

10 Best DBP Articles of 2024

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Menzin ER. The Pediatrician's Lament. N Engl J Med. 2025 Jan 23;392(4):320-321. doi: 10.1056/NEJMp2414640. Epub 2025 Jan 8. PMID: 39778184.

The Pediatrician's Lament

Eleanor R. Menzin, M.D.

“It’s your fault!” the renowned infectious disease attending told the cluster of students and residents. In the late 1990s, the varicella vaccine was relatively new, and uptake was disappointingly low. “You pediatricians,” he went on, “must correct your wording. Instead of telling parents their child is due for the MMR vaccine and then halfheartedly offering the varicella vaccine, you should include it with the same declarative certainty: ‘Your child is due for varicella and MMR vaccines.’”

Though it has been nearly 30 years, I remember that moment as one of those rare crystalline learning moments when a gifted teacher’s wisdom solidifies in a recep-

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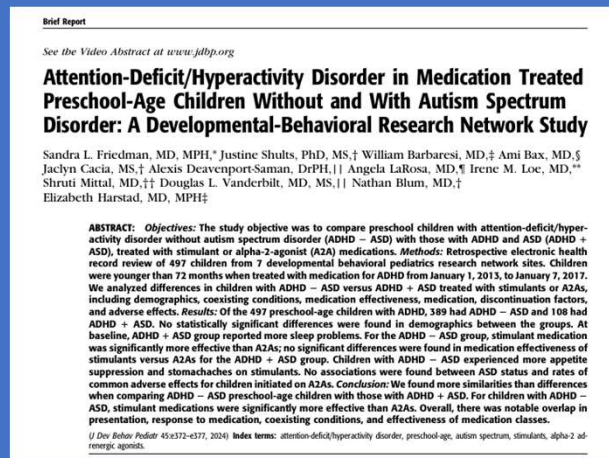
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What To Do Differently on Monday

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Friedman, Sandra et al. Attention-Deficit/Hyperactivity Disorder in Medication Treated Preschool-Age Children Without and With Autism Spectrum Disorder: A Developmental-Behavioral Research Network Study. *Journal of Developmental & Behavioral Pediatrics* 45(4):p e372-e377, July/August 2024.

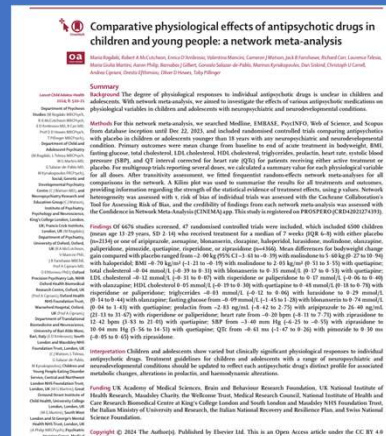


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What to do differently on Monday

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Rogdaki M, McCutcheon RA, D'Ambrosio E, Mancini V, Watson CJ, Fanshawe JB, Carr R, Telesia L, Martini MG, Philip A, Gilbert BJ, Salazar-de-Pablo G, Kyriakopoulos M, Siskind D, Correll CU, Cipriani A, Efthimiou O, Howes OD, Pillinger T. Comparative physiological effects of antipsychotic drugs in children and young people: a network meta-analysis. *Lancet Child Adolesc Health*. 2024 Jul;8(7):510-521.



7

Kim R, Margolis A, Barile J, Han K, Kalash S, Papaioannou H, Krevskaya A, Milanaik R. Challenging the Chatbot: An Assessment of ChatGPT's Diagnoses and Recommendations for DBP Case Studies. *J Dev Behav Pediatr*. 2024 Jan 1;45(1):e8-e13.

Challenging the Chatbot: An Assessment of ChatGPT's Diagnoses and Recommendations for DBP Case Studies

Rachel Kim, Alex Margolis, Joe Barile, BA, Kyle Han, BA, Saia Kalash, Helen Papaioannou, MD, Anna Krevskaya, MD, Ruth Milanaik, DO

