



FASD-CAN

Fetal Alcohol Spectrum Disorder
Care Action Network

RESEARCH SNIPPETS INFORMATION SHEET

Distinguishing FASD from ADHD

- **Topic:** Differential diagnosis and the clinical utility of ND-PAE adaptive functioning criteria (Capes et al., 2026).
- **What the research is about, and its relevance to FASD in Aotearoa:** This systematic review shows that while ADHD and FASD share executive dysfunction, FASD causes significantly deeper impairments in real-world adaptive life skills, daily living, and social communication. It provides kaimahi and clinicians in Aotearoa with clear justification to assess practical daily functioning over surface-level behavioural checklists to secure appropriate supports.

Research citation:

Capes, T. J., Aldrovandi, S., Khan, R., Amanatidou, V., Tsaprouni, L., & Mavritsaki, E. (2026). **Differentiating fetal alcohol spectrum disorders from attention-deficit hyperactivity disorder and reviewing diagnostic guidelines.** *Annals of the New York Academy of Sciences*, 1562(1), e70343.

<https://doi.org/10.1111/nyas.70343>

Overview of the Research

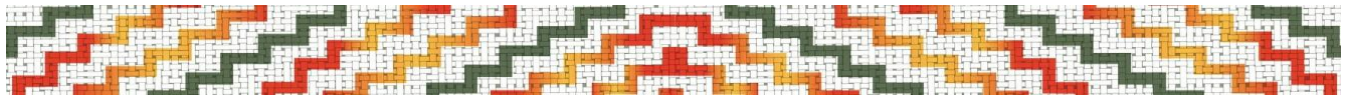
The systematic review and meta-analysis by **Capes et al. (2026)** investigated how to distinguish between Fetal Alcohol Spectrum Disorder (FASD) and Attention-Deficit/Hyperactivity Disorder (ADHD). Because FASD and ADHD often share outward features—such as differences in attention, impulse control, working memory, and energy levels—clinicians frequently find it difficult to tell them apart. As a result, many people living with FASD receive an ADHD diagnosis alone, while the broader impact of prenatal alcohol exposure remains unrecognised. To explore this, the researchers evaluated the proposed criteria for **Neurobehavioral Disorder Associated with Prenatal Alcohol Exposure (ND-PAE)** (found in the appendix of the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* [DSM-5]) to see whether these guidelines effectively separate FASD from ADHD.

Note: In Aotearoa New Zealand, clinicians do not use the American DSM-5 term "ND-PAE." Instead, under the *FASD Diagnostic Guidelines for Aotearoa (NZ) 2024*, clinicians assign a unified diagnosis of FASD. The local equivalent to assessing the multi-domain ND-PAE criteria is evaluating a patient across all nine neurodevelopmental brain domains (including Cognition, Attention, Executive Function, and Adaptive/Social Functioning) to see if they meet the local diagnostic threshold of severe impairment in at least three domains.

People with FASD experience greater magnitude neurodevelopmental deficits compared to those with ADHD, despite sharing a similar pattern. The study's findings support adaptive functioning and neurocognitive criteria as key differentiators while indicating that self-regulation criteria do not clearly separate the two conditions.

