



## Behavioral Assessment of Youth: Where Comorbidity is the Norm, Not the Exception

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New Hampshire  
Association of  
School Psychologists



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Clinical Director  
Neurology, Learning and Behavior Center

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## Disclosure

- I have developed tests marketed by Multi-Health Systems, Pro-Ed and Western Psychological Services.
- I have authored books marketed by Springer, Wiley, Guilford, Double Day, McGraw Hill, Brookes, Kluwer and Specialty Press.
- I am Editor in Chief of the Journal of Attention Disorders (Sage) and Co-Editor of the Encyclopedia of Child Development (Springer)
- I am compensated for this Webinar by NHASP

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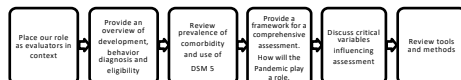
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## Learning Objectives For the Two Webinars




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Preschool Graduation Part I



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Preschool Graduation Part II



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The Bus Test



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## I Had a Revelation in St. Augustine

The world operates along a normal curve!




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Not surprisingly all but two things we do as psychologists are dimensional!

- Diagnosis
- Eligibility Determination




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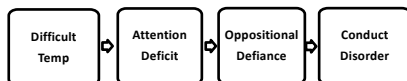
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## The Disruptive Continuum of Behavior




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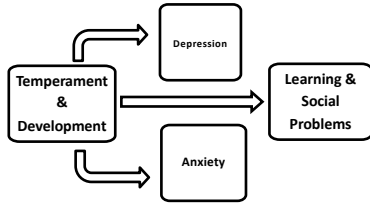
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### The Non-disruptive Continuum of Behavior




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### How Shall We Understand, Define and Categorize Mental Illness and Developmental Problems?



- By etiology or cause?
- By emotions, abilities, behaviors and thoughts?
- By impaired function in activities of life?

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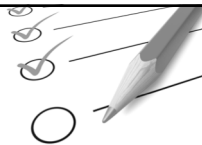
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### Diagnosis

*Medicine/Medical.*

The process of determining by examination the nature and circumstances of a diseased condition.

The decision reached from such an examination.




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## Eligible

*adjective*

**Having the right to do or obtain something, satisfying the appropriate conditions.**

"Customers who are eligible for discounts"

Synonyms: *entitled, permitted, allowed, qualified, able*

"Those people eligible to vote"  
(of a person) *desirable or suitable as a partner in marriage.*  
"The world's most eligible bachelor"

Synonyms: *desirable, suitable*



**Determining eligibility is an outcome best understood and obtained by a thorough assessment.**

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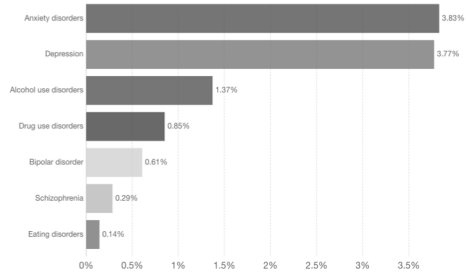
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## Prevalence by mental and substance use disorder, World, 2016

Share of the total population with a given mental health or substance use disorder. Figures attempt to provide a true estimate (going beyond reported diagnosis) of disorder prevalence based on medical, epidemiological data, surveys and meta-regression modelling.




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How distinct are these disorders from each other?

Much less so than makes me comfortable!




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### How Shall We Understand, Define and Categorize Mental Illness?

- By etiology or cause?
- By emotions, behaviors and thoughts?
- By impaired function in activities of life?

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### Co-Occurrence/Comorbidity

Dx	ASD	ODD	CD	Anx	Dep	LD
ADHD	59%	47%	22%	35%	41%	45%
ASD		4% to 37%	1% to 10%	42%	1.4% to 38%	70%+
ODD			42%	62%	39%	55%+

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### How distinct are these disorders from each other?

Although the National Institute of Mental Health (NIMH) has prepared well for this undertaking, much remains to be done. Rigorous diagnostic procedures are available for some mental disorders, but not all. Studies to identify the genes that influence the onset of mental disorders have been initiated, but too few are large enough to efficiently detect these genes. Dedicated investigators are working on various aspects of mental disorders, but more researchers with training in molecular and statistical genetics are required (NIH,1997)




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## How distinct are these disorders from each other?

For over a century, psychiatric disorders have been defined by expert opinion and clinical observation. The modern DSM has relied on a consensus of experts to define categorical syndromes based on clusters of symptoms and signs, and, to some extent, external validators, such as longitudinal course and response to treatment. In the absence of an established etiology, psychiatry has struggled to validate these descriptive syndromes, and to define the boundaries between disorders and between normal and pathologic variation.

Expert Review Published: 02 January 2018

### Psychiatric genetics and the structure of psychopathology

Jordan W. Smalley, Ole A. Andreassen, Howard J. Edenberg, Stephen V. Faraone, Stephen J. Glatt & Kenneth S. Kendler

Molecular Psychiatry (2018) Download Citation &

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## How distinct are these disorders from each other?

