EVIDENCE-BASED PRACTICES FOR

AUTISM SPECTRUM DISORDERS: THROUGH THE EYES OF PRACTITIONERS, SUSTAINING, AND SCALING-UP IN THE EDUCATIONAL SETTING

Sue Corbin and Susan Harmeyer

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ONE STUDY - TWO DISSERTATIONS

DISSERTATION TOPICS

Sue:

Evidence-Based Practices
 for Autism Spectrum
Disorders: Through the
Eyes of Practitioners

Susan:

Sustaining and Scaling Up
Evidence-Based Practices
for Autism Spectrum
Disorders in Educational
Settings



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INTRODUCTION TO THE STUDY

Based on the National Professional Development Center on Autism Spectrum Disorders (NPDC on ASD) work on Evidence-based Practices from 2007-2012.

Sue:

- Taking the EBPs from a clinical perspective to an implementation perspective.
- Look at the professional wisdom side of the EBPs for ASD through the eyes of the practitioner
- Attempt to provide more insight into how the EBPs are being interpreted and applied with students on the autism spectrum

Susan:

- Interconnected process of assessment, implementation, and outcomes
- Looks at the components that are essential to sustaining evidence-based for autism spectrum disorders in the education setting
- Explores the qualities of scaling-up as it relates to implementing evidence-based practices for autism spectrum disorders in the surrounding community and statewide

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PURPOSE OF THE STUDY/PROBLEM

- The use of evidence-based practices (EBPs) in the educational setting is a common practice of many professionals in the field.
- Focus of researchers, policy makers, and technical assistance providers has been on interventions themselves and not on the implementation of interventions.
- As the incidence of students with Autism Spectrum Disorders (ASD) increases, the need for educators to expand their knowledge of autism and interventions is evident. "The increased prevalence of ASD has intensified the demand for effective educational and therapeutic services, and intervention science is now providing evidence about which practices are effective" (Wong et al., 2014, p. 1).
- The lack of attention to the implementation stage has left many to their own demise. There is a missing link connecting research outcomes with the delivery of evidence-based practices in the field of education.

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Hmmm...

 "I know of Nobody who is purely autistic or purely Neurotypical, even God had some autistic moments, which is why all the planets spin."

» Jerry Newport



RESEARCH QUESTIONS



Sue:

- I. Is there a correlation between practice implementation and the research recommendations related to EBP for ASD by NPDC on the chart in Appendix A?
- 2. How do practitioners choose the best EBP?
- 3. Based on practitioners implementation of EBPs, which EBPs become the chosen ones or the "go-to" evidence-based practices for ASD?

Susan:

- 1. What are the essential components that need to be in place for evidence-based practices for autism spectrum disorders to be sustained at the classroom level?
- 2. How do educational leaders sustain the concepts embedded within the evidence-based practices for autism spectrum disorders model of design within a building and district-wide?
- 3. How can evidence-based practices for autism spectrum disorders be regionally supported and become statewide implemented?

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PILOT STUDY

- The study went through a pilot with staff from Whitley County Consolidated Schools, located in Columbia City, Indiana, and the Indiana Resource Center for Autism, part of Indiana University.
- The purpose of the pilot study was to ensure the validity of the survey, as well as to improve questions and the overall format of the survey if applicable.
- Staff participating in the pilot study had knowledge of and have implemented the evidence-based practices for autism spectrum disorders in the educational setting or were trainers in the coaching model itself within the state of Indiana.

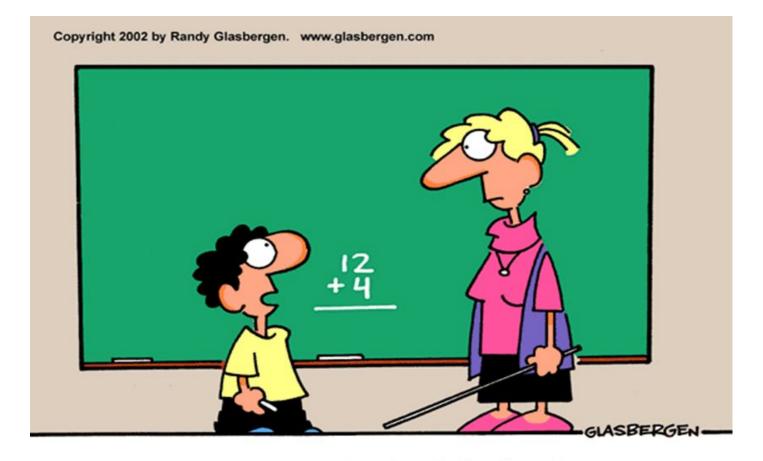
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DISSERTATION STUDY PARTICIPANTS



- The population for the main dissertation study consisted of staff that had utilized and/or had been trained in evidence-based practices for autism spectrum disorders with students in an educational setting.
- The survey was sent to 544 original emails; however, subjects were invited to forward the study to other staff members in their building that had the knowledge and experience of utilizing evidence-based practices for autism spectrum disorders in the educational setting.
- A total of 127 subjects (23%) participated in the study; however, only 69 (54% of the 23%) subjects completed the entire study.

