





ABANDON
ALL HOPE
YE WHO
ENTER HERE

THE FIELD OF AUTISM



“FLAVOR OF THE DAY”

√ = Research in Peer Reviewed Journals

Blue = Most Prominent Today

- Animal Assisted Therapy
- **ABA (Discrete Trial Teaching) √**
- Acupuncture
- ADAM (Autistic Internet Interface)
- Allergy Treatments
- Art Therapy
- Assisted Pig Therapy
- Auditory Integration Training
- Big Ear
- Blood Transfusions
- Blue Green Algae



FLAVOR OF THE DAY

- Bonding
- Brain Gym
- Breast Feeding, Extended
- Brushing
- Chiropractic Manipulations
- Cow Protein Injections
- Discrete Trial Trainer
- DMG/B-6
- Dolphin Therapy
- Dunking in the Gulf of Mexico
- Ear Earobics
- Electric Shock ✓



FLAVOR OF THE DAY

- Energy Therapy
- Equestrian Therapy
- Facilitated Communication
- Fast Forward (Halo)
- Fenfluramine
- Feingold Diet
- Flashlight Therapy
- Floor Time
- **Gluten/Casein Free Diets**
- Hippotherapy



FLAVOR OF THE DAY

- Hyperbolic
- Incidental Teaching (ABA) ✓
- **Inclusion**
- Linda Mood Bell
- Links to Language
- LSD
- Music Therapy
- Miller Method
- Natural Language Paradigm (ABA) ✓
- Options



FLAVOR OF THE DAY

- Organic Fish Oil
- Patterning
- PECS (ABA) ✓
- Pivotal Response Training (ABA) ✓
- Play Therapy
- Prism Glasses Prozac
- Prozac
- Rapid Prompting Method
- Reflexology
- RDI



FLAVOR OF THE DAY

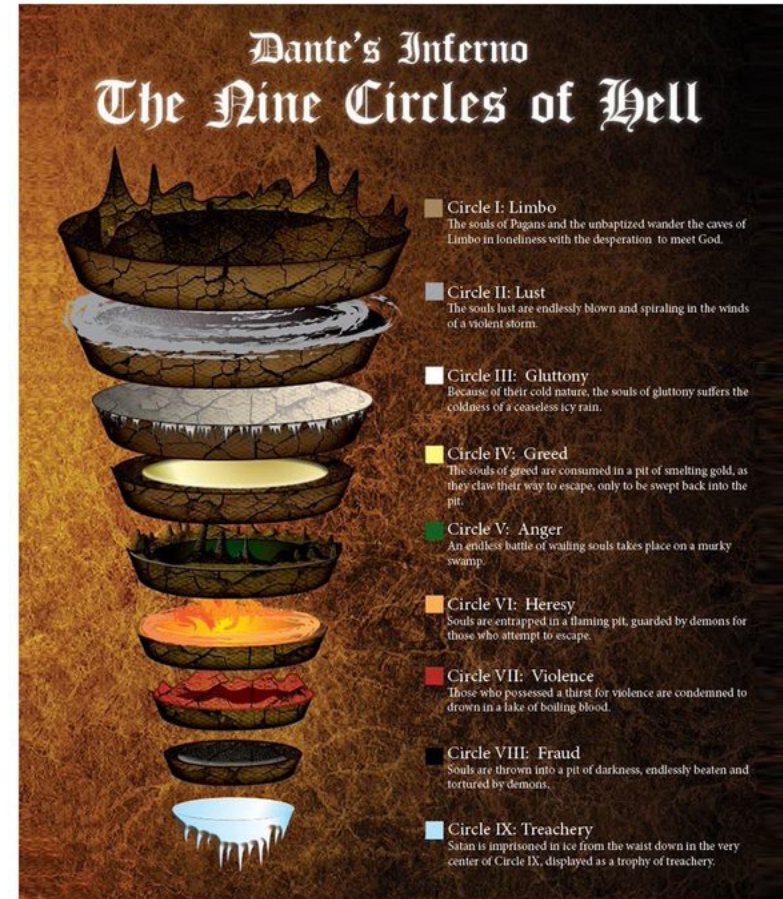
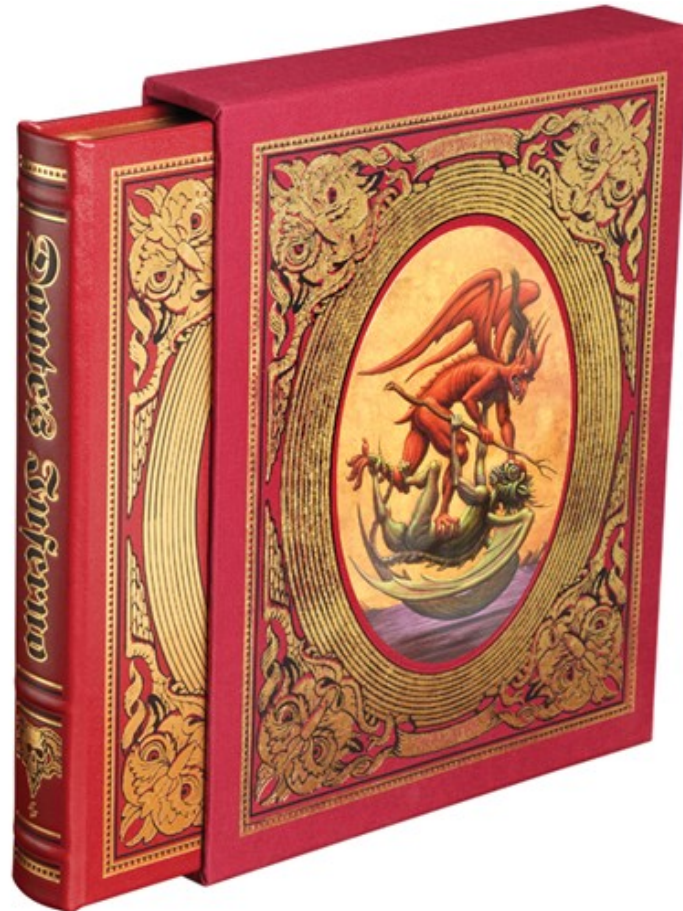
- Remote Healing
- Sacro-cranial Massage
- Sensory Integration
- Signing
- Social Stories
- Social Thinking
- Squeeze Box
- TEACCH
- Verbal Behavior (ABA) ✓
- Visual Therapy
- Womb Room



WHAT'S WRONG WITH TRYING????

- **Against BACB® Ethical Code**
- **Multiple Treatments Reduce Intensity**
- **Multiple Treatments May Dilute or Sabotage Effectiveness**
- **False Expectations**
- **Wasted Money, Time, and Emotion**
- **Possible Long Term Side Effects**
- **Research Does Not Support an Eclectic Approach**

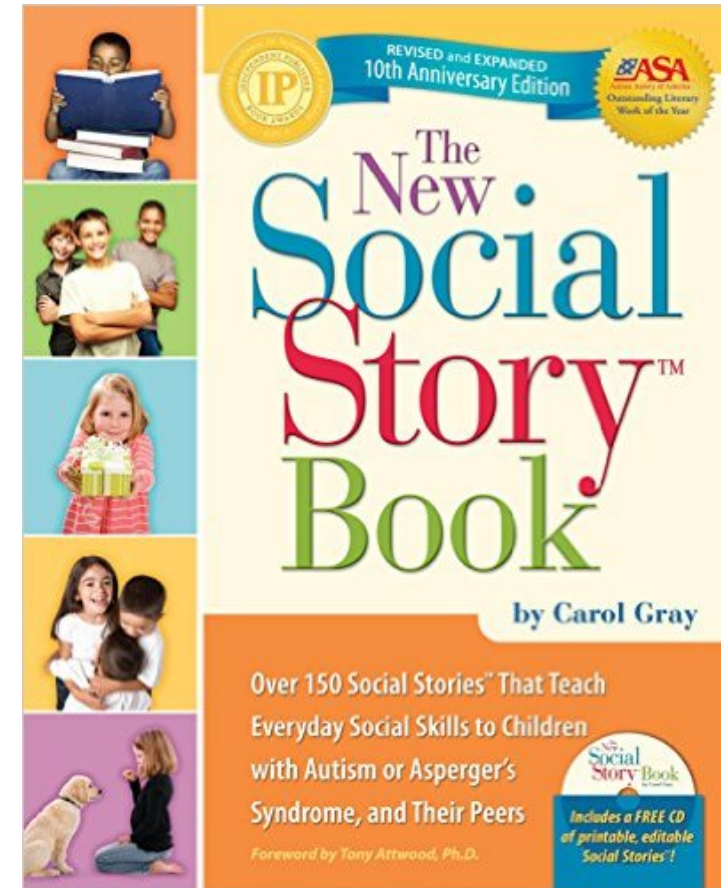
MY JOURNEY INTO THE NINE CIRCLES OF HELL



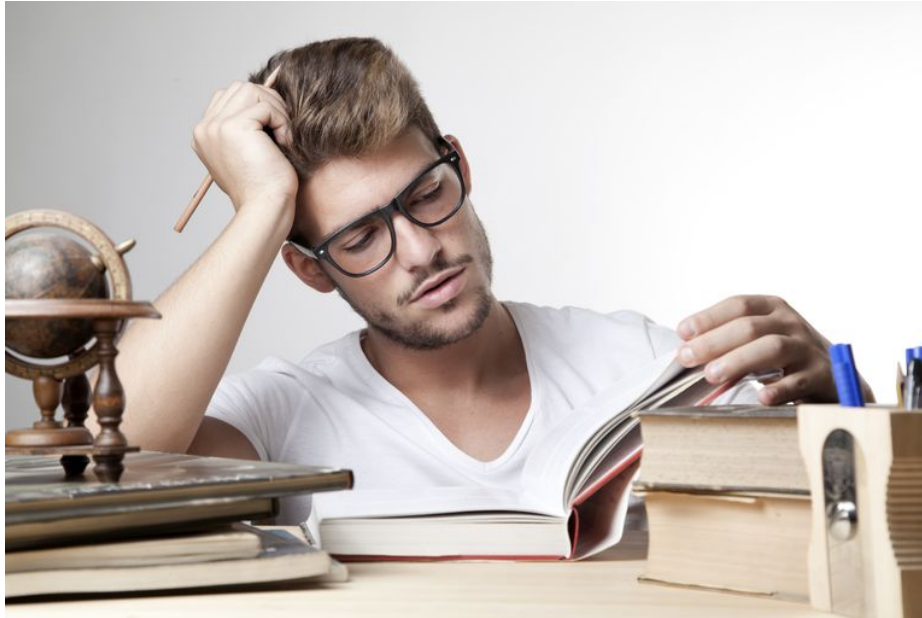
JOURNEY STARTS IN



AT THE 2008 ABAI CONFERENCE



1ST CIRCLE: LEARNING ABOUT SOCIAL STORIES



SOCIAL STORIES

- **Systematic Form of Intervention Where a Brief Text is Written to Describe a Social Behavior (Gray & Garand, 1993)**
- **Text Contains Information About:**
 - **When**
 - **Where**
 - **Why**
 - **What**

RESEARCH USING SOCIAL STORIES

- **Not Inherently Social Behaviors**
 - **Choice Making** (e.g., Barry & Burlew, 2004)
 - **Reducing Tantrums** (e.g., Lorimer, Simpson Myles, & Ganz, 2002)
 - **Sitting** (e.g., Crozier & Tincani, 2007)
- **Social Behaviors**
 - **Appreciation** (e.g., Delano & Snell, 2006)
 - **Smiling** (e.g., Scattone, 2008)
 - **Peer interaction** (e.g., Scattone, Tingstrom, & Wilczynski, 2006)

SOCIAL STORY GUIDELINES

- **Learner Must be in the “Trainable Mentally Impaired Range or Higher who Possess Basic Language Skills”** (Gray & Garand, 1993, p. 103)
- **Individualized**
- **Types of Sentence**
 - **Descriptive**
 - **Perspective**
 - **Affirmative**
 - **Directive**
- **Correct Ratio**
- **Written in the First Person**
- **Sit Side by Side**

