Introduction to the National Autism Conference 2018

August 6, 2018
National Autism Conference
Amiris Dipuglia
Welcome to the National Autism Conference!
This Session

• Will provide a review of some basic information related to technical terminology you may hear across many sessions

• Will provide a review of the conference schedule and highlights related to areas of interest
Focus of the Conference...

• The National Autism Conference is about instruction and autism
• It is probably the largest education conference in the world focused on education and the needs of students with autism
• Many of the sessions are focused on issues related to systematically building complex social and verbal skill sets!
What is Autism?

• Let’s look at the definition found in DSM V
• That’s DSM 299.00 in case you were wondering!
• Keep in mind that no child is “autism”: each child is an individual
• “You’ve met one child with autism, you’ve met one child with autism” P. Gerhardt
What Are Autism Spectrum Disorders? (DSM V Summary)

• **Social-Communication Deficits and Repetitive Behaviors:**
  – responding inappropriately in conversations
  – misreading nonverbal interactions
  – having difficulty building friendships appropriate to their age
  – may be overly dependent on routines, highly sensitive to changes in their environment, or intensely focused on inappropriate items

• The symptoms fall on a continuum (from mild to severe)

• Variations in symptoms and behaviors from person to person

• Symptoms occur from early childhood, even if those symptoms are not recognized until later

• Adapted from: http://www.dsm5.org/Documents/Autism%20Spectrum%20Disorder%20Fact%20Sheet.pdf
What are Autism Spectrum Disorders?

- Developmental Disability
- Diagnosis derived from behavior
  - No brain scan or blood test
  - Assumed biological disorder most likely of genetic origin characterized by qualitative differences in:
    - Social communication
    - Repetitive and stereotyped behaviors
PDE Child Count Data: Students Eligible for IEPs Under Definition of Autism, Ages 3-21
What does the literature say about effective instruction and autism?

- National Autism Center Standards Reports (2009; 2015) probably provides the most thorough and relevant summary
• “The National Autism Center has adopted the definition of evidence-based practice offered by David Sackett and his Colleagues: evidence based practice as ‘the integration of best research evidence, professional judgment, and values and preferences of clients.’” p.80

• “The combined results of NSP1 and NSP2 include data from more than 1000 studies. This is the largest review of its kind for individuals with ASD.” p. 80

• The report and evaluation methods can be retrieved from: http://www.nationalautismcenter.org/national-standards-project/phase-2/
Evidence-Based Interventions by Quantity of Findings

SMRS Research Findings
Interventions by Quantity

Quantity of Articles

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Intervention Category

- Behavioral Interventions
- Modeling
- Parent Training Package
- Peer Training Package
- Story-Based Interventions
- Social Skills Package
- Self-Management
- Naturalistic Teaching Strategies
- Pivotal Response Treatment
- Cognitive Behavioral Intervention
- Language Training Production
- Scoping
NAC Standards Report Conclusions (2009):

• Approximately two-thirds of the Established Treatments were developed **exclusively** from the behavioral literature (e.g., **applied behavior analysis**).

• Of the remaining one-third of the Established treatments studies are derived **predominantly** from the behavioral literature.

• This pattern of findings suggests that treatments from the behavioral literature have the strongest research support at this time.

• PATTAN Autism Initiative focuses primarily on interventions derived from or relying on principles of ABA.
Further Evidence for ABA and Autism Treatments

- National Autism Center Standards Report
- Maine Administrators Report
- Missouri Autism Guidelines
- Numerous research articles published in a wide range of behavioral, educational and disability focused peer reviewed journals
- Student level data: probably the strongest argument for ABA
Autism “A fad magnet” (Metz and Mulick, 2005)

• Be wary of quick fix interventions: some examples..
  – Sensory Integration
  – Facilitated communication
  – Vaccines/Mercury cause Autism
  – Rapid prompting
  – Certain biomedical interventions (chelation; diets)
  – And on and on..
Sessions on Evidence and Implications

- 10 & 17-Eb Blakely, Lindsey Wright, and Amber Lampert: Health and Safety Programs: ABA Procedures and Outcomes (Monday PM & Tuesday AM-intermediate)
- 11-Mike Miklos: Review of Evidence-Based Practices for Parents (Monday AM)
- 41-Panel Discussion: Perspectives on the Importance of a Behavior Analysis in Educational programs for Students with Autism Spectrum Disorders (Tuesday PM)
Sessions on Evidence and It’s Implications

• 57B Kara Vollmer & Ginette Drabert: Autism Services in Rural Areas: Two Examples of Integrated Intensive Programming

• 87-David Roth: Stimulus Control and its Role in Errorless Learning (Thursday PM-all participants)
Don’t Forget the Archives!