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"Do I get partial credit for simply having the courage to get out of bed and face the world again today?"

Practices by Age and Domain

	Academics &			Behavior		Communication			Play			Social			Transition			
	C	ognit	ion											1-1				
Evidence-Based Practices	C	E	н	C	E	M H	C	E	н	C	E	M H	6	E	ж	C	F	Н
Antecedent-based Interventions																		
Computer Assisted Instruction											П							
Differential Reinforcement																		
Discrete Trial Training																		
Extinction																		\Box
Functional Behavioral Assessment											Т							
Functional Communication Training											Т			\Box				
Naturalistic Interventions			\top								Т						\Box	
Parent Implemented Interventions	\neg		T		1												П	
Peer Mediated Instruction/Intervention	\neg																-	\top
Picture Exchange Com. System																	\Box	
Pivotal Response Training																	$\overline{}$	\Box
Prompting																		
Reinforcement											Т		$\overline{}$					
Response Interruption & Redirection											Т	$\overline{}$	$\overline{}$	$\overline{}$		$\overline{}$	\Box	\Box
Self-Management																		
Social Narratives																		$\overline{}$
Social Skills Groups																	-	T
Speech Generating Devices (VOCA)																		
Structured Work Systems			1															
Task analysis																		
Time delay																		
Video Modeling																		
Visual Supports																		

Odom, S. L., & Cox, A. W. (2010, July). Research-based intervention, translation to practice, and implementation for learners with autism spectrum disorders. Presentation at the OSEP Project Directors' Conference, Washington, DC.

Is there a correlation
between practice
implementation and the
research recommendations
related to EBP for ASD
by NPDC chart?

Evidence Based Practices	E	E	M	Research	Research	Research	Research	Research	Research
	С	L	Н	Practitioner	Practitioner	Practitioner	Practitioner	Practitioner	Practitioner
Intecedent Based Interventions									
omputer Assisted Instruction									
ifferential Reinforcement									
iscrete Trial Training									
extinction									
unctional Behavior Assessment									
unctional behavior Assessment									
unctional Communication Training									
Naturalistic Interventions									
Parent Implementation									
nterventions									
eer Mediated									
nstruction/Intervention									
Picture Exchange Com. System									
Pivotal Response Training									
rompting									
Reinforcement									

Behavior

Communication

Play

Social

Transition

Combined Chart of Research and

Practitioners

Domains

Academic &

Cognition

Combined Chart of Research and Domains Practitioners Levels		ins	Academic & Cognition	Behavior	Communication	Play	Social	Transition		
Evidence Based Practices	E	E	M	Research	Research	Research	Research	Research	Research	
	С	L	Н	Practitioner	Practitioner	Practitioner	Practitioner	Practitioner	Practitioner	
Response Interruption & Redirection										
Self-Management										
Social Narratives										
Social Skills Group										
Speech Generating Devices (VOCA)										
Structured Work Systems										
Task Analysis										
Time Delay										
Video Modeling										
Visual Supports										

Academic &

Combined Chart of Research and

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Gibbletoons By Dan Gibson



Here's the deal... If you cooperate with me I'll use the good-boy-drill. Jerk me around and you get this. How do practitioners choose the best EBP?

How Practitioners Choose an EBP	Used in the past	Always start with this one	Successful with other students	Meets the student's needs	Quick and Easy	"Go to" strategy	Only one I know	Been trained to use
Evidence Based Practices								
Antecedent Based Interventions								
Computer Assisted Instruction								
Differential Reinforcement								
Discrete Trial Training								
Extinction								
Functional Behavior Assessment								
Functional Communication Trng.								
Naturalistic Interventions								
Parent Implementation Interventions								
Peer Mediated Instruction/Intervention								
Picture Exchange Com. System								
Pivotal Response Training								
Prompting								
Reinforcement								
Response Interruption & Redirection								
Self-Management								
Social Narratives								
Social Skills Group								
Speech Generating Devices (VOCA)								
Structured Work Systems								
Task Analysis								
Time Delay								
Video Modeling								
Visual Supports								

