

# *Ask the Expert*

## *Educator Edition*

### Creating the Best Learning Environment for Students with ADHD



Sydney Zentall, PhD

The National Resource Center on ADHD: A Program of CHADD is the nation's clearinghouse for evidence-based information on ADHD. This *Ask the Expert* webcast is supported by Cooperative Agreement Number NU38DD005376 from the Centers for Disease Control and Prevention (CDC) and does not necessarily represent the official views of the CDC. The National Resource Center on ADHD, CHADD and the CDC do not endorse, support, represent or guarantee the accuracy of any content presented or endorse any opinions expressed in this webcast.

# CHADD is home to the



**National  
Resource  
Center  
on ADHD**

A Program of CHADD

A partnership between CHADD and the US Centers  
for Disease Control and Prevention (CDC)

For more information:

<http://www.chadd.org/About-CHADD/National-Resource-Center.aspx>



Slides

Resources	
Name	Size
Webinar Handouts	711 KB

Upload File... Download File(s)

Ask a question

Q & A

[User icons] [Menu icon]

[Input field] [Send icon]



**Do you need help with choosing  
what direction to go ?**

Call and speak to an  
ADHD Information and  
Resource Specialist



1-800-233-4050,  
Mon-Fri, 1-5pm ET



National  
Resource  
Center  
on ADHD  
A Program of CHADD



# *Ask the Expert*

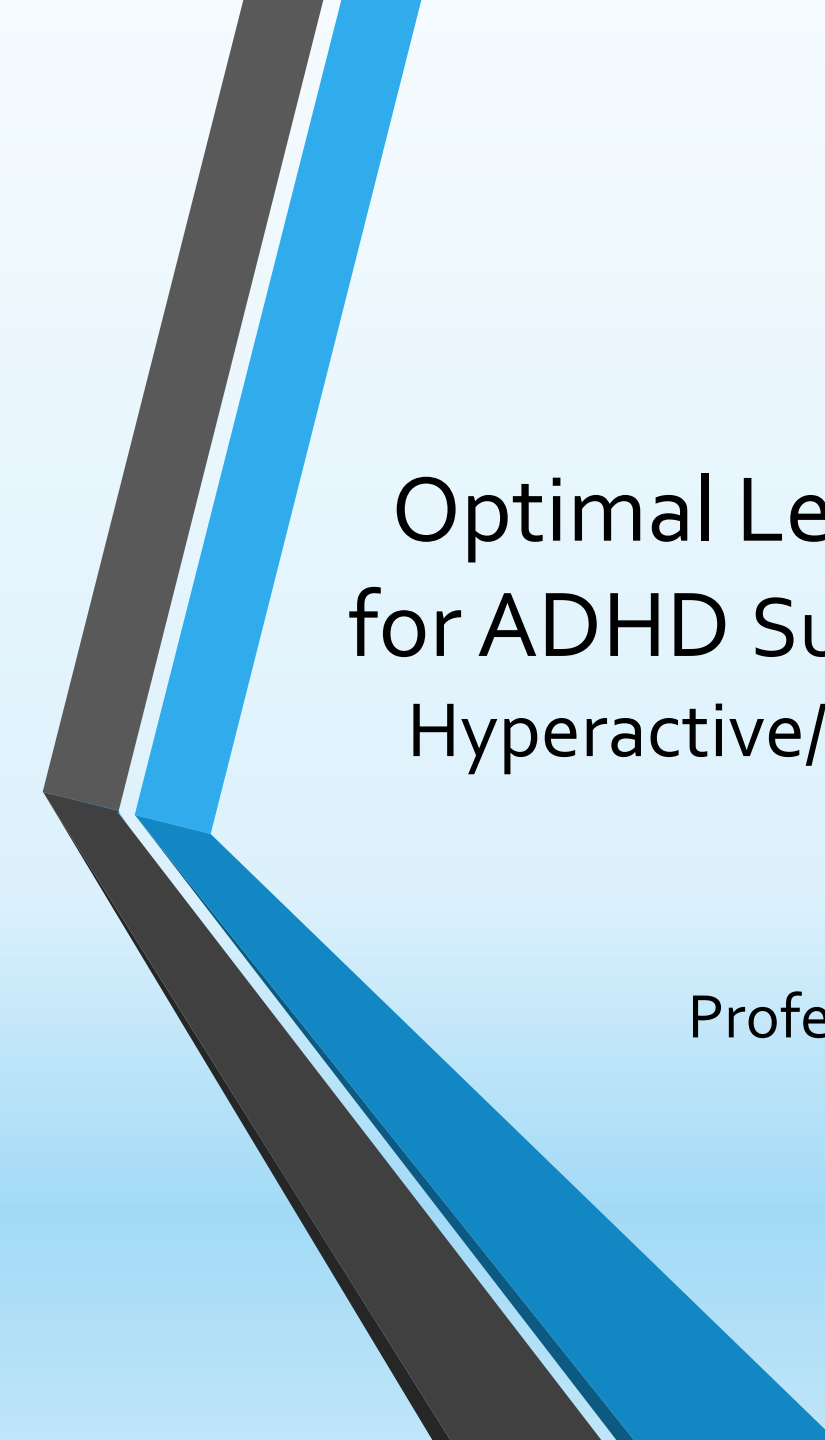
## *Educator Edition*

### Creating the Best Learning Environment for Students with ADHD



Sydney Zentall, PhD

