









# Tools For Diagnosis Autism Spectrum Disorder

Child Neurology Division, Department of Pediatrics, All India Institute of Medical Sciences, Delhi in collaboration with INCLEN Trust international, Delhi

# **The National Trust**

for the welfare of Persons with Autism, Cerebral Palsy,
Mental Retardation and Multiple Disabilities
Department of Empowerment of Persons with Disabilities (Divyangjan)
Ministry of Social Justice & Empowerment, Govt. of India

16-B, Bada Bazar Road, Old Rajinder Nagar, New Delhi-110 060 Ph: 011-43187878, Fax: 43187880 Email: contactus@thenationaltrust.in Website: www.thenationaltrust.gov.in





## AIIMS Modified INDT-ASD Tool for Autism Spectrum Disorder

#### **New Tool Developed By**

Sheffali Gulati, Jaya Shankar Kaushik, Biswaroop Chakrabarty, Lokesh Saini, Savita Sapra, NK Arora, RM Pandey, Rajesh Sagar, VK Paul, Shobha Sharma

#### **Previous Tool Developed By INCLEN-NDD**

Project Investigators: NK Arora (Project Leader), MKC Nair (Principal Investigator), Jennifer Pinto-Martin (Co-PI), Donald Silberberg (Co-PI), Sheffali Gulati (Network Co-ordinator) and INCLEN Study Group

#### How to use the tools

Website: http://www.pedneuroaiims.org

Mobile: m.pedneuroaiims.org

For Any Queries, please email: pedsneuroaiims@gmail.com

INCLEN Diagnostic Tool for Autism Spectrum Disorder (INDT-ASD)

# INCLEN Diagnostic Tool for Autism Spectrum Disorder (INDT-ASD): Development and Validation

Name of the Child: बच्चे का नाम		
Date of Birth : DD/MM/YYYY बच्चे का नाम	Age:yearsmonths	
Complete Address: लिंग (लड़का —1, लड़की—2)		
Phone Number: फोन नम्बर		
Date of Assessment: DD/MM/YYYY मूल्यांकन की तिथि		
Name of the Assessor: मूल्यांकन का नाम		

#### INSTRUCTIONS FOR EVALUATION

- •Primary caregiver must be present with the child
  - •साक्षात्कार के लिए प्राथमिक देखरेख कर्वा उपलब्ध होना चाहिए
- •These behaviors are to be assessed in the context of children of same age
  - •बच्चे का व्यवहार का मूल्याकंन उसी उम्र के बच्चों की तुलना में किया जाना चाहिए
- •Explain to parents that the answers should be based on the child's behavior most of the time
  - •उत्तरदाता को समझायें कि बच्चे के बारे में उत्तर उसके आमतौर के व्यवहार पर ही आधारित होने चाहिए
- Follow the age directions given along with the question. For questions where no age cut-off is given, they should be asked for all children i.e. all ages (2-9 years)
  - •जिन प्रश्नों के साथ उम्र सम्बन्धी निर्देश दिए गयेहैं उनका अनुसरण करें जहां उम्र सम्बन्धी निर्देश न हों वहां 2—9 वर्ष की उम्र वाले सभी बच्चों से प्रश्न पूछें
- Ask the questions verbatim

Question can be repeated if the respondent can not understand

Still, if the respondent cannot understand, give **example** for the particular behavior;

No further elaboration is allowed

- जिन प्रश्नों के साथ उम्र सम्बन्धी निर्देश दिए गये हैं उनका अनुसरण करें
- •जहां उम्र सम्बन्धी निर्देश न हों वहां 2–9 वर्ष की उम्र वाले सभी बच्चों से प्रश्न पूछें
- •The questionnaire should be **supplemented by observations** for the suggestive behavior in the child **throughout** the assessment.
  - •पूरे साक्षात्कार के दौरान बच्चे के व्यवहार का निरिक्षण करें, यदि निरक्षण और उत्तरदाता का उत्तर अलग—अलग है तब दोबारा प्रश्न पूछें और दोबारा निरिक्षण करें
- •Observe the behavior of child during the entire interview to confirm the presence or absence of a particular behavior (First ask, then observe if observation is discrepant, then re ask the question and re-check the observation)
  - •जब माता—पिता का उत्तर और आपका निरक्षण अलग—अलग है asterisk (\*) दर्शाता हैं कि उनके उत्तर और आपके निरक्षण में किसको महत्व दिया जाए
- When there is discrepancy between parental response and your observation, \* indicates whether parent report or observation should take precedence, and marked accordingly
  - •जब माता—पिता का उत्तर अनिश्चित है, आपके निरक्षण को उस व्यवहार के लिए महत्व दिया जाएगा चाहें माता पिता के उत्तर पर asterisk (\*) हो यदि आप भी व्यवहार का निरिक्षण करने में असफल हों, तब केवल अनिश्चित लिखें
- •When the parent's response is "unsure" your observation of the particular behavior will be given weightage even asterisk (\*) is on parental response. In case you are also unable to observe the behavior, and then only mark the response as "Unsure".
- •Some criteria have multiple questions. **While scoring,** consider the criteria fulfilled even if response to **any one** of the questions is abnormal. For example, the criterion A1a is considered fulfilled if any one of i, ii, iii, or iv is abnormal in the child
  - •कुछ प्रश्नों के कई भाग हैं, अंक जोड़ने के दौरान यदि किसी प्रश्न का कोई भी भाग असामान्य है तो उस व्यवहार को असामान्य माना जाएगा, उदाहरण के लिए— यदि A1a के किसी भी भाग (i, ii, iii या iv) में बच्चे का व्यवहार असामान्य है, तो A1a को असामान्य माना जाएगा

