...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?