Before the modern era of genomic research, family and twin studies demonstrated that all major psychiatric disorders aggregate in families and are heritable. Over the past decade, the success of large-scale genomic studies has confirmed several key principles: (1) psychiatric disorders are highly polygenic, reflecting the contribution of hundreds to thousands of common variants of small effect and rare (often de novo) SNVs and CNVs; (2) genetic influences on psychopathology commonly transcend the diagnostic boundaries of our clinical DSM nosology. At the level of genetic etiology, there are no sharp boundaries between diagnostic categories or between disorder and normal variation

Expert Review Published: 02 January 2018

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*Comorbidity is the*  
***RULE***  
*not the Exception*




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## Using the DSM 5: Training

- For teachers: <https://www.youtube.com/watch?v=9OhVshzYvn8>
- For School Psychologists:  
[https://www.youtube.com/watch?v=bFRLr\\_Bg2CU](https://www.youtube.com/watch?v=bFRLr_Bg2CU)  
<https://www.youtube.com/watch?v=0DUwB4TgQfk>

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Psychologist Continuing Education

### Mastering DSM-5: Diagnosing Disorders in Children, Adolescents, and Adults

With the publication of the DSM-5 in May 2013, the new standard for the diagnosis of Psychological and Emotional Disorder has been established. Some disorders are eliminated completely; others are ...  
[Learn more...](#)

**Book Required** | **8.0 hours**

Clinical, Assessment, ChildAndAdolescence, DSM-5

Get Unlimited CE's for only \$74.99!

TOTAL PRICE  
**\$47.92**

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### DSM-5: A Comprehensive Overview

This course provides a comprehensive overview of the DSM-5, its history and purpose, and the manual's changes and transitions from the DSM-IV. In addition, information on diagnostic criteria needed ...  
[Learn more...](#)

**No book to buy** | **5.0 hours**

Clinical, Assessment, DSM-5

TOTAL PRICE  
**\$29.95**

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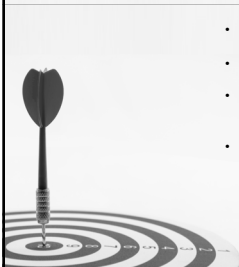
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## What is the Goal of a Comprehensive Evaluation?



- Identify and define symptoms?
- Identify and define strengths and weaknesses?
- Appreciate the relationship of a set of symptoms to a unitary condition?
- Define limits of functional impairment to set a baseline for intervention?

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### Components of a Thorough Assessment

- History
- Broad Spectrum Questionnaires (Parent and Teacher)
- Impairment. Risk. Executive Functioning
- Narrow Spectrum Questionnaires (Parent and Teacher)
- Self report Questionnaires
- Ability Assessment
- Achievement Assessment
- Interview with student




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### General Guidelines for a Comprehensive Evaluation

- A distinction should be made between acute vs. chronic problems.
- Person and environment protective factors need to be understood.
- Assessment should be strength and risk focused.
- Test results should be presented in ways that are useful to consumers (e.g. family, school, etc.).
- The least amount of assessment needed to answer referral questions should be completed.




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### Person Attributes Associated With Successful Coping\*

- Affectionate, engaging temperament.
- Sociable.
- Autonomous.
- Above average IQ.
- Good reading skills.
- High achievement motivation.
- Positive self-concept.
- Impulse control.
- Internal locus of control.
- Planning skills.
- Faith.
- Humorous.
- Helpfulness.



\*Replicated in 2 or more studies.

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### Environmental Factors Associated With Successful Coping\*

- Smaller family size.
- Maternal competence and mental health.
- Extended family involvement.
- Close bond with primary caregiver.
- Supportive siblings.
- Living above the poverty level.
- Friendships.
- Supportive teachers.
- Successful school experiences.
- Involvement in pro-social organizations.

\*Replicated in 2 or more studies.




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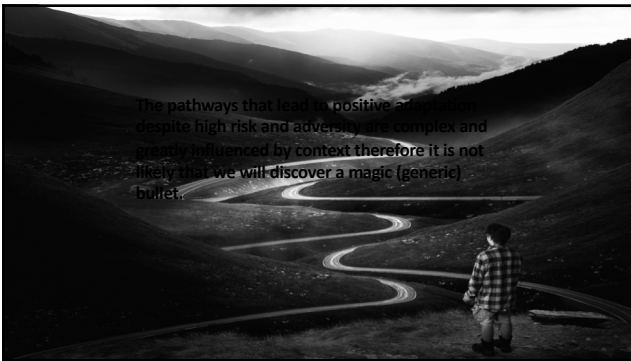
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The pathways that lead to positive adaptation despite high risk and adversity are complex and greatly influenced by context therefore it is not likely that we will discover a magic (generic) bullet.




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Determining eligibility is an outcome best understood and obtained by a thorough assessment.




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### Critical Issues In Assessment

- Demographics
- Symptoms vs. consequences
- Categories vs. dimensions
- Eligibility vs. diagnosis
- Developmental pathways: accept a moment in time
- There are no shortcuts
- Assess the environment




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### Critical Issues in Assessment

- Assess for intervention
- Understand positive and negative predictive power
- Understand sensitivity vs. specificity
- Begin with the disruptive/non-disruptive continuum
- Keep low incidence problems in mind
- Consider resilience (protective) factors
- Measure impairment




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### How the Brain Works Ability, Knowledge and Skill

- Ability: Innate qualities unevenly distributed across the population.
- Knowledge: Acquired information through experience.
- Skill: A verb as in skillfully reading.




