


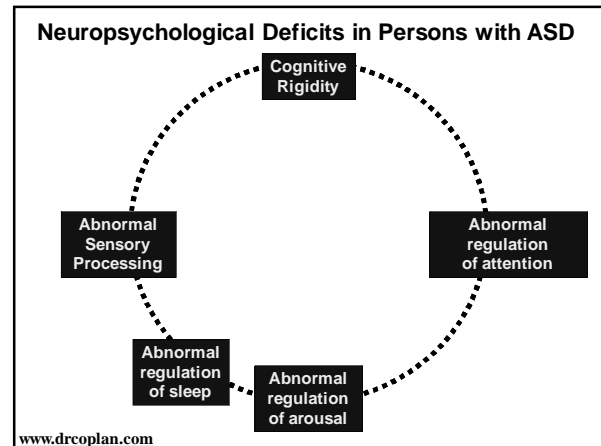
**JAMES COPLAN, M.D.**  
Neurodevelopmental Pediatrician · Author · Speaker  
Making Sense of Autistic Spectrum Disorders



**Beyond Access, Attention, and Escape**  
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**AUTISM SOCIETY**  
Improving the Lives of All Affected by Autism  
Autism Spectrum Disorders  
The Partnership Project

www.drcoplan.com **HONESTLY AUTISM DAY**



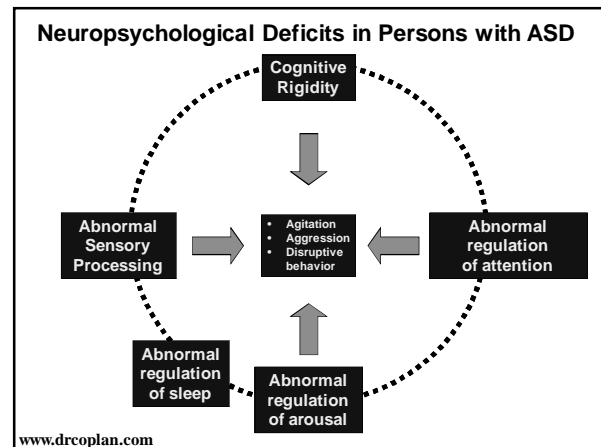
**Disclosures**

- Dr. Coplan is author of *Making Sense of Autistic Spectrum Disorders: Create the brightest future for your child with the best treatment options* (Bantam-Dell, 2010), and receives royalties on its sale



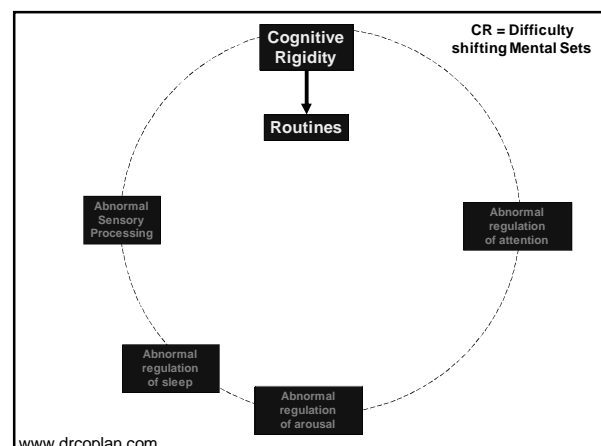
- This presentation will include a discussion of off-label drug use

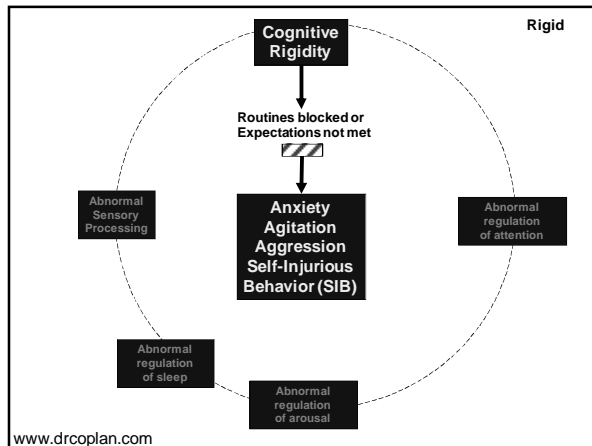
www.drcoplan.com



**Outline**

- Cognitive and Emotional Traits in ASD**
- The problem**
  - Neglect of Internalizing Behavior (and mental health)
  - How did we get here?
- The Solution**
  - Positive Behavior Support Plan for Internalizing Behavior
  - Proactive mental health assessment
  - SSRI's
  - Parent- and/or Family-centered intervention (Often) ➔ Part II !





Cognitive Rigidity → Anxiety → Disruptive Behavior

**“If he’s not doing what he wants at the time he wants, then all bets are off”**

Father of 9 y.o. boy with Fragile-X, ASD, anxiety, & disruptive behavior

JF  
MRN 06-0344

Cognitive Rigidity → Anxiety → Disruptive Behavior

**“Our son experiences extreme anxiety when what he anticipates isn’t what happens...When we know a change is coming we can prepare him, but those we can’t anticipate are still very upsetting for him...The switch flips in his mind, and it’s out of his control.”**

6 y.o. boy with ASD, anxiety, and normal nonverbal IQ

MRN 12-0782



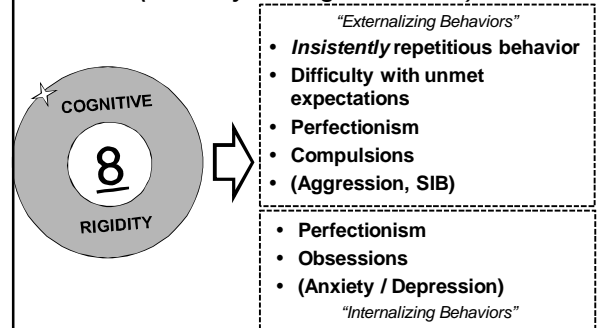
### Cognitive Rigidity: Changes in Routine / Unmet Expectations



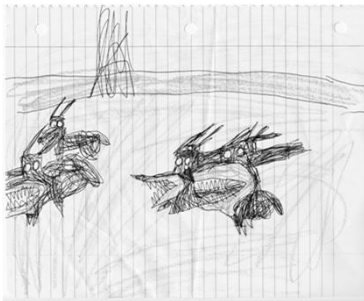
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Rainman, 1988

### Cognitive Rigidity (Difficulty shifting mental sets)



### Anxiety



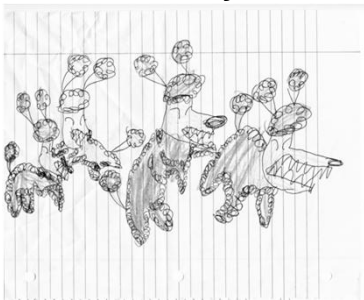
RD. 7 y.o. F, nl IQ, PDD-NOS & Anxiety. Father: GAD  
www.drcoplan.com MRN: 07-0427

### Anxiety



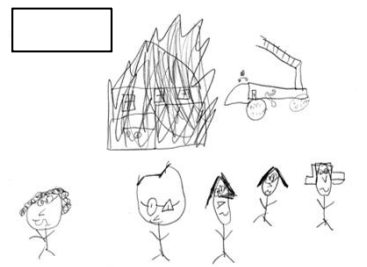
RD. 7 y.o. F, nl IQ, PDD-NOS & Anxiety. Father: GAD  
www.drcoplan.com MRN: 07-0427

### Anxiety



RD. 7 y.o. F, nl IQ, PDD-NOS & Anxiety. Father: GAD  
www.drcoplan.com MRN: 07-0427

### Anxiety



"The house is on fire and we are running for our life."