#### **SECTION A**

* For children aged less than 4 years: loes your child usually enjoy being taken in the lap or hugged? क्या (आपके बच्चे) को अक्सर आपकी नेदी में आना और आपसे गले लगना अच्छा गता है? For children aged 4 years or more: When our child was a baby/toddler, did he/she njoy being taken in the lap or ugged? ब (आपका बच्चा) छोटा था तब क्या स्से आपकी गोदी में आना और आपसे गले जिन्ना अच्छा लगता था ?  Does your child usually make eye ontact with you or other people?	In children below 4 age: Response to being touched and cuddled by parent: enjoys/tolerates/squir ms/ stiffens/ gets upset/ Indifferent 4 वर्ष से कम आयु के बच्चेः अभिभावकों द्वारा छुए जाने पर और दुलारे जाने परः आनन्द लेते हैं/ सहते हैं/ गुस्सा होते हैं/ विड़चिड़ाते हैं/ नाराज हो जाते हैं/ कुछ भी नही होता है।  *Quality of eye contact		No	Unsure
		Yes	No	11
g. While playing, asking for things, alking to you.  या (आपका बच्चा) अक्सर आपके या न्य लोगों के साथ नजर मिलाता है? सि— खेलते समयए चीजों के बारें में पूछते मय और बातचीत करते समय ।	* नजरों से सम्पर्क की गुणवत्ता			Unsure
a) * Does your child usually use various estures appropriately during social teractions?  g. Namaste, Salaam, waving bye-bye, ello, touching feet etc.  At least sometimes spontaneously)  see appropriate example as required)  स्या (आपका बच्चा) किसी से मिलने स्या जाते समय अक्सर उचित इशारों का स्तेमाल करता है?  से— नमस्कार, सलाम, बाय—बाय, हैलो रना, मुस्कुराना	Use of these gestures in response to your greeting and while departing विदा लेते समय तथा अभिवादन करते समय निम्न भाव मुद्राओं का प्रयोग करें।	Yes	No	Unsure
i) et t get ve ve	ा (आपका बच्चा) अक्सर आपके या त्य लोगों के साथ नजर मिलाता है? से— खेलते समयए चीजों के बारें में पूछते तय और बातचीत करते समय ।  * Does your child usually use various stures appropriately during social eractions?  g. Namaste, Salaam, waving bye-bye, llo, touching feet etc. t least sometimes spontaneously) se appropriate example as required)  या (आपका बच्चा) किसी से मिलने या जाते समय अक्सर उचित इशारों का तेमाल करता है? से— नमस्कार, सलाम, बाय—बाय, हैलो हना, मुस्कुराना	प्रा (आपका बच्चा) अक्सर आपके या त्य लोगों के साथ नजर मिलाता है? से— खेलते समयए चीजों के बारें में पूछते तय और बातचीत करते समय ।  * Does your child usually use various stures appropriately during social eractions?  g. Namaste, Salaam, waving bye-bye, llo, touching feet etc. t least sometimes spontaneously) are appropriate example as required)  या (आपका बच्चा) किसी से मिलने या जाते समय अक्सर उचित इशारों का तेमाल करता है? से— नमस्कार, सलाम, बाय—बाय, हैलो ला, मुस्कुराना  Ther elaborate if required about inappropriate gestures like repeatedly gowing जैसे: बिना वजह किसी भी अन्जान व्यक्ति को नमस्कार करना,	प्रा (आपका बच्चा) अक्सर आपके या त्य लोगों के साथ नजर मिलाता है? से— खेलते समयए चीजों के बारें में पूछते तय और बातचीत करते समय ।  ** Does your child usually use various stures appropriately during social eractions?  ** Roos your child usually use various stures appropriately during social eractions?  ** Roos your child usually use various stures appropriately during social eractions?  ** Roos your child usually use various stures appropriately during social eractions?  ** Roos your child usually use various stures appropriately during social eractions?  ** Roos your child usually use various stures appropriately during social eractions?  ** All All All All All All All All All A	ा (आपका बच्चा) अक्सर आपके या त्य लोगों के साथ नजर मिलाता है? से— खेलते समयए चीजों के बारें में पूछते तय और बातचीत करते समय ।  *Does your child usually use various stures appropriately during social eractions?  g. Namaste, Salaam, waving bye-bye, llo, touching feet etc. t least sometimes spontaneously) are appropriate example as required)  या (आपका बच्चा) किसी से मिलने या जाते समय अक्सर उचित इशारों का तेमाल करता है? से— नमस्कार, सलाम, बाय—बाय, हैलो ला, मुस्कुराना  There elaborate if required about inappropriate gestures like repeatedly greets anybody wowing जैसे: बिना वजह किसी भी अन्जान व्यक्ति को नमस्कार करना, बिना वजह बार—

