Innovations in Parent and Staff Training

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Caldwell University

Presentation Overview

- Importance of behavioral training
- Issues related to behavioral staff and parent training
- Types of skills that need to be taught
- Procedures that have been used
  - Behavioral skills training and video modeling
- Literature review on those procedures
- Current research
- Clinical and research recommendations

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What is Training?

- Teaching a person a particular skill or set of behaviors
- Verbal
  - Lectures
  - Discussions
  - Books
- Performance
  - Modeling
  - Practice
  - Feedback

Instructions ➡ Modeling ➡ Rehearsal ➡ Feedback

Reid & Fitch, 2011

Who Needs Training?

- 210 days (in school) x 6 hours/day = 1260 hours with staff
- 155 days (at home) x 24 hours/day + 18 hours/day x 210 days = 7500 hours with parents
- A lot of time for learning in both environments
- Imperative that we train both staff and parents

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Why do Behavioral Training?

- Evidence-based
  - Research support
- Combines verbal and performance training
  - Didactic and behavior
- Ensures competency
  - Meet some sort of criterion, procedural integrity
- Should include continued supervision
  - Although we might slip up here

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Why is Training often Neglected?

- Lack of knowledge regarding evidence-based training procedures (Reid, Parsons, Lattimore, Towery, & Reade, 2005)
- Training can be time consuming and effortful (Phillips, 1998)
- Need additional research that targets these issues

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Challenges Related to Training Staff

• Difficult job that requires a specific skill set

Challenges Related to Training Staff

• Hire only those who have this skill set?

Challenges Related to Training Staff

• What are we to do?

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What can we do?

• ID most difficult skills and focus on teaching those
  – Communicating effectively
  – Incidental or naturalistic teaching
  – Clinical decision making
  – Evaluate claims about interventions
  – Generalization of skills
  – Training others

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What can we do?

- Train other important skills too
  - Preference assessments
  - Functional behavior assessments
  - Discrete trial teaching (DTT)
  - Activity schedules
  - Reinforcement procedures
  - Guided compliance

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What can we do?

- Train effectively
  - Focus on procedural integrity
- Use evidence-based practices to train
  - Behavior skills training
  - Video modeling
- Evaluate social validity
  - Ask staff what they think, will staff use what they've learned?
- Assess maintenance
  - Will staff continue to do it?

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Behavior Skills Training (BST)

- Instructions
- Modeling
- Rehearsal
- Feedback

(Miltenberger, 2004; Reid & Parsons, 2006)

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Behavior Skills Training (BST)

- Instructions
- Modeling
- Rehearsal
- Feedback

Verbal

Parsons & Reid, 2012

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Behavior Skills Training (BST)

- Instructions
- Modeling
- Rehearsal   ➡   Performance
- Feedback

Parsons & Reid, 2012

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Benefits of BST

- Provides learners an opportunity to:
  - Observe & practice the desired behavior
  - Receive feedback
- Provides trainers an opportunity to ensure that learners are able to perform the new skill
- Group BST: (Bishop & Kenzer, 2012; Miltenberger, 2004; Parsons, Rollyson, & Reid, 2012)
  - More efficient
  - Learn from others during rehearsal and feedback
  - Generalization may be enhanced

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Previous Research

- Successful in training staff a wide variety of skills across a variety of settings
  - Communicating effectively (e.g., Miltenberger & Fuqua, 1985)
  - Incidental or naturalistic teaching (e.g.,Fetherston & Sturmey, 2014; Ryan, Hemmes, Sturmey, Jacobs,& Grommet)
  - Preference assessments (e.g., Lipschultz, Vladescu, Reeve, Reeve, & Dipsey, 2015; Weldy, Rapp, & Capocasa, 2014)
  - Functional behavior assessments (e.g., Lambert, Bloom, Kunnavatana, Collins, & Clay, 2013)
  - Discrete trial teaching (DTT) (e.g., Fetherston & Sturmey, 2014; Sarakoff & Sturmey, 2004; Severtson & Carr, 2012)
  - Activity schedules (e.g., Fetherston & Sturmey, 2014)

Can BST be used to Teach more Challenging Skills?

- Clinical decision making (data-based decisions)
- Evaluate claims about interventions
- Train other trainers
- Generalization

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Can BST be used to Teach more Challenging Skills?

- Clinical decision making
- Evaluate claims about interventions (e.g., Love, Carr, LeBlanc, & Kisamore, 2013)
- Train other trainers (e.g., Parsons, Rollyson, & Reid, 2012)
- Generalization (e.g., Cordier, Reeve, Reeve, Vladescu, & Sturmey, in preparation)

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EDUCATION AND TREATMENT OF CHILDREN Vol. 36, No. 1, 2013

Training Behavioral Research Methods to Staff in an Early and Intensive Behavioral Intervention Setting: A Program Description and Preliminary Evaluation

Jessa R. Love, James E. Carr, Linda A. LeBlanc, and April N. Kisamore
Western Michigan University

The Scientist-Practitioner Model

- Science and practice are inseparable
  - What advances one advances the other (Witmer, 1907/1996)