A.W.: 9 year old boy with PDD-NOS and normal IQ (MRN 11-07710)

### Anxiety



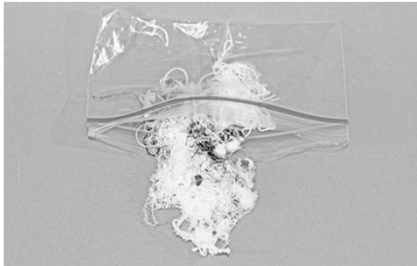
RD. 7 y.o. F, nl IQ, PDD-NOS and Anxiety. Fa: GAD  
R.D. MRN 07-0427

### Anxiety



"Standing in the Atlantic Ocean. The ocean has a very high surface, up to their mouth, so they can't breathe." Six year old boy with ASD and Anxiety. BK, MRN 09-0605

### Compulsions



Joseph F: 15 y.o. boy Asperger Syndrome

MRN: 05-0096

### Perfectionism



### Perfectionism



### Anxiety & Perfectionism

10 y.o. boy with ASD.

Bender-Gestalt: SS 116

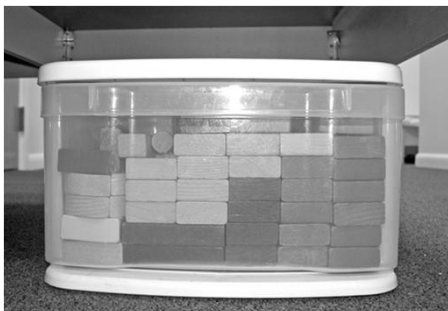
Hyperlexia

Verbal Comprehension: Moderate delay

Teacher report: "E. is a very sweet boy...  
Tries hard to please... *Constantly seeks  
reassurance.. He follows directions, but you  
have to let him complete what he is doing.  
He cannot leave things unfinished!"*

EK. MRN 06-0299

### Perfectionism



### Tony

7 y.o. boy with HFA, Anxiety, and Perfectionism

Teacher's Report: "Tony tries to exclude  
himself from any 'competition' types of games  
or activities, as he really dislikes being  
'wrong,' 'out,' or to lose. On the times he has  
had tantrums after being 'out' or when his  
team has lost, the other children have been  
very empathetic towards him and he has not  
lashed out at them. *His frustration appears to  
be with himself.*"

TQ. 8 yr old boy with AS  
MRN: 14-0916

### Tony

7 y.o. boy with HFA, Anxiety, and Perfectionism

#### Office Visit

**Examiner:** “Sometimes you just need to do your best, and then move on,” we stated in an encouraging tone of voice, then asked him “What do you think of that?”

**Pt:** “Not much,” he replied bluntly.

TQ  
MRN 14-0916

### Sean W.

MRN 14-0933

#### Exam: Perfectionism

S. earnestly attempted the Bender-Gestalt figures, but became overwhelmed, repeatedly erasing and re-erasing. He went so far as to measure the distance between the dots on one of the stimulus cards with his finger, trying to replicate the spacing exactly. *“If I can’t get something right I get angry with myself... Sometimes I take it out on other people,”* he confided. After he had labored mightily over the first few cards, he sighed *“This is torture...”* After he had manfully struggled over a single card for several minutes, we opted to move on to another task.

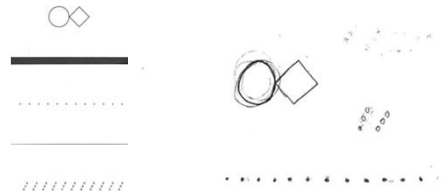
### Sean W.

MRN 14-0933

- 10 y.o. boy w. prior Dx of ADHD & OCD
- Developmental History:
  - Inconsistent eye contact
  - “No social filters”
  - “Precocious interests”
  - Sensory aversions
  - Behavioral deterioration on stimulants

### SW: “This is torture”

MRN 14-0933



### Sean W.

MRN 14-0933

- Exam
  - Friendly & cooperative
  - “My brain makes me worry about stupid stuff, like ‘Did I touch something?’”
  - Pedantic tone: Referring to his sister Alli: “I believe her real name is Allison”
  - Private monologues: “Pluto is the equality of Hades in Greek mythology.... Ares is the Greek god of war.... Cupid is the son of Aphrodite and Zeus....”

### Sean W.

MRN 14-0933

#### Impaired Theory of Mind and Central Coherence



Sean readily concluded that the boy on the left was “at the doctor’s and about to get a shot.” He interpreted the picture on the right as “A boy was walking home from school and took off his clothes and went for a swim.” Even after we pointed out the car, Sean never figured out that the picture shows a man who had been driving the car who stopped to take a swim (not a boy walking home from school).

**Sean W.**  
MRN 14-0933

The final task was a family drawing ("Draw a picture of your family, with everybody in the picture doing something"). The open-ended nature of the task threw him, and for a few moments he was unable to get started. Once he did get started, he worked very slowly, and made repeated erasures.

**Anxiety, Perfectionism, and Disruptive Behavior**

10 y.o. boy with ASD, normal NVIQ, and disruptive behavior at school

During... testing... B was cooperative and motivated to do well for the majority of the time... He was quiet, mild-mannered, and polite when offered encouragement and praise...and even commented that he liked some of the tasks...

He became increasingly frustrated as the testing progressed... He became quite distressed when asked questions about his own emotional life and behavior. This resulted in a cycle where he repetitively vocalized his need to complete the task and then became angry and frustrated by the questions that he was being asked....

Private psychologist's note B L

Sean W.  
MRN 14-0933



**Anxiety, Perfectionism, and Disruptive Behavior**

10 y.o. boy with ASD, normal NVIQ, and disruptive behavior at school

Given his otherwise kind and mild-mannered nature, it does not appear to this examiner that any of B's behavior is primarily oppositional or simply a tool to gain attention or escape a difficult task. When faced with tasks that he perceives are difficult or if he fears that he will make a mistake, B's internal response is so extreme that he appears to lose all ability to regulate the external expression of this emotion"