	iv) Does your child usually show appropriate facial expressions according to the situation?  E.g. being happy, sad, afraid etc.  क्या (आपका बच्चा) अपने चेहरे पर अक्सर परिस्थितियों के अनुसार अलग—अलग तरह के भाव प्रकट करता है? जैसे— खुशी/उदासी जाहिर करना, नाराजगी जताना इत्यादि।	*Appropriateness of facial expressions while interacting with parents, with you (stranger), while playing, when given toy/favorite food or when scolded.  *अभिभावकों के साथ, खेलते समय, अपनामन पसंद खिलौना दिये जाने पर/ अपनामन पसंद खाना दिये जाने पर या चिल्लाते समय अपने चेहरे पर उचित भाव लाएं।	Yes	No	Unsure
A1b	i) * Does your child usually enjoy the company of other children?  *क्या (आपके बच्चे) को अक्सर दूसरे बच्चों का साथ अच्छा लगता है?	Child's interaction with other children एक बच्चे के साथ दूसरे	Yes	No	Unsure
	ii) * For children aged 4 years or more: Does your child have friends of his/her age (In school and neighbor-hood) with whom he/she loves to chat, share food or play together? क्या(आपके बच्चे) के (स्कूल में या पड़ोस में) उसकी उम्र के दोस्त/सहेलियाँ हैं जिनके साथ वह खाना—पीना, उनसे बाते करना या खेलना पसंद करता है?	Quality of child's interaction with other children of his/her age एक बच्चे का व्यवहार उसी आयु के दूसरे बच्चें के साथ केंसा है।	Yes	No	Unsure or NA
	iii) * For children aged 4 years or more: Does your child play mostly with children who are much older or much younger than him/her? क्या(आपका बच्चा) अधिकतर अपनी उम्रसे बहुत बड़े या बहुत छोटे बच्चों के साथ खेलता है?	Quality of child's interaction with other children एक बच्चे का व्यवहार दूसरे बच्चें के साथ कैसा है।	Yes	No	Unsure or NA

A1c	i) * For children aged less than 4 years:  Does/did your child ever point with his/her index finger to bring your attention to show the things that interest him/her?  E.g. kite, plane flying in the sky, cow/dog on the road etc.  क्या (आपका बच्चा) आपका ध्यान अपनी पसंद की चीजों की तरफ आकर्षित करता है?  जैसे— उड़ती हुई पतंगए हवाई—जहाज, या कुत्ता, गाय,अन्य चीजें।  For children aged 4 years or more: Does your child usually bring things to show you on his/her own he/she has made painted or new toy/gift?  क्या (आपका बच्चा) अक्सर अपनी बनाई हुई चीजों कोए चित्रों को या नए खिलौनों को अपने आप आकर आपको दिखाता है?		Yes	No	Unsure
	ii) * For children aged 4 years or more, and are able to speak: Does your child talk to you about things he/she likes or has achieved without being asked about them? क्या (आपका बच्चा) अपनी पसंद की चीजों के बारे मैं या अपनी उपलब्धियों के बारे में बिना पूछे आपको बताता है?		Yes	No	Unsure Or NA
Ald	i) * Does your child usually prefer to play alone and gets irritated/moves away when his/her sibs or other kids try to play with him /her?* क्या (आपका बच्चा) अक्सर अकेला खेलना पसन्द करता है / करता था और अन्य बच्चे अगर उसके साथ खेलने की कोशिश करे तो वह चिढ़ जाता है / जाता था या दूर चला जाता है / जाता था?	Quality of play activity in a group of children or with siblings बच्चों के समूह या अपने भाई बहनों के साथ बच्चा कैसे खेल रहा	Yes	No	Unsure or NA
	ii) * Does your child play games involving turn taking or rule based with other children properly?  E.g. Cricket, Hide and seek/I-spy, Ludo, Stapoo, Ring-a-ring roses etc. क्या (आपका बच्चा) अपनी उम्र के अन्य बच्चों के साथ ऐसे खेल खेलता है जिनमें हर बच्चा बारी–बारी से खेलता है और नियमों का पालन करता हैं? जैसे–क्रिकेट, छुपन–छुपाई, स्टापू, पकडन–पकडाई, लूडो, गुल्ली–डण्डा, कन्चे, पिठ्ठू, गेंद।	Quality of child's involvement in rule-based games or games involving taking turns नियम पर आधरित खेलों या उन खेलों में जिनमें कि मोड होते हैं उनमें बच्चा कि तरह भाग ले रहा है।	Yes	No	Unsure or NA