EVER CHANGING GUIDELINES: SENTENCE TYPES

SENTENCE TYPES	DEFINITION	YEAR INTRODUCED
Descriptive	Where, Why, and How	1993
Perspective	Mental States Others Feel	1993
Directive	What to Do	1993
Control	Student Explaining the Story	1994
Partial	Fill in Blank	1994
Affirmative	Commonly Shared Belief	2000
Cooperative	How Others Can Help	2000

EVER CHANGING GUIDELINES: RATIO'S

GUIDELINE	YEAR
No Guideline	1993
Optional Ratio of: 1 to 3/5	1994
Ratio Should be Heavily Considered	1995
Required: 1 to 2/5	1998
Required 1 (Now Control) to 2/5	2000
Every Coaching Sentence must to 2 Other Types	2010

EVER CHANGING GUIDELINES: ILLUSTRATIONS

GUIDELINE	YEAR
No Illustrations	1993
Illustrations Optional	1994
Illustrations Discouraged	1995
Illustrations Optional	1998
Illustrations Encouraged	2010

EXAMPLE



LEVEL TWO: SOCIAL STORIES VS TIP

JOURNAL OF APPLIED BEHAVIOR ANALYSIS

2012, **45**, 281–298

NUMBER 2 (SUMMER 2012)

COMPARING THE TEACHING INTERACTION PROCEDURE TO SOCIAL STORIES FOR PEOPLE WITH AUTISM

JUSTIN B. LEAF, MISTY L. OPPENHEIM-LEAF, NIKKI A. CALL, JAN B. SHELDON,
AND JAMES A. SHERMAN

UNIVERSITY OF KANSAS

AND

MITCHELL TAUBMAN, JOHN McEACHIN, JAMISON DAYHARSH, AND RONALD LEAF

AUTISM PARTNERSHIP

This study compared social stories and the teaching interaction procedure to teach social skills to

PARTICIPANTS & SETTING

Name	Age	Diagnosis	IQ Score	Peabody Score	School Placement	Setting
Buddy	6	Autism	87	69 (2 nd Percentile)	Gen Ed without supports	KU and at Home
Hank	5	PDD-NOS	117	128 (98 th Percentile)	Early Intensive School	KU and at Home
Nick	5	Autism	68	79 (2 nd Percentile)	Gen Ed without Supports	KU and at Home
Lang	5	Aspergers	89	104 (66 th Percentile)	Gen Ed with Supports	Home
Apollo	12	Autism	80	99 (47 th Percentile)	Gen Ed without Supports	Home
Mickey	13	Autism	82	109 (39 th Percentile)	Gen Ed without Supports	Home

SOCIAL BEHAVIOR

- **Taught 6 Skills to Each Participant**
 - 3 with TIP
 - 3 with Social Stories
- **Each Skill Task Analyzed**
- **Random Assignment of Skills**

MEASURES

- **Naturalistic Probes with Lead Researcher**
- **Generalization Probes with Known Adults**
- **Generalization Probes with Peers**

RESULTS

- **Naturalistic Probes with Lead Researcher**
 - 100% Skills Learned with TIP
 - 22% Skills Learned with Social Stories
- **Generalization Probes with Known Adults**
 - Higher with Teaching Interaction Procedure
- **Generalization Probes with Peers**
 - Higher with Teaching Interaction Procedure

LEVEL THREE: SOCIAL STORIES VS TIP (GROUP)

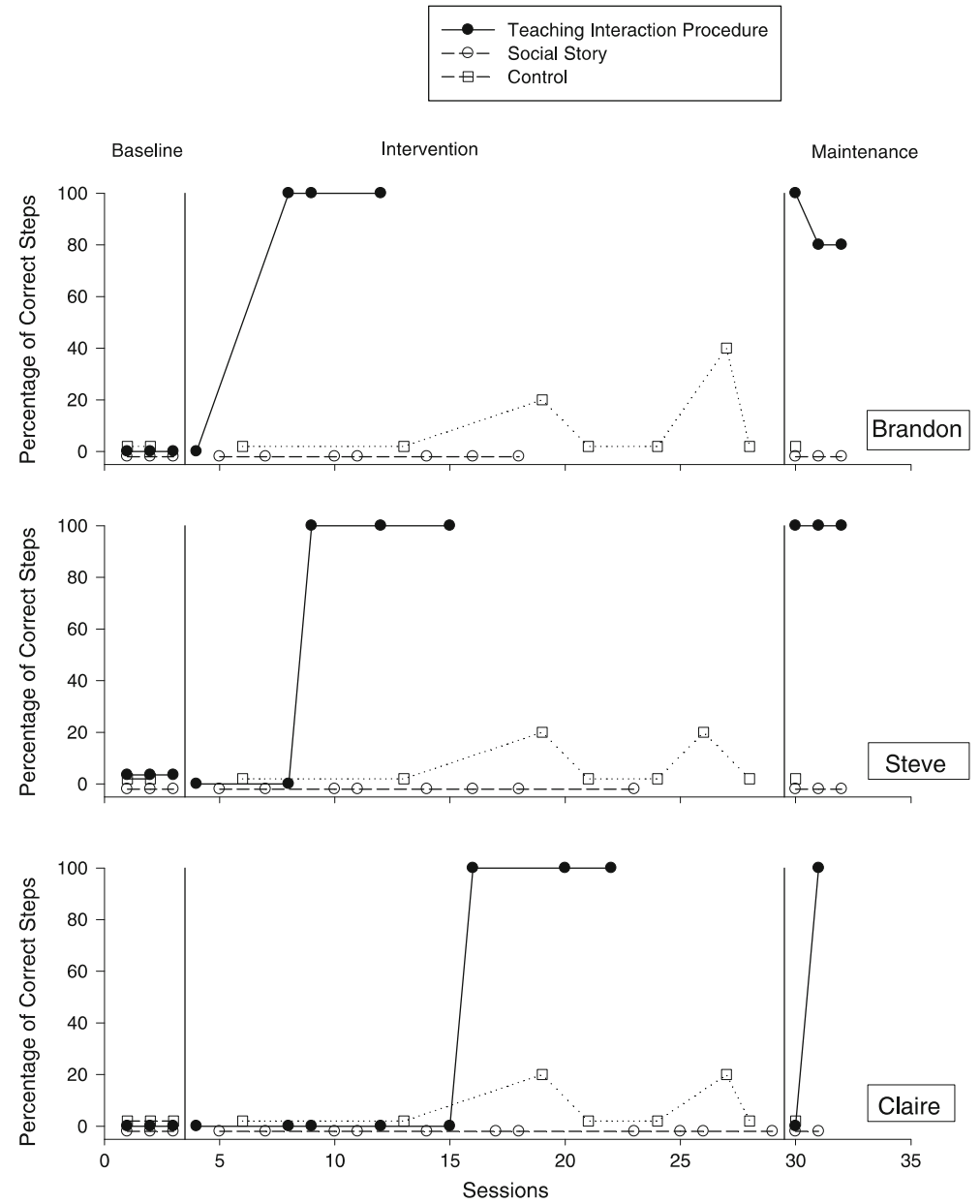
J Autism Dev Disord (2014) 44:2329–2340
DOI 10.1007/s10803-014-2103-0

ORIGINAL PAPER

Comparing the Teaching Interaction Procedure to Social Stories: A Replication Study

**Alyne Kassardjian · Justin B. Leaf · Daniel Ravid · Jeremy A. Leaf ·
Aditt Alcalay · Stephanie Dale · Kathleen Tsuji · Mitchell Taubman ·
Ronald Leaf · John McEachin · Misty L. Oppenheim-Leaf**

Results



LEVEL FOUR: SOCIAL STORIES VS CNC

EDUCATION AND TREATMENT OF CHILDREN Vol. 39, No. 2, 2016

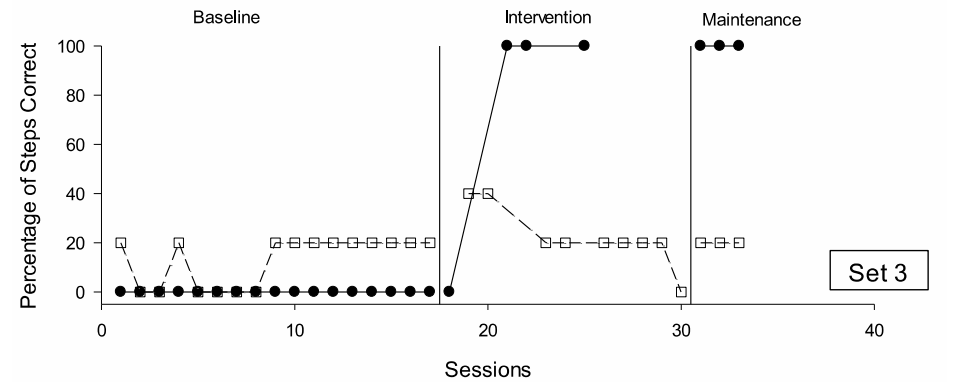
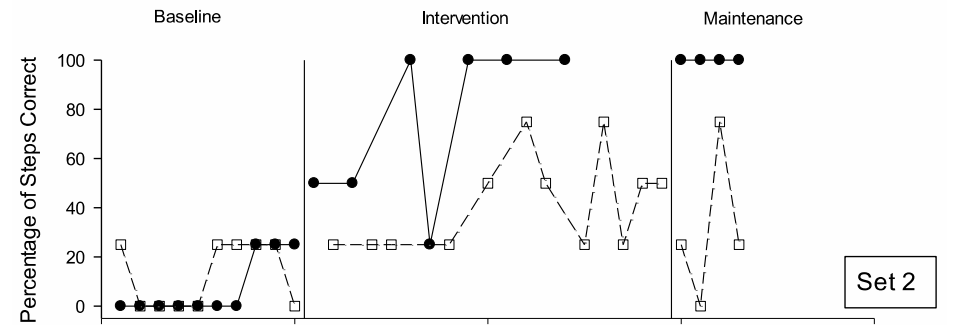
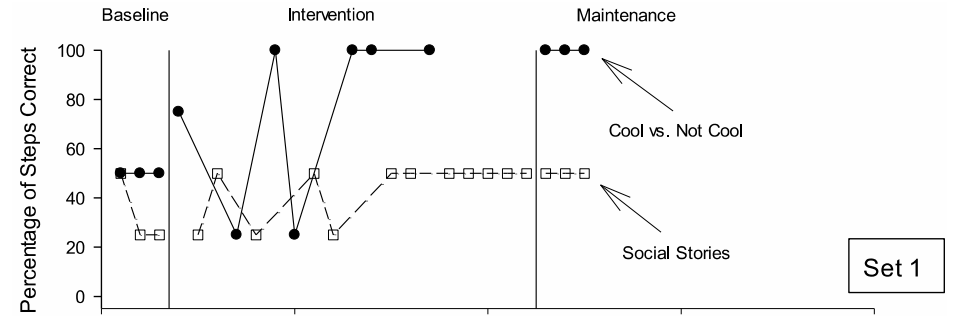
Comparing Social Stories™ to Cool Versus Not Cool

Justin B. Leaf

Erin Mitchell

Donna Townley-Cochran

Results



LEVEL FIVE: REVIEWING THE LITERATURE

REVIEW	NUMBER OF STUDIES REVIEWED	GENERAL FINDINGS
Sansosti et al., 2004	8	Limited
Ali et al., 2006	16	Can Be Beneficial
Reynhout et al., 2006	16	Variable and Ineffective
Rust	8	Serious Methodological Flaws
Kokina et al., 2010	18	Low Questionable Effectiveness
Karkhaneh et al., 2010	6	Effective
Reynhout et al., 2011	62	Mildly Effective & Spend Time on Other Interventions
Styles et al., 2011	51	Can Not Be Considered Evidence Based Practice
Test et al., 2011	28	Not Considered Evidence Based
Rhodes et al., 2014	7	Useful Instrument