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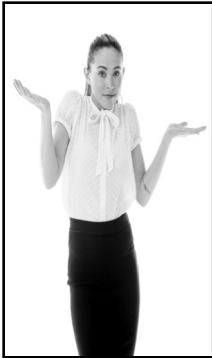
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**Why is the assessment of impairment critical to a comprehensive evaluation?**



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An exhaustive review of the literature demonstrates that the relationship between symptoms and functioning remains unexpectedly weak and often bidirectional (McKnight and Kashdan, 2009).

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**Impairment is the reduced ability to meet the demands of life because of a psychological, physical, or cognitive condition.**



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## SYMPTOMS VS. IMPAIRMENT

Impairment is not the same as symptoms

- ☐ Symptoms are physical, cognitive or behavioral **manifestations** of a disorder.
- ☐ Impairments are the functional **consequences** of these symptoms.



Inattention



Difficulty completing homework

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## SYMPTOMS VS. IMPAIRMENT

Impairment can exist absent of formal diagnosis.  
(Balazs et al., 2013; Wille et al., 2008)

In one study 14.2% of a sample of children were significantly impaired without a formal diagnosis.  
(Angold et al., 1999)

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## Adaptive Behavior vs. Impairment

Skill

vs.

Performance




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## Adaptive Behavior vs. Impairment



Using  
utensils

VS.



Not using utensils  
to eat

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## Symptoms vs. Impairment



Inattention

VS.



Difficulty completing  
homework

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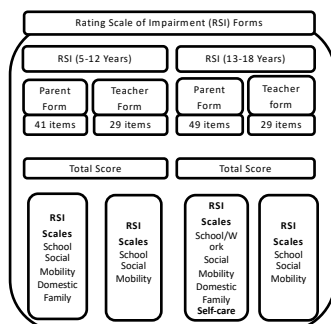
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## Relationship Between The RSI And Other Measures

RSI Total Score	
Adaptive Behavior	Psychopathology
-.54 Adaptive Behavior Assessment System-II	.26 Conners CBRS - Content Scales
	.29 Conners CBRS - Symptom Scales
Social-Emotional Competency	Ability & Achievement
-.71 Dweiss Student Strength Assessment	-.05 Wechsler Intelligence Scale for Children-IV
	-.06 Woodcock Johnson III Tests of Achievement
Executive Function	-.03 Cognitive Assessment System
-.78 Comprehensive Executive Function Inventory	

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## Relationship Between The RSI And Other Impairment Measures

- RSI and the Barkley Functional Impairment Scale (BFIS-CA)
  - Child Sample corrected  $r = .55$  to  $.67$
  - Youth Sample corrected  $r = .63$  to  $.71$
- RSI and the Children's Global Assessment Scale (CGAS)
  - Corrected  $r = -.34$  to  $-.51$

RSI Total Score	
Other Impairment Scales	
.59 Barkley Functional Impairment Scale	-.41 Children's Global Assessment Scale

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What do we mean by the term Executive Function(s)?

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## Executive Function (s)

- In 1966 Alexandr Luria first wrote and defined the concept of Executive Function (EF)
- He credited Bianchi (1895) and Bekhterev (1905) with the initial definition of the process



1902 - 1977 46

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## What is/are Executive Function(s)

There is no formal excepted definition of EF

- We typically find a vague general statement of EF (e.g., goal-directed action, cognitive control, top-down inhibition, effortful processing, etc.).
- Or a listing of the constructs such as
  - Inhibition,
  - Working Memory,
  - Planning,
  - Problem-Solving,
  - Goal-Directed Activity,
  - Strategy Development and Execution,
  - Emotional Self-Regulation,
  - Self-Motivation




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## Does Experience Shape EF?

- The Family Life Project has demonstrated that poverty is associated with elevated cortisol in infancy and early childhood.
- This association is mediated through characteristics of the household.
- Parenting sensitivity mediates the relationship between poverty and stress physiology.
- In combination parenting sensitivity and elevated cortisol mediate the association between poverty and poor EF in children.




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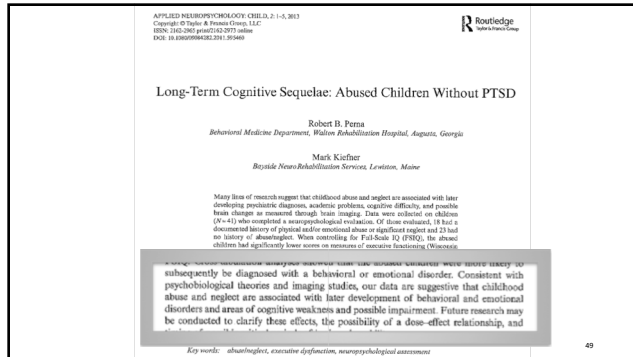
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## What Neural Activities Require EF?

- Those that involve planning or decision making.
- Those that involve error correction or troubleshooting.
- Situations when responses are not well-rehearsed or contain novel sequences of actions.
- Dangerous or technically difficult situations.
- Situations that require the overcoming of a strong habitual response or resisting temptation.

