

# TRI-STATE WEBINAR SERIES

## Catatonia and ASD: Hidden in Plain Sight

Ruth Aspy, Ph.D. and Barry G. Grossman, Ph.D.  
The Ziggurat Group



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## Tri-State Autism Spectrum Disorder Webinar Series



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## Presenter Information



**RUTH ASPY, Ph.D.**, is a licensed psychologist who specializes in transdisciplinary assessment and intervention for individuals with autism spectrum disorders. She is co-creator of a comprehensive model of intervention, the Ziggurat Model. Along with Dr. Barry Grossman, Dr. Aspy has written *The Ziggurat Model*, which earned the 2008 Literary Achievement Award from the Autism Society of America. The Model is being used successfully throughout the United States and internationally in countries including Japan, Greece, Canada, and Mexico. Dr. Aspy speaks nationally and internationally.



**BARRY G. GROSSMAN, Ph.D.**, is a licensed psychologist and author. He is in private practice with the Ziggurat Group and specializes in assessment and intervention for individuals with autism spectrum disorders. Dr. Grossman, along with Dr. Aspy, wrote *The Ziggurat Model*—a book on designing interventions for students with Asperger's Disorder and high-functioning autism. He and his co-author present on this model internationally. The Ziggurat Model has been adopted at the district-wide and state-wide levels.

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## Learner Objectives

- Define catatonia
- Describe how the DSM-5 categorizes catatonia (specifiers)
- Recognize the key characteristics of catatonia
- Describe issues surrounding catatonia in autism (separate condition?, waxing/waning)

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## Presentation Summary

- Catatonia is associated with ASD
- Characteristics of catatonia overlap with ASD
- The history of catatonia is complex
- Catatonia can be life threatening and requires its own treatment

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# Catatonia

A disorder of  
posture/movement, speech,  
mood, & “behavior.”

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# Autism

A disorder of  
posture/movement, speech,  
mood, & “behavior.”

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## Two Sides One Coin?

- Autism is an “early expression” of catatonia (Dhossche, 2004)
- “Catatonia is a later complication of autism spectrum disorders . . .” (Wing and Shah, 2000 p.357)



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## Autism? Catatonia?



“Catatonia provides a window into the mechanism of autism, and vice versa” p.157

Dhossche, (2014)

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## Fink's View of Catatonia

- Catatonia is a syndrome – a collection of a number of signs that occur spontaneously in a person.
- **Catatonia is its own entity – a separate syndrome.**

Fink, Personal Communication (12-29-15)

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## History

- **1874** – Kahlbaum first to describe & define catatonia
- **1899** - Kraepelin, described patients with dementia praecox (later schizophrenia) - catatonia as a subtype.

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## History

"The demotion of catatonia ... to that of a subtype (catatonic schizophrenia), ...has hidden catatonia from recognition as a unique syndrome for more than a century" (Fink, 2013, p. 10).

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## History

- **1952 to 1994** – The DSM classified catatonia as a type of schizophrenia
- **1973** - Kahlbaum's work is translated into English and others began to find catatonia in patients **without** schizophrenia

(Fink, 2013)

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## Fink's View of Catatonia

The APA task force could not agree what catatonia was so [they] put it in multiple places. Those of us who deal with it have concluded that catatonia is an individual disorder that [may occur] in anybody. It has nothing to do with schizophrenia.

Fink, Personal Communication (12-29-15)

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**TABLE 1**  
**DISORDERS ASSOCIATED WITH CATATONIA IN CHILDHOOD AND ADOLESCENCE<sup>7-22</sup>**

Developmental disorders

- Autistic disorder<sup>9,12</sup> and possibly childhood disintegrative disorder<sup>11</sup>
- Mental retardation<sup>7</sup>
- Prader-Willi Syndrome<sup>8</sup>

Psychotic disorders<sup>13</sup>

Mood disorders<sup>13</sup>

Mental disorders due to a general medical condition<sup>14-18</sup>

Substance-induced disorders<sup>14</sup>

Tourette's Syndrome<sup>12,19,20</sup>

Medication-induced movement disorder (NMS)<sup>21,22</sup>

NMS=neuroleptic malignant syndrome.

Dhossche DM, Wilson C, Wachtel LE. *Primary Psychiatry*. Vol 17, No 4. 2010.

Dhossche, Wilson, & Wachtel, L. E. (2010).

