

Effective Staff Training with Behavior Skills Training (BST)

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Goals of Staff Training

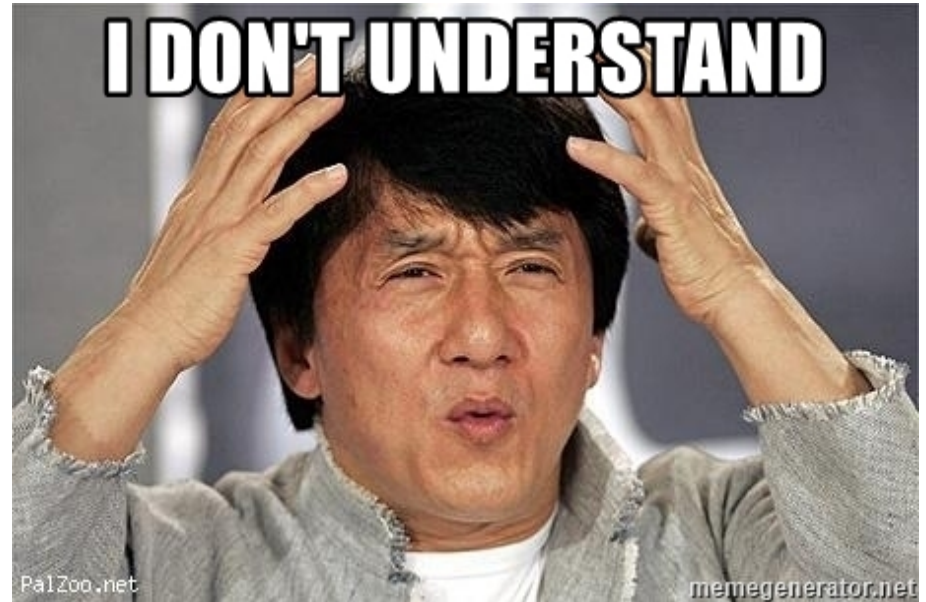
- Teach skills efficiently
- Teach skills that maintain
- Teach skills that generalize



Common Mistakes in Training



- Telling instead of Teaching
- No opportunity to see the skill
- Inadequate opportunities to practice
 - Trial & error implementation
 - Development of bad or incorrect habits





BST has been used to teach:

- parenting skills
- assertiveness
- abduction prevention skills
- social skills
- skills to promote gun safety in children
- sports-related skills
- behavioral assessment skills
- behavioral treatment skills
- And many more



What is BST?

- BST is a training model
- Emphasizes practice and feedback
- Flexible and modifiable





Why Use BST?

- BST increases staff competency in the target skill
- BST has an extensive base of evidence supporting its efficacy
- Staff trained with BST tend to maintain skills for longer



Case example

Functional communication training

- Identify function of problem behavior (FA)
- Place problem behavior on extinction
- Teach appropriate communicative response (FCR)
 - Usually on an FR1 schedule

Failure to reinforce the FCR

Allows problem behavior to contact reinforcement

***BEFORE* Getting Started**



Clearly define the task

Clearly define the conditions under which task occurs

Outline all necessary steps

Identify any required materials

Steps of Behavior Skills Training



Written or verbal description of target skill

Demonstration of target skill

Require trainee to practice target skill

Provide feedback during practice

BST Overview



Description

Modelling

Practice

Feedback



Description

- Provide rationale
- Behaviorally define
- Develop succinct checklist of all necessary actions
- Performance checklist should include if-then steps
- Allow time for questions and explanations



Sample Written Description

Multiple stimulus without replacement preference assessment (MSWO)

- Rationale: The MSWO allows for the establishment of a preference hierarchy in a short amount of time.
- It is important to identify preferred stimuli that may be used as possible reinforcers in reinforcement based behavioral interventions.
- In order to conduct a MSWO preference assessment, follow the instructions outlined on the MSWO instruction sheet.