REVIEWING THE LITERATURE

REVIEW	NUMBER OF STUDIES REVIEWED	GENERAL FINDINGS
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Rhodes et al., 2014	7	Useful Instrument

What is the Proof? A Methodological Review of Studies That Have Utilized Social Stories

Justin B. Leaf, Misty L. Oppenheim-Leaf, Ronald B. Leaf, Mitchell Taubman,
John McEachin, Tracee Parker, Andrea B. Waks, and Toby Mountjoy
Autism Partnership Foundation

Abstract: Social stories are a commonly empirically evaluated and implemented procedure to increase pro-social behaviors and decrease aberrant behaviors for individuals diagnosed with an autism spectrum disorder. Despite their widespread use there have been questions raised to the soundness of the research methodology and the results which have been demonstrated within these research studies. This paper is a methodological review of 41 studies that evaluated social stories for individuals diagnosed with autism. We classified each study as one that utilized either a case study design, a reversal design, or a multiple baseline design. After classification we evaluated each study across multiple methodological dimensions and used this analysis to determine if a study showed either a clear demonstration, partial demonstration, or if there was no clear demonstration that the social story was responsible for behavior change. Results of this analysis indicated that the majority of studies either showed only a partial demonstration or no clear demonstration that the social story procedure was responsible for the behavior change. Based upon this analysis recommendations for clinicians and future researchers are discussed.

ing any single criterion was considered of the study's demonstration that the story procedure was responsible for the behavior change. Table 1 displays the differing criterion and levels of demonstration studies where a case study design was used. Table 2 displays the different scoring and levels of demonstration for studies where a reversal design was utilized. Table 3 displays the different scoring criterion and levels of demonstration for studies where a baseline design was utilized.

Results

Table 4 provides the overall results of demonstration for studies across three designs evaluated. Table 5, 6, and 7 provide information about how each study scored across the measures and the level of demonstration each study was classified as. Within each category, the rationale for why a study was classified as a given level is highlighted within a cell. If any study does not have a cell it means that study was terminated to have a convincing demonstration.

Levels of Demonstration

Convincing Demonstration. Out of 19 studies reviewed, only 3 (7.3%) achieved a convincing level of demonstration. The social story was responsible for the participant changing his or her behavior; all of the studies utilized a multiple baseline design. Out of the 19 studies (15.7%) that utilized multiple baseline design were classified as a convincing level of demonstration.

Delano and colleagues (2006) were the first researchers that we identified to demonstrate a convincing demonstration that a social story procedure was effective in changing behavior for participants diagnosed with autism. In this study, the authors used a multiple probe design across three participants that social stories could be used to demonstrate appropriate social engagement while demonstrating inappropriate social engagement or inappropriate social engagement or inappropriate social engagement.

In 2008, Chan and O'Reilly published a second study that showed a clear demonstration

TABLE 1
Measures and Demonstration Levels for Case Study Designs

<i>Level of Demonstration</i>	<i>Type of Data</i>	<i>Length of Baseline</i>	<i>Baseline Trending</i>	<i>Effect Immediate</i>	<i>Overlapping Data</i>	<i>Combined with other procedures</i>
Convincing Evidence	Objective	3 or more sessions of baseline	Stable or trending in correct direction	Behavior change demonstrated within 3 sessions	20-0% overlapping data between baseline and intervention	Not combined with other procedures
Partial Evidence	Objective	1 or 2 sessions of baseline	Stable or trending in correct direction	Behavior change demonstrated within 3 sessions	40-21% overlapping data between baseline and intervention	Combined with other procedures
No Convincing Evidence	Subjective	0 sessions of baseline or baseline not reported	No stability or not trending in the correct direction	Behavior change occurring after 3 sessions	100 to 41% overlapping data between baseline and intervention	Combined with other procedures

TABLE 4**Results: Levels of Demonstration**

<i>Design</i>	<i>Number of Studies</i>	<i>Level of Convincing</i>		
		<i>No Convincing Evidence</i>	<i>Partial Evidence</i>	<i>Convincing Evidence</i>
Case Studies	9	9 (100%)	0	0
Reversals	13	6 (46.2%)	7 (53.8%)	0
Multiple Baselines	19	6 (31.6%)	10 (52.6%)	3 (15.8%)
Total	41	21 (51.2%)	17 (41.5%)	3 (7.3%)

wrong direction. Finally, three of these studies did not show a clear change in the participants' behaviors.

There were 10 studies that used a multiple baseline design that were classified as partial demonstration. Four studies implemented multiple procedures (i.e., video modeling,

behavior stability or trending in the correct direction.

There were six studies that used a multiple baseline design that were classified as no convincing evidence that the social story was responsible for the behavior change; five of the six studies were unable to show a clear change

IN THE MIDDLE
OF THE JOURNEY OF OUR LIFE
I CAME TO MYSELF WITHIN A DARK
WOOD WHERE THE STRAIGHT WAY
WAS LOST.

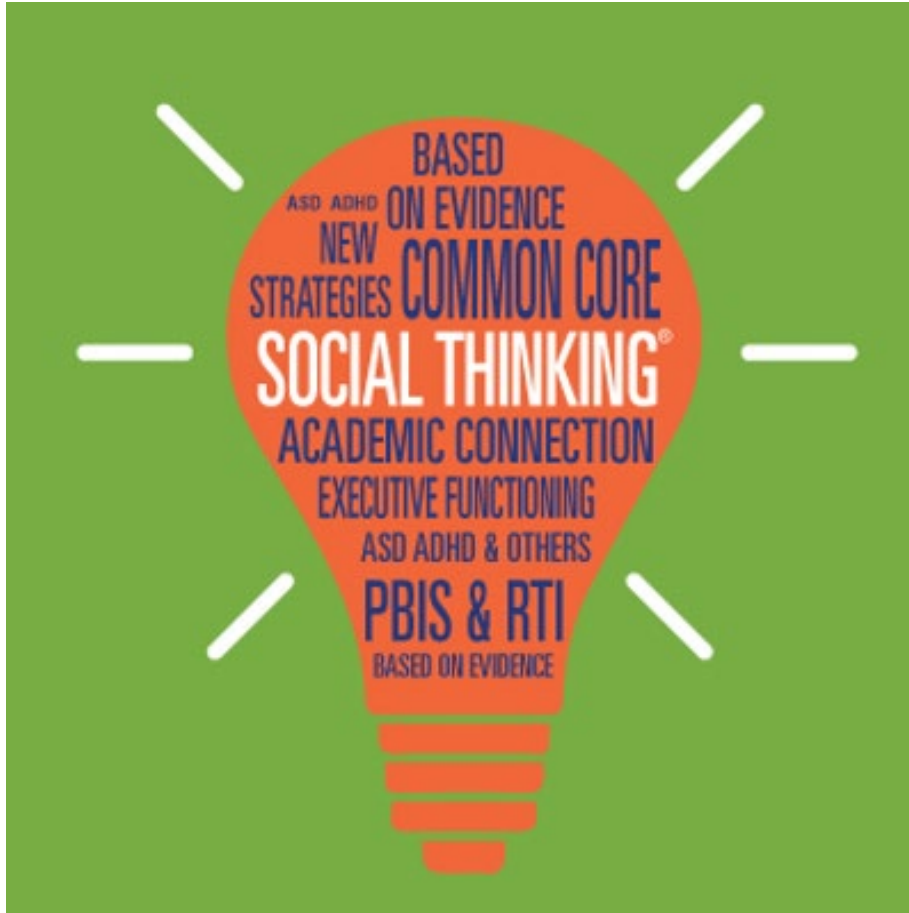
Dante Alighieri

mortisia.tumblr.com

THOUGHT I WAS DONE



LEVEL SIX: SOCIAL THINKING



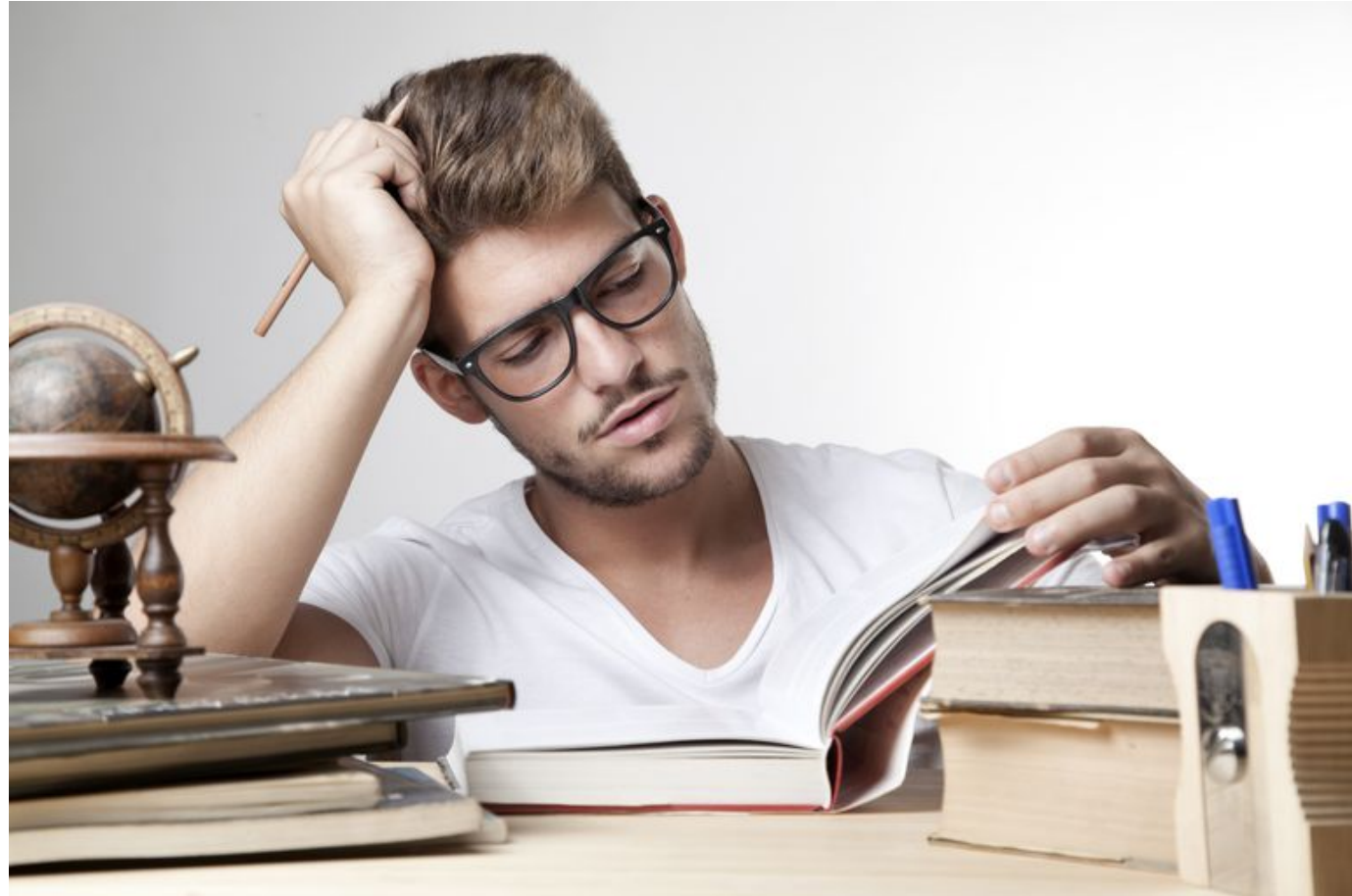
IN LONG BEACH







TIME TO STUDY AGAIN



SOCIAL THINKING®

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J Autism Dev Disord (2008) 38:581–591
DOI 10.1007/s10803-007-0466-1

BRIEF REPORT

EFFECTS OF THE SUPERFLEX™ CURRICULUM ON OF PRIMARY STUDENTS WITH ATTENTION DEFICIT DISORDER AND AUTISM SPECTRUM

DISORDER AND AUTISM SPECTRUM

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Arts in Special Education

For the degree of Master of Arts in Special Education

Mild/Moderate Disabilities

By

Kaitlin Riemen Yadiosky

Brief Report: Measuring the Effectiveness of Teaching Social Thinking to Children with Asperger Syndrome (AS) and High Functioning Autism (HFA)

Pamela J. Crooke · Ryan E. Hendrix · Janine Y. Rachman

Published online: 17 November 2007
© Springer Science+Business Media, LLC 2007

Abstract This is the first report from a large multiple baseline single-subject design study of children with Autism Spectrum Disorders (ASD). This brief report examines effectiveness of teaching a social cognitive (Social Thinking) approach to six males with Asperger syndrome (AS) or High Functioning Autism (HFA). Data included are restricted to pre-post-treatment comparisons of verbal and non-verbal social behaviors. Structured treatment and semi-structured generalization sessions occurred over eight weeks. Results indicated significant changes from pre- to post- measures on both verbal/nonverbal "expected" and "unexpected" behaviors, significant increases in the subcategories of "expected verbal", "listening/thinking with eyes", and "initiations", and robust decreases in the subcategories of "unexpected-verbal" and "unexpected-nonverbal". Importance of social cognitive approaches for children AS and HFA is discussed.