Private psychologist's note B L

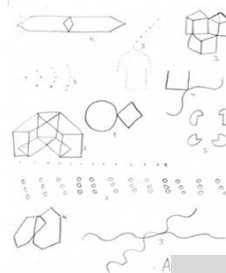
**Sean W.**  
MRN 14-0933

**Revised Dx**

- Asperger Syndrome
- OCD

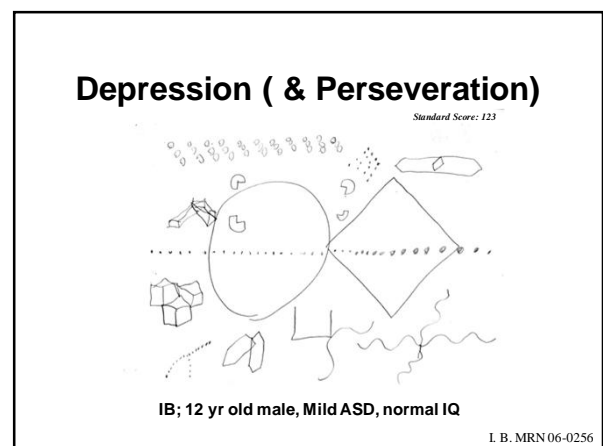
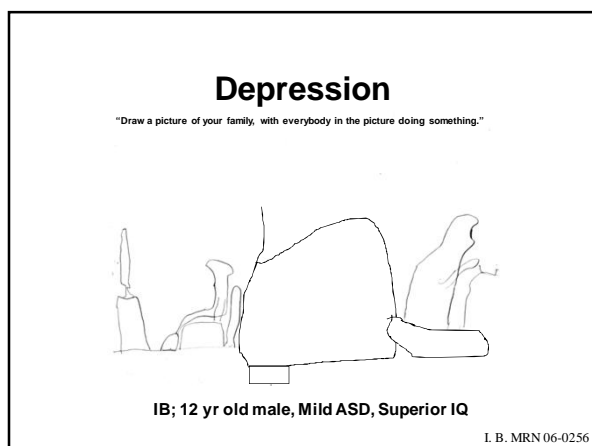
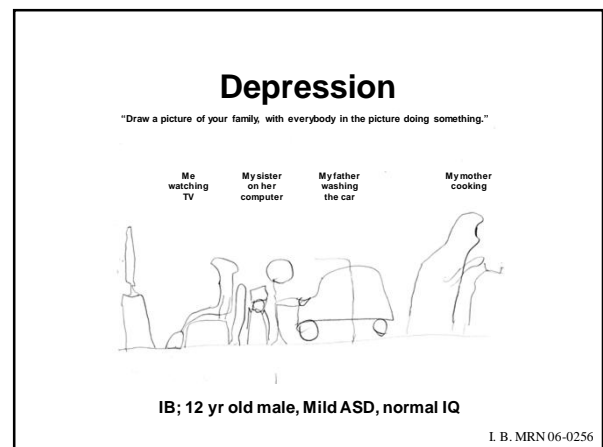
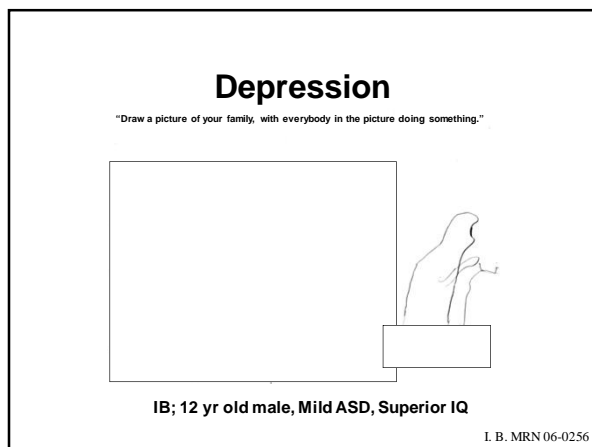
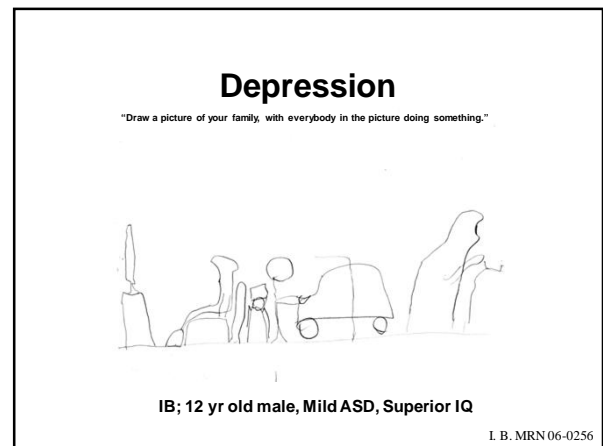
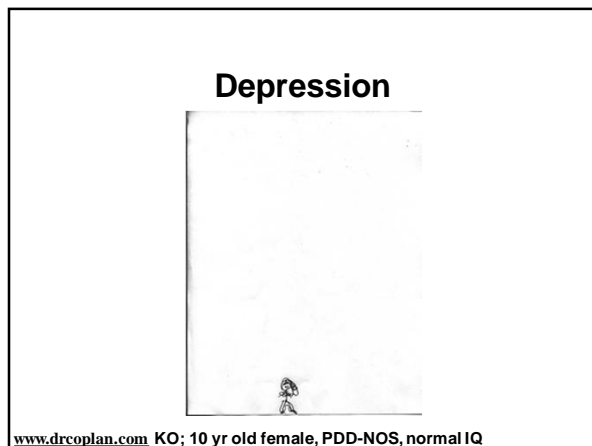
**Anxiety, Perfectionism, and Self-Injurious Behavior**

Standard Score: 138



A.D. : 9 y.o. girl with ASD (my MRN: 06-0227)

Throughout the session, "Alice" delivered a steady stream of self-deprecating comments, calling herself "stupid," or perseveratively asking if she was "fat." During the Bender, she anxiously and angrily twisted the eraser off the tip of the pencil, while declaring "Why do I keep making stupid mistakes?" As her stress level rose, she escalated to slapping herself, and then punching herself in the face.



### Psychiatric Symptom Impairment in Children with Autism Spectrum Disorders

Kaat, A.J., et al. Journal of Abnormal Child Psychology, 2013

- 115 pts w. ASD at University Hosp. Child Devel. Clinic
  - Age 6–12 yr; Male : 86 %; White: 91 %
  - Mean IQ : 85
    - ≥70: 91 (77%)
    - <70: 24 (23 %)
  - Spectrum Dx:
    - Autistic Disorder: 31 %
    - Asperger's Disorder: 19 %
    - PDD-NOS: 50%
- Child and Adolescent Symptom Inventory-4R
  - Parent & teacher ratings

**The science of  
who we are  
(or: Why do we act  
the way we do?)**

### Psychiatric Symptom Impairment in Children with Autism Spectrum Disorders

Kaat, A.J., et al. Journal of Abnormal Child Psychology, 2013

Disorder	Prevalence (%)*	
	Impairment**	DSM-IV criteria
ADHD (any type)	83%	82%
Oppositional defiant disorder	53%	34%
Conduct disorder	23%	9%
Anxiety disorders	70%	47%
• Generalized anxiety disorder	• 48%	• 32%
• Social phobia	• 51%	• 23%
Major Depressive D/O, Dysthymia	45%	19%
Manic episode	53%	18%
Schizophrenia	48%	10%
Any disorder	94%	84%

\* Combined Parent & Teacher ratings

\*\* "Impairment" = Symptoms "Often or Very Often"

### 19<sup>th</sup> century neuroscientists' dilemma

- We know from correlative neuroanatomy *where* certain functions reside within the brain, but *how* and *why* does the brain do what it does?
- *How do we construct a science of human behavior?*

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Human Behavior

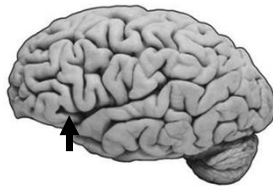


- Correlative Neuroanatomy / Neuropsychol.
  - Wernike, Broca
  - Penfield
- Classical Psychology ("consciousness")
  - James
- Behaviorism (Externally visible behavior)
  - Watson
  - Thorndike
  - Skinner
- Analytic Psychiatry (Introspection)
  - Freud



Correlative Neuroanatomy / Neuropsychology

**Broca's Area**



- Paul Broca, 1861
- Severe impairment of speech production
- Language comprehension remains intact ("Broca's aphasia")