• Numerous sessions archived over several years

http://legacy.wpsu.org/live/archive/
Quality Educational Programs: Key Features

- Focus on addressing core deficits of autism
- Provide high rates of active student responding
- Build Skills: explicit instruction
- Use of positive reinforcement/skill building
- Honor student interests, personality and skills
- Data driven
- Collaborative!

Video Harrisburg case studies
Sessions on Quality Instruction

• 13 & 27-Barry Morgenstern: Strategies for Making Inclusion Successful- (Tuesday Am & PM- all participants)

• 15-Ivy Chong: Teaching Procedures and Programs for Learners Diagnosed with Autism (Monday AM-intermediate)

• 35-Laura Yates: Instruction Basics (Tuesday PM- all participants)

• 36- Dita Chapman and Helena Vadurova: International Applications Derived from PaTTAN’s Autism Initiative (Tuesday PM-Intermediate)
Sessions on Quality Instruction

• 50-Jared Campbell & Amiris Dipuglia: Mathematics in Autism Interventions Topic (Wed AM-intermediate)
• 52-Aimee Miller: Teaching Basic Early Learning Skills to Naive Learners (Wed AM-all participants)
• 63a/63b-Promising Practice: Effective Instructional Practices (Wed PM-all participants)
• 65a/65b-Promising Practice: Making the Impossible – Possible! (Wed PM-all participants)
• 66a/66b-Promising Practice: Effective Group Instruction Across the Curriculum (Wed PM-all participants)
Sessions on Quality Instruction

• 73-Amiris Dipuglia: Sequence of Instruction from Basic to Complex Skill Sets for Children with ASD (Thursday PM- Intermediate)

• 83-Lori Chamberlain: The Role of Fluency in Programming for Students with Autism (Thursday AM-intermediate)

• 93-Aimee Miller and Ashley Harned: Direct Instruction Workshop (Thursday PM-all participants)
A Brief Review of ABA

• ABA is not a thing or a procedure
• It is a system of evaluating how the behavior of individuals systematically changes in relation to the ongoing and past situations in which the person behaves.
So What is ABA?

• The application of science of learning to socially significant human behavior
  – Applied: socially significant
  – Behavior: relation between environmental events and what people do
  – Analysis: uses scientific methods to establish and evaluate applications
  – It is a process, not necessarily a procedure

• Any intervention/method can use ABA; however, not all interventions do!
• What is a BCBA?
• What is a BCaBA?
• What is a RBT?
• Why are they helpful?

Session 12: An Update on Ethics from the Behavior Analyst Certification Board
Immediately after this session (all participants)
Applied Behavior Analysis

• Builds skills to help people be more independent

• Helpful across:
  
  **education, business, health practices** (e.g. smoking cessation, weight loss, reducing obsessions, etc), **animal training** (e.g. pouched rats and land mines), **environmental sustainability** (e.g. towel reuse in hotels and litter reduction), **occupational safety, gun safety, transportation safety**, and more...
ABC Analysis

- A = Antecedent (before behavior)
- B = Behavior (what a person does: observable and measurable)
- C = Consequence (after behavior)

video ABC analysis
Behavior Analysis Key Terms

• Antecedent
  – Motivating Operation
    • Unlearned (UMO)
    • Transitive (CMO-T)
    • Reflexive (CMO-R)
  – Discriminative stimulus (Sd)
    • Stimulus control
    • Instructional control
  – Prompt
Behavior Analysis Key Terms

- **Consequence**
  - Reinforcement
  - Positive Reinforcement
  - Negative Reinforcement
  - Punishment
  - Extinction
  - Schedules of Reinforcement (for instance, continuous, variable ratio, interval)
Why an ABC Analysis is Helpful

- It avoids having to guess about un-observable events (what is going on “inside the person”)
- It is optimistic!
- It allows for checking to see that interventions really work!
Some Educational Applications of ABA

- Mand Training
- Discrete Trial Training
  - Errorless Teaching
  - Error correction
- Direct Instruction
- Social skill building
- Altering a school culture
Sessions on Behavior Analysis