Key Terms Explained

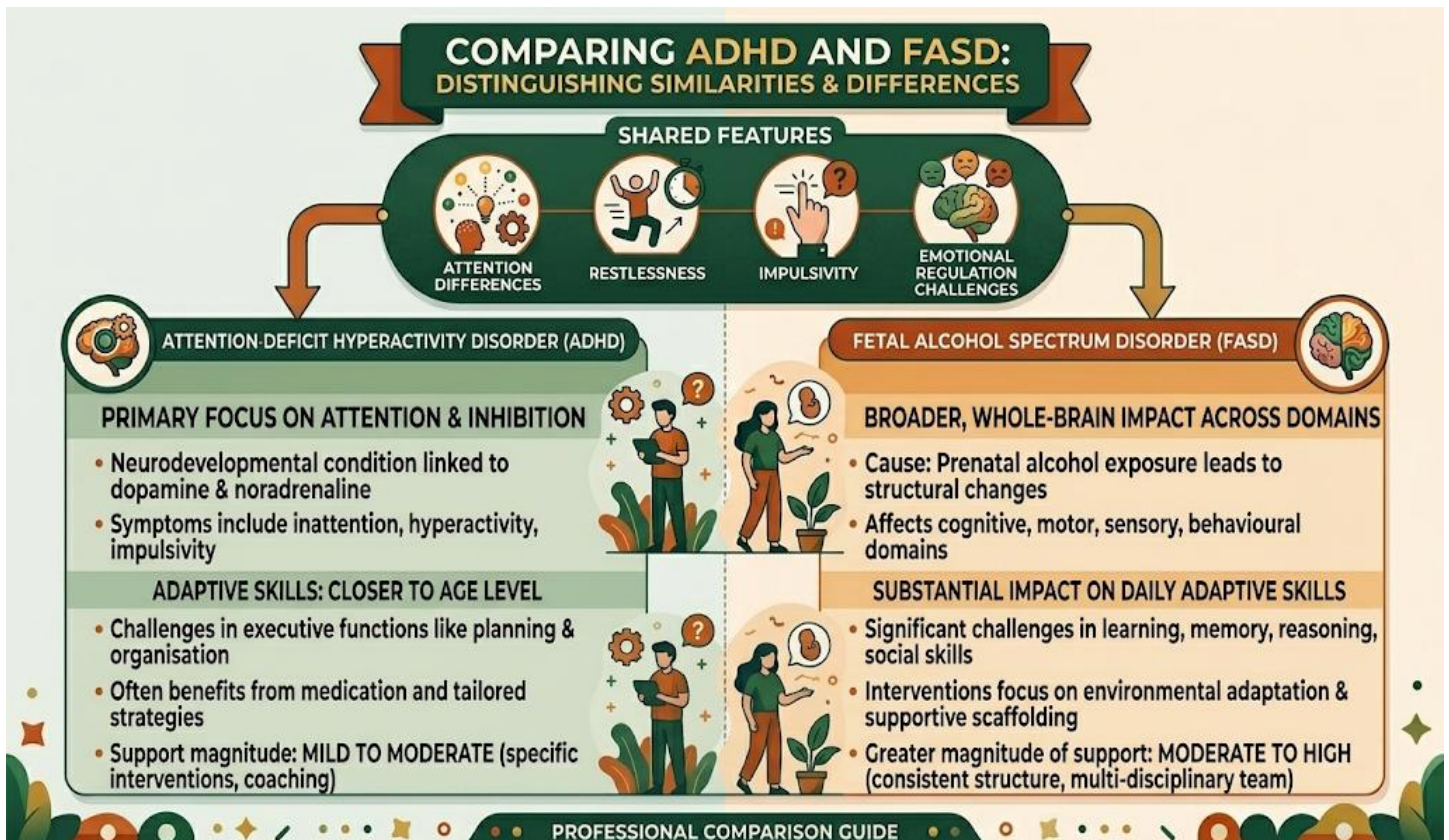
- **Differential Diagnosis:** The clinical process of working out which condition a person has when two or more conditions share similar features.
- **Neurocognitive / Executive Functioning:** The set of brain skills that help a person plan, focus attention, remember instructions, juggle multiple tasks, and solve problems.

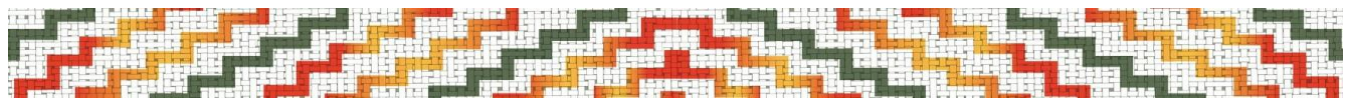


- **Adaptive Functioning:** How well a person handles everyday tasks and navigates real-world environments independently or with support.
- **Phenotype:** The observable traits, behaviours, and learning styles that result from how a person's brain and body develop.