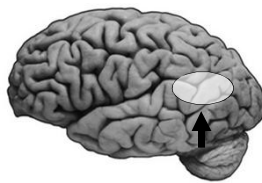
**Freud: Neuropathologist**

"Critical Introduction to Neuropathology" (1885-87)

SPECIELLE  
PATHOLOGIE UND THERAPIE  
HOFRATH PROF. D<sup>r</sup>. HERMANN NOTENAGEL  
DIE  
INFANTILE CEREBRALLÄHMUNG

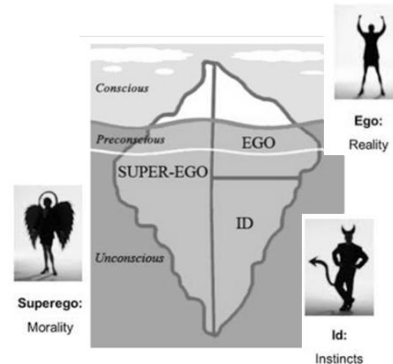
Dr. SIGM. FREUD  
Privatdozent an der Universität Wien.  
WIEN 1897.  
ALFRED HÖLDER  
K. U. K. Hof- und Universitäts-Buchhändler  
Lehrtergasse 14.

**Wernike's Area**

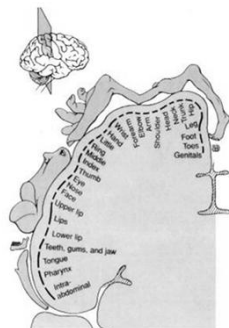


- Carl Wernicke, 1874
- Ability to speak remains intact, but language comprehension and ability to produce meaningful speech are impaired ("Fluent aphasia")

**Freud: Psychoanalytic Theory**

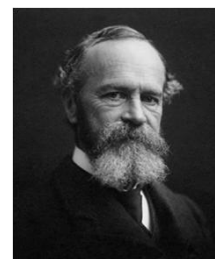


**Wilder Penfield  
(1891-1976)**



[http://editthis.info/psy3241/Wilder\\_Penfield](http://editthis.info/psy3241/Wilder_Penfield)

**William James  
1842-1910)**



"Father of American Psychology"

*The Principles of Psychology* (Harvard, 1890)

- Functional localization: "lower" → "higher" brain centers
- Stream of Consciousness, Emotion, Habit, Will, etc...

[http://en.wikipedia.org/wiki/William\\_James](http://en.wikipedia.org/wiki/William_James)

[http://en.wikipedia.org/wiki/The\\_Principles\\_of\\_Psychology](http://en.wikipedia.org/wiki/The_Principles_of_Psychology)

John Broadus Watson  
(1878 –1958)



*Psychology as the behaviorist views it* (Columbia, 1913): “A purely objective experimental branch of natural science. Its theoretical goal is the prediction and control of behavior. Introspection forms no essential part of its methods, nor is the scientific value of its data dependent upon the readiness with which they lend themselves to interpretation in terms of consciousness.”  
[http://en.wikipedia.org/wiki/John\\_B.\\_Watson](http://en.wikipedia.org/wiki/John_B._Watson)

Edward Thorndike  
(1874 –1949)



*Animal Intelligence: An Experimental Study of the Associative Processes in Animals* (Columbia University, Doctoral Dissertation, 1898)

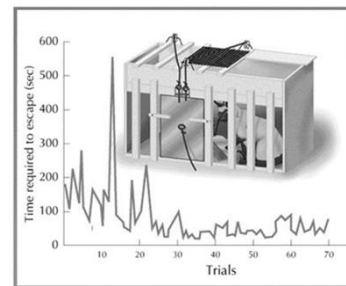
[http://en.wikipedia.org/wiki/Edward\\_Thorndike](http://en.wikipedia.org/wiki/Edward_Thorndike)

### Psychology without reference to “consciousness”

- Understanding, Insight, comprehension
- Intention, Desire
- Compliance / Noncompliance
  - “Compliance” and “Non-compliance” presuppose that the subject “understands” what is expected, and has “chosen” to not emit the behavior

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### Thorndike 1905



[http://en.wikipedia.org/wiki/File:Puzzle\\_box.jpg](http://en.wikipedia.org/wiki/File:Puzzle_box.jpg)

### Psychology without reference to “consciousness”

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### Law of Effect

*Animal Intelligence*. Edward Thorndike, 1911

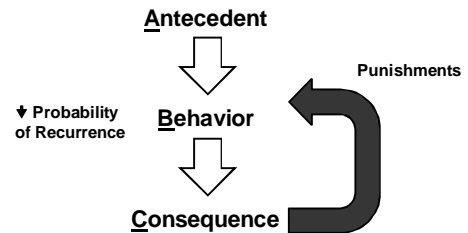
“ Of several [possible] responses...to the same situation, those which are...closely followed by satisfaction to the animal will...be more likely to recur. Those which are...followed by discomfort to the animal will...be less likely to occur. The greater the satisfaction or discomfort, the greater the strengthening or weakening of the bond”

### Skinner, ca. 1950



<http://www.youtube.com/watch?v=SUwCgFSb6Nk&NR=1&feature=endscreen>

### Behaviorism



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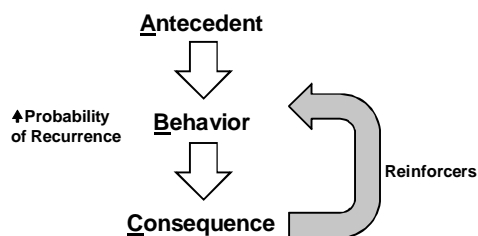
### Operant Conditioning *Skinner*

- ***Experimental manipulation of the consequences for a given behavior (by the subject) alters probability that that behavior will recur.***

### Antecedents

- **External:**
  - Imposition of a task
  - Change in routine
  - Denial of access to object or activity
  - Other....
  - Or: No apparent external antecedent

### Behaviorism



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### Behavior

- **“Topography”**
  - “What does the behavior look like?”
    - Verbal “defiance”
    - Task refusal (Better: Non-performance)
    - Flopping
    - Property destruction
    - SIB (describe)
    - Eloping
    - Etc...

## Consequences 1: Reinforcers

- **Reinforcers:** ↑Recurrence of antecedent behav.
  - **Positive Reinforcement** (adds something)
    - Access (to food, desired objects)
    - Attention
  - **Negative Reinforcement** (removes something)
    - Escape from task
    - Removal of non-preferred food

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## Consequences 2: Aversives

- **Aversives:** ↓Recurrence of antecedent behavior
  - **Logical Consequences**
    - If child refuses to use toilet, child must wear backpack with spare clothes
  - **Over-correction**
    - If the child spills milk on purpose: child must mop the entire kitchen floor
  - **Punishment**
    - Loss of privileges
    - Verbal
    - Physical

Besides being ethically questionable and possibly detrimental, these both constitute attention – a reinforcer!