	iii) * Does your child <b>usually</b> share his/her happiness with you or come to you for comfort when hurt or upset? *क्या (आपका बच्चा) अक्सर अपनी खुशी को आपके साथ बांटता है या चोट लगने पर और उदास होने पर आपके पास दिलासा लेने के लिए आता है?	Sharing happiness or distress with the parents अभिभावकों के साथ खुशी तथा तकलीफें बांटना।	Yes	No	Unsure
	iv) * For children aged 4 years or more:  Does your child usually share your happiness or try to comfort you when you are upset / sad?  क्या (आपका बच्चा) अक्सर आपकी खुशी को महसूस करता है और आपके दु:ख या उदासी में आपको दिलासा देने की कोशिश करता है?	Sharing of parent's happiness or distress by the child बच्चों द्वारा अभिभावकों के साथ अभिभावकों की खुशी तथा तकलीफे बांटना।	Yes	No	Unsure Or NA
A2a	* Does your child speak normally for his/her age? If the child cannot speak normally: Can he/she communicate with you by using gestures?  E.g. pointing with index finger, nodding/shaking head for yes/no etc. क्या (आपका बच्चा) अपनी उम्र के अनुसार बोल पाता है?  यदि वह बोल नहीं सकता है; क्या वह ऐसे इशारों से अपनी बात बता सकता है जो सब समझ सके? जैसे—अंगुली के द्वारा, हाँ या नहीं के लिए सिर हिलाना, लेने देने के लिए हाथ दिखाना।  If the child cannot speak at all AND cannot communicate by appropriate gestures, then only mark as "NO".  If the child cannot speak BUT can communicate by appropriate gestures, then mark as "YES".	Use of age-appropriate language (words and phrases); Spontaneous use of gestures for communication; *Quality/maturity of pointing (Mature or immature pointing and 'hand over hand' pointing) आयु के अनुसार उचित भाषा का प्रयोग जैसे कि शब्द तथा मुहावरे बातचीत के लिये स्वाभाविक भावमुद्रा 'इशारे करने की गुणवत्त / परिपक्वता;परिपक्व अथवा अपरिपक्व इशारे बाजी तथा हाथ पर हाथ रख कर दिखाना)	Yes	No	Unsure
	Ask A2b only if child is spe Ask A2c only if the child	aking at 2-3 word sentence is speaking at few words l	es level evel		

A2b	i)* Does your child <b>initiate</b> a conversation with you? * क्या(आपका बच्चा) अपने आप आपसे उचित बातचीत शुरू कर देता हैं?	Quality of child's conversation with parents or yourself अभिभावकों के साथ या खुद के साथ बच्चों की बातचीत की गुणवत्ता	Yes	No	Unsure
	ii)* For children aged 4 years or more: Can you have conversation with your child during which he/she not only answers your questions, but also adds something new to continue the conversation? बातचीत के दौरान क्या आपका बच्चा न केवल आपके प्रश्नों का उत्तर देता है बल्कि अपनी तरफ से बात को आगे भी बढ़ाता है?	Quality of child's conversation with parents or yourself अभिभावकों के साथ या खुद के साथ बच्चों की बातचीत की गुणवत्ता	Yes	No	Unsure Or NA
A2c	i) Does your child usually repeat words or phrases regardless of meaning (in part or whole) that he/she has heard?  E.g. If you say 'toffee' he will also say 'toffee' if you say 'come' he will also say 'come' and if you ask "what is your name", he/she also says "what is your name".  क्या (आपका बच्चा) अक्सर सुनें हुए शब्दों या वाक्यों को बारबार बिना मतलब के दोहराता रहता है?  जैसे— जब आप कहे "टाफी" तो कहेगा "टाफी" जब आप कहे "जाना" तो कहेगा "जाना" या फिर जब आप पूछते हैं "आपका नाम क्या है" तो वह दोहरााएगा "आपका नाम क्या है।"	* Immediate echolalia (words or phrases) शब्दों को तुरंत दोहराना शब्द तथा मुहावरे)	Yes	No	Unsure or NA
	ii) Does he/she incessantly repeat things/T.V serial dialogue regardless of meaning/ context, whatever he/she has heard later on? क्या (आपका बच्चा) सीरियल या नाटक के डायलॉगध्संवादों को या सुनी सुनाई बातों को बेमतलब के, बाद में दोहराता रहता है?	* Delayed echolalia शब्दों को देर से दोहराना	Yes	No	Unsure or NA

	iii) For children aged 4 years or more: Does your child usually use "I for me" and "me for you" incorrectly? E.g., when you ask "do you want milk?" he/she says "yes, you want milk" or "Rohit wants milk" (referring to him self). क्या (आपका बच्चा) बातचीत के दौरान "मैं" की जगह "तुम" और "तुम" की जगह	* Pronoun reversal उच्चारण को दोहराना	Yes	No	Unsure
	जैसे—जब आप पूछते हैं ''क्या तुम्हें दूध चाहिए''? वह जवाब देगा ''तुम्हें दूध चाहिए'' या ''रोहित को दूध चाहिए'' (स्वयं को सम्बोधित करते हुए)।				
	iv) For children aged 4 years or more: During conversation does your child often speak 'out of context' or irrelevantly? क्या(आपका बच्चा) अक्सर बातचीत के दौरान बिल्कुल अलग और बेमतलब की, अपनी ही बात शुरु कर देता है?	Out-of-context speech and neologisms विषय से बाहर जाकर बातचीत करना	Yes	No	Unsure or NA
	v) * For children aged 6 years or more: Does your child understand that somebody is making fun of him/her or can he/she understands jokes? जब कोई आपके बच्चें का मजाक उडाता है, या उसे चुटकुला सुनाता हैं तो क्या उसे समझ आता है?	Child's response to an age-appropriate joke उम्र के अनुसार के चुटकुलों पर बच्चों की प्रतिकिया	Yes	No	Unsure or NA
A2d	Does your child participate in games like "Pat-a-cake", "Peek-a-boo", "Ring-a-ring rose", "Akkad bakkad bambe po", "Posam paa", "Chal chameli baag mein" and "Totaa ud-maina ud" etc.? क्या(आपका बच्चा) ऐसे खेलों में हिस्सा लेता है या पहले लेता था? जैसे—"रिंग ए रिंग रोसेस", "अक्कड़— बक्कड़ बम्बे बो", "पोशम—पा","चल चमेली बाग में", "तोता उड़ मैना उड़" "छुपन.छुपाई या झात" इत्यादि	चीजों के साथ बच्चा कैसे खेल रहा है। किसी और के साथ	Yes	No	Unsure
	OR  Does your child play variable imaginative play with toys like For girls:- kitchen set/ dolls/clay or dough For boys:- telephone/ toy gun/motor car?				

