



CARD
CENTER FOR AUTISM
& RELATED DISORDERS

Practical Solutions for Addressing Challenging Behaviors

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October 8th, 2011



Outline

- **Purpose of functional assessment**
- **The common functions of behavior**
- **Indirect assessment**
- **Descriptive assessment**
- **Experimental functional analysis**
- **Function-based treatment**
- **Differential reinforcement**



Purpose of Functional Assessment

- **Purpose: To figure out the source of reinforcement for challenging behavior**
- **Knowing the cause of the challenging behavior will help you eliminate it**
- **Why?**
 - **Because ALL proven treatments basically boil down to:**
 - **Not giving that reinforcer for challenging behavior**
 - **And GIVING that same reinforcer for a more appropriate behavior**



What is Functional Assessment?

- **Any procedure which attempts to determine the function of a behavior**
- **There are many terms for functional assessment:**
 - **Functional assessment**
 - **Functional analysis**
 - **Functional behavioral assessment**
 - **Functional behavior analysis**



Function vs. Topograph

- **Topography = what the behavior looks like (e.g., hitting)**
 - Lets you know it when you see it but doesn't tell you WHY the behavior is happening
- **Function = source of reinforcement that maintains the behavior**
 - Tells you WHY the child continues to do the behavior
- **Diagnoses do not cause behavior – behaviors occur because they help the child get something he/she wants**



Causes of Challenging Behavior

- **Autism does not cause challenging behavior**
- **Research has shown that more than 95% of challenging behavior in children with developmental disabilities is caused by:**
 - **Getting something they want**
 - **Getting out of something they don't want**
- **Challenging behavior is like language**
- **Challenging behavior is the child telling you they want something**



Functions of Challenging Behavior

- **Common in research**
 - Attention
 - Tangible
 - Escape from demand
 - Automatic
- **Less common**
 - “Control”
 - Access to stereotypy or rituals
- **95% of the time, your child’s behavior has one of these functions**



The ABCs

- **What do the ABCs stand for?**
 - Antecedent – Behavior – Consequence
- **What is an antecedent?**
 - Events that precede behavior are called antecedents
- **What is a behavior?**
 - Anything anyone says or does
- **What is a consequence?**
 - Events that follow behavior are called consequences



The ABCs

- **Why do we care about antecedents and consequences?**
 - Because they help us figure out the function
- **Particular antecedents may be related to particular functions**
- **Particular consequences might be the actual reinforcers maintaining the behavior – the function**



Three Types of Functional Assessment

- **Indirect**
 - Interviews with caregivers, record review, etc.
- **Descriptive**
 - Direct observation and recording of the problem behavior in the natural environment
- **Experimental**
 - Systematic manipulation of antecedents and consequences



Indirect Assessments

- **Discuss the challenging behavior with someone who has seen the behavior a lot (teacher, parent, therapist)**
- **Unstructured: ask open-ended questions**
- **Structured: ask specific questions with “multiple choice” answers**
- **QABF, MAS, FAI, etc.**
- **Summarize answers according to functions**



Indirect Assessments

- **Advantages**
 - Does not require direct observation of behavior
 - Can be fast and inexpensive
 - May include important information from caregivers who know the behavior well
- **Disadvantages**
 - Depends on recall - Caregiver report may be inaccurate or incomplete
 - Research shows they are often inadequate or unreliable



Descriptive Assessments

- **There are many types, we are only going to talk about ABC recording**
- **Unstructured or “narrative” recording**
 - **Write down everything that you see happen before and after behavior**
- **Structured**
 - **Each time behavior happens, classify antecedent and consequence according to categories (“multiple choice”)**



Sample Narrative ABC Data Sheet

Antecedent	Behavior	Consequence
<i>Sitting by himself</i>	<i>Hit teacher</i>	<i>Teacher asked him to calm down</i>
<i>Doing a worksheet</i>	<i>Threw worksheet</i>	<i>Teacher scolded and gave him a timeout</i>



Sample Structured ABC Data Sheet

Antecedent	Behavior	Consequence
Low attn / Demand / Denied Access / None		Attn / Escape / Access granted / None
Low attn / Demand / Denied Access / None		Attn / Escape / Access granted / None
Low attn / Demand / Denied Access / None		Attn / Escape / Access granted / None
Low attn / Demand / Denied Access / None		Attn / Escape / Access granted / None
Low attn / Demand / Denied Access / None		Attn / Escape / Access granted / None