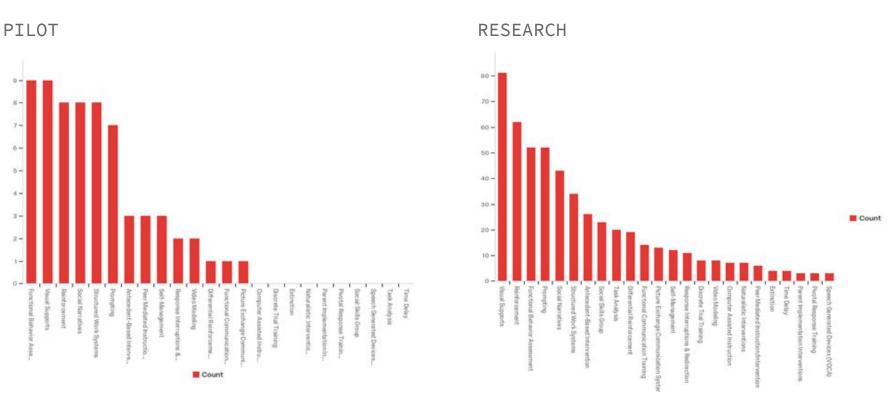
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Even as a little boy, Johnny knew he wanted to become a police officer.

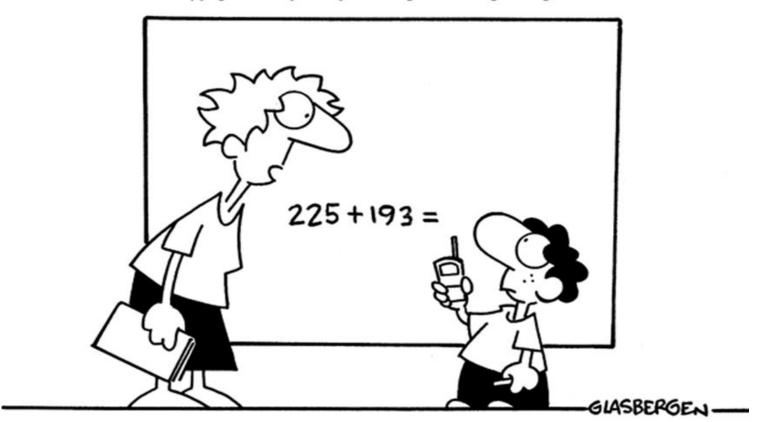
Based on practitioners implementation of EBPs, which EBPs become the chosen ones or the "go-to" evidence-based practices for ASD?

RANKING OF THE EBPS



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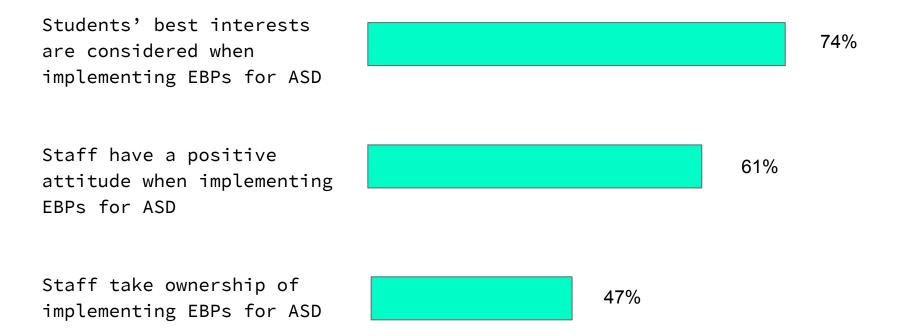
RANK	PILOT	STUDY
1	Visual Supports	Visual Supports
2	Functional Behavior Assessment	Reinforcement
3	Structured Work System	Functional Behavior Assessment
4	Social Narratives	Prompting
5	Reinforcement	Social Narratives
6	Prompting	Structured Work System
7	Antecedent Behavior Intervention	Antecedent Behavior Intervention
8	Peer Mediated Instruction/Intervention	Social Skill Groups
9	Self-Management	Task Analysis
10	Video Modeling	Differential Reinforcement
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"You have to solve this problem by yourself. You can't call tech support."