Keywords Asperger syndrome · High functioning autism · Social cognition · Social skills · Social thinking

Introduction

Social difficulties in children with autism spectrum disorders (ASD) are well recognized and considered to be a defining characteristic of autism (Krasner et al. 2005; Ozonoff and Miller 1995; Marriage et al. 1995; Weiss and Harris 2001). Interventions for social deficits reported in the literature vary widely in scope and effectiveness. Treatment studies commonly report the use of discrete skill-based approaches to teaching social behaviors, especially for children with emerging language or limited language skills. For children with ASD who possess more complex language, for instance, Asperger syndrome (AS) or High Functioning Autism (HFA), social cognitive tasks, such as interpreting verbal/nonverbal actions/intentions, understanding social reciprocity, and adjusting verbal/nonverbal behavior according to social cues, prove troublesome (Koning and Magill-Evans 2001; Ozonoff and Miller 1995; Tsatsanis et al. 2004; Weiss and Harris 2001). Social skill training, which involves the explicit teaching and reinforcement of desired discrete social skills, has been and continues to be a key feature of intervention for children with autism since the mid-1960's (Strain and Hoyson 2000). The literature is clear in stating that social skills can be taught, however, efficacy reviews do not boast "large-scale improvements" or evidence of generalization (Barry et al. 2003, p. 687; Bellini et al. 2007; Krasner et al. 2003; Williams et al. 2006). Why do traditional social interventions not lead to enduring social proficiency? It may be that the majority of treatment approaches fail to address the

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Thinking Socially Teaching Social Knowledge to Foster Social Behavioral Change

Pamela J. Crooke, Michelle Garcia Winner, and Lesley B. Olswang

This article addresses the complexity of what it means to "be social" thinking. This perspective recognizes social cognitive processes for social knowledge and, in turn, social behaviors. The article fur influence how one understands how to do what is expected in order of development, stakeholders, and context influence that process for individuals with autism spectrum disorders are discussed, as behavior-based and cognitive-based therapies. Finally, an example of based treatment framework, Social Behavior Mapping, is used to illustrate cognitive behavioral therapy. **Key words:** ASD, CBT, social behavior skills, social thinking

SEVERAL DECADES worth of research and clinical observation have described individuals with a variety of social communication challenges, but social challenges are particularly salient among individuals with a diagnosis of autism spectrum disorder (ASD). No single profile stands out to describe the social problems associated with ASD, as is

appropriate for individuals. In turn, a been developed to address social concerns, each with its own perspective on what it means to be social and how to best tackle concerns in treatment. In order for clinicians to make informed decisions as they plan treatment for individual clients, they need to understand the theoretical foundations on which various interventions are based. In this article, we attempt to elucidate the complex nature of being social and argue for the importance of focusing on not only behaviors but also underlying knowledge about how to behave socially in different contexts. We then describe the application of this perspective to individuals with high-functioning ASD, along with a specific example of a multidimensional framework for intervention.

BEING SOCIAL

What does it mean to be social? Or more accurately, what does it mean to be considered socially appropriate? Social competence is a judgment others form about us, as individuals, based on their interpretation of our social behaviors. We do not get to decide for ourselves,

Author Affiliations: Social Thinking, Santa Clara, California (Dr Crooke and Ms Winner); and Department of Speech and Hearing Sciences, University of Washington, Seattle, Washington (Dr Olswang).

While no direct financial support was provided for this project, Dr Crooke serves as the Chief Strategy Officer for Social Thinking and therefore receives a salary as part of this role. No other financial benefits or compensation relate to her position. Ms Winner owns the company Think Social Publishing, Inc., through which all Social Thinking concepts are developed. She is the founder of Social Thinking. She receives a salary from the company and spent part of her time working on this project for the group through her salaried income. Dr Olswang was recruited to be a research advisor and receive financial compensation from the research department in Social Thinking for expertise and time.

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the ideas of others, even before they can verbally express these ideas (Meltzoff, 1995). For example, the more a child engages in verbal communicative exchanges, the more he or she learns about what other people are thinking.

This early social thought ignites the development of perspective taking which encourages abstract language to communicate increasingly complex feelings and thoughts (Flavell, 2004). By four years of age, neurotypical children emerge in their use of mental state verbs (e.g., think, know, guess, decide, etc.) to express information about what they think others are thinking (De Villiers, 2000). By six years old they can understand the basic concept that people can lie, cheat and steal (Baron-Cohen, 2000). As children begin to realize they can manipulate other people, their language emerges into increasingly sophisticated linguistic trickery. It is not uncommon to see a third grade child trick someone into looking in a certain direction and then state, "made you look."

Social manipulation and the ability to think socially appear to be critical not only for social participation but also for understanding aspects of play, problem solving, understanding communicative intentions, written expression and reading comprehension (Booth, Hall, Robison & Kim, 1997; Norbury & Bishop, 2002; Westby, 1985). Not coincidentally, abstract social language and communicative interpretation become heavily coded in academic curricula, as students are asked early in their educational journey to interpret the intentions of a character in a story to understand the motives for the actor's actions. Children with typical development acquire this social communication foundation with ease; however, those with social learning



Efficacy of cognitive behavior therapy-based social skills intervention for school-aged boys with autism spectrum disorders

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Autism

ABSTRACT

School-aged children with Autism Spectrum Disorders (ASD) experience significant difficulty with peer interaction. Research to identify the most effective strategies to address this difficulty has increased but more evidence is needed. Cognitive behavior therapy (CBT), which focuses on changing how a person thinks about social situations as well as how he behaves, is a promising approach. This study evaluated the efficacy of a 15 week CBT-based social skills intervention for boys aged 10–12 years diagnosed with an ASD. Boys with average or better IQ and receptive language skills were randomly assigned to either a control (n = 8) or intervention condition (n = 7). During intervention, boys attended weekly 2 h long group sessions focusing on self-monitoring skills, social perception and affective knowledge, conversation skills, social problem-solving, and friendship management skills. Comparison of the outcomes using repeated measures analyses indicated that boys receiving the intervention scored significantly better on measures of social perception, peer interaction, and social knowledge than boys who had not received intervention. There were no differences on general measures of socialization. The manualized intervention used in this study shows promise but replication with larger samples is needed.

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1. Introduction

Difficulties engaging in social interaction are a primary concern for children with high-functioning autism (HFA) or Asperger's Syndrome (AS). While they are considered high-functioning by virtue of IQs in the average or above average range, they have social deficits which are primarily centered around social reciprocity, social cognition, and pragmatic language (e.g., Adams, Green, Gilchrist, & Cox, 2002; Church, Daniels, & Amanullah, 2000; Downs & Smith, 2004). Social difficulties become more evident as they begin school and move towards adolescence when the nuances of social interaction are more demanding. These children initiate fewer social interactions with peers (Orson, Krauss, & Seltzer, 2004) and are less socially responsive (Volkmann, 1987). They have difficulty inferring others' emotions and responding appropriately (Koning & Magill-Evans, 2001a; Ozonoff, Pennington, & Rogers, 1990), taking others' perspectives (Rehfeldt, Dillen, Ziomek, & Kowalchuk, 2007), and understanding social rules and conventions of interaction (Church et al., 2000).

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doi:10.1016/j.asdis.2011.07.011



In recent years, considerable interest has surfaced regarding the research-to-practice gap in communication sciences and disorders and, most importantly, ways to reduce it (as exhibited by the American Speech-Language-Hearing Foundation, 2014, and this supplement). Ideas for bringing evidence-based knowledge into practice include making research findings more accessible to practitioners through practice portals, systematic reviews, and practice guidelines. Recent emphasis on "implementation science" acknowledges the challenges of moving evidence through the research pipeline from bench to practice. Although this approach is an argument for the need to address practice needs and emphasizes the importance of research-practitioner collaboration, it too is based on a "one-way path" or "push" approach of moving research findings into practice. One can argue that prevailing wisdom has been that if evidence-based knowledge via controlled research studies is brought to bear on practice, the result will be more effective and efficient care for patients (Grol & Wensing, 2013). Perhaps, however, those making efforts to improve practice would do well to consider supplementing and complementing customary research practices with other sources of evidence, namely, from practice-based research (PBR).

Bidirectional Research Approach for Closing the Research-Practice Gap

This article examines the prevailing wisdom of moving evidence into practice as defined by the traditional research pipeline that has been viewed as the gold standard in health care. In comparison, evidence that comes from practice is explored as an alternative research-based paradigm that complements the traditional approach. Research originating within the research and practice setting is explored as a way to more effectively close the research-practice gap. PBR is defined, including principles and methodological guidelines. To illustrate PBR, retrospective data from an existing, highly utilized methodology for teaching social knowledge and behaviors to individuals diagnosed with social learning challenges, including autism spectrum disorders (ASD), is

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The Outcome of a Social Cognitive Training for Mainstream Adolescents with Social Communication Deficits in a Chinese Community

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The use of cognitive-based strategies for improving social communication behaviours for individuals who have solid language and cognition is an important question. This study investigated the outcome of teaching Social Thinking™, a framework based in social-cognition, to Chinese adolescents with social communication deficits. Thirty-nine students (33 with Autism Spectrum Disorders and six without), ranging in age from 12 to 15 years with social communication deficits, participated in a 12-week intervention. Students' pre- and post-intervention social behaviours were measured by six aspects of the Social Thinking-LAUGH Social Inventory 115 familiar raters. Students showed significant improvement in all the six subscales of the Social Thinking-LAUGH expert humour after training. Agreements on ratings among parents and school personnel were satisfactory. A framework based in social cognitive strategies, with appropriate linguistic and cultural adaptations, appears to be a promising tool for Chinese adolescents with social learning issues. Social behaviours improved across school and home settings as noted by groups of raters familiar with the students.

Keywords: adolescents; autism spectrum disorder (ASD); asperger; inclusive education; intervention; social cognitive training; social communication; social thinking

Introduction

As the prevalence of Autism Spectrum Disorders (ASD) continues to increase worldwide (Kim et al., 2011; McDonald & Paul, 2010), there is a new sense of urgency to develop social treatments for ASD. Teachers and therapists are faced with finding evidence-based interventions to address the social challenges of their students. For those practitioners needing to manage students from non-Western cultures, the challenge is not only to find lessons, but to adapt to their own linguistic and cultural norms.

Most studies related to social learning for students with ASD have utilised a behaviourally-based approach where social skills are modelled, taught, reinforced and practiced in a variety of settings (Strain & Hoyson, 2000). Yet despite the focus on improving discrete social skills, gains are reportedly poor (Bellini, Peters, Benner, & Hopf, 2007).