	क्या(आपका बच्चा) अलग अलग तरह के झूठ-मूठ के खेल खेलता है? जैसे—(For Girls - गुड़िया, बर्तन, मिट्टी या आटे से खेलना) (For Boys - टेलीफोन, मोटरकार, बन्दूक आदि से खेलना) ।  OR  Has your child played different games like "ghar-ghar", "teacher-student" (school-school), "chor-police" etc. with other kids interactively क्या(आपका बच्चा) अन्य बच्चों के साथ मिलकर "घर—घर", "चोर—पुलिस", "स्कूल—स्कूल" जैसे खेल खेलता है? जैसे— कभी चोर.कभी पुलिस				
	(May add age appropriate regional exa Note for interviewer: If any on	mples of variable pretendes is positive will be marke	l play as ed as "Ye	necessai s"	cy)
A3a	i)* Does your child have excessive interest in odd things/activities which other children do not have?  E.g., collecting toffee wrappers, polythene bags, piece of string or rope, pulling thread and rubber band etc. i) * क्या(आपके बच्च) को ऐसे बेमतलब के काम बहुत ज्यादा पसंद है, जो अन्य बच्चों को पसंद नहीं होते हैं; जैसे—रस्सी के टुकड़ों से, धार्गे से खेलना; प्लास्टिक की थैलियां, कीडें या टाफी के छिलकें इकट्ठे करना।	Any unusual interests i.e. unusual for child "s age कोई असामान्य बातें यानि कि बच्चे की आयु के अनुसार कुछ असामान्य	Yes	No	Unsure
	ii)* Does your child have excessive interest in typical things but the interest is so all encompassing that it interferes his/her activities? (Excluding T.V watching) *क्या(आपके बच्चें) के कुछ ऐसे शौक या खेंल है जिसमें वह इतना ज्यादा मग्न (खो) हो जाता है कि वह बाकी कोई काम नही करता हैं? (Exclude TV watching)	Excessive and all- encompassing interest in activities that are typical for other child his/her age उन गतिविधियों पर ज्यादा और जोर से ध्यान देना जो कि उस उम्र के ही लिये हैं।	Yes	No	Unsure

	iii)* Does your child like lining or stacking objects/toys excessively? (Excluding blocks) *क्या (आपका बच्चा) चीजों को या खलौनों को बार.बार एक लाइन में या एक के ऊपर एक जमा करता रहता है? (Excluding Blocks)	Excessive lining of objects or toys चीजों तथा खिलौनों का अतिरिक्त भंडार	Yes	No	Unsure
A3b	Does your child unreasonably insist on doing things in a particular way and/or become upset if there is any change in the daily routine?  E.g., Taking exactly the same route to the school or market, insisting on food being served in the same pattern or sequence etc.  *क्या(आपका बच्चा) बिना किसी कारण के किन्ही विशेष कार्यों को एक ही तरह से करने की जिद्द करता है, और उसमें किसी भी बदलाव से चिडिचड़ा हो जाता है जैसे— एक ही रास्ते से स्कूल या बाजार जाना, एक ही तरह से खाना परोसने की जिद्द करना, घर के सामान (मेज कुर्सी, चारपाई) इत्यादि की जगह बदलने पर चिडिचड़ा होना।	Child's insistence on any unusual routines or rituals किसी असामान्य बात या दिनचर्या पर बच्चे का जोर देना।	Yes	No	Unsure
A3c	i)Does your child keep on repeating any of the followings, like     flapping hands,     hand wringing,     toe-walking,     rocking or spinning,     making unusual finger or hand movements near his/her face?     i) क्या(आपका बच्चा) ऐसी हरकतें बार—बार करता रहता है जैसे—     हाथ फड़फड़ाना,     हाथ साफ करने के जैसी क्रिया बार—बार करना,     पन्जे के बल चलना,     आगे.पीछे या दाए.बाए झूलना,     गोल—गोल घूमना,     चेहरे के पास अंगुलियों या हाथों से अजीब	* Any type of motor stereotypes, unusual finger/hand movements near face  * किसी भी प्रकार के मोटर स्टीरियो प्रकार, चेहरे के पास उंगली या सिर की असामान्य गतिविधयां	Yes	No	Unsure

	ii) * Does your child have inappropriate fascination with movement? E.g. spinning wheels, opening and closing of doors, electric fan, running water and any other revolving object etc. * क्या ऐसी चीजें (आपके बच्चे) को अत्यधिक आकर्षित करती हैं, जैसे— घूमता हुआ पहिया, दरवाजे का खुलना और बन्द होना, पंखे का घूमना, बहते पानी को देखते रहना या अन्य घूमती हुई चीजें।	Child's inappropriate fascination with objects in motion  गतिमान चीजों के लिये बच्चे का अनुचित लगाव	Yes	No	Unsure
A3d	Does your child prefer to play with a particular part of a toy/object rather than the whole toy/object?  E.g. wheels of a toy rather than the whole toy क्या(आपका बच्चा) पूरे खिलौने या चीजों से खेलने के बजाय उनके सिर्फ एक ही भाग से खेलना पसन्द करता है?  जैसे—सिर्फ कार के पहियों से खेलना न कि पूरी कार से, खिलौने को घूमा—घूमा कर उससे निकलती हुई लाईट या सिर्फ उसकी आवाज पर ही ध्यान देना।	*Quality of child's play with different toys and objects  * विभिन्न खिलौनों तथा चीजों के साथ बच्चा कैसे खेल रहा है।	Yes	No	Unsure