• 18 & 32-Tim Hackenberg: Token Reinforcement: Bridging the Gap Between Science and Application (Tuesday AM & PM-intermediate)

• 19 & 33-Tim Vollmer: Differential Reinforcement as a Way of Life (Tuesday AM & PM-intermediate)

• 25-Lori Chamberlain & Rebekah Houck: Daily Ethical Considerations for Behavior Analysts (Tuesday PM-intermediate)

• 29- Ilene Schwartz: Ethical Dilemmas and Realistic Solution: Grappling with the Challenges of Practicing Behavior Analysis in the Real World (Tuesday PM-intermediate)
Sessions on Behavior Analysis

• 6 & 39-David Wilder: Integrating OBM Procedures into ABA Service Provision (Monday PM & Tuesday PM-intermediate)


• 76 & 89-Wayne Fuqua: Ethics (Thursday PM-advanced)

• 79 & 85b-Amy Naccarelli and Rebekah Houck: From Discrete Trial to Real Life Applications- Parts 1 &2- full day session Thursday-all participants

• 91-Rachel Kittenbrink: Supervision and Professional Mentorship (Thursday PM-intermediate)
Social Communication and Autism

- The Basic Verbal Operants
- Speaker Skills
  - Mand
  - Tact
  - Intraverbal
  - Echoic
  - Imitation (with sign language)
- Listener Skills
  - Listener Responding (Receptive)
- And Complex Skills
  - Multiple control
  - Atomic repertoires!!! (Palmer, 2012)
Sessions on the Analysis of Verbal Behavior and Complex Language

• 14 & 28-Vince Carbone: Teaching Advanced Verbal Behavior (Tuesday Am & PM-intermediate)

• 9- Charles Catania: Stimulus Control: Implications for Verbal Behavior, Social Contingencies and Education (Monday PM- all participants)
What is a Mand? Common Terms:

- Request
- Asking for something
- A question
-Demanding
- Inquiring
- Commanding
A Functional Approach to Language

Mand: Asking for something (A preferred toy, activity, information, etc.)

Tact: labeling what you see, hear, smell, taste, or touch

Echoic: repeating what has been said

Intraverbal: responding with words to things that have been said (conversation, answering questions, word associations)
A Functional Approach to Language

Listener responding/receptive: Following directions, selecting things named or otherwise behaving as a listener without speaking

Motor Imitation: Doing the same thing someone else does.

Match to Sample: Putting an item or picture in proximity of something with shared characteristics.

Introduction to Mand Training video

Video Sharae and Mike
Sessions on Mand Training

- 21-Ryan Delaney: Mand Training 101 (Tuesday AM-all participants)
- 82b-Mike Miklos: Advanced Mand Training (Thursday PM-intermediate)
- 84- Sarah Knaus, Katelyn Schulmeister, Meghan Foust and Maureen Archer: Mand Training from Elementary to High School (Thursday AM-all participants)
Some Words About Data

• Key aspect of ABA: understanding some of this may help you at this conference!
• Human memory is quite fallible
• Data helps us remember what happened
• Data helps us see patterns of performance and behavior change
• One might not need data on every behavior, but without data people often end up guessing
• Data systems should not interfere with instruction, rather they should support teaching and learning
Types of Data

- Counts
- Timings
- Continuous
- Sampled
- Skill Probes
- Cumulative responses or skills acquired
The Analysis: Functional Relations

• Graphs are very valuable
  – They allow a quick check of how a program or intervention is working

• Tests to determine if things are working:
  – If I change the way I teach, does it consistently change what the student does?
  – Does the intervention function to change behavior?
Total Cumulative Skills in 20 weeks: 68 (20 Mands)
Example: Decision Rules

Baseline | Intervention 1 | Intervention 2

Successive Days

Test Score

Aim line

X
Sessions on Data Analysis

• 42-Rick Kubina: Three Pillars of all Effective Interventions: Defining Behavior, Dimensional Measurement and a Standard Visual Display (Wed Am-all participants)

• All instruction focused sessions will also include data systems and data analysis
Treatment Fidelity and Staff Training

- Instruction and data will only result in good outcomes if interventions are implemented with fidelity.
- Fidelity of implementation is accomplished through:
  - Competency-based training
  - On site guided practice/feedback
  - Verification of treatment fidelity
## Motor Imitation Procedural Fidelity Checklist