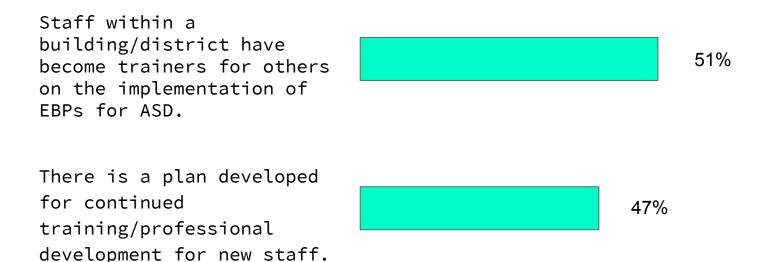
What are the essential components that need to be in place for evidence-based practices for autism spectrum disorders to be sustained at the classroom level?

COMPONENTS OF SUSTAINABILITY-READINESS FOR CHANGE



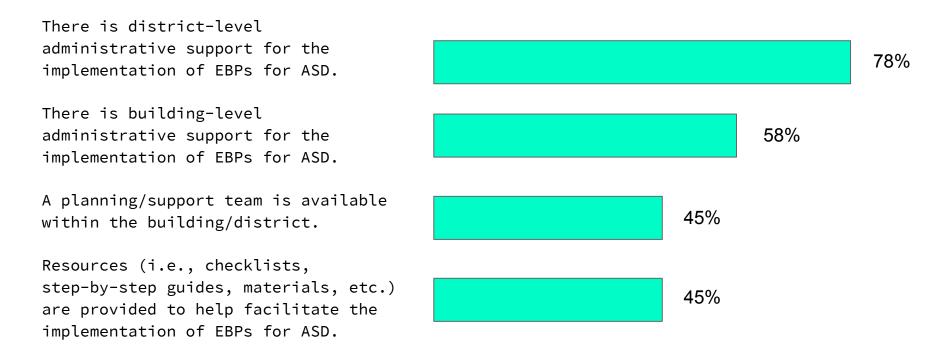
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COMPONENTS OF SUSTAINABILITY-TRAINING & PROFESSIONAL DEVELOPMENT



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COMPONENTS OF SUSTAINABILITY-SUPPORT



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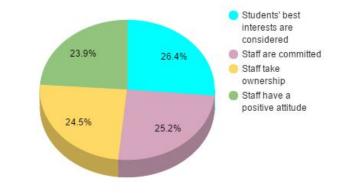
Snapshots at jasonlove.com



How do educational leaders sustain the concepts embedded within the evidence-based practices for autism spectrum disorders model of design within a building and district-wide?

COMPONENTS OF SUSTAINABILITY-READINESS FOR CHANGE

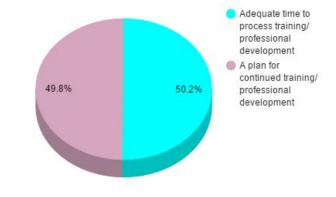
- Students' best interests are considered when implementing EBPs for ASD (4.56/5.00)
- Staff are committed to implementing EBPs for ASD with fidelity (4.36/5.00)
- **Staff take ownership** of implementing EBPs for ASD (4.24/5.00)
- Staff have a positive attitude when implementing EBPs for ASD (4.13/5.00)



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COMPONENTS OF SUSTAINABILITY-TRAINING & PROFESSIONAL DEVELOPMENT

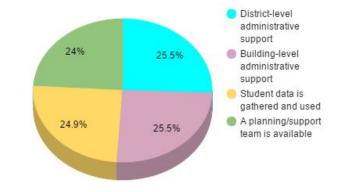
- Adequate time is allotted for staff to process training/professional development and implement EBPs (4.06/5.00)
- There is a plan developed for continued training/professional development for new staff (4.03/5.00)



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COMPONENTS OF SUSTAINABILITY-SUPPORT

- There is district-level administrative support for the implementation of EBPs for ASD (4.27/5.00)
- There is building-level administrative support for the implementation of EBPs for ASD (4.26/5.00)
- **Student data is gathered and used** to support the implementation of EBPs for ASD (4.17/5.00)
- A planning/support team is available within the building/district (4.02/5.00)

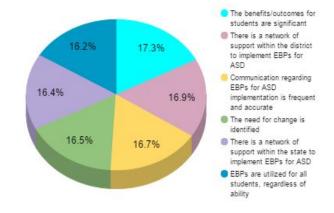


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How can evidence-based practices for autism spectrum disorders be regionally supported and become statewide implemented?