#### **SECTION B**

Complete this section (1-5) based on responses from section A and further history taking (6-12)

1. No. of criteria fulfilled in A1 of the section A (Social Interaction)
0: Less than two
1: Two or more
2. No. of criteria fulfilled in A2 of the section A (Communication)
0: Nil
1: One or more
3. No. of criteria fulfilled in A3 of the section A (Restricted Interests)
0: Nil
1: One or more
4. Interpretation of questionnaire (1 to 3)
<b>0:</b> No ASD ( If response to 2 or more of 1 to 3 is "0")
1: ASD present (If response to 1 is "1" and response to either or both
of 2 and 3 is "1")
01 2 did 3 is 1
5. Total number of criteria fulfilled in A1, A2 and A3 together
0: Less than Six
1: Six or more
6. Does / did your child have any of any of the following? क्या आपके बच्चे को इनमें से कोई परेशार्न
है/थी?
<b>0:</b> No <b>1:</b> Yes
A. Significant delay in development of language of the child? (Not spoken single words by 2 years
and communicative phrases by 3 years)
अपनी उम्र के हिसाब से देर से बोलना शुरू किया था (दो साल तक शब्द नही
बोला था और तीन साल तक दो या तीन शब्द के वाक्य नहीं बोलता था।
पाला जा जार तान ताल तक दा वा तान राज्य के वावच नहीं वालता जा।
<b>B.</b> Difficulty in using language in daily activities or during interaction
with other people?
अन्य लोगों से बातचीत देर से शुरू की या बातचीत करने में परेशानी होती है।
C. Started participating in varieties of pretend play at a later age/Not started pretend play?
अलग—अलग तरह के झूठ—मूठ के खेल खेलना दूसरे बच्चों की तुलना में देर
से शुरू किया था या खेलता ही नहीं था।
त सुरु किया या विस्ता हा नहीं वा।
D. ANY of the following (mark '1' if any one of the following is 'yes')
(Tick $(\checkmark)$ ) the problems present in the child)
-To be separate and indifferent from other children-
अन्य बच्चों से अलग-अलग या कटे-कटे रहना
- No/few friends दोस्त बहुत कम होना
- Difficulty in school (due to behavior or studies) स्कूल मे परेशानी (पढाई या व्यवहार) से सम्बन्धित
- Less understanding regarding societal norms समाज मे रहने या बातचीत करने के ढग की समझ ना होन

7. Did your child have these symptoms before three years?  क्या आपका बच्चे के यह लक्षण तीन साल की उम्र से पहले शुरू हुए थे ?  0:No
1:Yes/Do not know/ Not sure
<ul> <li>8. Does the child fulfill <u>all</u> the following criteria for diagnosis of Rett's Disorder?</li> <li>Female Child</li> </ul>
<ul> <li>Loss of purposeful hand skills between 5-30 months age and development of stereotyped hand wringing, hand washing or hand to mouthing movements</li> </ul>
<ul> <li>Loss of social engagement early in course during 9-29 months (although often social interaction develops later)</li> </ul>
Severely impaired expressive and receptive language development with severe psychomotor retardation
0: No 1: Yes
9. Does the child fulfill <u>all</u> the following criteria for diagnosis of Childhood Disintegrative Disorder?
<ul> <li>Normal development till 2 years age, by the presence of age appropriate verbal and nonverbal communication, social relationships, play and adaptive behavior</li> </ul>
<ul> <li>After 2 years of age, loss of previously acquired milestones (before age 10 years) in 2 or more of the following areas (Tick (✓) the areas in which milestones are lost)</li> </ul>
- Expressive/receptive language
<ul><li>Social skills/Adaptive behavior</li><li>Bowel or bladder control</li></ul>
- Play skills
- Motor skills
Abnormalities of functioning in at least two of the following areas:
- Qualitative impairment in social interaction
- Qualitative impairment in communication
- Restricted, repetitive and stereotyped patterns of behavior
1: No 1: Yes
10. There is no clinically significant delay in any of the following?
• Language development (single words used by age 2 years, communicative phrase used by age 3 years
(अपनी उम्र के हिसाब से बोलना शुरू किया था (दो साल तक शब्द बोलना और तीन साल तक दो या तीन शब्द के वाक्य बोलना।
• Cognitive Development OR Development of age-appropriate self-help skills मानसिक विकास या अपनी देखभाल करने की क्षमता
Adaptive behavior (Other than in social interaction)
<b>0:</b> No <b>1:</b> Yes
11. Summary assessment of ASD
0: No ASD (Response to 4 is "0")
1: Autism (Response to ALL of 1 to 7 is "1" and 8,9 is "0")
2: Asperger's Disorder (Response to 4 is "1", 6D is"1" and 10 is "1")
3: PDD-NOS (Response to 4 is "1" and either 5 or 7 or both is"0")
4: Rett's Disorder (Response to 4 is "1" and 8 is "1")  5: CDD (Response to 4 is "1" and 10 is "1")
5: CDD (Response to 4 is "1" and 9 is "1")
<b>9: Indeterminate</b> (Criteria not fulfilled, too many unsure responses, could not be tested in appropriate condition)