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Goldstein, Naglieri, Princiotta, & Otero (2013)



- We found more than 30 definitions of EF(s).
- Executive function(s) has come to be an umbrella term used for many different abilities, including planning, working memory, attention, inhibition, self-monitoring, self-regulation and initiation carried out by pre-frontal areas of the frontal lobes.

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### What is Executive Function(s)

1. Barkley (2011): "EF is thus a **self-directed set of actions**)" (p. 11).
2. Dawson & Guare (2010): "Executive skills allow us to **organize our behavior over time**" (p. 1).
3. Delis (2012): "Executive functions reflect the **ability to manage and regulate one's behavior** (p. 14).

52

### What is Executive Function(s)

4. Denckla (1996): "EF (is) a set of **domain-general control processes...**" (p. 263).
5. Gioia, Isquith, Guy, & Kenworthy (2000): "a **collection of processes that are responsible for guiding, directing, and managing cognitive, emotional, and behavioral functions**" (p. 1).

53

### What is Executive Function(s)

6. Pribram (1973): "**executive programmes ...to maintain brain organization** " (p. 301).
7. Roberts & Pennington (1996): EF "**a collection of related but somewhat distinct abilities such as planning, set maintenance, impulse control, working memory, and attentional control**" (p. 105).

54

### What is Executive Function(s)

6. Stuss & Benson (1986): "a variety of different capacities that enable purposeful, goal-directed behavior, including behavioral regulation, working memory, planning and organizational skills, and self-monitoring" (p. 272).
7. Welsh and Pennington (1988): "the ability to maintain an appropriate problem-solving set for attainment of a future goal" (p. 201).

55

### What is Executive Function(s)

10. McCloskey (2006): "a diverse group of highly specific cognitive processes collected together to direct cognition, emotion, and motor activity, including ...the ability to engage in purposeful, organized, strategic, self-regulated, goal directed behavior" (p. 1)

"think of executive functions as a set of independent but coordinated processes rather than a single trait" (p. 2).

56

### What is Executive Function(s)

10. Lezak (1995): "a collection of interrelated cognitive and behavioral skills that are responsible for purposeful, goal-directed activity," ...
11. "how and whether a person goes about doing something" (p. 42).
12. Luria (1966): "... ability to correctly evaluate their own behavior and the adequacy of their actions" (p. 227).

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## Executive Functions

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Executive functions

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The **executive system** is a theorized cognitive system in psychology that controls and manages other cognitive processes. It is also referred to as the **executive function**, **executive functions**, **supervisory attentional system**, or **cognitive control**. The concept is used by psychologists and neuroscientists to describe a loosely defined collection of brain processes which are responsible for planning, cognitive flexibility, abstract thinking, rule acquisition, initiating appropriate actions and inhibiting inappropriate actions, and selecting relevant sensory information.

Psychology

Ψ

History of psychology

Branches of psychology

The **executive system** is a theorized cognitive system in psychology that controls and manages other cognitive processes. It is also referred to as the **executive function**, **executive functions**, **supervisory attentional system**, or **cognitive control**.

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Executive functions - Wikipedia, the free encyclopedia

en.wikipedia.org/wiki/Executive\_functions

The **executive system** is a theorized cognitive system in psychology that controls and manages other cognitive processes. It is responsible for processes that are ...

→ Neurocognitive - Hypothetical role - Historical perspective - Development

What is Executive Function? - National Center for Learning Disabilities

www.ncld.org/-/executive-functioning\_what-is-executive-function

Dec 17, 2015 - **Executive Function** is a term used to describe a set of mental processes that help us connect past experience with present action. We use ...

Executive function - effects, person, people, used, brain, personality

www.researchgate.net/publication/261126107

The term **executive function** describes a set of cognitive abilities that control and regulate other abilities and behaviors. **Executive functions** are necessary for ...

Executive Function

www.researchgate.net/publication/261126107

However, today's savvy parents and educators realize that deficits in critical cognitive skills known as **executive functions (EF)** are slower to mature in many ...

Executive Function Fact Sheet | LD Topics | LD Online

www.ldonline.org/article/21202

Children use **executive function** to plan, organize, strategize, pay attention, manage details, and evaluate themselves. Read this fact sheet from the National ...

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curiositydiscovery.com/2017/07/

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What is Executive Function? - National Center for Learning Disabilities

www.ncld.org/-/executive-functioning\_what-is-executive-function

Dec 17, 2015 - The brain continues to mature and develop connections well into adulthood. A person's **executive function** abilities are shaped by both physical ...

MEANINGFUL LEARNING AND THE EXECUTIVE FUNCTIONS

www.researchgate.net/publication/261126107

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by G. Caron - Cited by 21 - Related articles

The **EXECUTIVE FUNCTIONS OF THE BRAIN** (Duffy, Caron and Renate Nussmeier) Caron, Published in Caron, G., Caron, R. (2005). *Meaningful Learning* ...

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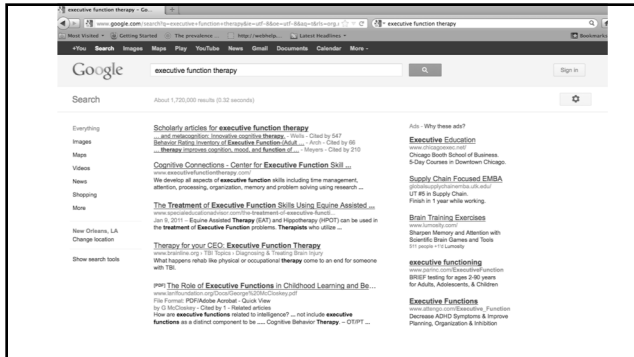
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And Finally. . .