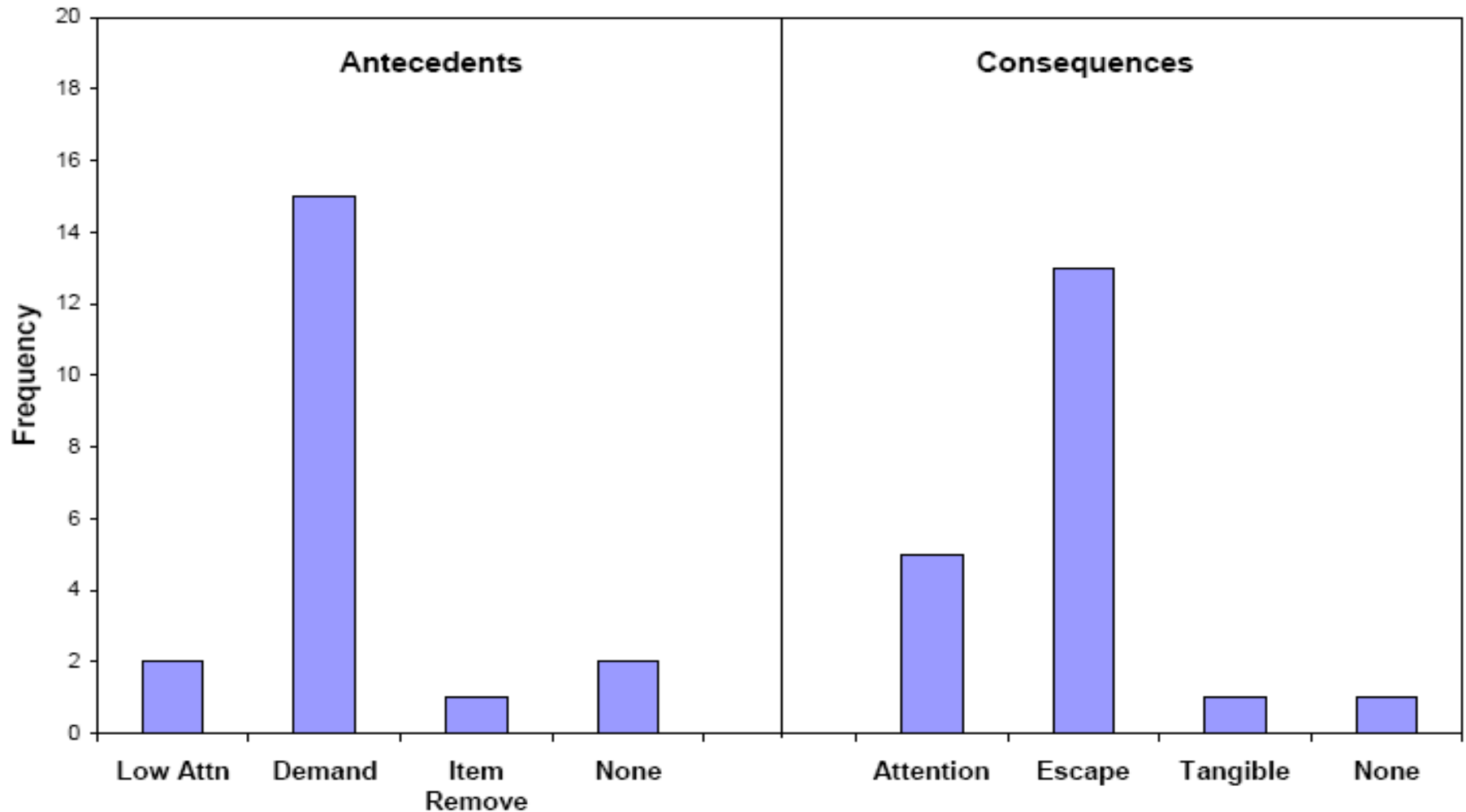
Analyzing ABC Data

- **Summarize according to function**
- **Make a graph**
- **Look for patterns according to function**



Sample ABC Data Graph

Johnny Aggression FBA





Interpreting ABC Data

- **Aggression and property destruction are rarely automatically reinforced**
- **Attention is the most common reaction to problem behavior in our culture**
 - Not necessarily the function just because it happens a lot
- **Staff are likely on their best behavior when you observe**
- **Observe a representative sample including all contexts in which behavior might occur (e.g., school work, play, downtime, etc.)**



Interpreting ABC Data

- **If you honestly are not able to construct a reasonable functional hypothesis from the indirect and descriptive, an experimental functional analysis may be needed**
- **If you don't know how to do an experimental, you may need to consider referring out to someone who does**



Descriptive Assessments

Pros / Cons

- **Advantages:**
 - **Direct observation of behavior**
 - **Involves natural environment**
 - **Safe: observer doesn't have to deal with behavior**
- **Disadvantages:**
 - **Correlational**
 - **Behavior might not occur**
 - **Research shows they are not entirely reliable**



