Evaluating the Performance Diagnostic Checklist-Human Services to Treat Performance Problems of Adults with Intellectual Disabilities

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PDC-HS

- Developed by Carr, Wilder, Majdalny, Mathisen, & Strain (2013)
- Intended to be a concise functional behavior assessment
- Attempts to match interventions to the function of targeted performance problem
4 studies conducted with individuals without disabilities (Carr et al. 2013; Ditzian et al. 2015; Bowe & Sellers, 2018; Wilder et al. 2018)

1 study conducted with individuals with disabilities (Smith & Wilder, 2018)
Research Questions

What are the effects of using an intervention indicated by the results of the PDC-HS on the performance of a shelf-cleaning task by three individuals with intellectual disabilities working in integrated employment?

What is the social validity of the PDC-HS?
Methods

Primary Participants
- 3 adults diagnosed with intellectual disabilities
- Receiving supported employment services
- Employed at a library

Secondary Participant
- Participants' supervisor
Experimental design

- Concurrent multiple baseline across participants

Settings

- Library
- Human services provider office
Performance Problem

- Shelf-cleaning task

Primary DV

- Accuracy
  - Percentage of steps completed on a checklist

Secondary DV

- Session duration
  - Measured in seconds
Procedural Sequence

Baseline → PDC-HS → BST → Post BST → Maintenance & Generalization → Social Validity
Completion of the PDC-HS

- Results indicated barriers in training and prompting for all participants.
- The indicated intervention for all participants consisted of behavioral skills training and prompting.
Behavioral Skills Training (BST)

Specifically designed to meet the needs of individuals with intellectual disabilities

BST Checklist

1. Describe the purpose of the task
2. Provide the participant with a summary
3. Review the summary with the participant
4. Have the participant watch a video of the task being performed
5. Conduct practice sessions
6. Conduct test sessions
7. Repeat steps 5 and 6 until the participant meets the mastery criteria for the testing step
Presented prior to BST practice sessions, BST test sessions and post BST sessions.

### Antecedent Prompting Procedure

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Vocally review the four sections of the summary with the participant</td>
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<tr>
<td>2.</td>
<td>Ask questions concerning each section</td>
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<tr>
<td>3.</td>
<td>Provide modeling and practice if needed</td>
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<tr>
<td>4.</td>
<td>Asking the participant they have any questions</td>
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<tr>
<td>5.</td>
<td>Place the summary on a shelf which is easily accessible</td>
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<tr>
<td>6.</td>
<td>Delivered the discriminative stimulus “the instructions will be here if you need to look at them”</td>
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</tbody>
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Maintenance & Generalization
Probes

Probe conduct after post BST condition

Social Validity

Questionnaire administered to participants after main/gen
Results
Baseline
Results - BST

First Conducted with Donny

- 2 separate BST sessions conducted to meet mastery criteria
- Antecedent prompting procedure revised
- 2 booster sessions conducted

![Graph showing performance metrics over sessions for BST and booster sessions, highlighting percentage steps correct and session duration in seconds.](chart.png)
Maude and Jeffery rapidly met the mastery criterion

Both participants were exposed to revised antecedent prompting procedure
Results

Post BST

Donny
- 19 sessions, 2 booster sessions, master criteria modified

Maude
- Met mastery criteria in 5 sessions

Jeffery
- Met mastery criteria in 6 sessions
Results
Main & Gen

Donny
- Main 56% accuracy, duration 500 s
- Gen 29% accuracy, duration 420 s

Maude
- Main 97% accuracy
- Gen 98% accuracy

Jeffery
- Main 68% accuracy
- Gen 47% accuracy
Results- Social Validity

Participants indicated that they thought the study was fair, liked the way they were taught to clean the shelf, the study did not cause problems with their friends and the study could help other people.

Responses may indicate the success of the tool in future applications.
Replicated and extended previous research

• Applied the PDC-HS with individuals with intellectual disabilities in integrated employment, evaluated the tool in a community setting, evaluated social validity, novel performance problem, evaluated the tool in a novel setting and evaluated main/gen

Provided further evidence for the tool’s use in supported employment
Functional relation established between the indicated intervention and a substantial increase in participant responding compared to baseline.

Research on BST furthered by the successful application of BST with VMVO.
References for this study are available upon request

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