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ial Pragmatic Communication Our Social Fabric

speech-language pathologist and the founder of Pamela Crooke is the Director of Research and Social Thinking Center.

has previously published in the subject area.

related strategies to help our students with social communication competencies requires us to Coherence (CC), and Executive Functioning (EF) instruct elements of social learning to explore communication and how this information is assessment currently available in our field. to be stronger social observers or "detectives" practice adapting their behaviors based on

the situation and the people within it is key to teaching social EF. Treatment philosophy encouraging the use of systematic social communication frameworks, such as Carol Gray's Social Stories (Gray & Garand, 1993) and Social Thinking's Social Behavior Mapping (Winner, 2007b) is explored to assist our students' in their development of social and self-regulatory strategies.

In today's educational and clinic arenas, executive functioning (EF) has morphed into an umbrella term that can represent many different things to many different people. At a core level, most of us think about it from a functional point of view—the abilities that allow us to plan, problem solve, and organize our lives—the "doing" processes we undertake. But what exactly are we supposed to plan, organize, and problem solve? The things we do or the thoughts in our heads? How about our social relationships? To what extent is EF part of the dynamic and synergistic social learning process we all experience day-to-day?

Furthermore, if we acknowledge that EF and social learning are, in fact, fibers in the same cloth that is our social nature, how does this notion impact how we teach social skills? Are we only teaching social skills, or do we "teach social" as a broader goal that encompasses not just an emphasis on the social behaviors we exhibit, but includes teaching the necessary EF abilities that facilitate the mental processing that precedes the behavior? At a practical level, is "thinking social" actually a social EF process that needs to be taught? This paper will take on the challenge of honing in on the role of social in EF that has been overlooked, in part, by contemporary research (Barkley, 2012). While common sense combined with professional judgment tells us that EF plays a role in social functioning across the home and school day, it does not give us a pathway for treatment. Our hope it to keep common sense as our guidepost while connecting the current literature to guide practical treatment strategies for the interplay between social learning and EF.

EVIDENCE FOR SOCIAL THINKING®

J Autism Dev Disord (2008) 38:581–591
DOI 10.1007/s10803-007-0466-1

BRIEF REPORT

Brief Report: Measuring the Effectiveness of Teaching Social Thinking to Children with Asperger Syndrome (AS) and Functioning Autism (HFA)

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Research in Autism Spectrum Disorders 7 (2013) 1282–1290



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Efficacy of cognitive behavior therapy-based social skills intervention for school-aged boys with autism spectrum disorders

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The Outcome of a Social Cognitive Training for Mainstream Adolescents with Social Communication Deficits in a Chinese Community

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DIDN'T GINA TALK ABOUT THIS?



CHAPTER TWO

Evaluating Claims about Treatments for Autism

Gina Green

Sometime shortly after a young child is diagnosed with autism or pervasive developmental disorder, the quest for help begins. Families typically feel an understandable urgency to get treatment for the child as soon as possible. When they seek information about available treatments, they often get a long and perplexing list that includes education, Auditory Integration Training, various drugs, vitamins and other "natural" substances, Imitation therapy (Options), Facilitated Communication, Sensory Integration Therapy, music therapy, Gentle Teaching, special diets of various kinds, Applied Behavior Analysis, patterning, deep pressure therapy, dolphin therapy, rhythmic entrainment (drum therapy), and more. Some treatments are said to produce miraculous results overnight (or even faster), with relatively little effort or expense. Some are reported to benefit most, if not all, people with autism. For many such claims, a moment's careful reflection may be all it takes to assess the odds that they could be true and to realize that the odds are slim to none.

It's rarely that easy, however, for a host of reasons. First, virtually everyone who works to better understand and serve people with autism wishes ardently for breakthroughs. We all want a cure for this puzzling disorder; short of that, we want at least to enable people with autism to live the most full and happy lives possible. But this is a two-edged sword. The same factors that make dedicated and enthusiastic parents, advocates, teachers, and researchers can produce a special kind of vulnerability, a tendency to accept claims about treatments without scrutinizing the basis for those claims as closely as we should. Additionally, when the exact cause of a condition is not known and the prognosis is not especially good, new treatments are invented (or old ones are recycled) with astonishing frequency. Reports about quick fixes, miracle cures, and breakthrough treatments have proliferated since autism was first labeled over 50 years ago. They have never been more prevalent—or confusing—than they are today.

Unfortunately, as the number and variety of therapies has increased, it seems that professionals are less and less inclined to provide families with strong, data-based advice to help them make informed choices among the various therapies. The prevailing view seems to be, "Since we don't know the cause of autism, we don't know what might or might not work. So we might as well try everything, including the implausible and even the outlandish. What have we got to lose?" Arguments like these seem reasonable on their face and can be very appealing to someone who feels that doing something—*anything*—is better than doing nothing. But this hit-or-miss approach is no more likely to lead to positive, lasting outcomes for any individual with autism than it is to produce solid, reliable advances in knowledge about the disorder in general. In fact, it can lead to harm, or at the very least, perpetuation of the current situation: an ever-changing kaleidoscope of therapies, most with little or no sound evidence to support their effectiveness, many with potential or known harmful side effects (for a review, see Chapter 4).

Finally, perhaps as a function of the perplexing nature of autism and the severity of its impact, debates about causes and treatments tend to provoke intense emotional responses. The search for information and help is thus influenced at least as much by ideologies, personal beliefs, and social movements as by logic and objective data.

SCIENCE, PSEUDOSCIENCE, AND ANTISCIENCE

For purposes of this chapter, approaches to answering fundamental questions about how and why the world works, including questions about the nature of autistic behavior and what might be done about it, can be grouped into three broad categories: science, pseudoscience, and antisense. Science relies on direct,

SCIENCE, PSEUDOSCIENCE, & ANTISCIENCE

Science	Pseudoscience	Antiscience
<ul style="list-style-type: none">• Direct objective observation and measurement• Systematic• Experimental design• Repeated demonstrations		

SCIENCE, PSEUDOSCIENCE, & ANTISCIENCE

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<ul style="list-style-type: none">• Direct objective observation and measurement• Systematic• Experimental design• Repeated demonstrations	<ul style="list-style-type: none">• Promoting Quick and High Levels of Success• Little to No Objective Data• Other Therapies are Not Useful• Procedures Would be Difficult to Evaluate• Slogans• Having “Expert” Endorsement	<ul style="list-style-type: none">• Rejection of science and the scientific method

WRITING ABOUT SOCIAL THINKING®

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Behav Analysis Practice
DOI 10.1007/s40617-016-0108-1



DISCUSSION AND REVIEW PAPER

Social Thinking®: Science, Psuedoscience, or Antiscience?

Justin B. Leaf¹ & Alyne Kassardjian¹ & Misty L. Oppenheim-Leaf² & Joseph H. Cihon¹ & Mitchell Taubman¹ & Ronald Leaf¹ & John McEachin¹

SCIENCE, PSEUDOSCIENCE, & ANTISCIENCE

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OUR CONCLUSION

BRACE YOURSELF

**THE PSEUDOSCIENCE IS
COMING**



LEVEL 7: SOCIAL THINKING® RESPONSE

Behav Analysis Practice (2016) 9:403–408
DOI 10.1007/s40617-016-0151-y



DISCUSSION AND REVIEW PAPER

Social Thinking® Methodology: Evidence-Based or Empirically Supported? A Response to Leaf et al. (2016)

Pamela J. Crooke¹ · Michelle Garcia Winner¹

ESSENCE OF THEIR RESPONSE

- **Not Claiming to Be Empirically Based**
- **Defining Evidence Based**
- **Claiming to Be Evidence Based**
- **Can Work Collaboratively with ABA**
- **Ignored Comments on Pseudoscience**
- **Told Us That We Misinterpreted Their Statements**

LEVEL EIGHT: RESPONDING TO SOCIAL THINKING®

Behavior Analysis in Practice

<https://doi.org/10.1007/s40617-018-0241-0>



DISCUSSION AND REVIEW PAPER



Social Thinking® Pseudoscientific, Not Empirically Supported, and Non-Evidence Based: a Reply to Crooke and Winner

Justin B. Leaf¹ & Joseph H. Cihon¹ & Julia L. Ferguson¹ & Mitchell Taubman¹ & Ronald Leaf¹ & John McEachin¹

Association for Behavior Analysis International 2018

Abstract

J. B. Leaf et al. (Behavior Analysis in Practice, 9, 152–157, 2016) wrote a commentary on social thinking (ST), an intervention

J Autism Dev Disord (2008) 38:581–591
DOI 10.1007/s10803-007-0466-1

BRIEF REPORT

EFFECTS OF THE SUPERFLEX™ CURRICULUM ON OF PRIMARY STUDENTS WITH ATTENTION DEFICIT DISORDER AND AUTISM SPECTRUM

DISORDER AND AUTISM SPECTRUM

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Arts in Special Education

For the degree of Master of Arts in Special Education

Mild/Moderate Disabilities

By

Kaitlin Riemen Yadiosky

Brief Report: Measuring the Effectiveness of Teaching Social Thinking to Children with Asperger Syndrome (AS) and High Functioning Autism (HFA)

Pamela J. Crooke · Ryan E. Hendrix · Janine Y. Rachman

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Abstract This is the first report from a large multiple baseline single-subject design study of children with Autism Spectrum Disorders (ASD). This brief report examines effectiveness of teaching a social cognitive (Social Thinking) approach to six males with Asperger syndrome (AS) or High Functioning Autism (HFA). Data included are restricted to pre-post-treatment comparisons of verbal and non-verbal social behaviors. Structured treatment and semi-structured generalization sessions occurred over eight weeks. Results indicated significant changes from pre- to post- measures on both verbal/nonverbal "expected" and "unexpected" behaviors, significant increases in the subcategories of "expected verbal", "listening/thinking with eyes", and "initiations", and robust decreases in the subcategories of "unexpected-verbal" and "unexpected-nonverbal". Importance of social cognitive approaches for children AS and HFA is discussed.

Keywords Asperger syndrome · High functioning autism · Social cognition · Social skills · Social thinking

Introduction

Social difficulties in children with autism spectrum disorders (ASD) are well recognized and considered to be a defining characteristic of autism (Krasner et al. 2005; Ozonoff and Miller 1995; Marriage et al. 1995; Weiss and Harris 2001). Interventions for social deficits reported in the literature vary widely in scope and effectiveness. Treatment studies commonly report the use of discrete skill-based approaches to teaching social behaviors, especially for children with emerging language or limited language skills. For children with ASD who possess more complex language, for instance, Asperger syndrome (AS) or High Functioning Autism (HFA), social cognitive tasks, such as interpreting verbal/nonverbal actions/intentions, understanding social reciprocity, and adjusting verbal/nonverbal behavior according to social cues, prove troublesome (Koning and Magill-Evans 2001; Ozonoff and Miller 1995; Tsatsanis et al. 2004; Weiss and Harris 2001). Social skill training, which involves the explicit teaching and reinforcement of desired discrete social skills, has been and continues to be a key feature of intervention for children with autism since the mid-1960's (Strain and Hoyson 2000). The literature is clear in stating that social skills can be taught, however, efficacy reviews do not boast "large-scale improvements" or evidence of generalization (Barry et al. 2003, p. 687; Bellini et al. 2007; Krasner et al. 2003; Williams et al. 2006). Why do traditional social interventions not lead to enduring social proficiency? It may be that the majority of treatment approaches fail to address the

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Thinking Socially Teaching Social Knowledge to Foster Social Behavioral Change

Pamela J. Crooke, Michelle Garcia Winner, and Lesley B. Olswang

This article addresses the complexity of what it means to "be social" thinking. This perspective recognizes social cognitive processes for social knowledge and, in turn, social behaviors. The article fur influence how one understands how to do what is expected in order how development, stakeholders, and context influence that process for individuals with autism spectrum disorders are discussed, as behavior-based and cognitive-based therapies. Finally, an example of based treatment framework, Social Behavior Mapping, is used to illustrate cognitive behavioral therapy. **Key words:** ASD, CBT, social behavior skills, social thinking

SEVERAL DECADES worth of research and clinical observation have described individuals with a variety of social communication challenges, but social challenges are particularly salient among individuals with a diagnosis of autism spectrum disorder (ASD). No single point stands out to describe the social problems associated with ASD, as is

appropriate for individuals. In turn, a been developed to address social concerns, each with its own perspective on what it means to be social and how to best tackle concerns in treatment. In order for clinicians to make informed decisions as they plan treatment for individual clients, they need to understand the theoretical foundations on which various interventions are based. In this article, we attempt to elucidate the complex nature of being social and argue for the importance of focusing on not only behaviors but also underlying knowledge about how to behave socially in different contexts. We then describe the application of this perspective to individuals with high-functioning ASD, along with a specific example of a multidimensional framework for intervention.