Multiple Stimuli without Replacement (MSWO) Preference Assessment: Instructions

1. Three items will be included in each assessment.
2. Collect the items that are going to be assessed and list them on the data sheet.
3. The student should be seated in a chair positioned in front of a table. The items may be placed on a large tray so that they can be removed from the table in between presentations.
4. Allow the student to sample each item prior to initiating the assessment (i.e., taste the food items or manipulate the leisure items for a short period of time).
5. Sequence items randomly in a straight line on the tray about 5 inches apart.
6. Instruct the student to "pick one."
7. Immediately after the selection, remove the remainder of the items to prevent multiple selections.
8. Record the selected item on the data sheet to the corresponding number. For example, the first item | selected would be written down on the space marked "1."
9. After one item is selected, it is not replaced. For example, after the first presentation of 7 items, only 6 will be presented next.
10. Prior to the next presentation, rotate the remaining items on the array by taking the item on the left end and moving it to the right end, then shifting the other items so that they are again equally spaced.
11. Present the remaining items and repeat the procedure described above.
12. Continue until all of the items are selected or until the student does not make a selection within 30 s from when they were told to "pick one." In the latter case, end the session and record the remaining items as "not selected."
13. Summarize the data by giving each item a ratio based on the number of times that it was selected (0 or 1) over the number of times that it was available (1 to 7). For example, the first four selected items will be given 1/1, 1/2, 1/3, and 1/4, in the order that they were selected. If the student selected four items but did not select any more on the fifth presentation, then all of the unselected items would be given the ratio 0/5.
14. Conduct 5 sessions in the manner described above, and then sum the ratios for each item across the sessions. For example, if during five sessions an item produced ratios of 1/2, 1/3, 1/2, 1/4, and 0/5, the overall sum would be 4/16 and the conversion would yield a score of .25 indicating that the item was chosen on 25% of the trials in which it was available.
15. Once the final percentage score is calculated for each item, rank the items (from high to low) to indicate which items are predicted to be the most effective reinforcers.

DeLeon, I. G., & Iwata, B. A. (1996). Evaluation of a multiple stimulus presentation format for assessing reinforcer preferences. *Journal of Applied Behavior Analysis*, 29, 519-533.

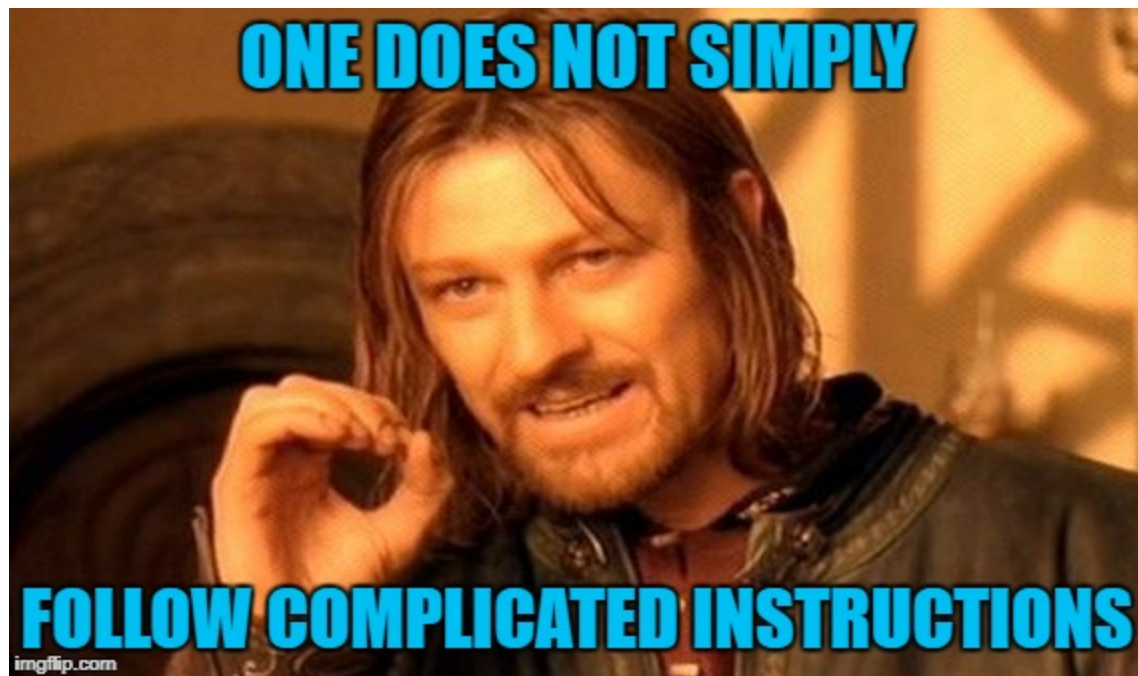


Description Component

As an isolated component, a written description of a skill will only slightly increase implementer competency (Yeaton & Bailey, 1983)

Therefore, it is not advised to give an instruction sheet and expect competent implementation of a certain skill

More components of training are needed.



