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## Deconstructing Diagnostic Criteria for ADHD

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# Deconstructing Diagnostic Criteria for ADHD

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## Introduction

\* Attention Deficit Hyperactivity Disorder (ADHD) is a common neurodevelopmental condition that affects a person's ability to self regulate, manifesting in widespread, heterogeneous problems with attention.

\* It is highly heritable and frequently found comorbid with learning, sensory processing, and mood disorders, Autism Spectrum Disorder, compulsive disorders, and many other negative outcomes.

\* Children cannot show the same range of dysfunction outlined in the Diagnostic and Statistical Manual (DSM)'s definition of ADHD as they are not yet cognitively or behaviorally capable of demonstrating them.

\* Thus, utilizing developmentally appropriate behavioral scales allows for more age-adjusted expectations of cognitive and behavioral patterns easier to observe at this age, such as temperament.

\* Temperament is a feature of personality that is observable as early as infancy and remains stable enough to use as a predicting variable, particularly when looking at dimensions of effortful control, negative affectivity, and surgency. This stability allows us to draw conclusions about a child's reactivity and self-regulatory capacity.

\* **Effortful control** = inhibitory control, attentional focusing, low-intensity pleasure, and perceptual sensitivity

\* **Negative Affect** = characterized by sadness, discomfort, frustration, or fear

\* **Surgency** = characterized by high activity level, high-intensity pleasure seeking, and impulsivity

**The following study conducted an examination of the DSM 5's diagnostic guidelines for ADHD as compared to the Child Behavior Questionnaire in 3-6 year olds to see how well these behavioral dimensions align across each scale's specific criteria.**

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## Hypothesis

\* H1 *effortful control* was hypothesized to be **negatively** correlated with 1, 2, 3, 5, 7, 8, 9, 10 & 12

\* H2 *surgency* was hypothesized to relate **positively** with items, 4, 11, 14, & 15

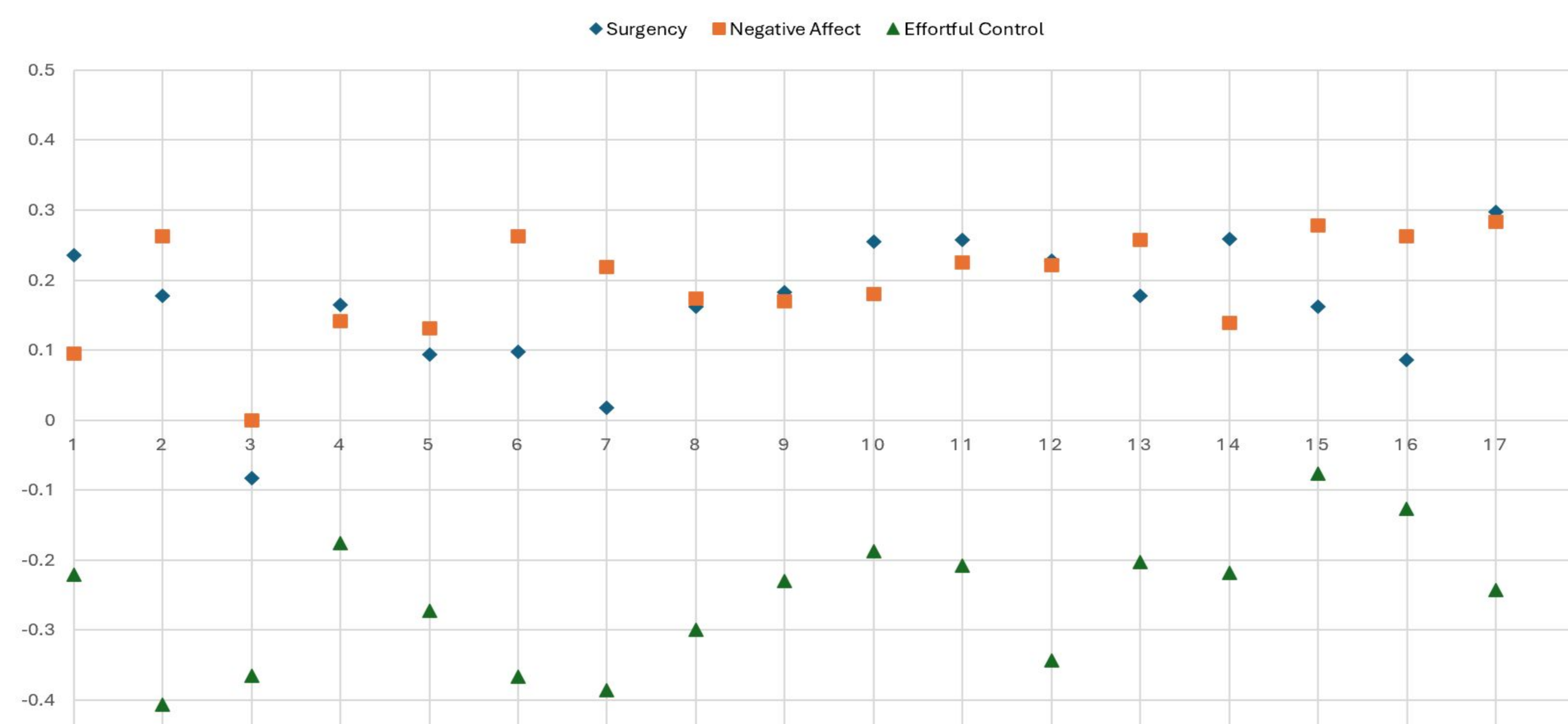
\* H3 *negative affect* is hypothesized to be **positively** correlated with aspects 2, 6, 11, and 16