The National Resource Center on ADHD: A Program of CHADD is the nation's clearinghouse for evidence-based information on ADHD. This *Ask the Expert* webcast is supported by Cooperative Agreement Number NU38DD005376 from the Centers for Disease Control and Prevention (CDC) and does not necessarily represent the official views of the CDC. The National Resource Center on ADHD, CHADD and the CDC do not endorse, support, represent or guarantee the accuracy of any content presented or endorse any opinions expressed in this webcast.



# Optimal Learning Environments for ADHD Subtypes and Combined: Hyperactive/Impulsive and Inattentive

Sydney S. Zentall, Ph.D.,  
Professor Emerita, Purdue University

# Fails to sustain attention

**OFF TASK:** Visual, Verbal (off-topic), Cognitive (daydreams), and Physical (changes activities)

## **Type of task difficulty:**

1. end of long and repetitive tasks
2. holding information in mind for planning/organizing, multiple steps, & language (working memory)

## **Type of situation difficulty:**

1. end of day
2. maintaining routines

# Modify Tasks to Sustain Attention

## *1. Short*

- Chapters, short books, task analysis
- Increase pace of instructions
- Give HW assignments at beginning of lesson

## *2. Sweet Novel*

1. **Composition, oral language, memory**  
(picture cues , CAI, games)
2. **Reading & Listening** (Novel: challenge, surprise, excitement) Color added (overlays reading) Active responding (reading aloud vs. silently)
3. **Use of Strengths** (incentives of preferred activities, as line leader, paper passer) and preferred tasks of problem solving, divergent thinking (multiple correct answers)



