

# Modified Checklist for Autism in Toddlers (M-CHAT)\*

Diana L. Robins, Ph.D.,<sup>1</sup> Deborah Fein, Ph.D.,<sup>2</sup> Marianne L. Barton, Ph.D.,<sup>2</sup> & James A. Green, Ph.D.<sup>2</sup>

<sup>1</sup>Georgia State University

<sup>2</sup>University of Connecticut

\*The full text may be obtained through the Journal of Autism and Developmental Disorders, April 2001

---

---

***PLEASE NOTE: The M-CHAT was not designed to be scored by the person taking it. In the validation sample, the authors of the M-CHAT scored all checklists. If parents are concerned, they should contact their child's physician.***

---

---

## Abstract

*Autism, a severe disorder of development, is difficult to detect in very young children. However, children who receive early intervention have improved long-term prognoses. The Modified Checklist for Autism in Toddlers (M-CHAT), consisting of 23 yes/no items, was used to screen 1,293 children. Of the 58 children given a diagnostic/developmental evaluation, 39 were diagnosed with a disorder on the autism spectrum. Six items pertaining to social relatedness and communication were found to have the best discriminability between children diagnosed with and without autism/PDD. Cutoff scores were created for the best items and the total checklist. Results indicate that the M-CHAT is a promising instrument for the early detection of autism.*

## Background

The M-CHAT is an expanded American version of the original CHAT from the U.K (Baron-Cohen et al., 1992; 1996). The M-CHAT has 23 questions using the original nine from the CHAT as its basis. The goal of the ongoing M-CHAT research is to demonstrate adequate psychometric properties of the M-CHAT (sensitivity, specificity, positive and negative predictive power). The M-CHAT is available for clinical and research use, with the following caveats:

1. Clinical use should proceed with caution, given that the current scoring system is designed to maximize sensitivity (i.e., identify as many children with autism spectrum disorders as possible), which results in a number of false positive cases (i.e., children who will not be diagnosed with an autism spectrum disorder, although they fail the M-CHAT). Once cross-validation of the M-CHAT is complete, the scoring may be revised.
2. The M-CHAT is not designed to detect all possible developmental disorders. Any parents who have concerns about their child should see their child's physician, regardless on the child's score on the M-CHAT.

M-CHAT research is ongoing at the University of Connecticut and Georgia State University. The follow-up study of the initial sample is expected to be published in the near future. This research is supported by funding from the National Institute of Child Health and Development, the Maternal and Child Health Bureau, and the National Alliance for Autism Research. For more information, please contact Diana Robins at drobins@gsu.edu or Deborah Fein at Deborah.fein@uconn.edu.

### **M-CHAT Scoring Instructions**

A child fails the checklist when 2 or more critical items are failed OR when any three items are failed. Yes/no answers convert to pass/fail responses. Below are listed the failed responses for each item on the M-CHAT. Bold capitalized items are CRITICAL items.

Not all children who fail the checklist will meet criteria for a diagnosis on the autism spectrum. However, children who fail the checklist should be evaluated in more depth by the physician or referred for a developmental evaluation with a specialist.

1. No	6. No	11. Yes	16. No	21. No
<b>2. NO</b>	<b>7. NO</b>	12. No	17. No	22. Yes
3. No	8. No	<b>13. NO</b>	18. Yes	23. No
4. No	<b>9. NO</b>	<b>14. NO</b>	19. No	
5. No	10. No	<b>15. NO</b>	20. Yes	