\* The specific relationship, EC -, SUR/NA + was hypothesized as present in items 5, 10, 13, 17 & 18

### DSM CRITERIA for ADHD SUMMARIZED

1. fails to give close attention to detail, makes careless mistakes	2. has trouble holding attention on tasks or play activities.	3. does not seem to listen when spoken to directly.	4. does not follow through on instructions and fails to finish tasks.	5. has trouble organizing tasks and activities.	6. avoids tasks that require sustained mental effort.	7. loses crucial objects necessary for tasks and activities.	8. easily distracted.	9. forgetful in daily activities.
10. fidgets, taps hands or feet, or squirms in seat.	11. leaves seat in situations when remaining seated is expected.	12. runs about or climbs in situations where it is not appropriate	13. unable to play or take part in leisure activities quietly.	14. acts restless, as if "driven by a motor"	15. talks excessively.	16. blurts out answers before the question	17. has trouble waiting their turn.	18. interrupts or intrudes on others.

### CORRELATION VALUES



## Methods

**Participants** - Data included 132 parents from a non-clinical sample with children (66 girls and 66 boys) between 3.5 to 6 years of age (M = 4.64 years; <4 n = 35, ≥4 and <5 n = 61, ≥5 n = 39); 84% White, 3.1% Black, 2.3% Hispanic, 9.9% Multiracial, and .8% identified as another race.

**Materials** - ADHD symptoms based on the DSM-5 criteria (American Psychiatric Association, 2013), measuring inattention and hyperactivity symptoms. Child behavior on a 4-point scale ranging from 0 (never or rarely) to 3 (very often). A high score indicated better control. Also utilized was Children's Behavior Questionnaire Very Short Form (CBQ-VSF; Putnam & Rothbart, 2006) which uses, Negative Affectivity (α = .74), Surgency Extraversion (α = .71), and Effortful Control (α = .74). Responses were on a 7-point rating scale ranging from 1 (extremely untrue of child) to 7 (extremely true of child). A high score indicated better effortful control.

**Data Analysis** - We conducted a secondary data analysis using Pearson's correlation to measure how well the temperamental dimensions of effortful control, surgency, and negative affect as defined by the CBQ-VSF align with the 18 listed DSM symptoms.

## Results

\* Hypotheses were supported in most cases, but did not completely cover the complexity of all relationships analyzed.

\* In many cases, one or two aspects of temperament were hypothesized correctly, and one or two aspects were also missed.

## Discussion

\* These assessments show widespread crossover between variables indicative of testing functionally similar, yet differently labeled metrics.

\* Effortful Control was the most present and widespread, including the most extreme effects sizes. Even implications across all symptoms.

\* Surgency shows medium frequency of significance and is mostly observed at medium effects sizes

\* Negative Affect showed the smallest effects sizes and less universality throughout the symptoms, showing a heavier presence in the hyperactive-impulsive category.

\* Important relationships were observed between these dimensions, specifically a positive in surgency often co-occurs with negative instances of effortful control, suggesting a more nuanced yet predictable relationship worthy of further research.

\* Future Research could be directed towards analyzing these temperamental aspects across other conditions that display shared characteristics of behavior, looking at how these aspects of temperament relate to each other as people mature and develop comorbid diagnoses.

## Conclusion

\* Internalized frustration further exacerbates social difficulties and tendencies towards negative coping mechanisms, which decreases positive outcomes all throughout the lifespan.

\* Recognizing how these diverse symptoms present this early in the lifespan is crucial for implementation and success, particularly when therapeutic endeavors early on could help to guide establishment of self-regulatory habits for future successes to build on.