiver to interact with the child to help them to relax. Testing may proceed once the child settles and is playing independently.

If at any time the child is unable to settle or becomes inconsolably distraught or uncooperative, allow the child to play with the Adaptation Period toys and ask the caregiver to try to calm them down. It may be necessary to give the child a 'break' by allowing them to leave the room and engage in an activity of their choice for 5 minutes or so, before resuming testing. If this is

unsuccessful, or is required more than once, the testing may be continued on another occasion.

Suggested Sequence for Testing

(Note: The following sequence is recommended to improve the efficiency of the session but items can be completed in any order.)

1. Response to name
2. Imitation (drum hands on box)
3. Stereotypical behaviour (upset when line of blocks is disturbed)
4. Gaze switching
5. Eye contact (engagement)
6. Functional play (toy telephone)
7. Pretend play (pretend phone)
8. Reciprocity of smile
9. Response to everyday sounds
10. Gaze monitoring (following a point/pointing)
11. Responds to a verbal command
12. Demonstrates use of words
13. Anticipatory posture (for being picked up)
14. Nestling into caregiver
15. Use of gestures (wave goodbye)
16. Ability to switch from task to task

Autism Detection in Early Childhood (ADEC)

Materials Required

- Device with speakers (e.g., desktop/laptop computer, mobile tablet)
- Box in which materials are stored, 50 litres
- Plastic building blocks, 10–12 cm in length
- Bowl, hard plastic, approximately 10cm in diameter
- Cup, hard plastic, approximately 6cm in diameter
- Plastic utensils
- Small soft toy
- Toy to elicit excited behaviour (e.g., a toy that moves and talks such as a Bouncing Tigger, or a pop-up toy such as a jack-in-the-box)
- Face flannel/handkerchief, dark and plain
- Toy phone shaped like a car (with wheels), or other multi-use toy phone
- Rectangular object (such as a piece of foam, dish sponge, or block) to use as a pretend phone

Adaptation Period

Materials: building blocks, bowl, cup and utensils, small soft toy

Procedure

Say to the caregiver:

This is a settling in time for [CHILD]. Allow [CHILD] to play alone with the toys. Once we start the testing, it is important that we test [CHILD]'s response without any additional suggestions or prompting from you; for example, don't try to show or tell them what to do, or in any way help them with the task. On some of the tasks, I'll ask for your suggestions and help. But mostly we are interested in seeing how [CHILD] does on their own.

Allow the child to play alone for 2 minutes.

> If, after 2 minutes, the child refuses to play independently, is crying, or clinging to the caregiver, instruct the caregiver to attempt to engage the child in playing with the toys. [Allow an additional 3 minutes for the child to settle.]

If the child is playing contentedly, pack away the toys.

1. Response to Name

Materials: none

Procedure

Ensure that the child is free from distractions and not interacting with the caregiver.

Position yourself at a 90-degree angle from the child.

Call the child's name once.

If the child does not turn their head toward you within 5 seconds, call the child's name again.

Repeat up to a maximum of 5 trials.

0	Child turns head toward the clinician immediately following name call on 1st or 2nd trial
1	Child turns head toward the clinician immediately following name call on 3rd, 4th, or 5th trial
1	Behaviour is seen to occur spontaneously at other times during the testing session (but not when required)
2	Child does not respond to name on any of the first 5 trials and this behaviour is not demonstrated spontaneously during the testing session

2. Imitation of Motor Behaviours

Materials: box

Procedure

Place the box between yourself and the child. Drum on the box with both hands flat and say:

Do this.

If the child makes no attempt to imitate, drum on the box again and say:

Do this.

Repeat up to a maximum of 3 trials.

0	Child drums on the box with both hands on at least 1 trial
1	Child makes clear attempt to imitate the gesture but is impeded by lack of motor coordination
1	Child imitates any action spontaneously during the testing session but not on command
2	Child makes no attempt to imitate gesture on any of the 3 trials

3. Stereotypical Behaviour	
Materials: blocks **Procedure** Line up a row of blocks. Draw the child's attention to the row of blocks. Mess up the row of blocks. If the child is unconcerned by disturbance, line up a row of blocks again and then mess them up. Repeat up to a maximum of 3 trials.	0 Child is unconcerned by disturbance of row of blocks or disturbs them themself 1 Child becomes upset at disturbance of row of blocks 1 Child demonstrates some linear alignment of objects at any time during the session 1 Child engages in any stereotypical behaviours with their body or their use of objects at any time during the session 2 Child becomes upset and attempts to realign the blocks