A NICHD panel in 1994  
identified 33 EFs by consensus!




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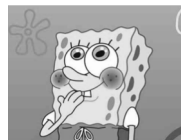
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The Top Six Were:

- Self-regulation
- Sequencing of behavior
- Flexibility
- Response inhibition
- Planning
- Organization of behavior




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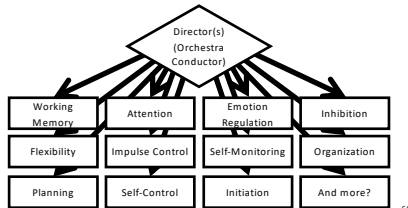
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### Three Categories of Theories

- Regulators that control
- Abilities (cognitive processes)
- Behaviors



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A similarly named ability and behavior (e.g. planning) may only overlap to a small extent in explaining outcome.

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In fact EF ability likely forms the foundation reflected in behavior, achievement, emotional regulation and socialization. The contributed variance likely is impacted by a host of other variables. Ability and knowledge interact with these variables to shape skillful behavior.

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Are EF challenges associated with other psychiatric and developmental conditions?



"Oh yes. We single out someone every week and highlight their performance." 67

## EF and ADHD

EF deficits are not necessarily unique to ADHD. They are neither necessary nor sufficient to make a diagnosis of ADHD. When EF impairments are measured in children with ADHD they tend to reflect specific rather than global impairments.

## EF and Other Disruptive Disorders (ODD & CD)

Early reviews reported that EF deficits were not characteristic of children and adolescents with ODD and CD after comorbid ADHD was factored out. More recent studies, however, suggest that inhibition deficits may be characteristic of both ADHD and CD but whether children with CD display impairments on additional EF measures is equivocal.

## EF and Tourette's

Distinct and robust impairments in EF do not appear to be characteristic of children with TD.

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## EF and Anxiety Disorders

EF deficits in set-shifting, cognitive flexibility, concept formation, interference control, and verbal fluency have been documented among children with separation anxiety disorder, overanxious disorder, and PTSD. EF in OCD has not been well addressed.

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## EF and Depression

Scant research has been conducted on the EF abilities among youth with depression.

Studies that have included older adolescents have suggested some degree of sensitivity of EF tasks in identifying unipolar depression, but less specificity.

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## EF and Bi-Polar Disorder

There is a growing consensus about the nature of BD among children. Several studies have targeted its EF concomitants.

Although results often have been confounded with significant co-morbidity issues, children and adolescents with BD reliably have demonstrated impairments relative to those without any history of mood disorders on several EF measures (e.g. working memory, set shifting).

## EF and Traumatic Brain Injury

Neuropsychol 2011; December 54(12):337-345

Original Article

### Pragmatic and executive functions in traumatic brain injury and right brain damage

An exploratory comparative study

Nicolas Zimmermann<sup>1,2</sup>, Gábor Gábor<sup>1,3</sup>,  
Camilla Rosa de Oliveira<sup>2,3</sup>, Rochelle Fitz-Fonseca<sup>4</sup>

**Abstract** - Objective: To describe the frequency of pragmatic and executive deficits in right brain damaged (RBD) and in traumatic brain injury (TBI) patients, and to verify possible dissociation between pragmatic and executive functions in these two groups. Methods: The sample comprised 7 cases of TBI and 7 cases of RBD. All participants were assessed by means of tasks from the Manual Communication Evaluation Battery and executive functions test including the Trail Making Test, Stroop Test, Wisconsin Card Sorting Test, semantic and phonemic verbal fluency tasks, and working memory tasks from the Brazilian Brief Neuropsychological

TBI individuals again exhibited a general profile of executive dysfunction, affecting mainly working memory, initiation, inhibition, planning and switching. Pragmatic and executive deficits were generally associated upon comparisons of RBD patients and TBI cases, except for two simple dissociations: two post-TBI cases showed executive deficits in the absence of pragmatic deficits. Discussion: Pragmatic and executive deficits can be severe

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## EF Deficits and ASD

J Child Psychol Psychiatr. Vol. 51, No. 1, pp. 1050-1105, 2010  
Printed in Great Britain

0021-9630/10 \$15.00 + 0.00  
© 2010 Association for Child Psychology and Psychiatry

### Executive Function Deficits in High-Functioning Autistic Individuals: Relationship to Theory of Mind

Sally Ozonoff,\* Bruce F. Pennington\* and Sally J. Rogers†

**Abstract**—A group of high-functioning autistic individuals was compared to a clinical control group on spatial or other control measures. Second-order theory of mind and executive function deficits were widespread among the autistic group, while first-order theory of mind deficits were found in only a subset of the sample. The relationship of executive function and theory of mind deficits to each other, and their primacy to autism, are discussed.