Key Findings

- **Magnitude over Pattern:** The study found that people with FASD and ADHD often share similar *patterns* of neurodevelopmental differences (the types of brain functions affected). However, **people with FASD generally experience a greater magnitude**—meaning the day-to-day functional impact across multiple areas of brain function is often deeper and more widespread.
- **Adaptive Functioning is a Key Differentiator:** The ND-PAE criteria were particularly effective at distinguishing FASD from ADHD in the area of **adaptive functioning**.
 - *Adaptive functioning* refers to the practical, real-world life skills a person uses every day, such as self-care, social communication, money management, understanding safety, and adapting to changing environments. People with FASD typically require significantly more supportive scaffolding in these everyday tasks than people with ADHD alone.
- **Executive Functioning Differences:** The criteria also supported distinctions in **neurocognitive and executive functioning** (the brain's 'management system', responsible for working memory, planning, switching between tasks, and abstract thinking).
- **Overlap in Self-Regulation:** The criteria for emotional and behavioural self-regulation did not clearly separate the two conditions on their own, as both people with ADHD and people with FASD frequently navigate heightened challenges with sensory processing and emotional regulation.
- **Clinical Implications:** The authors emphasise that diagnosticians and clinicians must look beyond surface-level behaviour checklists and carefully assess the overall depth and breadth of support a person will need in daily life.





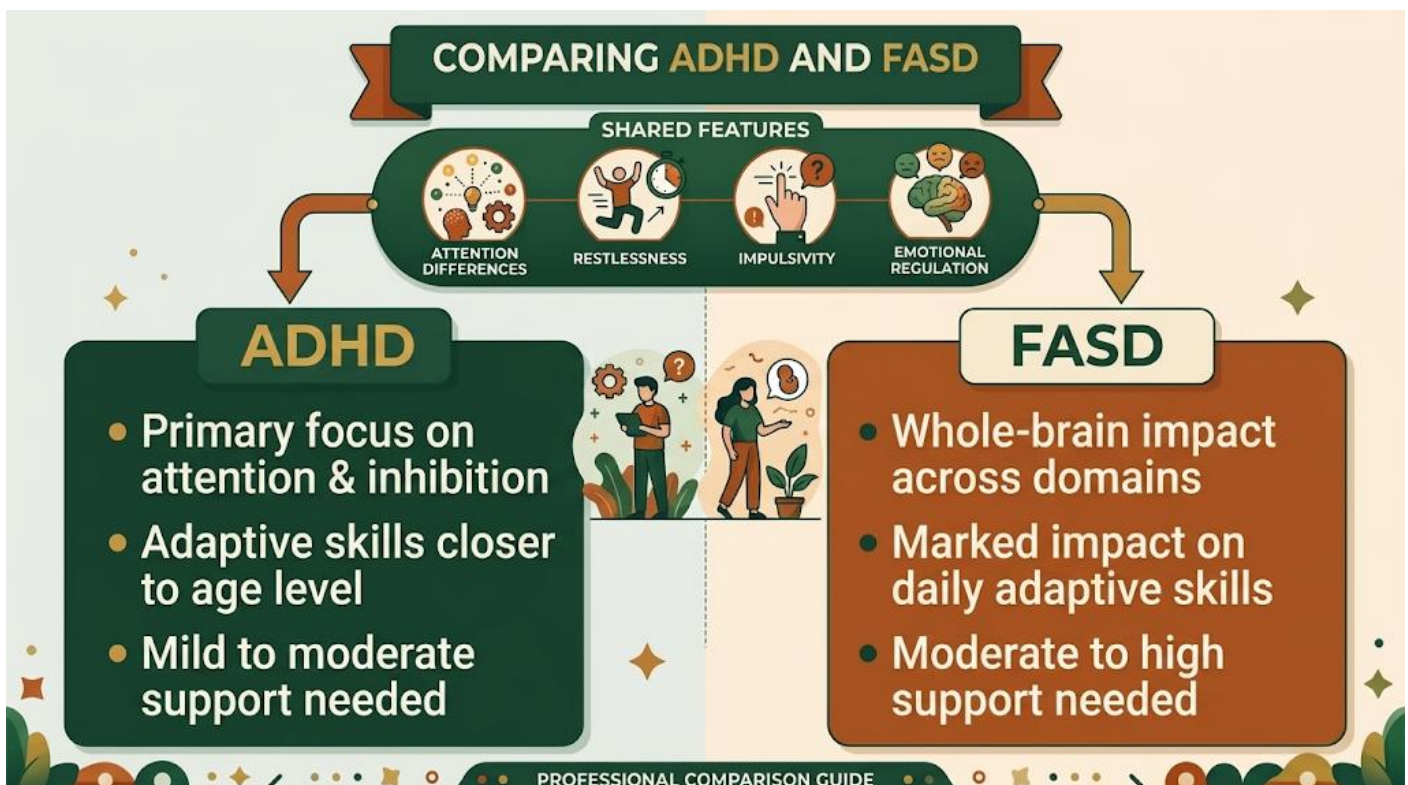
What this Implies for People with FASD, Whānau, and Professionals