# Fails to Selectively Attend= Attentional Bias (not deficit)

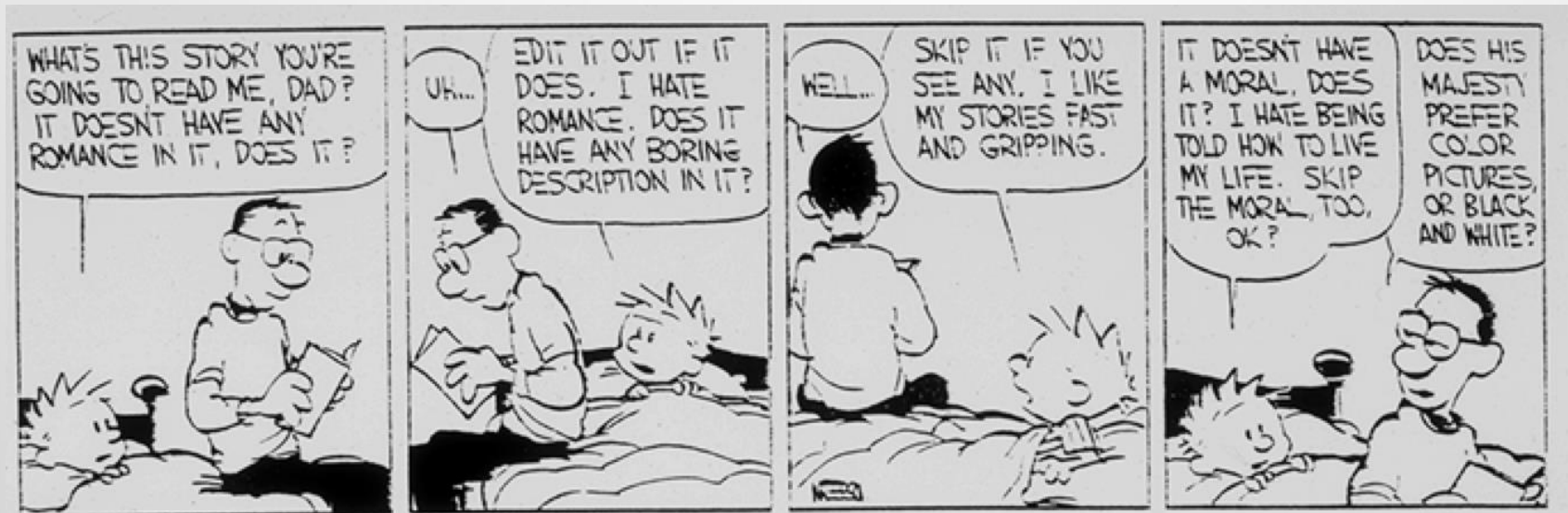
## **Socially—fails to note:**

- 1.** Subtle social-cues
- 2.** Subtle **internal cues** (thoughts, values, strategies, feelings, past experience)

## **Academically, fails to note in a new situation or task that has**

- 1.** Many details
- 2.** Overlapping visual and auditory backgrounds
- 3.** Multiple descriptions

# Listening/Reading and ADHD



# Modify Tasks/Environments:

Reduce to global & highlight

No background conversations during complex tasks, esp. for younger students

## Visually

**Color** added **initially** to **details** operations, early reading info, units of measure math)

Use mirrors for less observable self

## Verbally

Ask THEM questions (opinions strategies)

Highlight organizational **structure**

With '**Do-rules**' situation specific (next cartoon)