BEING SOCIAL

What does it mean to be social? Or more accurately, what does it mean to be considered socially appropriate? Social competence is a judgment others form about us, as individuals, based on their interpretation of our social behaviors. We do not get to decide for ourselves,

Author Affiliations: Social Thinking, Santa Clara, California (Dr Crooke and Ms Winner); and Department of Speech and Hearing Sciences, University of Washington, Seattle, Washington (Dr Olswang).

While no direct financial support was provided for this project, Dr Crooke serves as the Chief Strategy Officer for Social Thinking and therefore receives a salary as part of this role. No other financial benefits or compensation relate to her position. Ms Winner owns the company Think Social Publishing, Inc., through which all Social Thinking concepts are developed. She is the founder of Social Thinking. She receives a salary from the company and spent part of her time working on this project for the group through her salaried income. Dr Olswang was recruited to be a research advisor and receive financial compensation from the research department in Social Thinking for expertise and time.

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the ideas of others, even before they can verbally express these ideas (Meltzoff, 1995). For example, the more a child engages in verbal communicative exchanges, the more he or she learns about what other people are thinking.

This early social thought ignites the development of perspective taking which encourages abstract language to communicate increasingly complex feelings and thoughts (Flavell, 2004). By four years of age, neurotypical children emerge in their use of mental state verbs (e.g., think, know, guess, decide, etc.) to express information about what they think others are thinking (De Villiers, 2000). By six years old they can understand the basic concept that people can lie, cheat and steal (Baron-Cohen, 2000). As children begin to realize they can manipulate other people, their language emerges into increasingly sophisticated linguistic trickery. It is not uncommon to see a third grade child trick someone into looking in a certain direction and then state, "made you look."

Social manipulation and the ability to think socially appear to be critical not only for social participation but also for understanding aspects of play, problem solving, understanding communicative intentions, written expression and reading comprehension (Booth, Hall, Robison & Kim, 1997; Norbury & Bishop, 2002; Westby, 1985). Not coincidentally, abstract social language and communicative interpretation become heavily coded in academic curricula, as students are asked early in their educational journey to interpret the intentions of a character in a story to understand the motives for the actor's actions. Children with typical development acquire this social communication foundation with ease; however, those with social learning



Efficacy of cognitive behavior therapy-based social skills intervention for school-aged boys with autism spectrum disorders

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ABSTRACT

School-aged children with Autism Spectrum Disorders (ASD) experience significant difficulty with peer interaction. Research to identify the most effective strategies to address this difficulty has increased but more evidence is needed. Cognitive behavior therapy (CBT), which focuses on changing how a person thinks about social situations as well as how he behaves, is a promising approach. This study evaluated the efficacy of a 15 week CBT-based social skills intervention for boys aged 10–12 years diagnosed with an ASD. Boys with average or better IQ and receptive language skills were randomly assigned to either a control (n = 8) or intervention condition (n = 7). During intervention, boys attended weekly 2 h long group sessions focusing on self-monitoring skills, social perception and affective knowledge, conversation skills, social problem-solving, and friendship management skills. Comparison of the outcomes using repeated measures analyses indicated that boys receiving the intervention scored significantly better on measures of social perception, peer interaction, and social knowledge than boys who had not received intervention. There were no differences on general measures of socialization. The manualized intervention used in this study shows promise but replication with larger samples is needed.

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1. Introduction

Difficulties engaging in social interaction are a primary concern for children with high-functioning autism (HFA) or Asperger's Syndrome (AS). While they are considered high-functioning by virtue of IQs in the average or above average range, they have social deficits which are primarily centered around social reciprocity, social cognition, and pragmatic language (e.g., Adams, Green, Gilchrist, & Cox, 2002; Church, Daniels, & Amanullah, 2000; Downs & Smith, 2004). Social difficulties become more evident as they begin school and move towards adolescence when the nuances of social interaction are more demanding. These children initiate fewer social interactions with peers (Orson, Krauss, & Seltzer, 2004) and are less socially responsive (Volkmann, 1987). They have difficulty inferring others' emotions and responding appropriately (Koning & Magill-Evans, 2001a; Ozonoff, Pennington, & Rogers, 1990), taking others' perspectives (Rehfeldt, Dillen, Ziomek, & Kowalchuk, 2007), and understanding social rules and conventions of interaction (Church et al., 2000).

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In recent years, considerable interest has surfaced regarding the research-to-practice gap in communication sciences and disorders and, most importantly, ways to reduce it (as exhibited by the American Speech-Language-Hearing Foundation, 2014, and this supplement). Ideas for bringing evidence-based knowledge into practice include making research findings more accessible to practitioners through practice portals, systematic reviews, and practice guidelines. Recent emphasis on "implementation science" acknowledges the challenges of moving evidence through the research pipeline from bench to practice. Although this approach is an argument for the need to address practice needs and emphasizes the importance of research-practitioner collaboration, it too is based on a "one-way path" or "push" approach of moving research findings into practice. One can argue that prevailing wisdom has been that if evidence-based knowledge via controlled research studies is brought to bear on practice, the result

will be more effective and efficient care for patients (Grol & Wensing, 2013). Perhaps, however, those making efforts to improve practice would do well to consider supplementing and complementing customary research practices with other sources of evidence, namely, from practice-based research (PBR).

Bidirectional Research Approach for Closing the Research-Practice Gap

This article examines the prevailing wisdom of moving evidence into practice as defined by the traditional research pipeline that has been viewed as the gold standard in health care. In comparison, evidence that comes from practice is explored as an alternative research-based paradigm that complements the traditional approach. Research originating within the research and practice setting is explored as a way to more effectively close the research-practice gap. PBR is defined, including principles and methodological guidelines. To illustrate PBR, retrospective data from an existing, highly utilized methodology for teaching social knowledge and behaviors to individuals diagnosed with social learning challenges, including autism spectrum disorders (ASD), is

Disclosure: Pamela J. Crooke serves as the Chief Officer of Social Thinking and therefore receives a salary as part of this role. No other financial benefits or compensation relate to her position. Lesley B. Olswang was recruited post-data collection by the first author to be a research advisor and receive financial remuneration from the research department in Social Thinking for her expertise and time.

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speech-language pathologist and the founder of Pamela Crooke is the Director of Research and Social Thinking Center.

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related strategies to help our students with social communication competencies requires us to Coherence (CC), and Executive Functioning (EF) instruct elements of social learning to explore communication and how this information is assessment currently available in our field. to be stronger social observers or "detectives" practice adapting their behaviors based on

the situation and the people within it is key to teaching social EF. Treatment philosophy encouraging the use of systematic social communication frameworks, such as Carol Gray's Social Stories (Gray & Garand, 1993) and Social Thinking's Social Behavior Mapping (Winner, 2007b) is explored to assist our students' in their development of social and self-regulatory strategies.

In today's educational and clinic arenas, executive functioning (EF) has morphed into an umbrella term that can represent many different things to many different people. At a core level, most of us think about it from a functional point of view—the abilities that allow us to plan, problem solve, and organize our lives—the "doing" processes we undertake. But what exactly are we supposed to plan, organize, and problem solve? The things we do or the thoughts in our heads? How about our social relationships? To what extent is EF part of the dynamic and synergistic social learning process we all experience day-to-day?

Furthermore, if we acknowledge that EF and social learning are, in fact, fibers in the same cloth that is our social nature, how does this notion impact how we teach social skills? Are we only teaching social skills, or do we "teach social" as a broader goal that encompasses not just an emphasis on the social behaviors we exhibit, but includes teaching the necessary EF abilities that facilitate the mental processing that precedes the behavior? At a practical level, is "thinking social" actually a social EF process that needs to be taught? This paper will take on the challenge of honing in on the role of social in EF that has been overlooked, in part, by contemporary research (Barkley, 2012). While common sense combined with professional judgment tells us that EF plays a role in social functioning across the home and school day, it does not give us a pathway for treatment. Our hope it to keep common sense as our guidepost while connecting the current literature to guide practical treatment strategies for the interplay between social learning and EF.

NOT EMPIRICALLY
SUPPORTED

WHAT IS EVIDENCE BASED PRACTICE?



(APA, 2006; ASHA, 2005; Dollaghan, 2007;
Kazdin, 2008; NAC, 2015)

EVIDENCE BASED PRACTICE?

- APA (2006)
- ASHA (2005)
- Kazdin (2008)
- La Roche & Christopher (2009)

- Dollaghan (2007)
- National Autism Center (2015)
- Wong et al. (2015)
- Council for Exceptional Children
- Horner et al. (2005)

NOT AN EVIDENCE BASED PRACTICE

NOT ALIGNED WITH
ABA

STILL IS A
PSEUDOSCIENCE

LEVEL NINE: WHAT PEOPLE ARE SAYING



FACEBOOK RESPONSES

- **They Are Effective**
 - “This is about Social Thinking, but it has some interesting information...” (SOCIAL THINKING)
 - “We use them in our class with 2 of our students. They allow our students to see the flow of the necessary transition and what the achieving outcomes might be easier. Work well.” (SOCIAL STORIES)
 - “Imma big fan of Social Thinking and it’s pretty cognitive.” (SOCIAL THINKING)
- **Misinterpreting the Information**
 - “The evidence supports using them as part of a package. I have had success with combining with BST.” (SOCIAL STORIES)

FACEBOOK RESPONSES

- **In-conjunction**
 - “This comes up a lot. It is a useful tool when used in conjunction with ABA teaching methodologies, like behavioral skills training. It is not ABA on its own.” (SOCIAL THINKING)
- **Using Them**
 - “My Daughters ABA team makes them for us. They really seem to work.” (SOCIAL STORIES)
 - “Social story about winning and losing, work on flexibility, Superflex is awesome to help with this.” (SOCIAL STORIES AND SOCIAL THINKING)
- **No Harm**
 - “I think it’s always worth a shot. Some kids utilize them more than others. I’ve seen great success though. There are apps to make stories, I worked with a kid who liked to help make his.” (SOCIAL STORIES)

FACEBOOK RESPONSES

- **Importance of Evidence Based**
 - “I think it’s helpful that, rather than sort things as evidence based or non evidenced, it can be helpful to look at how we can use the wonderful ideas and materials so many people have come up with over the years in a more evidenced base way.” (SOCIAL STORIES)
 - ”It doesn’t lend itself to that kind of measurement and progress is going to be different.” (SOCIAL THINKING)



MY THOUGHTS

- **Effectiveness**
- **Understanding Research**
- **In-Conjunction**
- **Using Them**
- **No Harm**
- **Importance of Evidence Based and Empirically Supported**
- **It Works for My Child**
- **Ethical**

ETHICAL COMPLIANCE CODE

- **1.01 Reliance on Scientific Knowledge**
 - “Behavior analysts rely on professionally derived knowledge based on science and behavior analysis when making scientific or professional judgments in human service provision, or when engaging in scholarly or professional endeavors (p. 4).”
- **2.09 Treatment/Intervention Efficacy**
 - (a) “Clients have a right to effective treatment (i.e., based on the research literature and adapted to the individual client). Behavior analysts always have the obligation to advocate for and educate the client about scientifically supported, most effective treatment procedures. Effective treatment procedures have been validated as having both long-term and short-term benefits to clients and society (p. 8.)”