Date: _________________   Instructor: _______________________Student: _______________________

Observer 1: _________________________Observer 2:_________________________ IOA% __________

<table>
<thead>
<tr>
<th>Organization</th>
<th>YES</th>
<th>NO</th>
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<tbody>
<tr>
<td>1. Is instructional area neat and sanitized?</td>
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<td>2. Does instructor have all materials needed for instruction organized and ready?</td>
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<td>3. Does instructor have a variety of valuable reinforcers available?</td>
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<thead>
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<th>Teaching Procedures</th>
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<tr>
<td>4. When teaching, does instructor present the S^D and prompt the correct response?</td>
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<td>5. Once the student complies with the prompt, does the instructor re-present the S^D with no prompt or a faded prompt (transfer trial)?</td>
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<td>6. Is transfer trial followed by distractor(s)?</td>
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<tr>
<td>7. Following distract trials, does the instructor re-present the S^D with no prompt or a faded prompt as presented in transfer trial (check trial)?</td>
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<tr>
<td>8. Does instructor model the action to be performed for the prompt, transfer and check trials?</td>
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<td>10. Does instructor use a prompt that results in correct response?</td>
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<td>11. Does instructor differentially reinforce (better reinforcement) target responses?</td>
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<tr>
<th>Error Correction</th>
<th>YES</th>
<th>NO</th>
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<tr>
<td>12. Does instructor end the trial and ensure student is in neutral position (use ready hands if needed)?</td>
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<tr>
<td>13. Does instructor re-present the S^D and prompt the correct response?</td>
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<tr>
<td>14. Does instructor prompt student if no response occurred within 2 seconds for a previously mastered item?</td>
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<tr>
<td>15. Does instructor model the action to be performed for the prompt, transfer and check trials during error correction?</td>
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Notes:_____/15
Percentage of Y’s:
Session on Treatment Integrity and Staff Training

- 64a/64b- Promising Practice: The Role of an Effective Internal Coach in Autism Support Classrooms (beginner – all participants)
- 70a/70b-Promising Practice: Effective Staff Training (Wed-PM-all participants)
- 80- Audrey Banzhaf: Internal Coaching (Thursday AM- intermediate)
Family Engagement

• Meaningful family engagement is associated with:
  – Better School Attendance
  – Higher Test Scores
  – Higher Grades
  – Better Social Skills
  – Better adaptation to School
  – Post Secondary Education more likely

• Parental goals, perspectives and concerns should be considered in educational planning

• Caveat: parent preference is not always consistent with evidence base

• Parent training and communication
Family/Parent Focused Sessions:

- 11-Mike Miklos: Review of Evidence-Based Practices for Parents (Monday AM-all participants)
- 31-Rachel Kittenbrink: Social Communication and Reinforcement in the Home (Tuesday PM-all participants)
- 54-Laura Yates: Individualized Educational Plan (IEP) Basics for Parents (Wed-AM-all participants)
Family/Parent Focused Sessions:

• 56-Amiris Dipuglia: Parenting, Education and the Long View… (Wed PM-all participants)

• 58- Kerry Smith: An Adult Sibling Talks With Parents (Wed PM- all participants)

• 96-Jen Shade: Toilet Training in Public Schools: A Collaborative Effort Between Parents and Schools (Thursday PM- all participants)
Social Skills

• Most social skills involve communication
• Language instruction is social skill training
• Peer to Peer manding often a place to start
• Evidence based methods of addressing complex social skills is important
• Look for interventions that avoid rote learning.
Sessions on Social Skill Training

• 16 & 30- Alice Shillinsburgurg: Strategies to Promote Complex Social Communication Skills in Children with Autism and Significant Language Delays (Tuesday Am & PM-advanced)

• 26- Rene Jamison: Sex Matters: The Unique Presentation of Autism in Females and Overview of the Girls Night Out Model (Tuesday AM- all participants)

• 37- Tamara Kasper- Social Skills and ABA: Using a Functional Assessment and Conceptual Analysis to Guide Treatment (Tuesday PM-intermediate)
Sessions on Social Skill Training

• 43 & 73- Francesca Degli Espinosa: Early Social Responding and Verbal Behavior: An Analysis of Current Applications (Wed AM & Thursday AM- intermediate)

• 55- Jolin Jackson: Social Skills Instruction (Wed AM- all participants)