Objective: Chat Generative Pretrained Transformer-3.5 (ChatGPT) is a publicly available and free artificial intelligence chatbot that logs billions of visits per day; parents may rely on such tools for developmental and behavioral medical consultations. The objective of this study was to determine how ChatGPT evaluates developmental and behavioral pediatrics (DBP) case studies and makes recommendations and diagnoses. **Methods:** ChatGPT was asked to list treatment recommendations and a diagnosis for each of 97 DBP case studies. A panel of 3 DBP physicians evaluated ChatGPT's diagnostic accuracy and scored treatment recommendations on accuracy (5-point Likert scale) and completeness (3-point Likert scale). Physicians also assessed whether ChatGPT's treatment plan correctly addressed cultural and ethical issues for relevant cases. Scores were analyzed using Python, and descriptive statistics were computed. **Results:** The DBP panel agreed with ChatGPT's diagnosis for 66.2% of the case reports. The mean accuracy score of ChatGPT's treatment plan was deemed by physicians to be 4.6 (between entirely correct and more correct than incorrect), and the mean completeness was 2.6 (between complete and adequate). Physicians agreed that ChatGPT addressed relevant cultural issues in 10 out of the 11 appropriate cases and the ethical issues in the single ethical case. **Conclusion:** While ChatGPT can generate a comprehensive and adequate list of recommendations, the diagnosis accuracy rate is still low. Physicians must advise caution to patients when using such online sources.

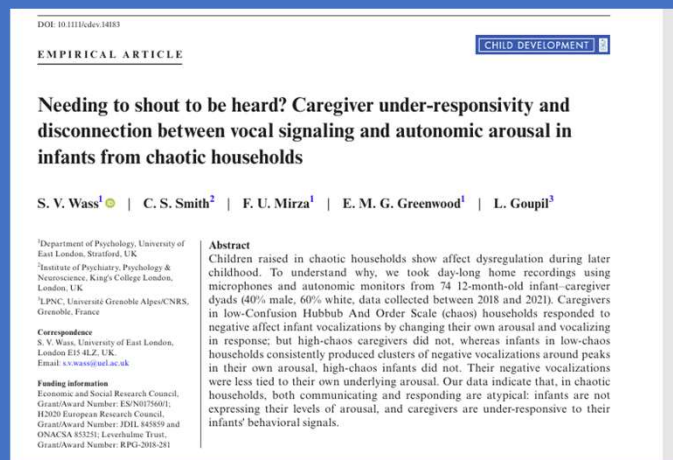
J Dev Behav Pediatr 00:e1-e5, 2024 | **Index terms:** artificial intelligence, ChatGPT, DBP case studies.

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What To Do Differently on Monday

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Wass SV, Smith CS, Mirza FU, Greenwood EMG, Goupil L. Needing to shout to be heard? Caregiver under-responsivity and disconnection between vocal signaling and autonomic arousal in infants from chaotic households. *Child Dev.* 2024 Nov 8.

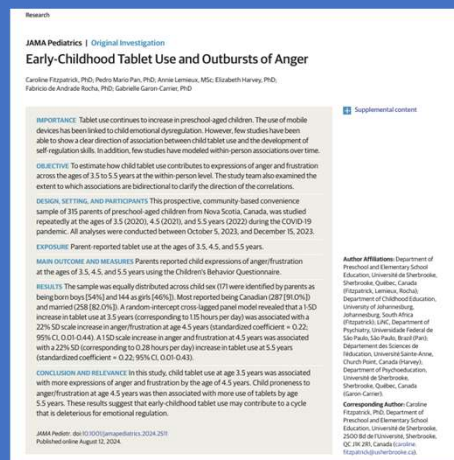


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What do you do differently on Monday?

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Fitzpatrick C, Pan PM, Lemieux A, Harvey E, Rocha FA, Garon-Carrier G. Early-Childhood Tablet Use and Outbursts of Anger. JAMA Pediatr. 2024 Oct 1;178(10):1035-1040. doi: 10.1001/jamapediatrics.2024.2511. Erratum in: JAMA Pediatr. 2024 Oct 1.



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What to do differently Monday

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Olfson M, McClellan C, Zuvekas SH, Wall M, Blanco C. Mental Health Impairment and Outpatient Mental Health Care of US Children and Adolescents. *JAMA Psychiatry*. 2024 Jun 1;81(6):606-610.



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What would you do differently on Monday?

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Pezalla AE, Davidson AJ. "Trying to remain calm...but I do reach my limit sometimes": An exploration of the meaning of gentle parenting. PLoS One. 2024 Jul 31;19(7):e0307492.



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What to do differently Monday

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Keehn B, Monahan P, Enneking B, Ryan T, Swigonski N, McNally Keehn R. Eye-Tracking Biomarkers and Autism Diagnosis in Primary Care. JAMA Netw Open. 2024 May 1;7(5):e2411190.