4. Gaze Switching	
Materials: toy to elicit excited behaviour (e.g., a toy that moves and talks such as a Bouncing Tigger, or a pop-up toy such as a jack-in-the-box) **Procedure** Position yourself at a 90-degree angle from the child. Turn on the toy.	0 Child turns head and eyes to look at the toy, then turns head and eyes to look at caregiver/clinician, then turns back to look at toy 1 Child looks at toy or caregiver/clinician but no switching of gaze between the toy and caregiver/clinician 2 Child makes no attempt to look at or engage the caregiver/clinician; child is fixated on toy; child is indifferent to toy

5. Eye Contact	
Materials: face flannel **Procedure** Using the face flannel, play a game of peek-a-boo with the child 5 times.	0 Child engages in game and looks into the clinician's eyes <u>on all 5 trials</u> 1 Child looks into the clinician's eyes <u>on at least 1 trial</u>, but not all 5 trials 2 Child does not look into the clinician's eyes on any of the 5 trials or deliberately tries to avoid eye contact

6. Functional Play	
Materials: toy phone shaped like a car (with wheels), or other multi-use toy phone **Procedure** Give the toy phone to the child to play with. Do not tell them what to do with it.	<u>Example behaviours:</u> ▪ picks up phone/receiver and holds it to their ear with/without vocalisations ▪ dials rotary phone numbers or pushes buttons on the phone ▪ pushes car along (for toy phone shaped like a car with wheels) ▪ flips phone open (for flip phone) 0 Child engages in <u>more than one</u> of the example behaviours 1 Child engages in <u>only one</u> of the example behaviours 1 Child engages in functional play using other toys at <u>any time during the session</u> 2 Child does not engage in any of the example behaviours

7. Pretend Play	
Materials: rectangular object (e.g., piece of foam, dish sponge, or block) **Procedure** Pick up the rectangular object and hold it up to your ear. Pretend to talk on the phone by saying: ***Hello? Oh, you'd like to speak to [CHILD]? Here they are.*** Then pass the object to the child and say: ***Here, [CHILD], it's for you. Have a talk on the phone.***	0 Child holds object to ear as if it is a phone and vocalises 1 Child takes object and may vocalise, but does not clearly demonstrate an understanding that it is a pretend phone 2 Child does not take the object; child takes the object but does not hold it against ear (e.g., holds it, throws it, eats it); child looks away

8. Reciprocity of Smile	
Materials: none **Procedure** Get the child's attention by calling the child's name (or any other verbal means) and smile enthusiastically at the child. You may ask the child to smile or talk to the child (e.g., "Are you going to smile at me? Come on, give us a smile") in a warm, encouraging manner. Repeat up to a maximum of 5 trials.	0 Child smiles immediately after 1st or 2nd trial and there is a clear change in expression from a non-smiling expression to a smile 1 Child demonstrates a delayed smile 1 Child smiles spontaneously at any time during the testing session 2 Child does not smile; child avoids eye contact with the clinician throughout the item

9. Response to Everyday Sounds	
Materials: ADEC playlist of household noises **Procedure** Ask the caregiver: ***Do any of these 5 sounds upset [CHILD]? A baby crying, a vacuum cleaner, loud banging, a blender, or a person coughing?*** If yes, award a score of 2 and proceed to Item 10. If no, play ADEC playlist of household noises.	0 Child turns head toward device, child points to device, or child looks at caregiver 1 Child ignores sounds and continues with activity 2 Child covers ears with hands, child attempts to leave room, child cries or screams 2 Caregiver reports child is bothered by any sound

10. Gaze Monitoring	
Materials: none **Procedure** Using an excited, animated tone, point across the room and say: ***Oh look [CHILD], is that [mummy/ daddy/ a familiar object]?***	0 Child turns head and looks in the direction the clinician is pointing or child points to something to engage the clinician 1 Child looks at the clinician's face or their pointing hand but does not look in the direction they are pointing 2 Child does not look at the clinician

11. Response to Verbal Command

Materials: none

Procedure

If the child has clearly responded to a number of commands prior to this, award a score of 0 and proceed to Item 12.

Ask the caregiver:

Is there any verbal command that [CHILD] will respond to, such as "Come here" or "Clap hands" without you physically gesturing it?

If no, award a score of 2 and proceed to Item 12.