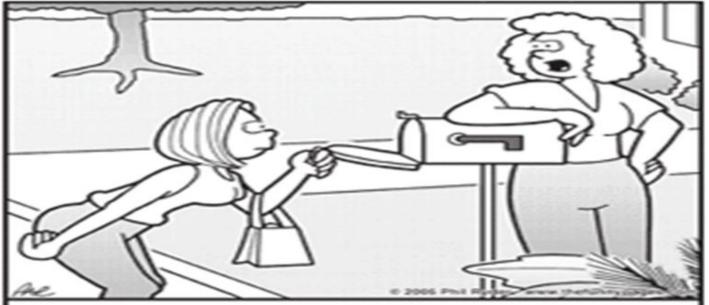
COMPONENTS OF SCALING-UP

- The **benefits/outcomes** for students are **significant** (4.29/5.00)
- There is a network of support within the district to implement EBPs for ASD (4.19/5.00)
- Communication regarding EBPs for ASD implementation is frequent and accurate (4.13/5.00)
- The **need for change** is identified (4.08/5.00)
- There is a **network of support within the state** to implement EBPs for ASD (4.05/5.00)
- EBPs are **utilized for all students**, regardless of ability (4.02/5.00)



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SO WHAT DOES ALL OF THIS MEAN?



"Don't tell me...let me guess; your computer keeps telling you, 'You've got mail.'"

- Bob Tofferi · Ludlow, VT

IMPLICATIONS



- 1. There is a close match between what practitioners are doing and what research has shown (76%)
- 2. Practitioners are implementing EBPs in domains that are not supported by research.
- 3. Research is available for some EBPs in certain domains that practitioners are not implementing.
- 4. Practitioners are choosing EBPs mainly to meet the needs of the student and from the success with other students as well as familiarity.
- 5. At least 7 EBPs are identified as the "go to" strategies for ASD. They are:

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IMPLICATIONS (CONT.)

- 1. Visuals
- 2. Functional Behavior Assessment
- 3. Social Narratives
- 4. Structured Work Systems
- 5. Reinforcement
- 6. Prompting
- 7. Antecedent Behavior Interventions
- (1 and 7 are set with 2-6 in no set order)



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IMPLICATIONS

- Several components are important to have embedded within the evidence-based practices for autism spectrum disorders model of design within a building and district-wide for sustainability.
- These components fall into three categories: readiness for change, training and professional development, and support.
- Evidence-based practices for autism spectrum disorders can become regionally supported and statewide implemented if six key components of scaling-up are present.

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FIDELITY OF IMPLEMENTATION

- Implementing an intervention in same manner in which it was done in the evidence-based research
- How is this achieved?
 - Use self-learning modules on practices
 - Offer training on the practice, as needed
 - Use implementation checklists for the EBP to capture fidelity of implementation
 - Coach on the practice until fidelity is attained

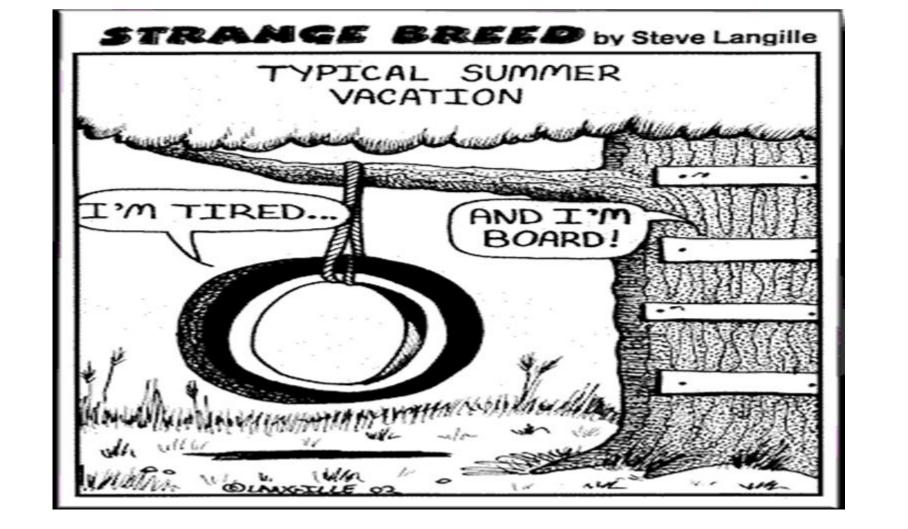
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OPPORTUNITIES FOR FURTHER STUDY

- In the domain of Transition
- Success of the EBPs
- Use of the tools for implementation with fidelity
- Correlation of sustainability and scaling-up components within EBPs for
 ASD and other educational initiatives (i.e. PBIS)



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ADDITIONAL RESOURCES

To learn more about Evidence-based Practices for Autism Spectrum Disorders and the NPDC project, please visit:

The National Professional Development Center on Autism Spectrum Disorders

http://autismpdc.fpg.unc.edu/

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