12. Can these symptoms be solely explained byIntellectual Disability?  0: No 1: Yes					
If yes, refer to TAG review					
13. Additional note and observation during the interview					
Name of the Assessor	Signature of the Assessor	Date of assessment			

AIIMS Modified INDT-ASD Diagnostic Evaluation for Autism Spectrum Disorder

#### AIIMS Modified INDT-ASD Diagnostic Evaluation for ASD

Section	Ask	Observe	Yes	No	Unsure
A1a	i) * For children aged	Observe how the child			
Social	less than 4 years:	draws attention toward a			
emotional	Does/did your child ever	toy/object of interest; Look			
reciprocity	point with his/her index	for coordinated pointing			
	finger to bring your				
11	attention to show the				
	things that interest				
	him/her? E.g. kite,				, ,
	plane flying in the sky,				
	cow/dog on the road etc.				
	For children aged 4				
	years or more: Does				
	your child usually bring				
	things to				
	show you on his/her own				
	he/she has				
	made painted or new				
	toy/gift?				
	ii) * For children aged				
	4 years or more, and			$\cup$	
	are able to speak : Does				
9	your child talk to you				
	about things he/she likes				
	or has achieved without				
9	being asked about them?				
	iii) * Does your child	Quality of play activity in a			
	usually prefer to	group of children or with			
	play alone and gets	siblings			
	irritated/moves away				
	when his/her sibs or				

r ASD	other kids try to play	odified IND I-ASD DI	1 21	1114	
	with him/her?				
	iv) * Does your child	Quality of child's			
	play games involving	involvement in rule-based			
	turn taking or rule	games or games involving			
	based with other	taking turns			
	children <b>properly</b> ? <i>E.g.</i>				
	Cricket, Hide and seek/I-				
	spy, Ludo, Stapoo, Ring				
	a- ring roses etc.				
	v) * Does your child	Sharing happiness or			
,	usually share his/her	distress with the parents			
	happiness with you or				
	come to you for comfort				
	when hurt or upset?				
	vi) * For children aged	Sharing of parent's			
	4 years or more:	happiness or distress by the	w n 🖟 N		
	Does your child usually	child			
	share your				
	happiness or try to				
	comfort you when you				
	are upset / sad?				
	vii) * Does your child	Quality of child's			
	initiate a conversation	conversation with parents			
	with you?	or yourself		~	
	viii)*For children aged	Quality of child's			
	4 years or more: Can	conversation with parents			
	you have conversation	or yourself			
	with your child during				
	which he/she not only				
	answers your questions,				
	but also adds something				
	new to continue the				

	conversation?			
Section A1b	i) *For children aged	In children below 4 years		
Non verbal	less than 4 years:	age: Response to being		
communication	Does your child usually	touched and cuddled by		
	enjoy being taken in	parent:		
	the lap or hugged? For	enjoys/tolerates/squirms/		
	children aged 4 years or	stiffens/ gets upset/		
	more: When your child	Indifferent		
	was a baby/toddler, did			
	he/she enjoy being taken			
	in the lap or hugged?			
	ii) Does your child	* Quality of eye contact		
	usually make eye			
	contact with you or other			
	people?			
	E.g. While playing,			
	asking for things,			1
	talking to you.			
	iii) * Does your child	Use of these gestures in		
	usually use various	response to your greeting		
	gestures appropriately	and while departing		
	during social			
	interactions?			
	E.g. Namaste, Salaam,			
	waving bye-bye, hello,			
	touching feet etc. (At			
	least sometimes			
	spontaneously) (use			
	appropriate example as			
	required)			
	iv) Does your child	*Appropriateness of facial		
	usually show	expressions while		
	appropriate facial	interacting with parents,		
	expressions according	with you (stranger), while		

	to the situation?	playing, when given			
	E.g. being happy, sad,	toy/favorite food or when			
	afraid etc.	scolded.			
Section A1c	i) * Does your child	Child's interaction with			,
Relationships	usually enjoy the	other children		$  \bigcirc  $	
	company of other				
	children?				
	ii) * For children aged 4	Quality of child's			
	years or more: Does	interaction with other			
	your child have friends	children of his/her age			
	of his/her age (In school				
	and neighborhood) with				
	whom he/she loves to				
	chat, share food or play				
	together?				
	iii)* For children aged	Quality of child's			
	4 years or more:	interaction with other			
	Does your child play	children			
	mostly with children				
	who are much older or				
	much younger than				
	him/her?				
G - 1 - 1 - 2		* Immediate cabalalia	-		
Section A2a	i) Does your child	* Immediate echolalia			
Stereotyped	usually repeat words or	(words or phrases)			
movement or	phrases regardless of				
speech	meaning (in part or				
	whole) that he/she has				
	heard?				
	E.g. If you say 'toffee'				
	he will also say 'toffee'		,		
	if you say 'come' he will	7 - 7 -			
	also say 'come' and if				
	you ask "what is your				