If yes, say to the caregiver:

Can you demonstrate how [CHILD] responds to that command? First, get [CHILD]'s attention. Then, give the command but don't use any gestures, just the verbal command.

0 Child demonstrates the behaviour to the standard normally achieved according to the caregiver

1 Child responds to the command (looks up at caregiver, approaches caregiver) but does not demonstrate the behaviour they were asked to do

2 Child does not respond or looks away from the caregiver

2 Caregiver states that child is unable to respond to a verbal command

12. Use of Words

Materials: none

Procedure
If the child has clearly used an appropriate number of words for their age during the testing period, award a score of 0 and proceed to Item 13.

Ask the caregiver:

Does [CHILD] use any words?

If no, award a score of 2 and proceed to Item 13.

If yes, ask the caregiver:

What are some of the words [CHILD] can use? Without saying the word yourself, can you try to get [CHILD] to say it?

0 Child clearly pronounces:
≥ 1 word (12–8 months)
≥ 6 words (18–24 months)
≥ 12 words (24–36 months)

1 Child makes an attempt but the word is not pronounced clearly, or child just babbles, or less words are spoken than is desirable for the child given their age

2 Child does not respond or looks away from the caregiver

2 Caregiver states that child is unable to use words

13. Anticipatory Posture	
Materials: none	Example behaviours: ▪ leans forward toward caregiver ▪ raises one or both elbows/arms to make armpits available for caregiver to grasp ▪ displays anticipation of being picked up but appears to reject it (e.g., by squeezing arms against body as if to prevent the caregiver from gaining access to their armpits) 0 Child demonstrates one or more of the example behaviours, making it clear they realise the intent of the caregiver 1 Child demonstrates one or more of the example behaviours after much prompting (either verbal or physical) 2 Child does not display any of the example behaviours
Procedure Ask the caregiver: ***Without saying anything, could you stand in front of [CHILD] and put your hands out to pick them up?*** If the child does not respond, say to the caregiver: ***Can you clap your hands to get [CHILD]'s attention?***	

14. Nestling

Materials: none

Procedure

Observe the child's response to being held.

This item can also be scored at any other time throughout the session when the child is being held.

Non-example behaviours:

- assumes rigid posture
- assumes limp posture (needs to be held up by caregiver)
- struggles
- arches back
- pushes caregiver away

0 Child nestles into caregiver by resting body on caregiver's body and leaning head on caregiver's shoulder (may put arms around caregiver)

1 Child displays some indications of discomfort but none of the non-example behaviours, or child will only nestle at their initiative but not when responding to the caregiver

2 Child displays one or more of the non-example behaviours

15. Use of Gestures

Materials: none

Procedure

Say to the caregiver:

I want to see if [CHILD] waves goodbye to me without being prompted. I'll pretend to leave but don't wave to me or try to get [CHILD] to wave.

Return all materials to the box and walk toward the door.

Wave to the child and say:

[CHILD], I'm going now. Bye-bye!

0 Child waves to the clinician at least once (arm or hand is extended towards the clinician and waved side to side and/or up and down repeatedly, or hand is opened and closed palm facing toward the clinician)

1 Child makes a clear attempt to wave (e.g., child extends arm towards the clinician but does not move it up and down in a waving action)

2 Child does not respond or looks away

16. Ability to Switch Tasks	
Materials: none	0 Child readily changes from one activity to another 1 Child may become fixated on one task but generally is happy to change tasks 2 Child does not respond to the clinician's requests to change tasks or will not engage in tasks as required, preferring to do their own thing
Procedure This ability should be observed throughout the testing procedure.	

Flinders University

Autism Detection in Early Childhood (ADEC)

Name:	Date of Birth:
ID:	Date of Testing:
Examiner	Age at Testing:

Item	Score		
Response to Name	0	1	2
Imitation of Motor Behaviour	0	1	2
Stereotypical Behaviour	0	1	2
Gaze Switching	0	1	2
Eye contact	0	1	2
Functional Play	0	1	2
Pretend Play	0	1	2
Reciprocity of Smile	0	1	2
Response to Everyday Sounds	0	1	2
Gaze Monitoring	0	1	2
Response to Verbal Command	0	1	2
Use of Words	0	1	2
Anticipatory Posture	0	1	2
Nestling	0	1	2
Gestures	0	1	2
Ability to Switch Tasks	0	1	2
	TOTAL:		