75

## EF and Learning Disabilities

### Working Memory Impairments in Children with Specific Arithmetic Learning Difficulties

Janet F. McLean, Graham J. Hitch

Lancaster University, Lancaster, United Kingdom

<https://doi.org/10.1080/10682016.2016.1166130>, How to Cite or Link Using DOI

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#### Abstract

Working memory impairments in children with difficulties in arithmetic have previously been investigated using questionable selection techniques and control groups, leading to problems concluding where deficits may occur. The present study attempted to overcome these criticisms by assessing 8-year-old children with difficulties specific to arithmetic, as indicated by normal reading, and comparing them with both age-matched and ability-matched controls. A battery of 10 tasks was used to assess different aspects of

and some aspects of executive processing. Compared to ability-matched controls, they were impaired only on one task designed to assess executive processes for holding and manipulating information in long-term memory. These deficits in executive and spatial aspects of working memory seem likely to be important factors in poor arithmetical attainment.

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If all of these conditions are statistically related to behaviors and abilities reflecting EF than a common denominator must exist.

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Impairment in behaviors associated with EF can have multiple etiologies often operating simultaneously.




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### Impaired Behavior Associated With Poor EF Can Result From:

- Lack of ability.
- Lack of knowledge.
- Lack of motivation.
- Internalizing symptoms.
- Externalizing symptoms.
- Poor impulse control.

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Starting with an assessment of EF behaviors defines the real life landscape and can be used as a foundation to than explore etiologies.




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### Executive Function(s)

- One way to examine this issue is to research the factor structure of behaviors related to EF(s)
- To do so, we examined the factor structure of the Comprehensive Executive Function Inventory (CEFI)
- We conducted a series of research studies to answer the following question:
  - What is the underlying structure of the behaviors assessed on the CEFI?
  - Is there is just one underlying factor called executive function), or do the behaviors group together into different constructs suggesting a multidimensional structure?

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## CEFI Scales

Each form yields a **Full Scale** score and 9 separate content scales which contain items as follows...

Consistency Index  
Negative Impression Scale  
Positive Impression Scale

**Full Scale**

**CEFI Scales**  
Attention  
Emotion Regulation  
Flexibility  
Inhibitory Control  
Initiation  
Organization  
Planning  
Self-Monitoring  
Working Memory

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## Group Differences: ADHD

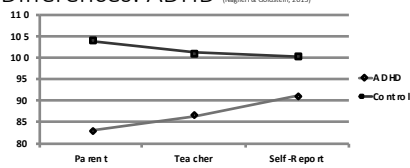


Table 8.19 Differences Between ADHD and Matched General Population Samples: CEFI Full Scale

Form		ADHD	Matched Gen. Pop.	d-ratio	F(df)	P
Parent	M	83.1	103.9	-1.59	216.56 (1, 340)	< .001
	SD	11.0	11.9			
	N	171	171			
Teacher	M	86.7	103.1	-1.07	79.93 (1, 278)	< .001
	SD	13.5	13.5			
	N	138	142			
Self-Report	M	91.2	100.3	-0.62	22.21 (1, 232)	< .001
	SD	14.7	14.7			
	N	117	117			

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## Group Differences: ASD

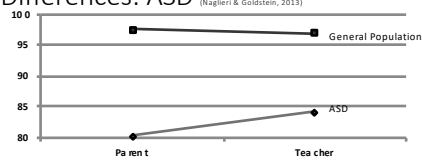


Table 8.20 Differences Between ASD and Matched General Population Samples: CEFI Full Scale

Form		ASD	Matched Gen. Pop.	d-ratio	F(df)	P
Parent	M	80.4	97.7	-1.41	48.96 (1, 96)	< .001
	SD	12.2	12.2			
	N	48	50			
Teacher	M	84.3	96.9	-0.99	23.11 (1, 92)	< .001
	SD	12.7	12.7			
	N	47	47			

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### Group Differences: Learning Disabilities (Naglieri & Goldstein, 2013)

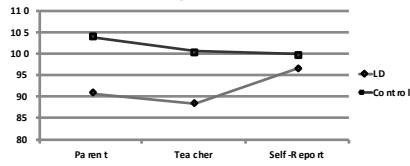


Table 8.22 Differences Between LD and Matched General Population Samples: CEFI Full Scale

Form		LD	Matched Gen. Pop.	d ratio	p (df)	
Parent	M	90.8	103.9	-0.92	19.89 (1, 93)	< .001
	SD	14.4	14.4			
	N	47	48			
Teacher	M	88.4	100.6	-0.91	37.29 (1, 178)	< .001
	SD	13.4	13.4			
	N	90	90			
Self-Report	M	96.6	100.0	-0.21	1.45 (1, 126)	0.281
	SD	15.9	15.9			
	N	64	64			

### Group Differences: Mood Disorders (Naglieri & Goldstein, 2013)

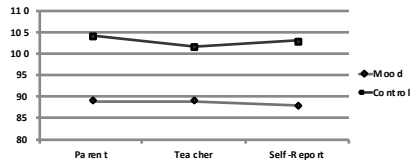


Table 8.21 Differences Between Mood Disorder and Matched General Population Samples: CEFI Full Scale