## CALVIN AND HOBBS



# *Hyperactive/Impulsive Subtype*

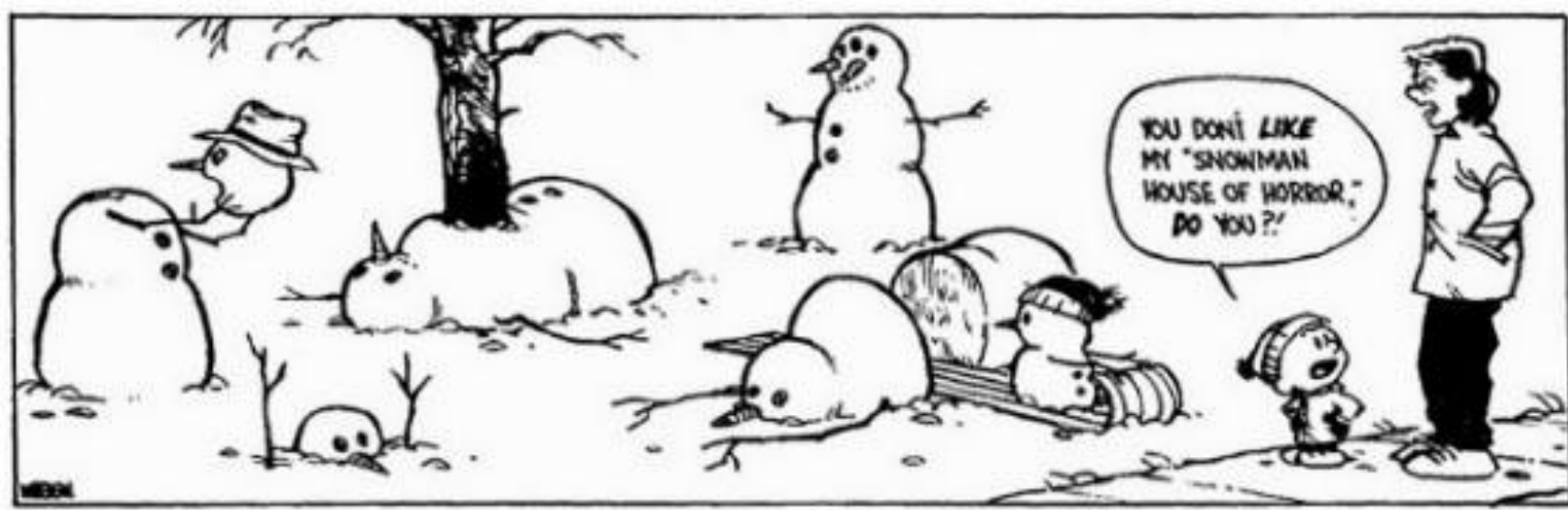
## **Sensation-Seeking Activity**

### **YOUNGER**

- up & down
- home accidents
- noise
- noncompliant

### **OLDER**

- talk
- car accidents
- few routines
- stirring up vs. getting into trouble

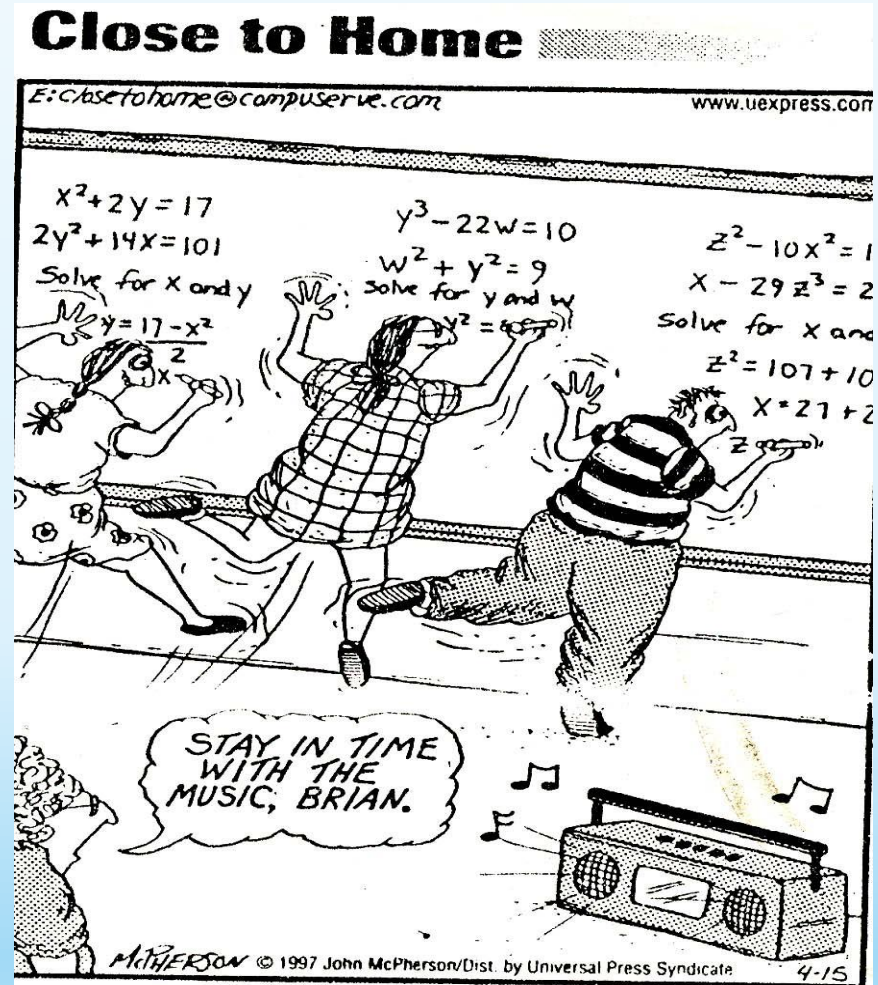




# Modify Tasks/Environments for Activity

## Activity Redirection

- Encourage activity replacement not reduction (sports, role play --act out history)
- Active tasks (working on board, role play)



In an effort to emphasize both physical fitness and academics, officials at Westbury High devised aerobic algebra.