Score	Likelihood of autism	Possible follow-up
0 – 10	Low likelihood	No immediate action required
11 – 13	Moderate likelihood	Child should be reviewed
14 – 19	High likelihood	Further testing required
> 19	Very high likelihood	A formal autism assessment is strongly recommended

Autism Detection in Early Childhood – Virtual (ADEC-V)

Materials Required

By caregiver:

- Device with speakers, camera, and microphone (e.g., desktop/laptop computer, mobile tablet)
- Box in which materials are stored, 50 litres
- Plastic building blocks, 10–12 cm in length
- Bowl, hard plastic, approximately 10cm in diameter
- Cup, hard plastic, approximately 6cm in diameter
- Plastic utensils
- Small soft toy
- Toy to elicit excited behaviour (e.g., a toy that moves and talks such as a Bouncing Tigger, or a pop-up toy such as a jack-in-the-box)
- Face flannel/handkerchief, dark and plain
- Toy phone shaped like a car (with wheels), or other multi-use toy phone
- Rectangular object (such as a piece of foam, dish sponge, or block) to use as a pretend phone

By clinician:

- Device with speakers, camera, and microphone (e.g., desktop/laptop computer, mobile tablet)

Adaptation Period

Materials: building blocks, bowl, cup and utensils, small soft toy.

Procedure

Ensure that the video link is working well, and the camera is positioned to provide a clear view of the child and caregiver. Say to the caregiver:

This is a settling in time for [CHILD]. Allow [CHILD] to play alone with the toys. Once we start the testing, it is important that we test [CHILD]'s response without any additional suggestions or prompting from you; for example, don't try to show or tell them what to do, or in any way help them with the task. On some of the tasks, I'll ask for your suggestions and help. But mostly we are interested in seeing how [CHILD] does on their own.

Allow the child to play alone for 2 minutes.

> If, after 2 minutes, the child refuses to play independently, is crying, or clinging to the caregiver, instruct the caregiver to attempt to engage the child in playing with the toys. [Allow an additional 3 minutes for the child to settle.]

If the child is playing contentedly, instruct the caregiver to pack away the toys.

1. Response to Name

Materials: none

Procedure

Ensure that the child is free from distractions and not interacting with the caregiver. Say to the caregiver:

The first thing we are going to look at is their response to name. When [CHILD] is at a 90-degree angle from you, call their name once to see how they respond.

> If the child does not turn their head toward the caregiver within 5 seconds, say:
>
> ***One more time, when they are at about a 90-degree angle, can you call their name again?***
>
> Repeat up to a maximum of 5 trials.

0	Child turns head toward the caregiver immediately following name call on 1st or 2nd trial
1	Child turns head toward the caregiver immediately following name call on 3rd, 4th, or 5th trial
1	Behaviour is seen to occur spontaneously at other times during the testing session (but not when required)
2	Child does not respond to name on any of the first 5 trials and this behaviour is not demonstrated spontaneously during the testing session

2. Imitation of Motor Behaviours

Materials: box

Procedure

Say to the caregiver:

For this next task, place the box between yourself and [CHILD]. Drum on the box with both hands flat and say, "Do this." Don't say anything else, just say, "Do this."

If the child makes no attempt to imitate, say:

Try that one more time. Drum on the box and say, "Do this."

Repeat up to a maximum of 3 trials.

0	Child drums on the box with both hands on at least 1 trial
1	Child makes clear attempt to imitate the gesture but is impeded by lack of motor coordination
1	Child imitates any action spontaneously during the testing session but not on command
2	Child makes no attempt to imitate gesture on any of the 3 trials

3. Stereotypical Behaviour

Materials: blocks

Procedure

Say to the caregiver:

Now I'm going to get you to line up a row of blocks.

Try to get [CHILD]'s attention to the row of blocks.

Now mess them up.

If the child is unconcerned by disturbance, say:

Try that one more time. Line up a row of blocks and then mess them up.

Repeat up to a maximum of 3 trials.