Form		Mood Disorder	Matched Gen. Pop.	d ratio	p (df)	
Parent	M	88.9	104.3	-1.11	22.66 (1, 71)	< .001
	SD	13.8	13.8			
	N	36	37			
Teacher	M	88.9	101.7	-1.01	14.9 (1, 57)	< .001
	SD	12.8	12.8			
	N	29	30			
Self-Report	M	88.0	103.1	-1.09	16.34 (1, 53)	< .001
	SD	13.9	13.9			
	N	27	28			



Differentiating Ability From Achievement

## PASS Theory

- **PASS** theory is a modern way to define 'ability' based on measuring neurocognitive abilities
- **P**lanning = THINKING ABOUT THINKING
- **A**ttention = BEING ALERT
- **S**imultaneous = GETTING THE BIG PICTURE
- **S**uccessive = FOLLOWING A SEQUENCE

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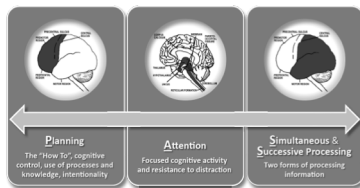
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## The Brain as PASS

PASS: A neuropsychological approach to the Brain based on three Functional Units described by A. R. Luria (1972)



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## PASS Theory: Planning

- **Planning** is a neurocognitive ability that a person uses to determine, select, and use efficient solutions to problems
  - problem solving
  - developing plans and using strategies
  - retrieval of knowledge
  - impulse control and self-control
  - control of processing

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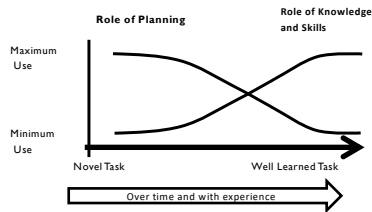
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### Knowledge and Planning Learning Curves

- Learning depends upon instruction and intelligence (PASS)
- At first, PASS plays a major role in learning
- When a new task is learned and practiced it becomes a skill and execution requires less PASS




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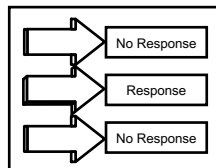
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### PASS Theory

- ▶ **Attention** is a basic neurocognitive ability we use to selectively attend to some stimuli and ignores others

- focused cognitive activity
- selective attention
- resistance to distraction



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### PASS Theory

- **Simultaneous** processing is a basic neurocognitive ability which we use to integrate stimuli into groups and solve problems

- Stimuli are seen as a whole
- Each piece must be related to the others

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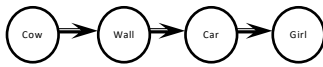
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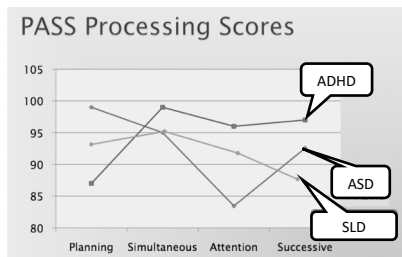
### PASS Theory: Successive

- **Successive** processing is a basic neurocognitive ability which we use to manage stimuli in a specific serial order
- Stimuli form a chain-like progression
  - Stimuli are not inter-related



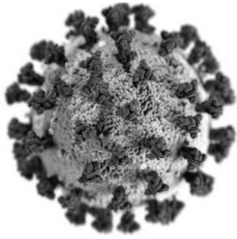
94

### Ability Profiles



### Organizing the Data

- A day in the life
- Ability/Knowledge/Skill
- Take a chronological perspective.
- Risk and Protective factors
- Determining eligibility
- Suggesting possible diagnoses
- Recommending needs
- Considering continuum of services



## How Will the Pandemic Impact Our Work?

Corona Virus Stress Syndrome (CoViSS)

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## How Will the Pandemic Impact Our Work?

- Type and incidence of presenting problems – School versus Special Education populations?
- Short term effect on use of Norm Referenced self-report and observer reports with current students. No pandemic when norms collected.
- No reason to believe adverse impact on standardized tests assuming they are administered as developed, even with students wearing masks.
- How will Special Education students fare with fewer school days, less hours of support and remote learning?

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## Corona Virus Stress Syndrome (CoViSS)

- Unlike the 9/11 tragedy, an unexpected, sudden event, the virus pandemic has evolved at a slow creep until critical thresholds were reached and governments began to act.
- Even then their actions have rolled out slowly over days and weeks until our country is coming to a halt, much like a speeding train trying to slow down before a downed bridge.
- Further, the rapid growth of technology in the past twenty years is such that nearly every citizen has access to the web and television instantly on their phones.
- Cable news stations are devoting twenty-four-hour coverage of the pandemic. For better or worse we have truly become a global village. As with this teen's father I think we are beginning to see some of our children, friends, family and neighbors succumb to these events.

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### Corona Virus Stress Syndrome (CoViSS)

- Spending hours on end watching news channels.
- Spending hours posting and reposting events related to the pandemic.
- Buying household products, foods, etc. that far exceed immediate need.
- Setting alerts on your phone for every news channel.
- Repeatedly texting friends, family and co-workers about related news events.

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### Corona Virus Stress Syndrome (CoViSS)

- Repeatedly making dire posts on social media.
- Making the pandemic all you can speak about with others.
- Ignoring daily responsibilities.
- Ignoring hygiene, rest and food.