For People with FASD and their Whānau

- **Validation of Lived Experience:** Whānau often notice that standard ADHD strategies or medications do not fully address the challenges their loved one's face. This research validates that FASD impacts a wider range of daily living and adaptive skills, confirming that their loved ones are navigating distinct, whole-brain neurodevelopmental profiles.
- **Advocating for the Right Supports:** When whānau understand that adaptive functioning (everyday practical life skills) is where the greatest divergence occurs, they can advocate more effectively for environmental adaptations and long-term supportive scaffolding at school, at home, and in the community.
- **Relieving Systemic Pressures:** Moving away from viewed 'behavioural non-compliance' to understanding brain-based differences helps whānau and communities wrap compassion, consistency, and structure around the person.

For Clinicians, Educators, and Support Professionals

- **Comprehensive Assessments:** Diagnosticians cannot rely solely on standard ADHD screening tools. Assessments must include thorough evaluations of adaptive behaviour and multi-domain neurodevelopmental history.
- **Tailored Scaffolding rather than Standard Behaviour Plans:** Behavioural modification programmes that rely heavily on consequence-based learning or abstract reasoning often cause distress for a person with FASD. Instead, support professionals should focus on adapting the physical and social environment (e.g. keeping communication short, clear, visual, and predictable).
- **Emphasising Interdependence:** Rather than pushing for complete, unassisted independence where a person's brain capacity faces continuous fatigue, professionals can design supportive, interdependent networks that foster the person's strengths and protect their well-being.





What makes the ND-PAE criteria particularly effective at distinguishing FASD from ADHD in the area of adaptive functioning?

Research indicates that people with FASD often face significantly greater challenges in adaptive functioning compared to those with Attention-Deficit Hyperactivity Disorder (ADHD). While both conditions share characteristics such as differences in executive functioning, the ND-PAE criteria effectively differentiate FASD by focusing on specific deficiencies in adaptive skills that are often less pronounced in ADHD.

Why the ND-PAE Criteria Are Effective in Differentiating Adaptive Functioning

- **The Scope of Deficit is Broader:** Studies have shown that people with FASD generally experience a greater **magnitude** of functional impairment in their everyday lives than those with ADHD, even when their cognitive profiles appear similar.
- **Targeting Practical Life Skills:** The ND-PAE criteria assess **adaptive functioning**, which refers to a person's ability to handle the practical demands of daily life. Research comparing the two conditions using tools like the **Vineland Adaptive Behavior Scales (Vineland-II)** reveals crucial distinctions:
 - **FASD:** People with FASD typically display marked impairments in **Communication, Daily Living Skills, and Socialisation**. They frequently struggle to use and understand language in social contexts and apply practical skills consistently.
 - **ADHD:** While people with ADHD can certainly face challenges in these areas, their difficulties are often considered secondary. The foundational **adaptive skills** themselves are often closer to the expected level for their age, but their ability to consistently *perform* those skills may be hindered by aspects of ADHD, like inattention or impulsivity.
- **Distinct Profiles in Core Domains:** The effectiveness of the ND-PAE criteria lies in their ability to pinpoint how prenatal alcohol exposure (PAE) impacts specific domains differently than ADHD:
 - **Communication:** People with FASD often struggle with receptive and expressive communication (understanding and responding to others) more severely.
 - **Daily Living Skills:** This domain, which covers practical self-care and independence skills, is often particularly challenging for people with FASD.
 - **Socialisation:** Although both groups can struggle socially, the nature of the difficulty can differ. Research indicates that socialization skills are often a significant area of weakness within the overall adaptive functioning profile of people with FASD.

Essentially, the ND-PAE criteria effectively highlight the more profound and pervasive difficulties in applying knowledge and skills to daily life that characterise FASD, setting it apart from the often more context-specific or performance-related challenges seen in ADHD.

This information sheet is part of a series providing research summaries for the FASD community. Any queries, please contact Kim Milne, Principal and Practice Advisor, FASD-CAN Inc. Aotearoa.

kim.milne@fasd-can.org.nz



Attribution-NonCommercial-ShareAlike

© FASD-CAN Inc. Aotearoa
August 2026