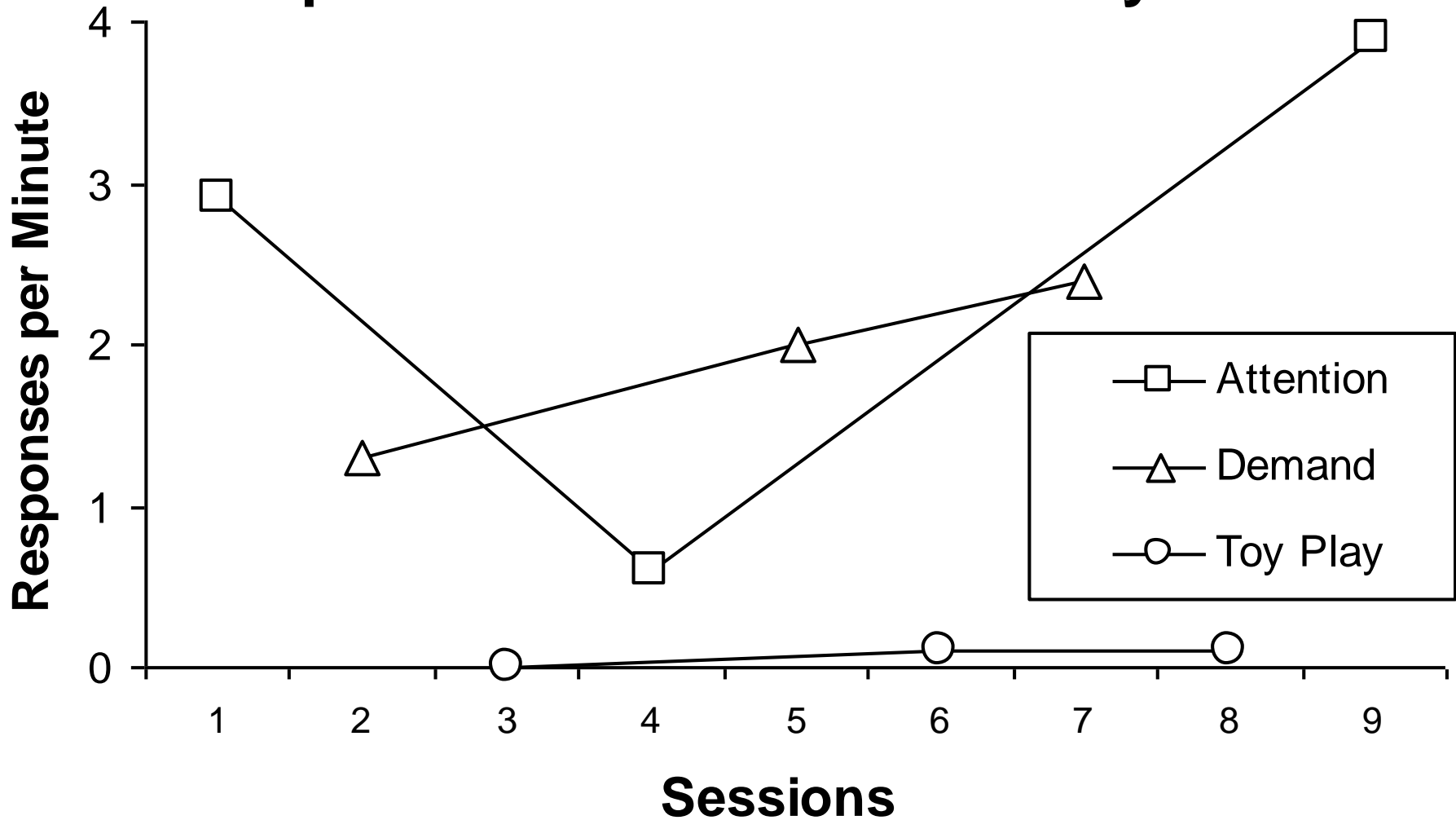
Experimental Functional Analysis

- Arranges conditions to intentionally evoke the behavior
- An individual is exposed to a variety of predetermined conditions and data are collected on how the individual behaves
 - Attention
 - Demand
 - Alone
 - Play
 - Tangible
- Sessions are ~ 10 minutes in duration and are alternated randomly



Sample FA Graph

Experimental Functional Analysis





Experimental Functional Analysis

- Advantages
 - Produces clear results
 - Can be rapid
 - Demonstrates reliable reinforcement relations
- Disadvantages
 - You are intentionally evoking and reinforcing challenging behavior (like an allergy test)
 - Requires specialized training