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## Attention as a reinforcer



<https://larajoseph.wordpress.com/2015/03/11/attention-as-a-reinforcer/>  
[https://ku scholarworks.ku.edu/bitstream/handle/1808/12939/Bayles\\_ku\\_0099D\\_13181\\_DATA\\_1.pdf?sequence=1](https://ku scholarworks.ku.edu/bitstream/handle/1808/12939/Bayles_ku_0099D_13181_DATA_1.pdf?sequence=1)

## Self-Inflicted Punishment in children with ASD & Perfectionism

Antecedent (Task Demand)



Behavior



Consequence

Perfectionism  
→ Self-inflicted punishment for perceived failure  
→ "Task avoidance"

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## Goal

- **To abolish self-inflicted punishment following failure to complete a task perfectly**
  - Mistakes are OK
  - I made a mistake – I will not die
  - I can try again
  - Mistakes are how I learn new things
    - Michaelangelo



Angel with Candlestick, 1494-95

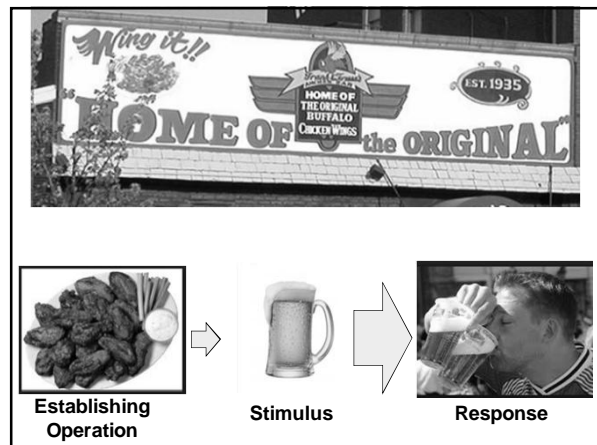
*I saw the angel in the marble and carved until  
I set him free. Michelangelo*



### Motivating Operations (MO)

[http://en.wikipedia.org/wiki/Motivating\\_operation](http://en.wikipedia.org/wiki/Motivating_operation)

- “Motivating operations affect whether a person wants or does not want a stimulus at a given moment, which helps explain [the person’s] behavior at that point in time.”

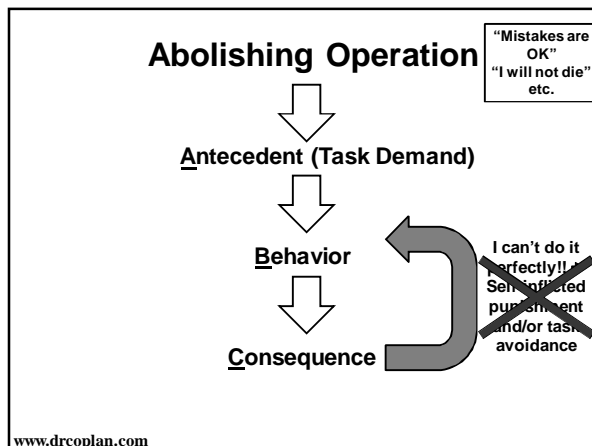


### Motivating Operations (MO)

[http://en.wikipedia.org/wiki/Motivating\\_operation](http://en.wikipedia.org/wiki/Motivating_operation)

- MOs that ↑ the reinforcing or punishing qualities of a stimulus are termed *Establishing Operations (EO)*
- MOs that ↓ the reinforcing or punishing qualities of a stimulus are termed *Abolishing operations (AO)*





**ED.gov** U.S. Department of Education  
Promoting educational excellence for all Americans

This site was created to provide a "one-stop shop" for resources related to IDEA and its implementing regulations...

- **Comment:** A few commenters recommended that Sec. 300.324(a)(2)(i) refer specifically to children with *internalizing and externalizing behaviors*.
- **Discussion:** We do not believe it is necessary to make the recommended change because Sec. 300.324(a)(2)(i) is written broadly enough to *include children with internalizing and externalizing behaviors*.
- **Changes:** None.

<http://idea.ed.gov/explore/view/pl.root,regs,preamble2,prepart2,D,2766>

**Outline**

- Cognitive and Emotional Traits in ASD
- The problem
- **The Solution**
  - Positive Behavior Support Plan for Internalizing Behavior
  - Proactive assessment of mental health
  - SSRI's
  - Parent- and/or Family-centered intervention (Often) ➤ Part II !

**IDEA**

- **As a practical matter, however:**
  - "Behavior" is tacitly interpreted to mean "Externalizing" behavior
  - "Impedes Learning" is equated with academic failure

**IDEA, Section 614(d)(2)(B)**

<http://idea.ed.gov/explore/view/pl.root,statute,I,B,614,d>

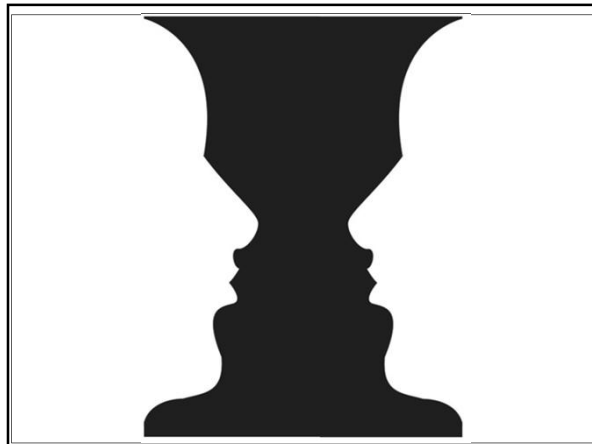
**(B) Consideration of special factors.--The IEP Team shall--**

**(i) in the case of a child whose behavior impedes the child's learning or that of others, consider the use of positive behavioral interventions and supports, and other strategies, to address that behavior.**

**Reclaiming IDEA:  
Positive Behavior Support for  
Internalizing Behavior**

- Staff Awareness
  - "Seeing the vase"
- Visual Schedules
- Relaxation Techniques
- Abolishing Operations

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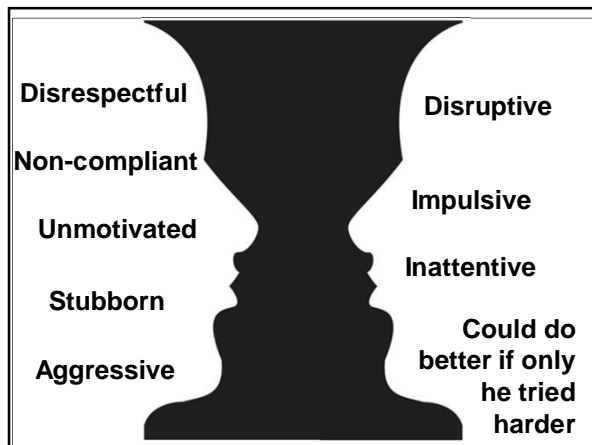
### Not seeing the vase

Daniel C: 11 y.o. boy with AS

**“It is so disappointing to see Daniel choose to act the way he does... He has been inconsiderate of his science group, and his teachers... He just doesn’t want to focus ....His attitude makes me sad.”**

– Teacher report

MRN: 13-0863



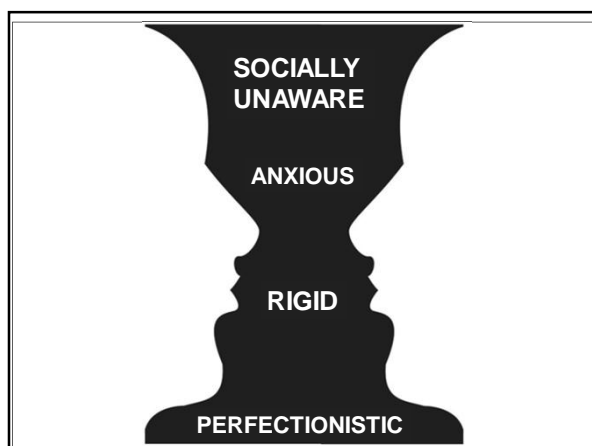
### Not seeing the vase

Daniel C: 11 y.o. boy with AS

**“Daniel makes choices that affect his relationships with peers... Makes choices not to comply with directions or expectations... Can be sweet yet also very stubborn or refuses to comply with directions... Difficulty with transitions... Difficulty perceiving situations accurately.”**

– Teacher report

MRN: 13-0863



### The Story of Billy’s Box - 1

*(or, why it’s important to ID internalizing behavior)*

- 8 y.o. boy with ASD and normal Nonverbal IQ
- Severe tantrums at school
- Antecedents:
  - TRANSITIONS
- Function?
  - Not attention, escape, access
  - “Biological” (i.e. “just part of his ASD”)?

