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**GLOBAL CAUSES OF PROBLEM BEHAVIOR IN  
 TEACHING CHILDREN WITH AUTISM AND HOW TO  
 ADDRESS THEM**  
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**PROBLEM BEHAVIOR**

- Behavior that poses a danger or harm to self and/or others
- Behavior that causes property damage
- Behavior that interferes with an individual's ability to learn and function in society
- Behavior that if not reduced, will decrease opportunities for an individual to contact reinforcement

Adapted from Cooper, Heron & Heward, 2007

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**LEARNED FUNCTIONS OF PROBLEM BEHAVIOR**

- Assumptions
  - Problem behavior is learned
  - Problem behavior and adaptive behavior are acquired and maintained via similar contingencies

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Global Causes of Problem Behavior Behavior when Teaching Children with Developmental Disabilities

- I. Failure to establish teachers, teaching materials, and teaching environments as conditioned reinforcers
- II. Lack of an enriched environment and/or developmentally appropriate curriculum
- III. Inability to utilize evidence-based teaching procedures

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Global Cause #1

- I. Failure to establish teachers, teaching materials, and teaching environments as conditioned reinforcers

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Why do Many Children with Developmental Disabilities Dislike Teachers and Teaching Environments ?

- When teachers and teaching environments become “paired” with relatively less reinforcement and are correlated with a worsening set of conditions, the mere presence of a teacher and/or instructional setting can evoke problem behavior (CMO-R).

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**Positive Reinforcer**

- A **Positive Reinforcer** is a stimulus, such as an object, food item, or activity, that when presented after a behavior, increases the future rate of that behavior
- As a teacher, you want to become a positive reinforcer (**conditioned reinforcer**) before placing arbitrary demands on the student

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**Condition Reinforcer**

- A conditioned reinforcer is a type of reinforcer that obtains its value by having been paired with other reinforcers

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**CONDITIONED MOTIVATING OPERATION-REFLEXIVE (CMO-R)**  
AKA: Reflexive EO

- A neutral stimulus that has been correlated with a worsening set of conditions and as a result, the mere presentation of this stimulus alters the value of its removal as a reinforcer, and evokes all behaviors that have produced its removal.

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**TEACHING AS CMO-R**

- The teacher, teaching materials, teaching environment, and the **presentation of demands** may be a CMO-R for many children with autism.
- **This can be a major problem because children with autism need to have many demands placed on them in order to learn.**

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**MCGILL (1999)**

- “It seems likely that clinically significant, long-term, generalized change in problem behavior can occur only if the EOs that evoke the problem behavior are, directly or indirectly, addressed in treatment.” (p.406).
- He also raises a concern that **failure to recognize the CMO-R and implicate it in the treatment may raise ethical concerns.**

McGill, P. (1999) Establishing Operations: implications for the assessment, treatment and prevention of problem behaviors. *Journal of Applied Behavior Analysis*, 32,389-418.

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**Three Steps to Pairing Staff with Positive Reinforcement**

- ① Identify positive reinforcers and increase their value through deprivation
- ② Restrict the visibility and availability of positive reinforcers (sanitize the environment)
- ③ Deliver positive reinforcers abundantly without placing arbitrary demands on the student

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Three Benefits of Pairing Staff with Positive Reinforcement

- ① Student enjoys being with the teacher; the teacher's presence and attention is reinforcing
- ② Student is eager to cooperate
- ③ Easier to teach language and other important skills

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FAQ: How do I Know When I am a Conditioned Reinforcer?

- Consider yourself a conditioned reinforcer when the child readily approaches you and willingly remains engaged with you for a period of time

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THE PAIRING WITH REINFORCEMENT PROCESS

- The goal of the pairing with reinforcement process is to establish teachers, peers, teaching materials and the teaching environment as **conditioned reinforcers**
- Children with developmental disabilities who have **many and strong conditioned reinforcers** will learn important skills more easily and quickly

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### Global Cause #2

- II. Lack of an enriched environment and/or a developmentally appropriate curriculum

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### HABILITATION

- Habilitation (adjustment) is the degree to which the person's repertoire maximizes short and long term reinforcers for that individual and for others, and minimizes short and long term punishers.

Cooper, Heron & Heward, 2007 citing Hawkins (1984)

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### DSM IV- AUTISM

- Qualitative impairment in **social** interaction
- Qualitative impairments in **communication**
- Restricted, repetitive, and stereotyped patterns of **behavior**, interests and activities

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**ASSESSING THE SOCIAL SIGNIFICANCE OF POTENTIAL TARGET BEHAVIORS**

- **Is this behavior likely to produce reinforcement in the student's natural environment after intervention ends?**
- Is this behavior a necessary prerequisite for a useful skill?
- Will this behavior increase the student's access to environments in which other important behaviors can be learned and used?

Adapted from Cooper, Heron & Heward, 2007

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**ASSESSING THE SOCIAL SIGNIFICANCE OF POTENTIAL TARGET BEHAVIORS (CONTINUED)**

- Will changing this behavior predispose others to interact with the student in a more appropriate and supportive manner?
- Is this behavior a behavioral cusp or a pivotal behavior?
- Is this an age appropriate behavior?