0	Child is unconcerned by disturbance of row of blocks or disturbs them themself
1	Child becomes upset at disturbance of row of blocks
1	Child demonstrates some linear alignment of objects at any time during the session
1	Child engages in any stereotypical behaviours with their body or their use of objects at any time during the session
2	Child becomes upset and attempts to realign the blocks

4. Gaze Switching	
Materials: toy to elicit excited behaviour (e.g., a toy that moves and talks such as a Bouncing Tigger, or a pop-up toy such as a jack-in-the-box) **Procedure** Ask the caregiver: ***Could you now get the Bouncing Tigger toy (or equivalent) and turn it on?***	0 Child turns head and eyes to look at the toy, then turns head and eyes to look at caregiver, then turns back to look at toy 1 Child looks at toy or caregiver but no switching of gaze between the toy and caregiver 2 Child makes no attempt to look at or engage the caregiver; child is fixated on toy; child is indifferent to toy

5. Eye Contact	
Materials: face flannel **Procedure** Say to the caregiver: ***Now I'm going to ask you to use the flannel to play a game of peek-a-boo with [CHILD]. Play the game 5 times.***	0 Child engages in game and looks into the caregiver's eyes on all 5 trials 1 Child looks into the caregiver's eyes on at least 1 trial, but not all 5 trials 2 Child does not look into the caregiver's eyes on any of the 5 trials or deliberately tries to avoid eye contact

6. Functional Play

Materials: toy phone shaped like a car (with wheels), or other multi-use toy phone

Procedure

Say to the caregiver:

For this next task, give the toy phone to [CHILD] to play with. We want to see how they play with it on their own, so try not to tell them what to do.

Example behaviours:

- picks up phone/receiver and holds it to their ear with/without vocalisations
- dials rotary phone numbers or pushes buttons on the phone
- pushes car along (for toy phone shaped like a car with wheels)
- flips phone open (for flip phone)

0 Child engages in more than one of the example behaviours

1 Child engages in only one of the example behaviours

1 Child engages in functional play using other toys at any time during the session

2 Child does not engage in any of the example behaviours

7. Pretend Play

Materials: rectangular object (e.g., piece of foam, dish sponge, or block)

Procedure

Sao to the caregiver:

Now pick up the rectangular object and hold it up to your ear. Pretend to talk on the phone by saying, "Hello? Oh, you'd like to speak to [CHILD]? Here they are." Then pass the object to [CHILD] and say, "Here, [CHILD], it's for you. Have a talk on the phone."

0 Child holds object to ear as if it is a phone and vocalises

1 Child takes object and may vocalise, but does not clearly demonstrate an understanding that it is a pretend phone

2 Child does not take the object; child takes the object but does not hold it against ear (e.g., holds it, throws it, eats it); child looks away from the caregiver

8. Reciprocity of Smile	
Materials: none	0 Child smiles immediately after the 1st or 2nd trial and there is a clear change in expression from a non-smiling expression to a smile 1 Child demonstrates a delayed smile 1 Child smiles spontaneously at any time during the testing session 2 Child does not smile; child avoids eye contact with the caregiver throughout the item
Procedure Say to the caregiver: ***Can you now get [CHILD]'s attention and then smile at [CHILD] to see if they smile back? You may talk to [CHILD] and encourage them to smile.*** Repeat up to a maximum of 5 trials.	

9. Response to Everyday Sounds	
Materials: ADEC playlist of household noises	0 Child turns head toward device, child points to device, or child looks at caregiver 1 Child ignores sounds and continues with activity 2 Child covers ears with hands, child attempts to leave room, child cries or screams 2 Caregiver reports child is bothered by any sound
Procedure Ask the caregiver: ***Do any of these 5 sounds upset [CHILD]? A baby crying, a vacuum cleaner, loud banging, a blender, or a person coughing)?*** If yes, award a score of 2 and proceed to Item 10. If no, play ADEC playlist of household noises.	

10. Gaze Monitoring	
Materials: none **Procedure** Say to the caregiver: ***Using an excited, animated tone, point across the room and say, "Oh look [CHILD], is that [mummy/ daddy/ a familiar object]?"***	0 Child turns head and looks in the direction the caregiver is pointing or child points to something to engage the caregiver 1 Child looks at the caregiver's face or their pointing hand but does not look in the direction they are pointing 2 Child does not look at the caregiver

11. Response to Verbal Command	
Materials: none **Procedure** If the child has clearly responded to a number of commands prior to this, award a score of 0 and proceed to Item 12. Ask the caregiver: ***Is there any verbal command that [CHILD] will respond to, such as 'Come here' or 'Clap hands' without you physically gesturing it?'*** If no, award a score of 2 and proceed to Item 12. If yes, say to the caregiver: ***Can you demonstrate how [CHILD] responds to that command? First, get [CHILD'S] attention. Then, give the command but don't use any gestures, just the verbal command.***	0 Child demonstrates the behaviour to the standard normally achieved according to the caregiver 1 Child responds to the command (looks up at the caregiver, approaches the caregiver) but does not demonstrate the behaviour they were asked to do 2 Child does not respond or looks away from the caregiver 2 Caregiver states that child is unable to respond to a verbal command

12. Use of Words

Materials: none

Procedure
If the child has clearly used an appropriate number of words for their age during the testing period, award a score of 0 and proceed to Item 13.