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## Catatonia Today

- According to Fink (2013), research demonstrates that catatonia is an independent condition
- 2013 – The DSM-5 added catatonia secondary to a medical disorder and associated with mental disorders (specifier)

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## DSM-5 ASD Specifiers

1. With or without intellectual impairment
2. With or without language impairment
3. Associated with known medical or genetic condition
4. Associated with another neurodevelopmental, mental, or behavioral disorder
5. **With catatonia**

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## DSM-5 Catatonia Associated with Another Mental Disorder (Catatonia Specifier)

1. Stupor
2. Catalepsy
3. Waxy flexibility
4. Mutism
5. Negativism
6. Posturing
7. Mannerism
8. Stereotypy
9. Agitation, not influenced by external stimuli
10. Grimacing
11. Echolalia
12. Echopraxia



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## Immobility & Excitability

Broadly stated, symptoms of catatonia manifest in two ways:

- Immobility (e.g., stupor, catalepsy)
- Excitability (e.g., agitation, hyperactivity, aggression)

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**Stupor:** Extreme hypoactivity, immobility. Minimally responsive to stimuli

**Staring:** Fixed gaze, little or no visual scanning of environment, decreased blinking

## Stupor/Staring



<https://www.youtube.com/watch?v=lu7C5cIA4q0>

Dhossche, D. M., & Wachtel, L. E. (2008, p.456)

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## Posturing/Catalepsy

Maintains posture(s), including mundane (e.g., sitting or standing for hours without reacting)



<https://en.wikipedia.org/wiki/Catalepsy>

Dhossche, D. M., & Wachtel, L. E. (2008, p.456)

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## Posturing/Catalepsy



<http://www.artandmedicine.com/clinical/neuro/Paralysis%20Agitans%20.html>

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## Waxy Flexibility



During repositioning, patients offers initial resistance before allowing himself to be repositioned (similar to that of bending a warm candle)

<https://en.wikipedia.org/wiki/Stupor>

Dhossche, D. M., & Wachtel, L. E. (2008, p.456)

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# Waxy Flexibility



[https://en.wikipedia.org/wiki/Waxy\\_flexibility](https://en.wikipedia.org/wiki/Waxy_flexibility)

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**TABLE 2  
COMMON CATATONIC SYMPTOMS IN CHILDREN AND ADULTS\*<sup>8</sup>**

	<i>Children (%)</i>	<i>Adults (%)</i>
Mutism	87	78
Posturing/grimacing	52	66
Stupor	80	66
Staring	49	57
Waxy flexibility	62	35
Incontinence	45	—

\*Based on data reported by Dhossche and Bouman<sup>8</sup>

Dhossche DM, Wilson C, Wachtel LE. *Primary Psychiatry*. Vol 17, No 4. 2010.

Dhossche, Wilson, & Wachtel, L. E. (2010).

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## Posture & Movement

- Immobility or slowness in walking
- Inability to eating or drink / slow eating or drinking
- Tics
- Repetitive, non-goal oriented movements
- Hyperactivity/hypoactivity
- Constant motor activity (e.g., pacing)

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## Posture & Movement

- Odd gait – unusual way of walking, toe-walking
- Odd stiff posture
- Freezing during actions
- Difficulty crossing lines
- Inability to stop actions



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## Posture & Movement

- Fixed eye gaze, little visual scanning of environment, decreased blinking
- Odd facial expressions that are held for long time
- Impulsive inappropriate behaviors (e.g., remove clothes)

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## Posture & Movement

- Excitement & agitation – uncontrollable destructive movements and unprovoked destructive acts (**note: “aggressive” not used here because implies intent to harm**)
- Minimally responsive to environment
- Ritualistic behaviors
- Incontinence

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## Dystonia

- Dys – means abnormal
- Tone – means tension

Dystonia – movement disorder – sustained muscle contractions causing, twisting, repetitive movement, or abnormal postures

Dhossche, D. M., & Wachtel, L. E. (2008, p.458)

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## Focal Hand Dystonia

- Involuntary movements or tremor in hand or arm
- Interferes with writing by causing involuntary muscle contractions
- Sometimes task specific – only apparent during certain activities such as writing or eating



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## Dystonia - Anismus

- Type of dystonia
- Causes painful constipation and defecation
- May be complicated by encopresis

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## Speech: Spasmodic Dystonia

- Causes the voice to sound broken hoarse or reduces volume to a whisper

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## Speech: Mutism and Echoalia

- Minimal verbal responses
- Significant reduction in speech production
- Total absence of speech
- Echolalia
- Verbigeration – repeating meaningless words or phrases

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## Mood

- **“The inability to initiate and complete movements causes frustration, resulting in stress and tension that, in turn, is likely to exacerbate the difficulty with voluntary movements.”**

(Shah & Wing, 2006 p.256)

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## DSM-5

“The seemingly opposing clinical features and variable manifestations of the diagnosis contribute to a lack of awareness and decreased recognition of catatonia” (p.119).

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## Poll

- Based on these characteristics, how many of you believe that you may have worked with an individual who may have had catatonia and ASD?

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## Poll

- For those of you who responded, “Yes,” how many of you suspected catatonia in this individual for the first time ?