# More Novelty will Reduce Activity

1. Color
2. Science
3. Animals
4. Social Stimulation



# Increase Social Stimulation: Use Peers



- Instruction-Checkers
- Homework Pals
- Tutors (including student as tutor)
- How to ask questions
- Work at tables

# Use Teachers

## Change Teaching Format/Role



**ADD Social Stimulation**  
e.g., traveling teacher

# Change Child by Requiring Activity-Stimulation in Class



**Two seats**



**Timed stations**



**Messages**  
**\*in class**  
**\*outside**

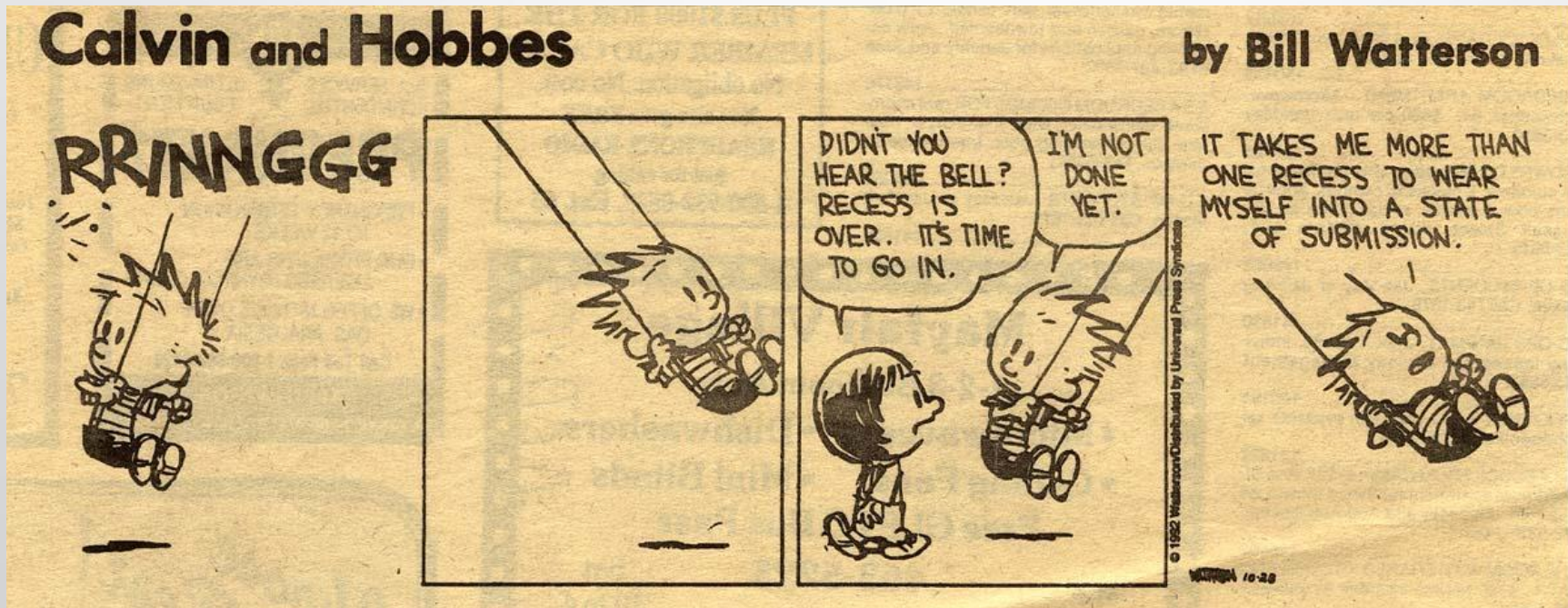
## **Require Verbal and Written Activity**

- 1. Choral Responding** -- fast pace helps practice the correct
- 2. Written Response Cards** to assess understanding of instructions or knowledge (write brief answers on individual boards)
- 3. Voting to clarify differences of opinions** (e.g., thumbs up/down)



# Require Out of Classroom Activity

(e.g., during recess, breaks)



# Provide Opportunities for Cognitive Activity



such as **CHOICE** of:

1. Learning content
2. Reporting methods
3. Order of tasks

# IMPULSIVITY—delay is punishing

## Task Performance:

Speed = careless errors

- Fast and inaccurate esp. on multiple choice
- Skims long directions
- Poor organizing & planning
- Difficulty waiting transitions

## *Social Behavior:*

- Greater emotionality to good and bad life events
- Impatient with slow action = bossy
- Often thrives on emotional responses (argues & negative statements); nonemotional reprimands
- Interrupts (cannot hold even their own thoughts )

# Modify w/ reduced delays & fast-paced

## Younger Children

- Reduce wait time (individual transitions, self-paced tasks)
- Teach manners and **situation**-specific rules
- Have them restate events w/o punishment

## Older Children

- Cross out incorrect on multiple choice
- During groups, take turns & justify responses
- Teach them what to say to be assertive.