ONE DOES NOT SIMPLY

FOLLOW COMPLICATED INSTRUCTIONS

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Demonstrate Target Skill

Model the skill

- in situ
- role-play
- Video model

Role-plays can be paused at certain points to emphasize aspects of the target skill

Role-plays should be scripted and rehearsed in order to increase accuracy and fluidity



Video Model

Video example of MSWO

Important note:

- This model does NOT include a pre-exposure to items

[Link](#)

Data Sheet



Stimuli:

1. Skittles Trials 3 / Selection 3 = Percent Selection 100%
2. Gummy B's Trials 3 / Selection 6 = Percent Selection 50%
3. M & M's Trials 3 / Selection 9 = Percent Selection 3%
3

	Trials ⇒ Selections ⇓		
	1	2	3
1. Skittles	1	1	1
2. Gummy B's	2	2	2
3. M & M's	3	3	3

Student Preference

1. Skittles
2. Gummy B's
3. M & M's



Practice Target skill

Have the trainee rehearse the skill

Competency can be quantified by using the performance checklist as a fidelity measure

Provide multiple exemplars in practice scenarios



A Note on Competency

Depending on the skill being taught

- There may be different levels of competency required
- Certain components of the skill may need to be 100%

Example – MSWO

- Items evenly spaced and randomized
- Participant only selects one item (vital component)

Other examples...



Competency Continued

There is a difference between performance and verbal skills.

2 components of evidence-based staff training

- Performance-based: trainee's behavior during training
- Competency-based: demonstration of skill mastery in a role-play scenario or real-life situation.

Repeat Practice and Feedback Steps



Continue practice and feedback until the trainee achieves a pre-specified performance criterion.

Use performance checklist to measure trainee performance

Continue delivering supportive and corrective feedback

Stop practice and feedback when trainees have achieved a previously defined performance criterion



Provide Immediate Feedback

Provide supportive and corrective feedback

Supportive feedback involves describing exactly what the trainee has done correctly

Corrective feedback involves specifying what has not been performed correctly and instruction on how to perform in the future

- May include modeling



Tips for Providing Feedback

Feedback sandwich

- May soften some of the corrective feedback given
- May not be universally effective

Pre-session feedback vs post-session feedback

- Feedback delivered immediately prior to practicing the skill
- Feedback delivered at the conclusion of a practice session
- Research suggests that pre- vs. post-session feedback effects may be idiosyncratic (Digennero Reed & Henley, 2015)



Feedback Examples

“Jason, you did an excellent job of ensuring that only one item was selected when you conducted the preference assessment. Next time I would like to focus on rotating items when you present.”

“Seth, next time I would like to see you focus on recording each selection immediately after it occurs. You did very well ensuring that all items were evenly spaced.”



Component Analysis of BST

In a study by Ward-Horner and Sturmey (2012), the individual components of BST were analyzed in order to determine the “active ingredient.”

- Feedback and modeling were the most important components of BST
- Instruction and practice were not as effective, but still led to some performance increase in participants



Considerations

Must be able to approximate behavior/task in a role play and practice sessions

Learners must be able to imitate

Used when more intrusive prompting and fading or chaining procedures are not necessary

May be used individually or in groups



Procedural Fidelity Checklist

Procedural Integrity definition

Two types of errors in treatment fidelity

- Commission
- Omission
- Outline all steps required to implement an intervention/assessment

Tally or code correct and incorrect actions on a per opportunity basis, then divide incorrect by total opportunities in order to yield a percent correct score



Importance of Procedural Fidelity

Higher levels of Procedural fidelity are correlated with best client outcomes (DiGennaro et al., 2011)

With procedural fidelity failures, client behavior may become less predictable (Groskreutz, et al., 2011)

Procedural fidelity errors are less detrimental to client performance when procedures are initially implemented with perfect integrity (St. Peter Pipkin et al., 2010)



Procedural Fidelity Continued

Why do we care about procedural fidelity?

- Students have a right to the best available treatment
- Procedural drift is prevalent across time and interventionist

“If support personnel do not implement treatment plans proficiently, then in essence there is no treatment for challenging behavior” (Reid & Parsons 2002, p. 6)

Example Performance Checklist



Trainee Name: _____

Data Collector: _____

Date: _____

Steps	Correct	Incorrect
1. All items are present prior to beginning MSWO preference assessment		
2. Student seated in chair across from implementer		
3. Student is allowed to sample each item prior to assessment		
4. Items are presented to student in an array of three at least 5 inches apart		
5. Implementer instructs the student to "pick one"		
6. Immediately after the student selects an item, all remaining items are removed		
7. The implementer marks the data sheet with the corresponding number in order of selection. Example: first item chosen is marked 1		
8. The remaining items are rotated and presented again to the student		
9. All items are presented at least 3 times		
10. Calculate percentage selection for each item		
11. Rank the order of student preference for each item presented		

Incorrect ____/Total ____ = Percent Correct ____%



Maintaining Trained Skills

Conduct regular fidelity checks

Fade fidelity checks over time (more up front, fewer later on)