ETHICAL COMPLIANCE CODE

- **2.09 Treatment/Intervention Efficacy**
 - (c) “In those instances where more than one scientifically supported treatment has been established, additional factors may be considered in selecting interventions, including, but not limited to, efficiency and cost effectiveness, risks and side-effects of the interventions, client preference, and PR actioner experience and training (p. 9).”
- **4.01 Conceptual Consistency**
 - “Behavior analysts design behavior-change programs that are conceptually consistent with behavior analytic principles (p. 12).”

MY THOUGHTS: AS A BEHAVIOR ANALYST WE CANNOT...

- **Endorse**
- **Recommend**
- **Implement**
- **Implement In-conjunction with ABA**

MY THOUGHTS: AS A BEHAVIOR ANALYST WE NEED TO...

- **Stand Up to All Pseudoscience and Antiscience**
- **Implement Empirically Supported and Evidence Based Procedures**
- **Not Implement an Eclectic Approach**
- **Do What is Right For Individuals with ASD**

ABA COMMUNITY NEEDS TO TAKE A STAND





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ORIGINAL PAPER

An Evaluation of a Behaviorally Based Social Skills Group for Individuals Diagnosed with Autism Spectrum Disorder

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Misty Oppenheim-Leaf¹ · Norma Torres¹ · Donna Townley-Cochran¹ · Ronald Leaf¹ ·
John McEachin¹ · Paul Yoder² · Autism Partnership Foundation**

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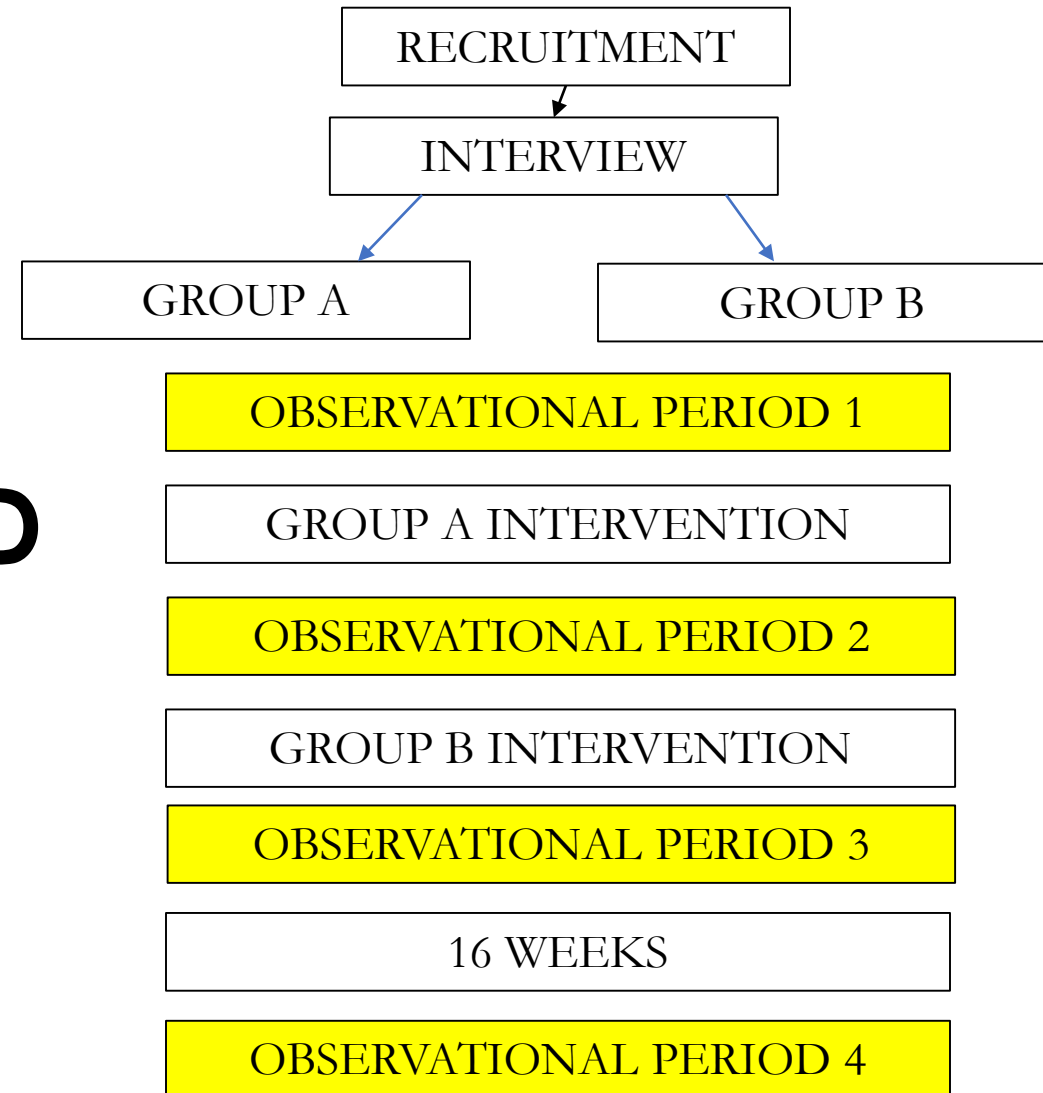
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PARTICIPANT OVERVIEW

Domain	Group A	Group B	P Value	Significant Difference
Number of Participants Meeting Inclusion Criterion	8	7	N/A	N/A
Average Age in Months	55 Months	58 Months	0.555	Not Significant
Average IQ Score	101.4	105.7	0.448	Not Significant
Average Vineland Adaptive Score	83.9	82.9	0.918	Not Significant
Average Expressive 1 Word Standard Score	108.8	109.1	0.933	Not Significant
Average Peabody Picture Vocabulary Standard Score	104.2	108.6	0.435	Not Significant



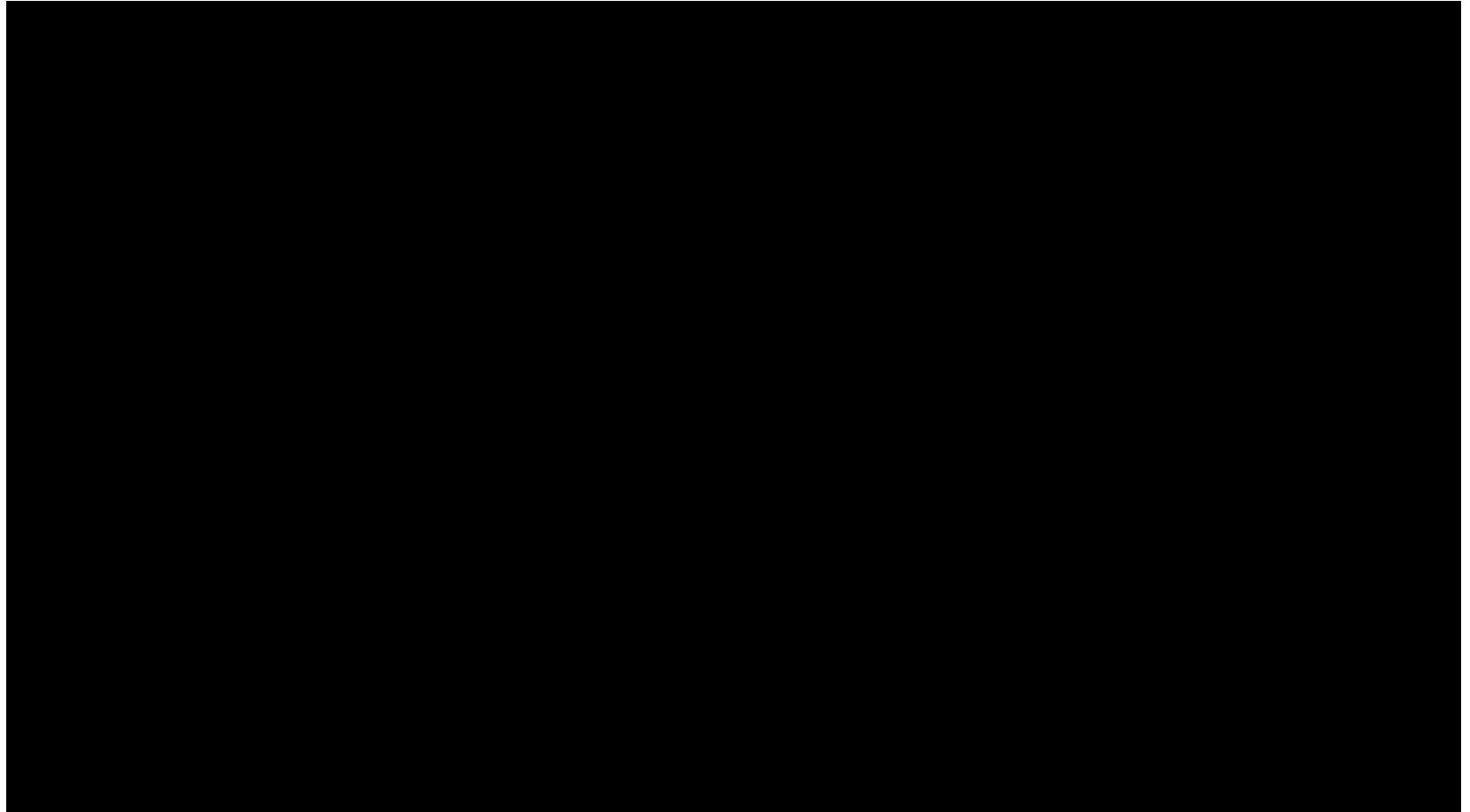
GENERAL METHOD



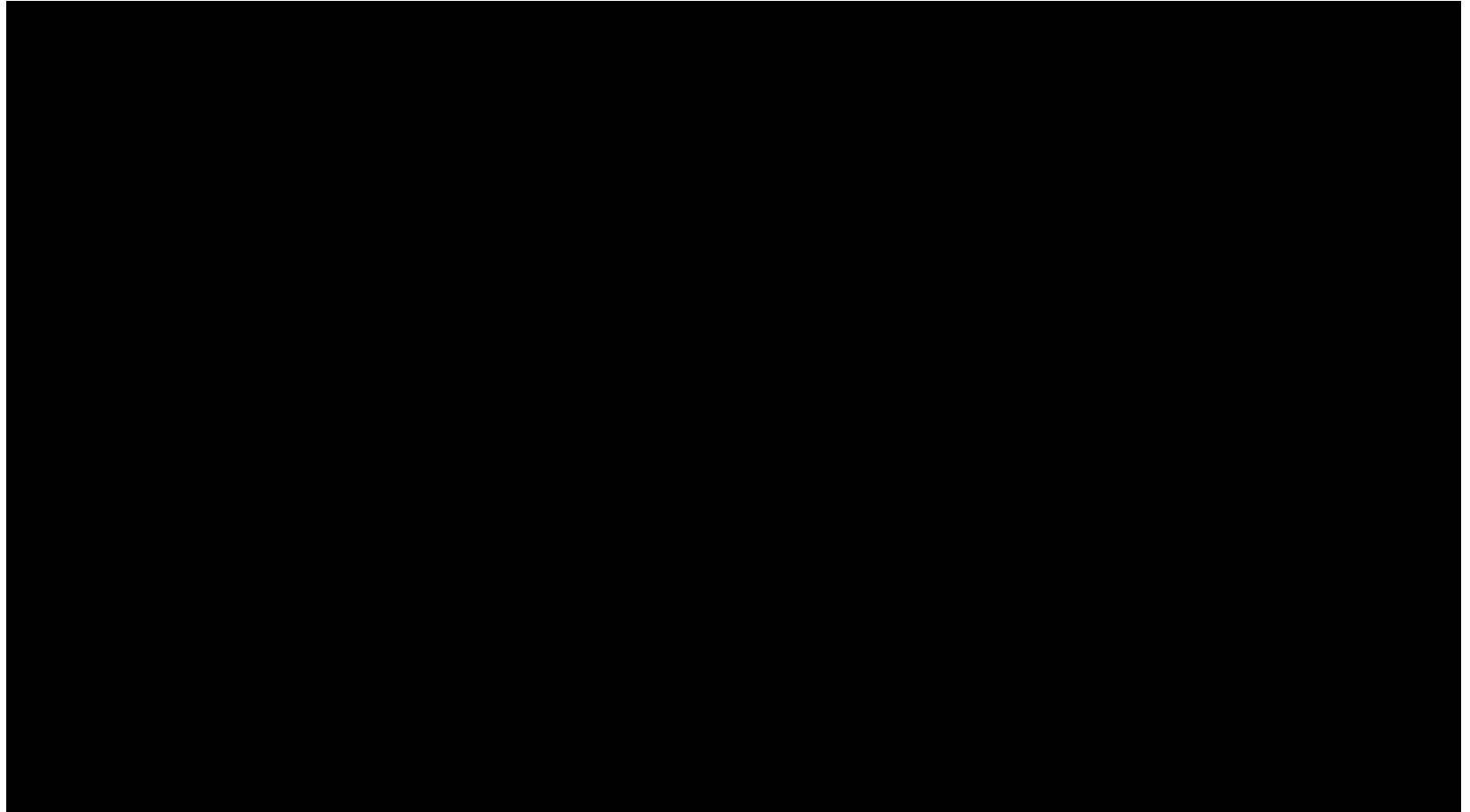
SOME SKILLS TARGETED....

