An Assessment and Treatment of Problem Behavior Maintained by Access to Rituals

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Overview

• Prior Ritualistic Behavior Literature
• Study 1 – Assessment
  – Method
  – Results
• Study 2 – Treatment Evaluation
  – Method
  – Results
• Discussion & Future Research
Ritualistic Behavior

• Impedes learning opportunities
• Response topographies
  – Repetitive body movement
  – Stereotyped object manipulation
  – Compulsive behavior
  – Insistence on “sameness”
  – Circumscribed interests
  – Self-injurious behavior

Related Literature

• Rodriguez et al., 2012
  – Functional analyses of item arranging
  – Competing items + Blocking
• Leon et al., 2013
  – Blocking analyses of aggression
  – Functional Communication Training (FCT) + Extinction (EXT)
• Rispoli et al., 2014
  – Functional analyses of aggression
  – FCT + EXT + Schedule thinning
Study 1 – Assessment

Purpose

• Replicate prior functional analysis procedures in the assessment of aggression related to item arranging
Method

<table>
<thead>
<tr>
<th>Subject</th>
<th>Age</th>
<th>Item Arranging Response(s)</th>
<th>Aggression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abby</td>
<td>13</td>
<td>Arranging and straightening objects moved from their original location</td>
<td>Pushing, prying fingers off of held items</td>
</tr>
<tr>
<td>Remy</td>
<td>5</td>
<td>Repetitive play with items used to build light posts and telephone poles</td>
<td>Hitting, kicking, throwing items at experimenter</td>
</tr>
<tr>
<td>Cameron</td>
<td>3</td>
<td>Repetitive play with block structures, shopping cart with food, and toy cars</td>
<td>Hitting, kicking, throwing items at experimenter</td>
</tr>
</tbody>
</table>

Method

- Initial Functional Analyses
- Conditions:
  - Play (Control)
    - Continuous attention
    - Therapist did not interact with items
  - Blocking
    - Item displacement on an FT 30-s schedule
    - Aggression → access to item arranging
  - Item Displacement
The graphs show the rate of aggression over sessions for two subjects, Abby and Remy. The x-axis represents the sessions, and the y-axis represents the rate of aggression.

For Abby:
- Play (Control): Open circle
- Blocking: Square
- Item Displacement: Triangle

For Remy:
- Play (Control): Open circle
- Blocking: Square
- Item Displacement: Triangle

Abby's rate of aggression remains relatively stable across sessions, while Remy's rate of aggression shows an increasing trend over the sessions.
Study 2 – Treatment Evaluation
Purpose

• Evaluate schedule thinning in the treatment of item arranging
• Evaluate continuously versus briefly signaled delays

Method

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<th>Item Arranging Response(s)</th>
<th>FC Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abby</td>
<td>13</td>
<td>Arranging and straightening objects moved from their original location</td>
<td>“Can I move it?”</td>
</tr>
<tr>
<td>Remy</td>
<td>5</td>
<td>Repetitive play with items used to build light posts and telephone poles</td>
<td>“Please don’t touch (object).”</td>
</tr>
<tr>
<td>Cameron</td>
<td>3</td>
<td>Repetitive play with block structures, shopping cart with food, and toy cars</td>
<td>“Stop, please.”</td>
</tr>
</tbody>
</table>

• Design
  – Reversal design with probes of the terminal 60-s continuously and briefly signaled delay
Method

• Baseline
  – Item displacement on an FT 30-s schedule
  – Aggression → access to item arranging

• FCT + EXT

• Delay probes
  – 60-s continuously signaled delay
  – 60-s briefly signaled delay

• Schedule thinning
  – 5 s, 10 s, 15 s, 20 s, 25 s, 60 s
Schedule Thinning & 60-s Delay Probes

- Immediate Reinforcement
- 60-s Delay (Continuous Signal)
- 60-s Delay (Brief Signal)

Rate of Aggression

Rate of Mands

Sessions

Schedule Thinning & 60-s Delay Probes

- Immediate Reinforcement
- 60-s Delay (Continuous Signal)
- 60-s Delay (Brief Signal)

Rate of Mands

Sessions
Discussion & Future Research

• FCT effective means to decrease problem behavior
• Schedule thinning was effective in limiting mands and item arranging
• Utility of terminal probes
  – Increased delays to reinforcement
  – Continuous versus brief delays

Thank you!