Use fidelity checklist developed in behavior skills training session

Graph performance and deliver feedback



Ongoing Training

Use fidelity checklists to identify areas of weakness

Use targeted training and feedback to increase competency in area(s) of weakness

Continue training and feedback until mastery criterion is reached

Performance Assessment (Carr et al., 2013)



- Training is not the only solution for performance issues
 - When is training appropriate? If two or more of the following are true
 - Staff have never received formal instruction
 - staff cannot accurately describe target task
 - If there is evidence the staff has not completed the task accurately in the past
 - Staff cannot complete the task within reasonable time constraints

Other Causes of performance issues



- Unclear expectations
- Unclear understanding of the purpose of the task
- Inadequate reminders (prompting)
- Environmental barriers to task completion
- Inadequate or unorganized materials
- Other task interference
- Inadequate supervision and performance monitoring
- Task priority and task difficulty



Identifying Performance Barriers

PDC-HS

Performance Diagnostic Checklist – Human Services

Employee's Name: _____ Interviewer: _____ Date: _____

Describe Performance Concern:

Instructions: Answer the questions below about the employee's specific performance problem (not the employee in general). The problem should be operationalized as either a behavioral excess or deficit. Items with an asterisk (*) should be answered only after the information is verified through direct observation.

TRAINING

1	<input type="radio"/> Yes <input type="radio"/> No	Has the employee received formal training on this task? If yes, check all applicable training methods: <input type="radio"/> Instructions <input type="radio"/> Demonstration <input type="radio"/> Rehearsal
2*	<input type="radio"/> Yes <input type="radio"/> No	Can the employee accurately describe the target task and when it should be performed?*
3	<input type="radio"/> Yes <input type="radio"/> No	Is there evidence that the employee has accurately completed the task in the past?
4*	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A	If the task needs to be completed quickly, can the employee perform it at the appropriate speed?*

TASK CLARIFICATION & PROMPTING

1	<input type="radio"/> Yes <input type="radio"/> No	Has the employee been informed that he/she is expected to perform the task?
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How to use

- Interview managers, supervisors, or employees
- Observe staff performance
- Score domains
- Identify indicated intervention
- Implement
- Evaluate intervention effects



Practice Activity

Develop and deliver your own training on how to make a paper airplane

Resources*

BST_activity1.doc

BST_template.doc

Parsons, et al., (2012)

Carr et al., (2013)

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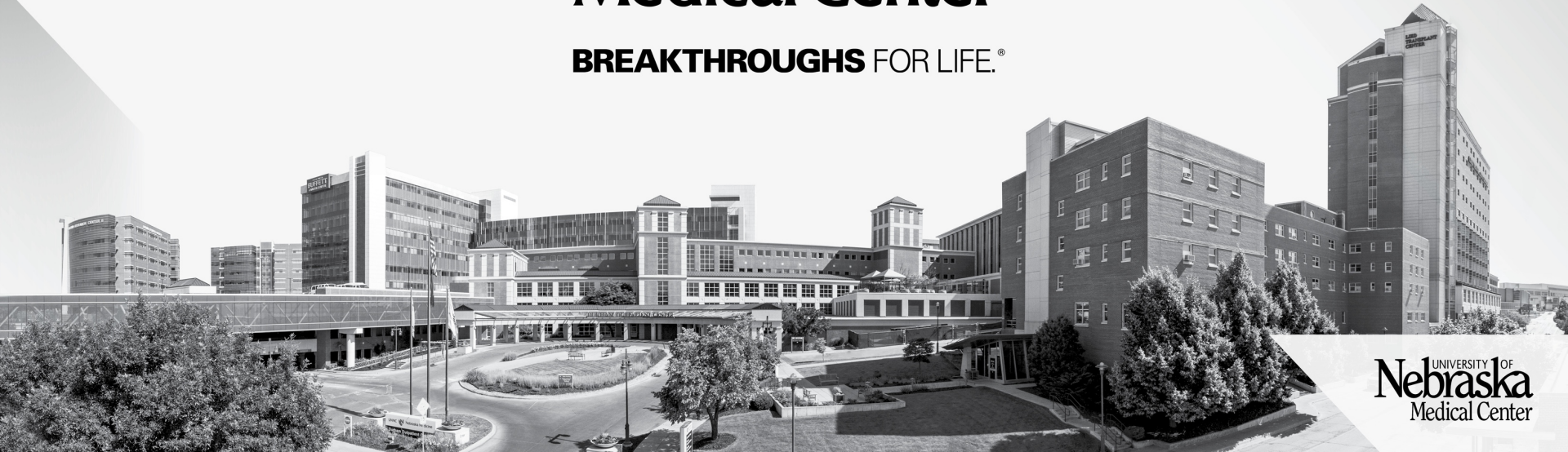
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