Function-Based Treatment

- **We don't have time for a comprehensive workshop on function-based treatments**
- **Let's briefly hit the most basic, practical treatments**
- **Everything in applied behavior analysis comes down to reinforcing behaviors we want and not reinforcing behaviors we don't want**
- **This is called differential reinforcement of alternative behaviors (DRA)**



DRA for Attention

- **DRA is extinction for problem behavior and reinforcement for alternative behavior**
- **Extinction**
 - don't pay attention to the behavior any more
- **Train alternative behavior:**
 - Prompt alternative behavior frequently
 - Reinforce immediately and intensely
 - Fade out prompts



DRA for Tangible

- **Extinction**
 - don't ever give the client the item/activity for at least 30 seconds since the last occurrence of target behavior
- **Train alternative behavior:**
 - Prompt alternative behavior frequently
 - Reinforce immediately
 - Fade out prompts



DRA for Escape from Demands

- **Extinction**
 - Do not discontinue, postpone, or negotiate any aspect of demands contingent on target behavior
 - Demands have to continue at the same rate and difficulty as though target behavior did not occur
 - Do not decrease the number of demands when target behavior is occurring
- **2 good choices for alternative behavior:**
 - Asking for break and/or help
 - You will need to fade this out to a reasonable level
 - Compliance with demand



DRA for Automatic Reinforcement

- **Extinction**

- **You may or may not be able to do this**
- **Response blocking**
 - **physically prevent the response from occurring, WITHOUT restraining client**
- **Sensory extinction**
 - **alter the environment so that it does not produce the sensory input the child wants (pad a table so it doesn't make a banging sound when the child bangs it)**



DRA for Automatic Reinforcement

- **Alternative behavior**
 - **Choose something that will *become* automatically maintained once it occurs enough**
- **Toy play**
- **Object manipulation**
- **Other forms of automatically reinforced behavior that are more appropriate and/or less harmful to self**



Picking Good Alternative Behaviors

- **Good alternative behaviors**
 - **Communicating for reinforcer (FCT)**
 - **Communication is good because it:**
 - **Gives the client what they wanted to begin with**
 - **Is likely to be reinforced in the client's natural environment**
- **Examples:**
 - **Vocal, sign, picture card**
 - **Make it easy to be successful at first!**



Picking Good Alternative Behaviors

- **Bad choices for alternative behavior**
 - Behaviors that aren't functional or useful in the client's natural life
 - Behaviors that aren't likely to be reinforced in his/her natural life
- **Examples:**
 - Hands in pockets
 - Clasping hands together
 - Sitting on hands
 - Having “hands down”



Prompting Alternative Behaviors

- **Don't prompt alternative behavior *as a response to* problem behavior**
- **You need to remind the child to do the alternative behavior **BEFORE** he does the challenging behavior**



Without Extinction

- **Sometimes extinction is impossible**
 - **Severe SIB**
 - **Severe aggression**
 - **Any aggression to peers**
 - **Severe property destruction**
 - **PICA**
- **Tips**
 - **Minimize reinforcement for target**
 - **Maximize reinforcement for alternative**
 - **VERY frequent prompting for alternative**



Other Tips

- **Demand Fading**
 - *Don't do so much work all at once*
 - **Start with one demand and then a break**
 - **Then increase number of demands to break gradually**
- **Task Modification**
 - **Change some aspect of the task so that work is less aversive**
 - **Do easier demands**
 - **Intersperse maintenance tasks with acquisition tasks**
 - **Incorporate more client choice**



Noncontingent Reinforcement

- **When in doubt give more reinforcement!**
 - **For attention: Give attention frequently, regardless of behavior**
 - **For tangible: Give access to the item(s) frequently, regardless of behavior**
 - **For escape: Give frequent breaks**
- **NCR is not a complete behavior intervention plan – it doesn't help teach alternative behavior**
- **Watch out for adventitious reinforcement – don't give the reinforcer right after the occurrence of challenging behavior**



Evaluating Effectiveness

- **Evaluating effectiveness**
- **If the treatment is going to work, you should see a change in behavior very rapidly**
- **Do not continue to “see how it goes” for months, with no sign of behavior change**
- **If treatment is being implemented accurately, 2 weeks is plenty of time to see at least some change in behavior**



Accountability

- **Don't blame the diagnosis**
- **Don't make excuses**
- **If the behavior is still happening, it's our responsibility to change the strategy till we find something that works**



Conclusion

- **Identify function**
- **Extinction for target behavior, if possible**
- **Train a replacement behavior**
- **Prompt replacement behavior frequently**
- **Use LOTS of reinforcement**
- **Make alternative behavior easier than target behavior**
- **Gradually fade out contrived reinforcement**
- **Train all relevant caregivers and supervise their implementation**