Ask the caregiver:

> ***Does [CHILD] use any words?***
>
> If no, award a score of 2 and proceed to Item 13.

If yes, ask the caregiver:

What are some of the words [CHILD] can use? Without saying the word yourself, can you try to get [CHILD] to say it?

0 Child clearly pronounces:
≥ 1 word (12–8 months)
≥ 6 words (18–24 months)
≥ 12 words (24–36 months)

1 Child makes an attempt but the word is not pronounced clearly, or child just babbles, or less words are spoken than is desirable for the child given their age

2 Child does not respond or looks away from the caregiver

2 Caregiver states that child is unable to use words

13. Anticipatory Posture

Materials: none

Procedure

Ask the caregiver:

Without saying anything, could you stand in front of [CHILD] and put your hands out to pick them up?

> If the child does not respond, say to the caregiver:
>
> ***Can you clap your hands to get [CHILD'S] attention?***

Example behaviours:
- leans forward toward caregiver
- raises one or both elbows/arms to make armpits available for caregiver to grasp
- displays anticipation of being picked up but appears to reject it (e.g., by squeezing arms against body as if to prevent the caregiver from gaining access to their armpits)

0 Child demonstrates one or more of the example behaviours, making it clear they realise the intent of the caregiver

1 Child demonstrates one or more of the example behaviours after much prompting (either verbal or physical)

2 Child does not display any of the example behaviours

14. Nestling

Materials: none

Procedure

Observe the child's response to being held.

This item can also be scored at any other time throughout the session when the child is being held.

Non-example behaviours:

- assumes rigid posture
- assumes limp posture (needs to be held up by caregiver)
- struggles
- arches back
- pushes caregiver away

0 Child nestles into caregiver by resting body on caregiver's body and leaning head on caregiver's shoulder (may put arms around caregiver)

1 Child displays some indications of discomfort but none of the non-example behaviours, or child will only nestle at their initiative but not when responding to the caregiver

2 Child displays one or more of the non-example behaviours

15. Use of Gestures

Materials: none

Procedure

Say to the caregiver:

I want to see if [CHILD] waves goodbye to me without being prompted. I'll pretend to leave but don't wave to me or try to get [CHILD] to wave.

Wave to the child and say:

[CHILD], I'm going now. Bye-bye!

0 Child waves to the clinician at least once (arm or hand is extended towards the clinician and waved side to side and/or up and down repeatedly, or hand is opened and closed palm facing toward the clinician)

1 Child makes a clear attempt to wave (e.g., child extends arm towards clinician but does not move it up and down in a waving action)

2 Child does not respond or looks away

16. Ability to Switch Tasks	
Materials: none	0 Child readily changes from one activity to another 1 Child may become fixated on one task but generally is happy to change tasks 2 Child does not respond to caregiver's requests to change tasks or will not engage in tasks as required, preferring to do their own thing
Procedure This ability should be observed throughout the testing procedure.	

Flinders University

Autism Detection in Early Childhood – Virtual (ADEC-V)

Name:	Date of Birth:
ID:	Date of Testing:
Examiner	Age at Testing:

Item	Score		
Response to Name	0	1	2
Imitation of Motor Behaviour	0	1	2
Stereotypical Behaviour	0	1	2
Gaze Switching	0	1	2
Eye contact	0	1	2
Functional Play	0	1	2
Pretend Play	0	1	2
Reciprocity of Smile	0	1	2
Response to Everyday Sounds	0	1	2
Gaze Monitoring	0	1	2
Response to Verbal Command	0	1	2
Use of Words	0	1	2
Anticipatory Posture	0	1	2
Nestling	0	1	2
Gestures	0	1	2
Ability to Switch Tasks	0	1	2
	TOTAL:		

Score	Likelihood of autism	Possible follow-up
0 – 10	Low likelihood	No immediate action required
11 – 13	Moderate likelihood	Child should be reviewed
14 – 19	High likelihood	Further testing required
> 19	Very high likelihood	A formal autism assessment is strongly recommended