### The Story of Billy's Box - 2

(or, why it's important to ID internalizing behavior)

**Q: "Billy – You're always getting in trouble at school. What's going on?"**

**A: "I'm afraid that if I hand in my work, I'll never get a chance to go back and make it perfect."**

### Social Skills Deficit + Cognitive Rigidity

"L's IEP includes a Positive Behavior Support Plan, with goals that focus on *compliance*, and *awareness of the feelings of others*.

Specific target behaviors include "Refusal to comply with task," "Time off task," and "Making noises." The "Perceived Functions" of these behaviors are listed as "Escape from work, self-stimulation, sensory, and attention-seeking."

LC: 9 y.o. boy with superior IQ & AS  
MRN 10-0660

### The Story of Billy's Box - 3

(or, why it's important to ID internalizing behavior)



"Put your papers in the box, and we promise you will be able to go back later and work on them some more, if you want to."

### Social Skills Deficit + Cognitive Rigidity

"We are pleased to see that L. has a Positive Behavior Support Plan, but we are dismayed that it does not consider *perfectionism* as an antecedent, in which case L's refusals may not be for the purpose of escape from task *per se*, but to *avoid self-criticism for not being able to do a task perfectly*.

Liam's Behavior Plan calls for him to recognize the feelings of others, which is fair. By the same token, his Behavior Plan should also require the adults to make an effort to figure out what *Liam* may be feeling – not just react to the surface topography of the behavior."

LC: 9 y.o. boy with superior IQ & AS  
MRN 10-0660

### Social Skills Deficit + Cognitive Rigidity

"With his teachers, L. is defiant, argumentative and refuses to complete tasks. He manipulates all situations and has much difficulty with the teacher/pupil hierarchy. He is very comfortable telling adults what to do and why... *He has great difficulty seeing the consequences of his actions and views punishment or consequences as personal attacks....*"

LC: 9 y.o. boy with superior IQ & AS  
MRN 10-0660

### Not seeing the vase

(ignoring internalizing behavior)

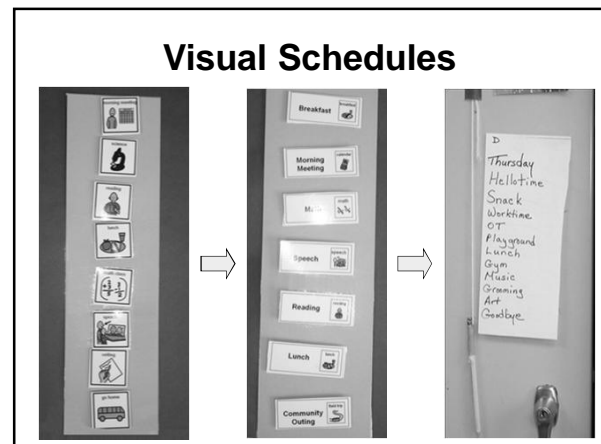
ASSESSMENT SUMMARY:			
Antecedents to the behavior of concern	Behavior of concern	Consequences maintaining the behavior of concern	Perceived function of the behavior of concern
Denied Access Transitioning Task Demand (individual) Social Situations (competitive)	Tantrum (4 levels) Level of tantrum: 1. Isolation tantrum: Clinging from adults or from the classroom/assigned area, not responding or refusing staff prompting 2. Low Frustration tantrum: clenching fists, stomping feet, grunting, whining, crumpling/bending objects, or crying. 3. Physical tantrum: aggression is defined	anxiousness entering into regular education classroom increased academic standards difficulty maintaining focus on instructor and tasks limited time frames for task completion increased expectations for written work	To <i>gain</i> Attention  To <i>avoid, escape, or postpone</i> academic tasks/expectations

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MW; MRN 06-0211



Seeing the vase (recognizing internalizing behavior)			
ASSESSMENT SUMMARY:			
Antecedents to the behavior of concern	Behavior of concern	Consequences maintaining the behavior of concern	Perceived function of the behavior of concern
<del>Denied Access to preferred task (individual)</del> <del>Social interactions</del> <del>Competition</del>	Tantrum (4 levels) 1. Isolation tantrum: eloping from adults or from the classroom/assigned area, not responding or refusing staff prompting 2. Low frustration tantrum: clenching fists, stomping feet, grunting, whining, crumpling/bending objects, or crying. 3. Physical tantrum: aggression is defined	<del>anxiousness entering into regulation</del> <del>classroom</del> <del>increased academic standards</del> <del>difficulty maintaining focus on instructor and tasks</del> <del>limited time frames for task completion</del> <del>increased expectations for written work</del>	<del>Task completion</del> <del>Attention</del> <del>Task avoidance</del> <del>Task refusal</del> <del>Task escape, or post-task academic task/expectations</del>
<b>Antecedents</b>	<b>Behaviors</b>	<b>Consequences</b>	<b>Perceived Function</b>
Anxiousness Perfectionism Fear of Failure	Tantrums Eloping Task Refusal	Temporary reduction in anxiety via task avoidance (stress reduction via mild SIB?)	Stress Reduction; Avoidance of self-blame for not completing the task perfectly
www.drcoplan.com		MW; MRN 06-0211	



Seeing the vase (Recognizing <i>internalizing</i> behavior as the driver of <i>externalizing</i> behavior)			
Antecedent (what happens before behavior of concern)	Behavior of Concern (what is the problem behavior or behaviors?)	Consequences to Maintaining Behavior of Concern (What happens as a result of the behavior?)	Perceived Function of the Behavior of Concern
Given a non-preferred task or a highly stimulating task demand situation	Michael will: 1. Show a decreased ability to focus and persist to tasks 2. Refuse to follow directions 3. Get angry and verbally disruptive when redirected 4. Become physically aggressive	1. Michael will be verbally redirected and encouraged to refocus and persist on task. 2. Michael will be asked if he needs a movement break. 3. Michael will be physically prevented from hurting others.	1. Maladaptive attempt to reduce stimulation 2. Maladaptive attempt to regulate frustration and anxiety. 3. Task avoidance
<b>Functional Behavioral Assessment Summary Statement:</b> When Michael is presented with a non-preferred task or a highly stimulating task demand environment, Michael will demonstrate a decreased ability to focus and persist to task, he may become physically aggressive in order to attempt to reduce stimulation, manage his frustration, anger and/or anxiety and/or avoid the task or situation.			
ML. MRN 13-0839 5 y.o. boy with AS and superior IQ			

### Positive Behavior Support Plan for Internalizing Behavior

- Staff Awareness
- Visual Schedules
- Relaxation Techniques
- Abolishing Operations

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### Positive Behavior Support Plan for Internalizing Behavior

- Staff Awareness
- Visual Schedules
  - What am I supposed to be doing now?
  - What am I supposed to be doing next?
  - What do I do if there is a change in plan?
- Relaxation Techniques
- Abolishing Operations

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### The Incredible 5-Point Scale

Assisting students with autism spectrum disorders in understanding social interactions and controlling their emotional responses

Kari Dunn Buron and Mitzi Curtis

The scale consists of five numbered boxes (1-5) with corresponding faces. Box 1 has a neutral face, box 2 has a slightly smiling face, box 3 has a happy face, box 4 has a very happy face, and box 5 has a face with a wide, toothy grin.