## Both

School wide discipline based on offense (not talking back, running in hall)



# Summary Younger Student: Short & Sweet Tasks , Teach Delay with Alternatives, and Channel Activity

- 1. INATTENTION = SHORT AND SWEET** with added choice, projects, and high interest (space, dinosaurs, science, survival) and color placed on relevant information
- 2. IMPULSIVITY = teach DELAYING ACTIONS** (pipe cleaners, write notes to teacher)
- 3. HYPERACTIVITY = increase ACTIVE INVOLVEMENT** socially, physically

# Summary Older Student

Reward persistence and effort more than accuracy

Use graphs to gradually increase expectations

1. HYPERACTIVITY = clubs, hobbies, & use of typing not handwriting
2. IMPULSIVITY = teach planning (task analysis) strategies, teach wait-a-day
3. INATTENTION = choice of content, use of visual cues, strategies for test-taking and time management (how to use of procrastination)

# REFERENCES USED that provide summaries

1. Zentall, S.S., Tom-Wright, K., & Lee, J. (2013). Psychostimulant and sensory stimulation interventions that target the reading and math deficits of students with ADHD. *Journal of Attention Disorders*. doi: 10.1177/1087054711430332
2. Zentall, S. S. (2013). *Students with Mild Exceptionalities: Characteristics and Applications*. London: Sage Publications.
3. Zentall, S. S. (2006). *ADHD and Education: Foundations, Characteristics, Methods, and Collaboration*. Upper Saddle River, N.J., Pearson Merrill Prentice Hall.

# *Ask the Expert*

## *Educator Edition*

### Creating the Best Learning Environment for Students with ADHD



Sydney Zentall, PhD

The National Resource Center on ADHD: A Program of CHADD is the nation's clearinghouse for evidence-based information on ADHD. This *Ask the Expert* webcast is supported by Cooperative Agreement Number NU38DD005376 from the Centers for Disease Control and Prevention (CDC) and does not necessarily represent the official views of the CDC. The National Resource Center on ADHD, CHADD and the CDC do not endorse, support, represent or guarantee the accuracy of any content presented or endorse any opinions expressed in this webcast.

# Upcoming Webcasts

Department of Education Guidance Broadens  
Understanding of 504 Rights for Kids with ADHD  
Part II: Practical Strategies for Protecting Kids and Changing Systems

Monday, November 7, 2016 at 3pm ET

Guest expert: Matthew Cohen, JD

Register Now at

[www.Help4ADHD.org/AsktheExpert](http://www.Help4ADHD.org/AsktheExpert)



## Watch this ATE again

- ✓ CHADD website

- ✓ YouTube:

<https://www.youtube.com/helpforADHD>



## Listen to a recording

- ✓ SoundCloud:

<https://soundcloud.com/help4adhd>

- ✓ iTunes:

<https://itunes.apple.com/us/podcast/national-resource-center-on/id1149072856?mt=2>

# This is a presentation of the



Provide feedback for the Ask the Expert webcast series!  
Your opinion helps evaluate and improve these  
presentations.

[www.Help4ADHD.org](http://www.Help4ADHD.org)  
800.233.4050



- The information provided in this episode of *Ask the Expert* is supported by Cooperative Agreement Number NU38DD005376 from the Centers for Disease Control and Prevention (CDC). The *Ask the Expert* webinars' contents are solely the responsibility of the invited guest Expert and do not necessarily represent the official views of CDC. Neither CHADD and the National Resource Center on ADHD, nor the CDC endorses, supports, represents or guarantees the accuracy of any material or content presented in the *Ask the Expert* webinars, nor endorses any opinions expressed in any material or content of the webinars. CHADD and the National Resource Center on ADHD offer webinars for educational purposes only; the information presented should not be regarded as medical advice or treatment information.