	nama" ha/aha alaa aasa		
N. Carlotte	name", he/she also says		
	"what is your name".		
	ii) Does he/she	* Delayed echolalia	
	incessantly repeat		
	things/T.V serial		
	dialogue regardless of		
2	meaning/ context,		
	whatever he/she has		
	heard later on?		
	iii) For children aged 4	* Pronoun reversal	
	years or more: Does		
	your child <b>usually</b> use "I		
	for me" and "me for		
	you" incorrectly?		
	E.g., when you ask "do		
	you want milk?" he/she		
	says "yes, you want		
	milk" or "Rohit wants	b <sub>1</sub>	
	milk" (referring to him		
	self).		
	iv) For children aged 4	Out-of-context speech and	
	years or more: During	neologisms	
	conversation does your		
	child often speak 'out of	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
	context' or irrelevantly?		
	v) * For children aged 6	Child's response to an age	
	years or more:	appropriate joke	
	Does your child		
	understand that		
	somebody is making fun		
	of him/her or can he/she		
	understands jokes?		
	vi) Does your child keep	* Any type of motor	
	on <b>repeating</b> any of	stereotypes, unusual	

	the followings liles	finger/hand maximums			
	the followings, like	finger/hand movements			
	• flapping hands,	near face			
	hand wringing,				
	• toe-walking,				
	• rocking or spinning,				
	• making unusual				
	finger or hand				
	movements near				
	his/her face?				
	vii) * Does your child	Child's inappropriate			
	have inappropriate	fascination with objects in			
	fascination with	motion			
	movement?				
	E.g. spinning wheels,				
	opening and closing of				
	doors, electric fan,				
	running water and any				
	other revolving object		7		
	etc.				
Section A2b	Does your child	Child's insistence on any			
Routines	unreasonably insist on	unusual routines or rituals			
	doing things in a				
	particular way and/or				
	become <b>upset</b> if there is				
	any change in the daily				
	routine?				
	E.g., Taking exactly the				
	same route to the school				
	or market, insisting on				
	food being served in the				
	same pattern or				
	sequence etc.				
	1	1	_	_	-

Section A2c Fixed interest	Does your child prefer to play with a particular <b>part</b> of a toy/object rather than the whole toy/object? E.g. wheels of a toy rather than the whole toy And/Or Persistent unusual preoccupation with inanimate objects? E.g. Toffee wrappes, threads, bits of papers, flowing water And/Or Persistent behavioural attributes? E.g. Liking particular sound/visual stimuli, any particular color or form of cloth	* Quality of child's play with different toys and objects		4011
Section A2d Sensory symptoms	i) Is your child indifferent to pain or temperature?	Apparent indifference to pain or temperature	0	
	ii) Does your child show excess reaction to specific sound or texture	Getting irritated with certain specific sounds or texture of certain clothes		
	iii) Does your child have excessive smelling?	Excessive smelling of hands or arms	0	
	iv) Does your child have excessive touching of objects?	Excessive touching objects in the room		

### SECTION B Complete this section (1-2) based on responses from section A

1. No. of criteria fulfilled in A1 of the section A (Social Interaction and communication)					
0	: Two or	less			
1	l: Three				
2. No. of criteria fulfilled in A2 of the section A (restrictive and repetitive)					
0	: Nil or o	one			
1	1: Two or	more			
3. Is there onset at earl	ly develo	pment?			
0	<b>):</b> No				
1	1: Yes				
4. Is there an impaired	function	ning?			
(	<b>):</b> No				
1	1: Yes				
5. Interpretation of que	estionnai	ire (1 to 4)			
(	0: No AS	<b>D</b> (If reponse to any of 1-4 is "0")			
1	1: ASD present (If response to 1-4 is "1")				
6. Total number of crit	teria fulfi	illed in A1 and A2 together			
	0: Four o	eless			
1	1: Fives o	or more			
7. Summary assessmen	nt of ASD				
	0: No AS	<b>D</b> (Response to 5 and 6 is "0")			
1	1: <b>ASD</b> (I	Response to 5 and 6 is "1" and 8 is	s "0")		
8. Can these symptoms be solely explained by Intellectual Disability?					
	<b>0:</b> No				
1	1: Yes				
9. Additional note and observation during the interview					
Name of the Asses	sor	Signature of the Assessor	Date of assessment		

# Mobile App Diagnostic Tool For Autism Spectrum Disorder

Available on Google Play Store and iOS

# **Autism Helpline**

Email: pedneuroaiims@yahoo.com,

autismhelp.pedsaiims@gmail.com

Mobile: 9868399037

Web/ Microsite
http://pedneuroaiims.org
m://pedneuroaiims.org

## **The National Trust**



for the welfare of Persons with Autism, Cerebral Palsy,
Mental Retardation and Multiple Disabilities
Department of Empowerment of Persons with Disabilities (Divyangjan)
Ministry of Social Justice & Empowerment, Govt. of India

16-B, Bada Bazar Road, Old Rajinder Nagar, New Delhi-110 060 Ph: 011-43187878, Fax: 43187880
Email: contactus@thenationaltrust.in Website: www.thenationaltrust.gov.in