Cooper, Heron & Heward, 2007

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**BEHAVIORAL CUSP**

- A behavior that has sudden and dramatic consequences that extend well beyond the idiosyncratic change itself because it exposes the person to new environments, reinforcers, contingencies, responses, and stimulus controls
  - Crawling
  - Generalized imitation (motor/vocal)
  - Reading

Rosales-Ruiz and Baer (1997)

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**VERBAL BEHAVIOR**

- Skinner (1957) defined verbal behavior as “behavior that is reinforced through the mediation of another person’s behavior”
- He defined verbal behavior by its function rather than its form (grammar & syntax)

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**SPEAKER BEHAVIOR**

- At the core of Skinner’s functional analysis of speaker behavior is **the distinction between the mand, tact and intraverbal**
- Skinner suggests that classifying them all as “expressive language” masks important distinctions between these functionally independent types of language

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**VERBAL BEHAVIOR MILESTONES ASSESSMENT AND PLACEMENT PROGRAM (VB-MAPP)**

- Assessment tool based on B. F. Skinner’s (1957) analysis of verbal behavior, typical developmental milestones, and field-test data from typically developing children and children with autism
  - VB-MAPP Skills Assessment
  - VB-MAPP Skills Task Analysis
  - VB-MAPP Barriers Assessment
  - VB-MAPP Transition Assessment
  - VB-MAPP IEP Goals

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### Functionally Independent Types of 'Expressive' Language

Verbal Operant	Example	Reinforcement	Who Benefits?
Mand	Saying "Ball" because you want the ball	Reinforcer specific to motivation	Child (speaker)
Tact	Saying "Ball" when seeing a picture of a "ball"	Social	Teacher (listener)
Intraverbal	Saying "Ball" as a response to the question: What's round and you play catch with it (without it being present in the environment)?	Social	Teacher (listener)

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### Three Benefits of Mand Training

- ① learning to mand may very well reduce problem **behavior**
- ② leads to **social** initiations which may not readily occur in children with autism
- ③ Pairs functional **communication** with strong reinforcement and therefore encourages more of it
  - a) Teaches the student that communication is useful

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### IMPORTANCE OF MAND TRAINING

- Development of a strong manding repertoire may be essential for the development of all other types of verbal behavior (ex. tacting, intraverbals, etc.)
- **Manding teaches a student that verbal behavior is valuable**; the other repertoires teach what to say once the student "wants to talk."

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Global Cause #3

III. Inability to utilize ten evidence-based teaching procedures

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PROBLEM BEHAVIOR AND PERSONS WITH DEVELOPMENTAL DISABILITIES

- Epidemiological studies suggest that between 40 and 60% of problem behavior with persons with developmental disabilities is the result of escape motivated behavior (**socially negative reinforcement**)
- This occurs when the student has a history of having **demands removed** following problem behavior

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Ten Evidence-based Teaching Procedures

- ① Pair teaching environments with positive reinforcement and use competing reinforcers
- ② Fade in the effort and difficulty of tasks
- ③ Fade in the number of demands
- ④ Mix and vary instructional demands
- ⑤ Intersperse easy and difficult demands

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- ⑥ Reduce learner errors (errorless teaching methods)
- ⑦ Fast-paced instruction (short Inter-trial intervals)
- ⑧ Teach skills to fluency
- ⑨ Use a variable rate schedule of reinforcement
- ⑩ Use escape extinction for off-task responses

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**BASIC TEACHING TEMPLATE**

<b>FUN</b> <b>(SR<sup>+</sup>)</b>	<b>FUNCTIONAL SKILLS</b>	<b>FUN</b> <b>(SR<sup>+</sup>)</b>
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\*Provide a high rate of reinforcement; use errorless teaching procedures; mix in effortless responses and then gradually increase the *number* of responses

Adapted from Carbone, 2003

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**TO INTERNALIZE A CONCEPT**  
**Master it**

- 8-12 repetitions for a **gifted** student
- 25-35 repetitions for an **average** student
- 1400 repetitions for a **“naive”** student

U.S. Department of Education (1986), What Works: Research About Teaching and Learning

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## FEEDBACK

Please help me to improve this workshop by providing feedback on my facebook page:



or via email:  
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## References

- Cooper, J., Heron, W., & Hewett, W. (2007). Applied Behavior Analysis. Englewood Cliffs, NJ: Prentice-Hall.
- McGill, P. (1999) Establishing Operations: implications for the assessment, treatment and prevention of problem behaviors. *Journal of Applied Behavior Analysis*, 32,389-418.
- Michael, J. (1983). Evocative and repertoire-altering effects of an environmental event *The Analysis of Verbal Behavior*. L1 9 - 21.
- Skinner, B. F. (1957). Verbal behavior. New York Appleton-Century
- Smith, R. and Iwata, B. (1997) Antecedent influences on behavior disorders, *Journal of Applied Behavior Analysis*, 30, 267-278.

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