Behavioral Control	Frustration Tolerance	Recall	Understanding Contingencies	Attending	Observational Learning	Conditional Instructions
Receptive Instructions	"Figuring it Out"	Play Areas	Duck-Duck Goose	Favorable Affect	Learning from Feedback	Flexibility
Delayed Instructions	Rule Governed Play	General Knowledge	Pop Culture Knowledge	Playing with A Friend	Asking for Help	Joining In
Walking in Line	Talking to a Friend	Responding	Being Silly	Losing Graciously	Trying	Friendship Development

SLEEPING GAME



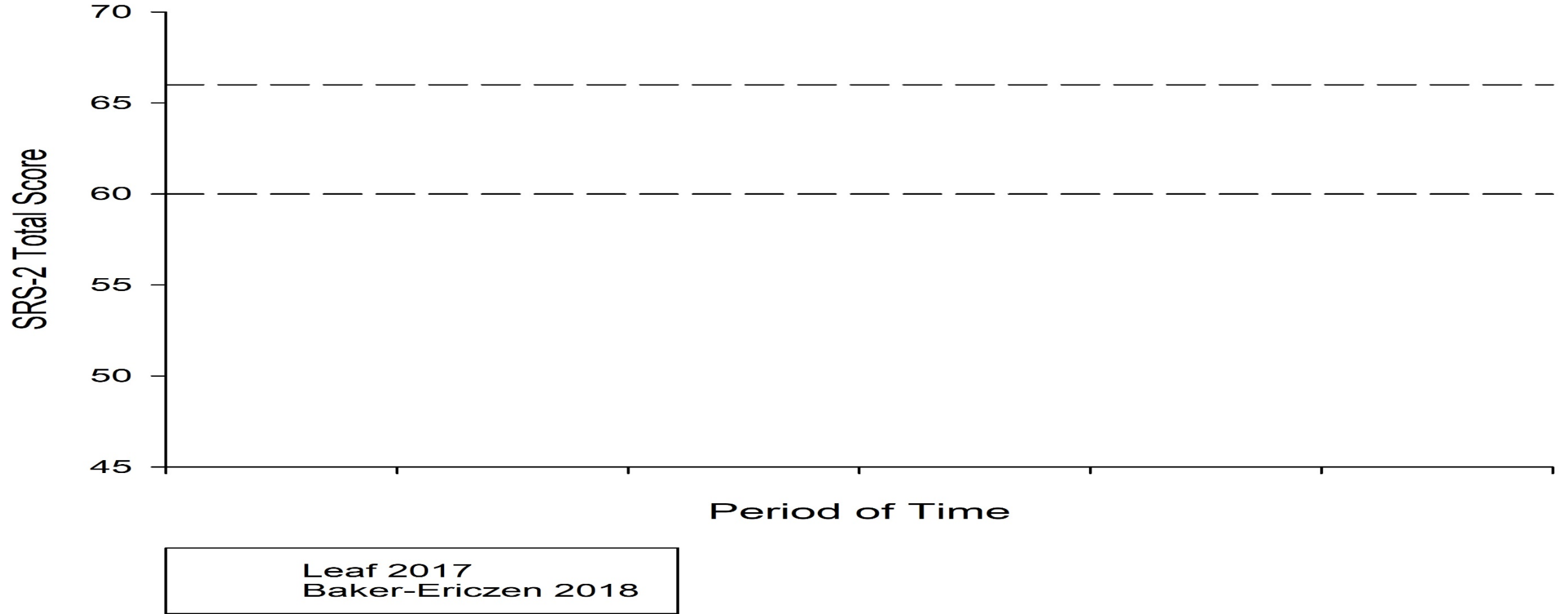
FRUIT SALAD



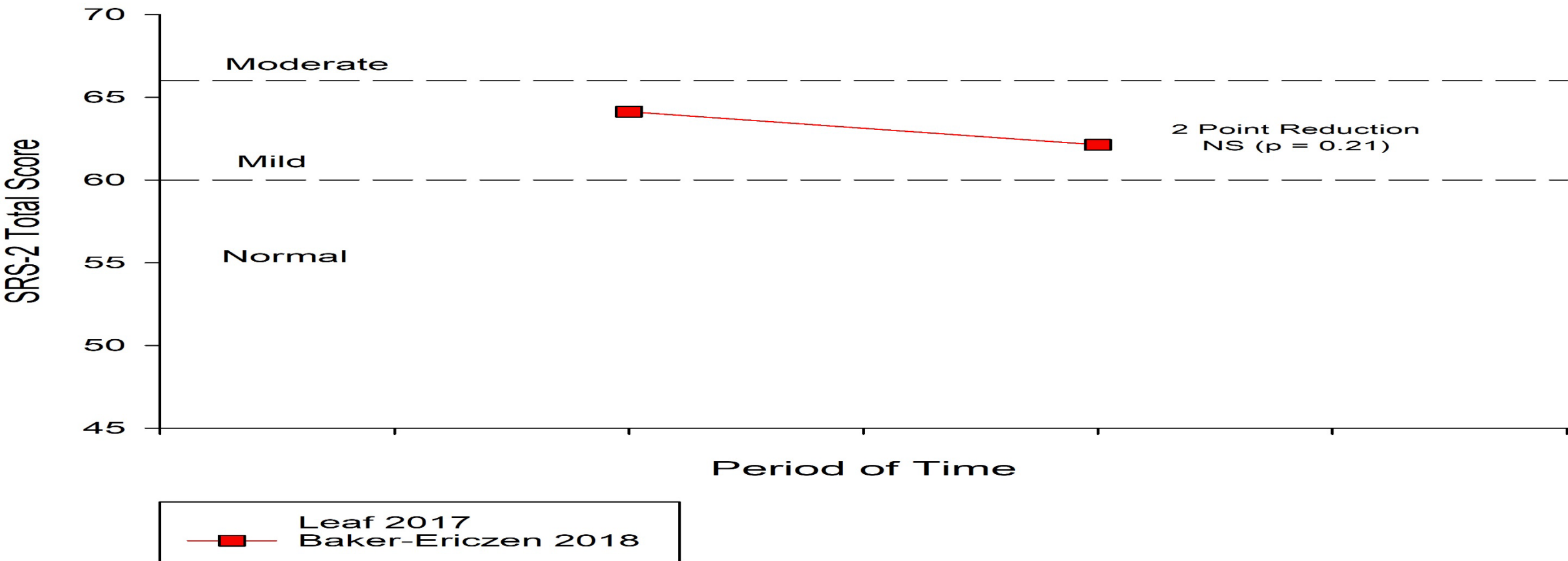
FROM FACEBOOK

“Justin Leaf why is it so difficult to admit that another field may be better equipped to work on a particular area that is not really our strong point?”

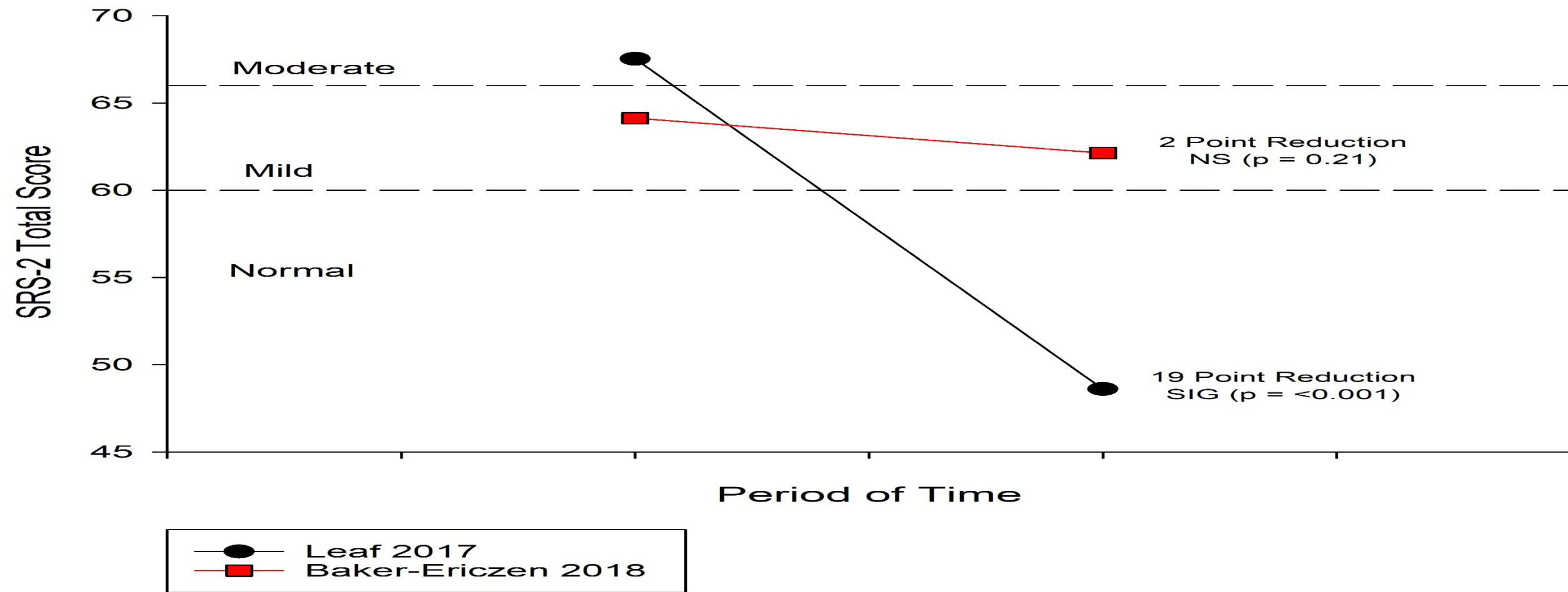
HOW DOES IT COMPARE TO SOCIAL THINKING ®?



HOW DOES IT COMPARE TO SOCIAL THINKING ®?



HOW DOES IT COMPARE TO SOCIAL THINKING ®?



FINAL THOUGHTS

- **We Need to Implement Evidence Based and Empirically Supported Procedures**
- **You Cannot be a Behavior Analyst Only Part of the Time**
- **Do What is Right**

obrigado

Dank U

Merci

mahalo

Köszí

спасибо

Grazie

Thank
you

mauruuru

Takk

Gracias

Dziękuję

Děkuju

danke

Kiitos