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### Stress and Illness

- Stress and illness have intersecting components. Many studies indicate such a link.
- Theories of the stress–illness link suggest that both acute and chronic stress can cause illness, and lead to changes in mental and physical health, behavior and in how the body functions.
- Research indicates the type of stressor, whether it is acute or chronic and individual person characteristics such as age and physical well-being before the onset of the stressor can combine to determine the effect of stress on an individual.
- A person's personality, genetics, and childhood experiences including possible major stressors and traumas may also predispose their response to an event such as a viral pandemic.

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### Impact Of Quarantine and Isolation

- Increased social isolation.
- Increased problems with school work.
- Kindles depression and/or anxiety.
- Health fears.
- Frustration and boredom.

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### Corona Virus Stress Syndrome (CoViSS)

- If these symptoms fit you, a family member or loved one don't despair.
- The lesson we learned from 9/11 is that most people over time draw strength from family and friends and eventually return to more normal behavior.
- However, it never hurts to bring your concerns about yourself to a mental health professional if you experience CoViSS, speak to a friend or family member in whom you recognize these signs.

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### I Suggest For You:

- Limit your news watching to ½ hour per day.
- Turn off all alerts from news channels on your devices.
- Exercise.
- Attend to daily responsibilities.
- Work if you can.

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### I Suggest For You:

- Keep busy with family activities even if restricted to home.
- Resist posting or texting bad news.
- Reassure your children the world isn't ending.
- Consider a budget for spending if needed over the next 3 months.

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### Guidelines for Quarantine

- Information is key; people who are quarantined need to understand the situation.
- Effective and rapid communication is essential.
- Supplies (both general and medical) need to be provided.
- The quarantine period should be short and the duration should not be changed unless in extreme circumstances.
- Most of the adverse effects come from the imposition of a restriction of liberty; voluntary quarantine is associated with less distress and fewer long-term complications.
- Public health officials should emphasize the altruistic choice of self-isolating.

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### I Suggest For the Youth You Work With:

- Communicate the facts as is age appropriate.
- Have parents make time to talk.
- Reframe the current stress.
- Look into the future.
- Help children think logically.
- Listen for catastrophic thinking.
- Offer empathy.
- Model problem solving.
- Teach relaxation.

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The late singer songwriter Tom Petty wrote in his classic song *Crawling Back to You*, "Most things I worry about never happen anyway".

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### Who We Are

- Worry is in our genes. It keeps us alert and aware of danger.
- But worry can also consume us if we are not vigilant and proactive, further complicating challenging situations and times.
- But so too is hope, optimism, motivation and empathy, the foundations of resilience.

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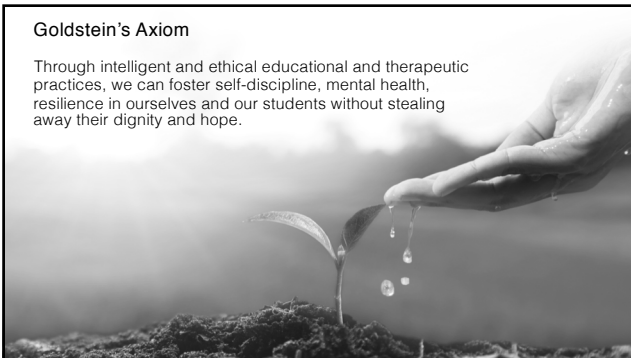
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### Goldstein's Axiom

Through intelligent and ethical educational and therapeutic practices, we can foster self-discipline, mental health, resilience in ourselves and our students without stealing away their dignity and hope.




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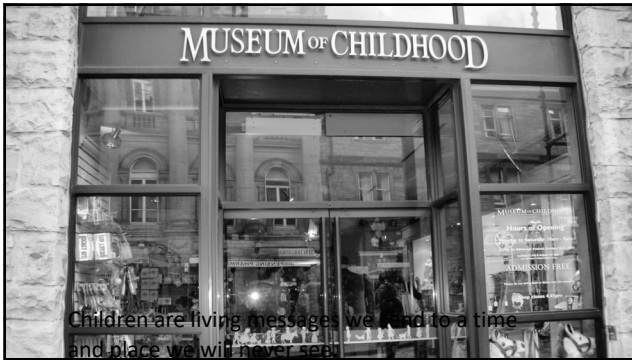
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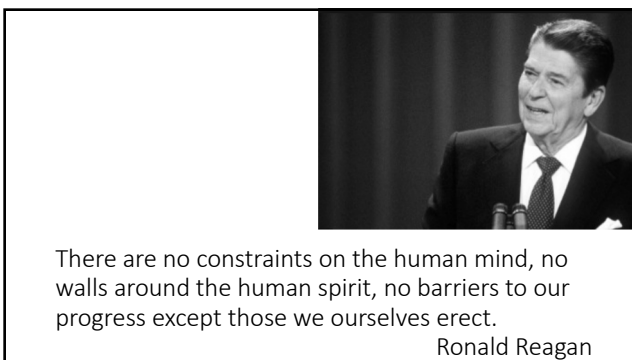
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Questions?

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 [@doctorsamgoldstein](https://www.facebook.com/doctorsamgoldstein)

TEDx: <https://www.youtube.com/watch?v=isfw8JJ-eWM>

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