The Effects of Antecedents and Consequences on Accurate Identification of Function of Problem Behavior

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WHO WILL CARE?
The Workforce Crisis In Human Services
Classroom

- Instruction: Written, Slides, Examples
- Model: Video, Live demo
- Rehearsal: Role Play
- Feedback: Sr+ and Corrective Competency Checklist

Fieldwork

- Instruction: Skill Sheet, Competency Checklist
- Model: Repeated Demonstration
- Rehearsal: With Client
- Feedback: Staff Supervision Form
Carter, O'Rourke, Sisco & Pelsue (2009)
Problem behavior involves complex interactions among controlling variables. Individual problem behaviors may be maintained by more than one mechanism. A group of problem behaviors may be members of a single response class.

Functional assessment is at once redefining the standards for clinical interventions and reemphasizing the importance of studying basic behavioral mechanisms. This commentary describes one perception of what we are learning from current research on functional assessment and suggests directions for the future.

DESCRIPTORS: functional analysis
Training teachers and paraprofessionals to detect and record putative antecedents and consequences of problem behavior in the classroom has a number of potential benefits. In this study, we evaluated the outcomes of a computer-based training program consisting of lectures, models, and practice. A total of 39 teachers and paraprofessionals participated. Participants scored videos of teacher-student interactions after completing components of the instruction. The study was designed to evaluate the incremental contribution of instruction focused on (a) single exemplars of antecedents and consequences, (b) multiple exemplars of antecedents and consequences, and (c) simultaneously occurring antecedents and consequences. Training to detect simultaneously occurring events was necessary for the majority of participants to reach high levels of performance. The findings support the efficacy of computer-based training and indicate the necessary and sufficient components of this training.

Key words: descriptive analysis, data collection, problem behavior, teacher training
It can be challenging for those with limited training in the science of behavior to **discriminate** between relevant and **irrelevant stimuli** when forming hypotheses of function.
“A connection between an operant and a reinforcing stimulus can be established independently of any specific stimulation acting prior to the response.”

The Behavior of Organisms p. 177
Selection By Consequences
Does antecedent information affect the accurate identification of escape and attention functions by observers with limited experience?
Participants
Materials

Item 1
I know you hate this but you have to play with your shape sorter

I know you are tired but it's time to play with your shape sorter

Why don't you play with your new shape sorter, you love it so much

Play with that brand new shape sorter you bought with your birthday money yesterday
No I don’t want to

I don’t feel like it

Please do it with me

Will you please play too?
I will do it with you
It is nice to play together
Complexity

simple

(not a complete diagram)
<table>
<thead>
<tr>
<th></th>
<th>Attention</th>
<th>Escape</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Date:
Initials:
Research Design

Multielement Design
### Independent Variable

#### Condition 1: Consistent

<table>
<thead>
<tr>
<th>Suggested Function</th>
<th>Antecedent</th>
<th>Behavior</th>
<th>Consequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Escape (E)</td>
<td>“I know you are tired, but it’s time to play with your shape sorter.”</td>
<td>“I don’t feel like it”</td>
<td>No subtitle added</td>
</tr>
<tr>
<td>Attention (A)</td>
<td>“Why don’t you play with your new shape sorter, you love it so much.”</td>
<td>“Please do it with me.”</td>
<td>“I will do it with you.”</td>
</tr>
</tbody>
</table>
### Condition 2: Inconsistent

<table>
<thead>
<tr>
<th>Suggested Function</th>
<th>Antecedent</th>
<th>Behavior</th>
<th>Consequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Escape (E)</td>
<td>I know you are tired, but it’s time to play with your shape sorter.</td>
<td>“I don’t feel like it”</td>
<td>I will do it with you.”</td>
</tr>
<tr>
<td>Escape (E)</td>
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<td>No subtitle added</td>
</tr>
</tbody>
</table>
Accuracy

Antecedent/Consequence Condition

<table>
<thead>
<tr>
<th>Antecedent/Consequence</th>
<th>Consistent</th>
<th>Inconsistent</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>92%</td>
<td></td>
</tr>
<tr>
<td>EE</td>
<td>89%</td>
<td></td>
</tr>
<tr>
<td>AE</td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>EA</td>
<td>44%</td>
<td></td>
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</tbody>
</table>

n=18
Consequence Control

Percent Correct

Trials

Consistent (AA, EE)  Inconsistent (AE, EA)

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Antecedent Control

Percent Correct vs. Trials

Consistent (AA, EE) vs. Inconsistent (AE, EA)
Consistent is Accurate
Inconsistent is Variable

Percent Correct

Trials

Consistent (AA, EE)  Inconsistent (AE, EA)
Percent Correct

Shifting Control

Trials

Consistent (AA, EE)  Inconsistent (AE, EA)

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Undetermined
Control

Percent Correct

Trials

Consistent (AA, EE)  Inconsistent (AE, EA)

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Source of Control

- Consequence: 33%
- Antecedent: 39%
- Consistent Accurate/Inconsistent Variable: 22%
- Undetermined: 6%
Discussion

the cause of the error may not be clear
Discussion

The ability to **pinpoint** controlling stimuli is essential to treatment.
This procedure was efficient.
Considerations

Participants completed the assessment under differing conditions.

Participants were asked to hypothesize function based upon the current trial only.
How is each type of error best remediated? May be helpful in other applications, such as parent training and support.
References


