DOCUMENT SUMMARY This 2017 study provides a detailed breakdown of storytelling (narrative) abilities in children with Autism Spectrum Disorder (ASD) and Attention-Deficit/Hyperactivity Disorder (ADHD), arguing for the use of direct language analysis over parent questionnaires. It identifies both shared difficulties (e.g., syntactic complexity, forming cohesive stories) and distinct profiles (e.g., speech fluency issues in ADHD), moving beyond monolithic diagnostic labels. Critically, the study links these narrative challenges to underlying cognitive processes like Theory of Mind and working memory, supporting an explanatory rather than purely descriptive model of neurodivergent communication.

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Narrative Production in Children With Autism Spectrum Disorder (ASD) and Children With Attention-Deficit/Hyperactivity Disorder (ADHD): Similarities and Differences

Why This Matters to Enlitens

This paper is a model for the Enlitens approach. It takes a standard diagnostic activity—the storytelling task from the ADOS—and instead of just using it for a score, it performs a deep, qualitative analysis of the language itself to create rich, nuanced profiles. This demonstrates the value of performance-based assessment and treating clinical interactions as data-gathering opportunities beyond the checklist.

The study's findings are crucial for our work in two ways. First, by identifying both shared and distinct communication patterns between ASD and ADHD, it scientifically validates our commitment to moving beyond simple labels to understand each person's unique neurotype. Second, by linking these communication patterns to underlying cognitive functions like Theory of Mind and working memory, it supports our core philosophy of explaining *why* a person communicates the way they do, rather than just pathologizing the behavior. This research provides a direct counter-argument to simplistic assessments and offers a framework for the kind of in-depth, explanatory work we do in the Enlitens Interview.

Critical Findings: Moving Beyond Diagnostic Labels

The study analyzed narratives from children with ASD, children with ADHD, and typically developing (TD) children, revealing a complex pattern of similarities and differences.

Similarities Between ASD and ADHD Groups (Compared to TD peers)

- **Shorter Sentences:** Both clinical groups produced shorter utterances (lower Mean Length of Utterance) than the TD group.
- **Impaired Syntactic Complexity:** Both groups used fewer complex clauses and made more morphosyntactic errors.
- **More Repetitions:** Both the ASD and ADHD groups produced more repetitions in their speech. The authors suggest this may be indicative of repetitive behaviors in general, not just a language-planning issue.
- **Reduced Cohesion:** Both groups were less likely to use causal conjunctions (e.g., "because," "therefore") to explain relationships between events in their stories.

Differences Between ASD and ADHD Groups

- **Speech Fluency:** The ADHD group produced *fewer* pauses and *fewer* retracings than both the ASD and TD groups, suggesting they spend less time on syntactic and lexical planning.
- **Referring to Characters:** Children with ADHD were less specific and used more ambiguous referring expressions when introducing characters into the story, while children with ASD did not differ from TD children in this regard.
- **Primary Challenges:** The authors conclude that children with ASD seem to have the most problems with syntactic complexity, while children with ADHD have the most problems with speech fluency and choice of referring expressions.

Underlying Cognitive Drivers of Narrative Skills

The study links narrative performance to specific cognitive functions, providing an explanatory framework for the observed language differences.

- **Theory of Mind (ToM):** Performance on a second-order False Belief task (a measure of ToM) was associated with all five linguistic categories studied (verbal productivity, speech fluency, syntactic complexity, lexical semantics, and discourse pragmatics). This suggests perspective-taking is deeply integrated with a wide range of language skills.
- **Working Memory (WM):** WM was positively associated with verbal productivity, syntactic complexity, and discourse pragmatics. Children with lower WM capacity tended to produce shorter and simpler stories and had more difficulty creating a coherent narrative.
- **Response Inhibition:** Motor response inhibition was **not** related to any of the narrative skills measured. The authors speculate that cognitive inhibition (interference control) might be more relevant.

Why Narrative Analysis is Superior to Questionnaires

This study provides strong evidence that direct analysis of a child's language is more informative than relying solely on parent questionnaires like the Children's Communication Checklist (CCC-2).

- **They Measure Different Things:** The correlations between the narrative measures and the CCC-2 composite scores were "modest," confirming that "narratives give different information about children's linguistic performance than what parents observe in their children".

- **Narratives are More Direct and Precise:** The authors argue that narratives provide a "direct and more objective measure of children's language abilities" and can "measure more precisely the different aspects of children's language than parental questionnaires".
- **Revealing Nuance:** While the CCC-2 showed that both ASD and ADHD groups had problems with language structure, the narrative analysis was able to pinpoint specific, differing patterns of difficulty between the two groups.

Quotes We Might Use

- **On the value of narrative analysis:** "By investigating narratives, different aspects of language use can be tapped very precisely: from structural components, such as lexical diversity, syntactic complexity, and sentence length, to more pragmatic components..."
- **On the limits of questionnaires:** "This confirms that narratives give different information about children's linguistic performance than what parents observe in their children."
- **On the link between cognition and language:** "ToM and working memory performance but not response inhibition were associated with many narrative skills, suggesting that these cognitive mechanisms explain some of the impairments in language production."
- **On the different profiles of ASD and ADHD:** "Children with ADHD but not children with ASD showed problems in their choice of referring expressions and speech fluency."
- **On shared difficulties:** "...children with ASD and children with ADHD show comparable deficits in narrative production, not only on pragmatic measures, but also on measures of language structure."

Clinical Implications (The Enlitens Way)

The study's findings emphasize the need to go beyond a diagnosis and assess language and communication skills directly and in-depth for both autistic and ADHD children. For our clinical practice, this means:

1. The Enlitens Interview should include opportunities for clients to produce narratives (storytelling, explaining events) as a rich source of information.
2. Our analysis should look for the specific patterns identified in this research: use of complex sentences, causal connectors, referential clarity, and speech fluency (pauses, repetitions).
3. When communication difficulties are present, we should consider the role of underlying differences in working memory and perspective-taking (ToM) as contributing factors, rather than viewing the communication style as a simple "deficit."
4. We can use this evidence to explain to parents why a deep dive into their child's language use provides more useful information for support strategies than a simple score from a questionnaire or standardized test.