...automatically reinforced behavior

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Overview

- A bit about my background and research interests
- Overview of the functions of severe problem behavior
- Typical treatment logic and why it does not always apply to automatically reinforced behavior
- Subtypes of automatic reinforcement
- Treatment approaches for automatically reinforced behavior; limitations and silver linings
- Assessment approaches for automatically reinforced behavior
- Time permitting: The role of skills training
- Time permitting: parent and careprovider training.

My background

- Ph.D. in psychology under Brian Iwata in 1992.
- School Psychology faculty at Louisiana State from 1992- 1996.
- Medical School faculty at University of Pennsylvania in 1996-1998.
- University of Florida Psychology Professor (Psychiatry affiliate) from 1998-current

Related Research Interests

- Assessment and treatment of severe behavior disorders
- Differential and noncontingent reinforcement as treatment
- Automatically reinforced problem behavior
- Parent and careprovider training

Current Project Sites

- Behavior analysis research clinic
- Florida autism centers
- State of Iowa
- Gainesville area schools
- Rural school districts surrounding Gainesville

Severe Problem Behavior

- Self-injurious Behavior (SIB)
- Aggression
- Property Destruction
- Tantrums
- Climbing in dangerous ways
- Elopement

Operant functions of Severe Problem Behavior

- Positive Reinforcement in the form of attention
- Positive Reinforcement in the form of tangible items
- Negative Reinforcement in the form of escape from instructional activity, self-care activity, aversive social contexts, etc.
- Automatic positive or negative reinforcement
- "Automatic" means simply that the reinforcement is not socially mediated.

Methods used to identify function

- Indirect assessments (questionnaires, checklists)
- Descriptive methods
- Functional analysis methods (experimental analysis)

Two examples of automatically reinforced SIB (Ringdahl et al., 1997)

Questions?

Treatment logic for socially reinforced behavior

- By identifying the reinforcer via FA, the reinforcement of problem behavior can be minimized (ideally extinction).
- And, the reinforcer can be used to either strengthen some alternative behavior (differential reinforcement) or abolish the strength of the motivating operations (noncontingent reinforcement)

Prognosis

- Treatment of socially reinforced behavior→ good prognosis
- Treatment of automatically reinforced behavior→not so good.

Evidence of automatically reinforced behavior as operant behavior

- Access to the behavior increases behavior that produces that access.
- The behavior goes away if the stimulus products are sufficiently blocked.
- Many appropriate forms of behavior are known to be maintained by automatic reinforcement

Alternative (viable) mechanisms

- Elicited "biting" when the organism experiences aversive stimulation (e.g., Hutchinson, 1977)
- Elicited or schedule-induced aggression (e.g., Azrin)
- "Damage" to another organism as reinforcement
- These possible mechanisms need up-to-date research with humans

Typical treatment progression

- Environmental Enrichment
- Differential Reinforcement
- Blocking, brief timeout, or mild punishment
- More extreme punishment or restraint

Consider the possible functions of response blocking

- It can function as positive reinforcement
- It can function as extinction
- It can function as punishment

Questions?

Idiosyncratic examples: Pica and Vocal Stereotypy

Be wary of RIRD procedure

Considerations in developing Treatment

- Stimulus preference
- Effects of preferred stimulus on problem behavior
- Effects of response blocking (see other slide on this topic)
- Skill development
- Care provider training

Care-provider Training: behavioral skills training

- Discussion
- Modeling
- Role play with feedback
- In situ with immediate feedback
- In situ with delayed feedback

Summary

- The prognosis for effective treatment is more favorable for socially reinforced behavior than it is for automatically reinforced behavior.
- Automatic reinforcement simply means reinforcement in the absence of social mediation.
- Typical interventions involve environmental enrichment, differential reinforcement, and possibly mild punishment such as response blocking.
- Careproviders should be trained to competency using a behavioral skills training model.

Questions?