The Incredible 5-Point Scale

### Obsessional Index

5	I can't control it. I will need lots of support.
4	I am feeling very nervous and will probably need some support.
3	I am thinking about my obsessions, but I may need to talk to someone about it. I think I have some control.
2	I am feeling pretty relaxed today. I can probably think about my obsessions but still do well in the classroom.
1	It is a great day! My obsessional personality is a neurological work of art!

### CBT

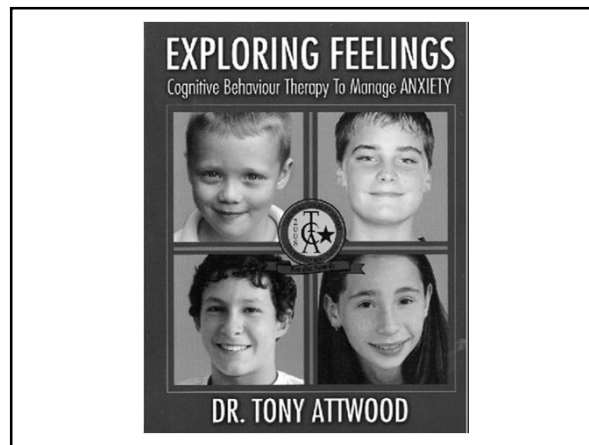
What might happen? →	What is the worst thing that might happen?	What is a bad thing that might happen, but not the worst?	What is a neutral thing that might happen (not bad or good)?	What is a better thing that might happen (but not the best)?	What is the very best thing that might happen?
What is the chance that each of these things might happen (must add up to 100%) →	___%	___%	___%	___%	___%
What really happened? Mark the boxes that come closest to your prediction →					

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### My Calming Sequence

Sometimes my worries are way too big! I can stop, squeeze my hands and take a deep breath. I can also rub my head and rub my legs. This can help me to stay calm.

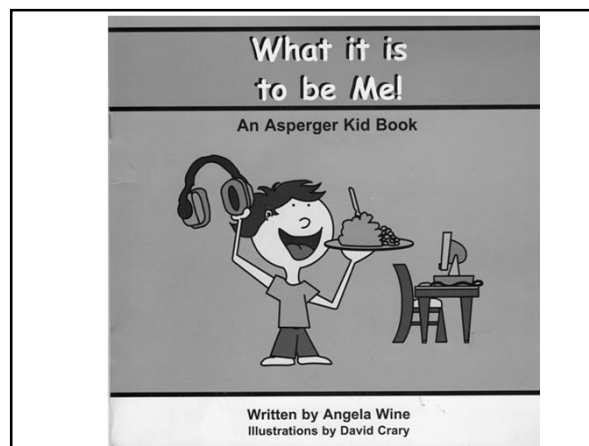
5			
4			
3			
2			
1			

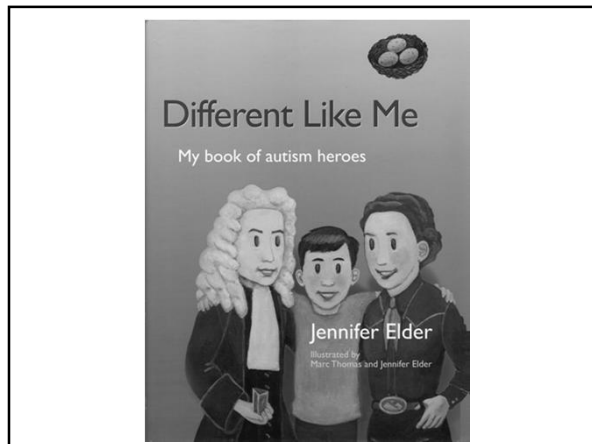


### Positive Behavior Support Plan for Internalizing Behavior

- Staff Awareness
- Visual Schedules
- Relaxation Techniques
- Abolishing Operations (long before task)
  - Cognitive Behavioral Therapy (CBT)
  - Educate child about his/her ASD
  - Build self-esteem

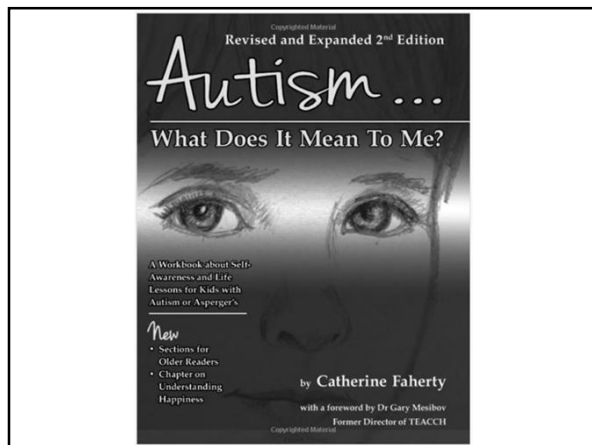
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## Outline

- **Cognitive and Emotional Traits in ASD**
- **The problem**
  - Neglect of Internalizing Behavior (and mental health)
  - How did we get here?
- **The Solution**
  - Positive Behavior Support Plan for Internalizing Behavior
    - Proactive mental health assessment
  - SSRI's
  - Parent- and/or Family-centered intervention (Often) ➔ Part II!



SHOOTING AT SANDY HOOK ELEMENTARY SCHOOL  
REPORT OF THE OFFICE OF THE CHILD ADVOCATE

<http://www.ct.gov/oca/lib/oca/sandyhook11212014.pdf>



- **Knowledge is Power**  
Sir Francis Bacon
- **Self-esteem, self-esteem, self-esteem**  
Jim Coplan

## OCA Report

Evaluation by Yale Child Study Ctr: 10/24/06 (9th Grade)

*"... We are very concerned about AL's increasingly constricted social and educational world. Much of emphasis has been on finding curricular level of instruction....Inability to interact with classmates will prove increasingly deleterious to education..."*

## OCA Report

"By this point, there were multiple indicators that AL met statutory-regulatory criteria and applicable guidance for autism spectrum disorders or, alternatively, for emotional disturbance...By not classifying his needs appropriately, attention to AL's severe disabilities focused, as the Yale psychiatrist previously warned, on *curricular issues* rather than on the social and emotional characteristics that were seriously impacting his ability to participate in a regular educational environment. .."

## Pharmacotherapy for anxiety disorders in children and adolescents

Ipser JC, Stein DJ, Hawkrigge S, Hoppe L. Cochrane Database of Systematic Reviews 2009, Issue 3.