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## “Catatonia Variants”

### Disorders that meet criteria for Catatonia

- Obsessive-compulsive disorder (OCD)
- Tourette’s Disorder
- Selective Mutism
- Vocal and Motor Tic Disorder (DSM-5)
- Neuroleptic-Induced Parkinsonism (DSM-5)
- Stereotypic Movement Disorder

Fink (2013)

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## Same Thing – Different Words



“Psychiatrists, neurologists, pediatricians, psychologists, and other child specialists often have their own criteria and terminology that are never compared **across disciplines**. Like with the Tower of Babel, synergy that may advance the field of autism and catatonia is lost due to **confusing diagnostic terminology** among specialties.”

(Dhossche, Shah, Wing, 2006, page 269)

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## Catatonia-like Deterioration (ASD)

- Features of catatonia manifest for first time or become marked in adolescence or adulthood
- Symptoms are severe with decline in:
  - Movement
  - Self-care
  - Pattern of activities
  - Practical skills



Shah & Wing, 2006

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## Catatonia-Like vs. Catatonia

**Shah and Wing (2006) indicate:**

- Catatonic stupor is rare
- No incidence of waxy flexibility

**Onset of deterioration and Outcomes**

- Slow
- Not as responsive to medical intervention

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**4 to 17 percent**  
of adolescents and adults with  
ASD have catatonia

(Wing and Shah, 2000, Billstedt et al., 2005, Oheta et al., 2006, Hutton et al., 2008, and Ghaziuddin et al, 2012)

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## Onset

- Between 10 and 19 years
- Often gradual

(Wing and Shah, 2000)

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## Wing & Shah - Catatonia & ASD

1. Slowness of movement and verbal responses
2. Difficulty initiating and completing actions
3. Increased reliance on physical or verbal prompting
4. Increased passivity and apparent lack of motivation

Wing & Shah (2000)

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## Wing & Shah - Catatonia & ASD

5. Reversal of day and night
6. Parkinsonian features – tremor, eye rolling, dystonia
7. Excitement and agitation
8. Increased repetitive, ritualistic behavior

Wing & Shah (2000)

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## Catatonia & ASD

- The effects on movement are **NOT under voluntary control**.
- The person is **NOT** being **deliberately** manipulative, aggressive, stubborn, willful, obstructive, or lazy.

Shah & Wing, 2006, p.255

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## Wachtel's Symptoms of Catatonia in Autism

- Immobility/rigidity
- Stupor
- Mutism
- Posturing
- Echophenomena
- Grimacing
- Physical excitement
- Combativeness
- Stereotypy
- Negativism
- Autonomic instability

Wachtel (2013)

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## SUSPEND DISBELIEF

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## Waxing and Waning

- In all cases of catatonia and ASD, the severity changes within the span of a day.



[https://en.wikipedia.org/wiki/Lunar\\_phase](https://en.wikipedia.org/wiki/Lunar_phase)

(Ohta, Kano, and Nagai in Dhossche, Wing, Ohta, and Neumarker, 2006)

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## Ambitendency

- ambi – both
- Tendency - a proneness to a particular kind of thought or action



**Tendency to act in opposite ways or directions:**

- **The presence of opposing behavioral drives**
- **Contrary behavior, does exact opposite of instruction**

(My brain says, “Cooperate” but my body says, “No.”)

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## Negativism

- **Motiveless** resistance to instructions or attempts to move
  - Unplanned
  - Without purpose

Bush-Francis Catatonia Rating Scale

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What is the function of this movement?

- Escape
- Attention
- Access
- Avoidance
- Automatic reinforcement

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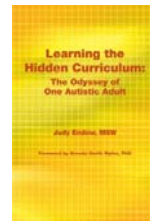
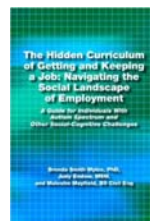
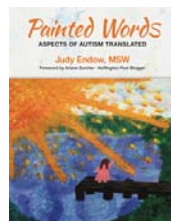
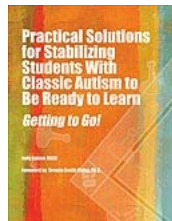
## Motiveless

- Just because there is a pattern does not mean there is a purpose/function  
Cause is the wind
- In catatonia behaviors are caused by **catatonia**. They are not done “on purpose.”

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Judy Endow



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## Betrayal Discussion

- Negativism
- Stereotypy



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## Contact Information

Ruth Aspy, Ph.D.  
[aspy@texasautism.com](mailto:aspy@texasautism.com)

Barry G. Grossman, Ph.D.  
[grossman@texasautism.com](mailto:grossman@texasautism.com)



[www.texasautism.com](http://www.texasautism.com)

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# THANK YOU!

Ruth Aspy, Ph.D.

[aspy@texasautism.com](mailto:aspy@texasautism.com)

Barry G. Grossman, Ph.D.

[grossman@texasautism.com](mailto:grossman@texasautism.com)



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