JAMA Network Open

Original Investigation | Pediatrics

Eye-Tracking Biomarkers and Autism Diagnosis in Primary Care

Brandon Keehn, PhD, Patrick Monahan, PhD, Brett Enneking, PhD, Tatyana Ryan, PhD, Nancy Swigonski, MD, MPH, MBA, Rebecca McNally Keehn, PhD

Abstract

IMPORTANCE Finding effective and scalable solutions to address diagnostic delays and disparities in autism is a public health imperative. Approaches that integrate eye-tracking biomarkers into tiered community-based models of autism evaluation hold promise for addressing this problem.

OBJECTIVE To determine whether a battery of eye-tracking biomarkers can reliably differentiate young children with and without autism in a community-referred sample collected during clinical evaluation in the primary care setting and to evaluate whether combining eye-tracking biomarkers with primary care practitioner (PCP) diagnosis and diagnostic certainty is associated with diagnostic outcome.

DESIGN, SETTING, AND PARTICIPANTS Early Autism Evaluation (EAE) Hub system PCPs referred a consecutive sample of children to this prospective diagnostic study for blinded eye-tracking index test and follow-up expert evaluation from June 2, 2020, to September 23, 2022. Participants included 146 children (aged 14–48 months) consecutively referred by 7 EAE Hubs. Of 154 children enrolled, 146 provided usable data for at least 1 eye-tracking measure.

MAIN RESULTS AND MEASURES The primary outcomes were sensitivity and specificity of a composite eye-tracking (ie, index) test, which was a consolidated measure based on significant eye-tracking indices, compared with reference standard expert clinical autism diagnosis. Secondary outcome measures were sensitivity and specificity of an integrated approach using an index test and PCP diagnosis and certainty.

RESULTS Among 146 children (mean [SD] age, 2.6 [0.6] years; 104 [71%] male; 21 [14%] Hispanic or Latino and 96 [66%] non-Latino White; 102 [70%] with a reference standard autism diagnosis), 13 (7%) had concordant autism outcomes between the index (composite biomarker) and reference outcomes, with 77.5% sensitivity (95% CI, 68.4%–84.5%) and 77.3% specificity (95% CI, 63.0%–92.3%). When index diagnosis was based on the combination of a composite biomarker, PCP diagnosis, and diagnostic certainty, outcomes were concordant with reference standard for 114 of 127 cases (90%) with a sensitivity of 90.7% (95% CI, 83.3%–95.0%) and a specificity of 86.7% (95% CI, 70.3%–94.7%).

Key Points

Question Can a battery of eye-tracking measures accurately identify young children with autism, and does integrating biomarkers with primary care practitioner (PCP) diagnosis provide a method for improving diagnostic accuracy?

Findings In this diagnostic study of 146 children aged 14 to 48 months, 6 eye-tracking indices were associated with reference standard autism outcome. A composite eye-tracking biomarker had 78% sensitivity and 77% specificity, and when integrated with PCP diagnosis and diagnostic certainty, had 91% sensitivity and 87% specificity.

Meaning These findings suggest that equipping PCPs with a validated, multimethod approach to autism evaluation has the potential to substantially improve access to timely, accurate diagnosis.

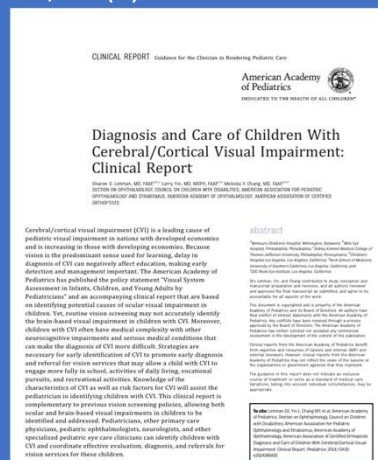
Supplemental content
Author affiliations and article information are listed at the end of this article.

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What will you do differently on Monday?

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Lehman SS, Yin L, Chang MY; SECTION ON OPHTHALMOLOGY; COUNCIL ON CHILDREN WITH DISABILITIES; AMERICAN ASSOCIATION FOR PEDIATRIC OPHTHALMOLOGY AND STRABISMUS, AMERICAN ACADEMY OF OPHTHALMOLOGY; AMERICAN ASSOCIATION OF CERTIFIED ORTHOPTISTS. Diagnosis and Care of Children With Cerebral/Cortical Visual Impairment: Clinical Report. *Pediatrics*. 2024 Dec 1;154(6):e2024068465.



What to do differently on Monday