- **Studies reviewed: 22 RCTs/ 2,519 participants**
  - Short-term (average 11 wks)
  - Mean age 12 yrs
  - Drugs studied (versus placebo)
    - SSRIs :15 (fluoxetine 6, fluvoxamine 2, paroxetine 3, sertraline 4)
    - SNRIs: 5, (clomipramine 3), venlafaxine 2)
    - Benzodiazepines: 2: (alprazolam 1, clonazepam 1)
    - Tricyclic antidepressants: 1 (desipramine)
- **Meta-analysis**
  - Response rate: Medication 59%; Placebo 31%
  - 7.3% of subjects treated with SSRIs withdrew bec/o side effects
  - "The overwhelming majority of evidence of efficacy was for the SSRIs, with the most evidence in paediatric OCD"

## Outline

- Cognitive and Emotional Traits in ASD
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  - Neglect of Internalizing Behavior (and mental health)
  - How did we get here?
- The Solution
  - Positive Behavior Support Plan for Internalizing Behavior
  - Proactive mental health assessment
  - SSRIs
  - Parent- and/or Family-centered intervention (Often) ➔ Part II !

## SSRIs

- **Side Effects**
  - Activation
    - Hyperactivity
    - Irritability
    - Insomnia
    - Agitation
  - Uncommon or irrelevant
    - GI dysfunction
    - Sexual dysfunction
    - "Black Box" warning (suicidal mentation)

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## Selective Serotonin Reuptake Inhibitors (SSRIs)

- **Primary targets**
  - Cognitive Rigidity
    - Anxiety
    - Obsessions (thoughts)
    - Compulsions (behavior)
    - Perfectionism
  - Depression
- **"Downstream" benefit:**
  - ↓ Disruptive Behavior
  - ↑ Quality of Life

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## Cognitive Rigidity

"I haven't been 'fired' or told that I was 'the worst mom ever' in a month! ... Our son has been more adaptable. He has not had a meltdown in a month. (He has come close – but we managed or problem-solved, to come back from the cliff.)"

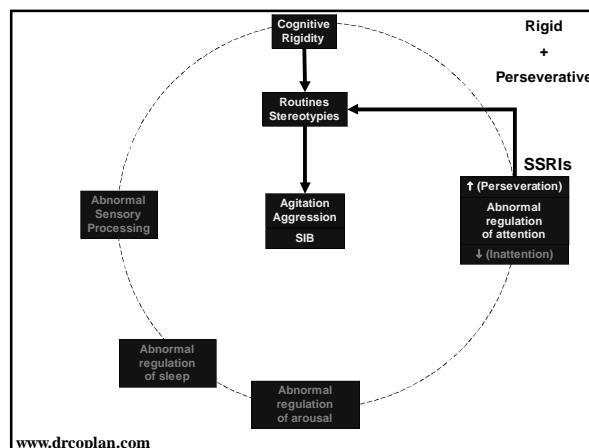
Mother of an 8 y.o. with ASD and normal IQ, 4 wk after starting SSRI

MRN 10-0701

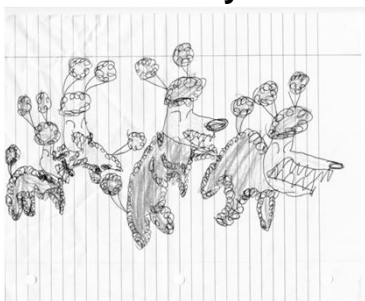
### After one week on Sertraline

Sent: Thursday, May 31, 2012  
To: James Coplan  
Subject: amazing shift in A.D.  
Importance: High

Dr. Coplan,  
I "know" that it takes several weeks for SSRIs to "kick in" but the child I saw in my office today is simply a different child and the improvements are being noted across settings by multiple adults. There was NO self abuse, NO negative self statements, an availability for interventions, just a complete transformation. We "fixed" mistakes, "re-did" errors, told jokes, and played together. The "core" Autistic symptoms are obviously still there - perseveration on bras, drawing, etc - but mood-wise there is no question that A. is already benefitting from the Sertraline... Impossible perhaps but really visibly clear...  
Thank you very much.  
S.S. Ph.D.



### Anxiety



RD. 7 y.o. F, nl IQ, PDD-NOS & Anxiety. Father: GAD  
www.drcoplan.com RD; MRN: 07-0427

### Perseveration

"Draw a picture of your family, with everybody doing something"

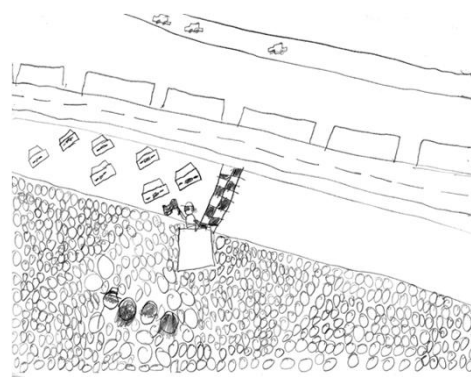


"We are going into the Grand Hyatt"  
Wm W; 10 y.o. male: ASD & Anxiety; MRN 12-0827

### Anxiety after Rx with CBT & Escitalopram



RD. 9 y.o. F, nl IQ, PDD-NOS & Anxiety. Father: GAD  
www.drcoplan.com RD; MRN: 07-0427



"Me and my parents and my sister at Dover Speedway"

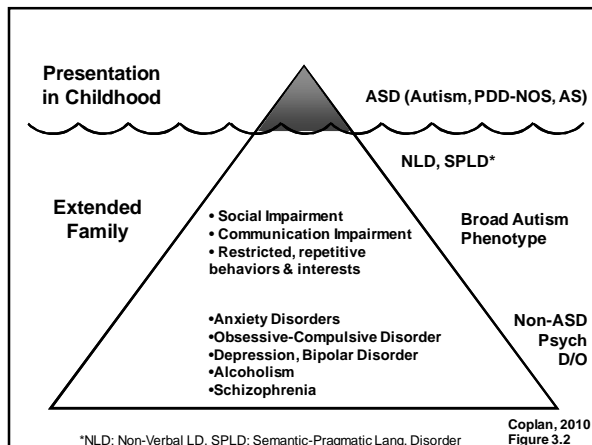
14 y.o. male with AS RT; MRN 08-0545

## Outline

- Cognitive and Emotional Traits in ASD
- The problem
  - Neglect of Internalizing Behavior
  - How did we get here?
- The Solution
  - Positive Behavior Support Plan for Internalizing Behavior
  - Proactive assessment of mental health
  - SSRI's
  - Parent- and/or Family-centered intervention (Often) ➔ Part II !

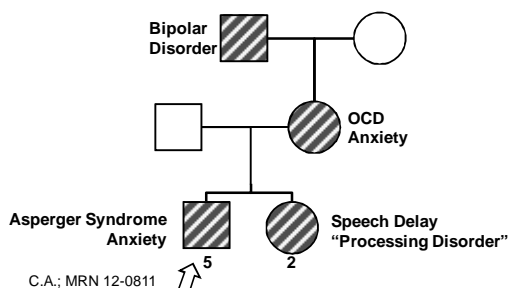
## Summary

- Internalizing behaviors are common in persons w. ASD
  - Unaddressed internalizing behavior often boils over to externalizing behavior
  - Sometimes it's not the task *per se*, but self-inflicted punishment the child wishes to avoid
  - Implement Abolishing Operations to reduce the aversive quality of less-than-perfect performance (e.g. CBT)
- Educate the child about his/her ASD
- Work on self-esteem
- Proactively assess mental health
- Consider SSRIs
- Look to the parents / family dynamic (anxious children often have anxious parents)



## Re-conceptualize the relationship between ASD and “Mental Illness”

## BPD, OCD, Anxiety, AS



**The myth of “comorbidity”**  
A, B, C.... etc. are completely different entities, that sometimes happen to co-exist.

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