• 69a/69b- Promising Practice: Watching and Sharing: Using Video Visual Scene Display Technology to Support Communication (Wed PM- all participants)
Behavior management

• FBA
• PBSP
• Function Based
  – Motivation
  – Competing skill
  – Making PB ineffective and inefficient
Sessions on Behavior Management


• 92b- Willow Hozella: Behavior Protocol Workshop (Thursday PM-all participants)
Life skills and Activities of Daily Living

• Functional Approach
• These are critical skills: becoming toilet trained, for instance, alters likely trajectory
• Safety skills
Sessions on Life Skills and Activities of Daily Living

• 62-Promising Practice: Teaching Job Skills – Activities of Daily Living (Wed PM- all participants)
• 24-Sandy Jin: Treating Sleep Problems in Children with Autism (Tuesday AM-intermediate)
Transition Programming

• As children enter middle and high school it is critical to begin planning for the transition to life, career and education opportunities beyond public education.

• Programming for these opportunities remains rooted in evidence base.
Sessions Related to Transition and Career and College Ready

• 40- Laurie Ackles: College to Career: Navigating the Path to Professional Employment for Those on the Autism Spectrum (Tuesday PM- all participants)

• 53- Jane T. Brown and Cherie Fishbaugh: Social Success in College and Beyond: Can ABA and Positive Psychology Work Together? (Wed AM-intermediate)

• 59- Mike Minor and Diane Funsten: How to Plan to Increase Graduation Rates for Students with Disabilities in Pennsylvania (Wednesday PM- all participants)
Sessions Related to Transition and Career and College Ready

• 78-Vanessa Bethea-Miller, Alicia Waranis and Kristen Csizmadia: Topic of Middle/High School Aged Kids of Average Intelligence (Thursday AM- all participants)
• 81 & 94-Peter Gerhardt: Older Students and Transition (Thursday AM & PM- all participants)
• 85- Jane T. Brown and Kristin Starosta: In Their Own Words: College Students with Autism(Thursday AM- all participants)
Sessions on Early Intervention

• 44- Valerie Postal and Donna Miller: Implementing Speech Generating Devices Within A Behavior-Analytic Framework (Wed AM- all participants)

• 47- Mary Mikus and Shelley Chaplin: How Can I Include My Young Child with ASD in Preschool and Community? A Family Forum on Evidence-Based Practices (Wed AM- all participants)

• 57- Andrea Algatt and Susan Zeiders: OCDEL’s Reduction of Expulsion and Suspension in Early Childhood Programs in Pennsylvania – What it Means for Children with ASD (Wed PM- all participants)
Sessions on Early Intervention

• 67a/67b- Barbara Weber and Merle Crawford: LEAP Preschool Model: Pre-planned, Targeted Strategies for Active, Meaningful Engagement (Wed PM- all participants)

• 68a/68b-Nancy Draftina: Adding the Early Start Denver Model into Part C Service Delivery: The Experience of Two EI Providers (Wed PM- all participants)

• 98-Caitlin Kirkwood: Caregiver Training for Pediatric Feeding Disorders (Thursday PM-all participants)
Teaching Speech and Articulation Skills

• 22-Tamara Kasper: Speech Production and Applied Behavior Analysis: Using a Conceptual Analysis to Teach Phonetic Hand Cues to Shape Speech Production (Tuesday AM-intermediate)

• 75 & 88-Dave Palmer: The Role of Automatic Reinforcement in Shaping Speech (Thursday AM & PM-advanced)

• 77 & 90-Barbara Esch: Vocal Training Basics: Tips for Target Selection and Application (Thursday AM & PM-intermediate)

• 97- Amy Foor and Heather Forbes: Vocal Training Workshop (Thursday PM-all participants)
Don’t Forget!!

• Panel Discussion: Perspectives on the Importance of a Behavior Analysis in Educational programs for Students with Autism Spectrum Disorders – Tuesday 4:30

• Poster Session - Wed 3:30

• Session : Closing Keynote: Behavior Analysis and Adults with Autism: A Focus of Bigger Skills and Better Outcomes - Thursday after PM sessions
Remember: PATTAN staff are here to help! If you have any questions or concerns, please ask!

Thank you for attending this session.

Have a productive and enjoyable conference experience!

“If you don’t have the time to do it right, when will you have the time to do it over?”

John Wooden
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