- 3 Roles: (Hayes, Barlow, & Nelson-Gray, 1999)
  - Consumer of research
  - Evaluator of interventions
  - Researcher

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Single-case Methodology in ABA

- Effective clinicians:
  - Evaluate interventions on an on-going basis
  - Make data-based changes as needed

- Effective scientists:
  - Demonstrate experimental control over behavior change

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Scientist-practitioners in EIBI

- A scientist-practitioner approach would be helpful:

  – Research should be directly applicable to clinical problems

  – Foster scientific thinking that is useful in developing and evaluating interventions even outside a specific research protocol

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Research in EIBI Settings

- Data-based decisions and intervention evaluations are critical
  – BACB code of ethical conduct

- Why might data-based decision-making and intervention evaluations be difficult in these settings?
  – Inadequate training for direct-care staff
  – Methods courses may not address research in clinical settings
  – Contingencies may not support research or contact with research

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Purpose

- Evaluate a modified BST approach for training staff to design and implement single-case research protocols in an EIBI setting

  – Are participants able to learn the necessary skills?

  – Are participants able to apply those skills?

  – Are participants satisfied with the training and experience?

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Participants

- 24 Clinical supervisors & senior therapists
  - CS: caseload of clients, develop and supervise individual treatment plans
  - ST: assist CS, supervise instructor therapists who work directly with the clients
- Organization providing EIBI services
- Ontario, Canada
- Demographic Questionnaire

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Table 1. *Demographic Information*

		Mean (years)	Range (years)
Age		29.5	25 – 39
Duration of Experience		5.5	2.9 – 9.2

		Number of Participants	Percentage of Sample
Sex	Male	2	8.3%
	Female	22	91.7%
Position	Senior Therapist	20	83.3%
	Clinical Supervisor	4	16.7%
Degree	High School Diploma	1	4.2%
	Bachelor's	18	75.0%
	Master's	5	20.8%
Discipline	Psychology	13	54.2%
	Behavior Analysis	6	25.0%
	Linguistics	3	12.5%
	English	2	8.3%
	Behavior Science Tech.	2	8.3%
	Early Education	1	4.2%
	Applied Science	1	4.2%
	Special Education	1	4.2%
	Sociology	1	4.2%
Certification	None	19	82.6%
	BCBA	4	17.4%
Methods Course	No	6	25.0%
	Undergraduate	11	45.8%
	Graduate	5	20.8%
	Both (undergrad & grad)	2	8.3%
Performance Management Training	Yes	9	37.5%
	No	15	62.5%

Curriculum: 8 Modules

1. Measurement
2. IOA & Procedural Integrity
3. Data Sheets
4. Single-case Designs
5. Graphing
6. Research Ethics & Informed Consent
7. Protocol Implementation
8. Protocol Development

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1. Measurement

– Reasons for & importance of measurement

– Operational definitions

– Event, trial, and momentary time sampling

– When to use, how to report data

2. IOA & Procedural Fidelity

– Assessing reliability of data - why and how

– Measuring fidelity of IV

– Frequency of IOA and fidelity assessments

– Standard acceptable results

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3. Data Sheets

– Creating user-friendly data sheets

– Necessary components

– Piloting data sheets

– Samples

4. Single-case Design

– Experimental control

– Reversal, multiple baseline, alternating treatments

– When & how to use each design

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5. Graphing

– Step-by-step instructions

– Visual inspection

– Samples

6. Research Ethics & Informed Consent

– Confidentiality of data, risks to participants, falsification of data

– Developing consent documents & obtaining consent

– Sample informed consent documents

– Conducting research with clients

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7. Protocol Implementation

– Instructions for running sessions

• Scheduling

• Planning IOA and fidelity assessments

• Managing Data

– Practice running sessions

8. Protocol Development

– How to develop a protocol

– Develop a protocol & materials

• Given a relevant research question

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Structure of Training

- Pre-test
- Lectures *(Instructions & Modeling)*
- Supplementary reading when applicable
- Homework *(Rehearsal & Feedback)*
- Post-test

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Evaluation of Training (Kirkpatrick, 1967)

- **Learning, Behavior, Reactions, Results**

- **Learning**
  - Principles, facts, and techniques learned
  - Acquisition of verbal information
  - Application evaluated elsewhere
  - Pre-test vs. Post-test scores
    - Content taken directly from lectures

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Evaluation of Training (Kirkpatrick, 1967)

- **Learning: Inter-rater Agreement**
  - 2nd independent rater, with key
  - *Agreement* = both raters providing same score for a given question on a given test
  - Pre-tests:
    - 33% of tests (range 29-41%)
    - Average agreement: 95% (range 87-99%)
  - Post-tests:
    - 30% of tests (range 26-32%)
    - Average agreement: 95% (range 90-98%)

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Evaluation of Training (Kirkpatrick, 1967)

- **Behavior**
  - Changes in participant behavior that result from training
  - Maintenance & application of information in non-training environment
  - Homework assignments

  - Inter-rater agreement:
    - 32% of assignments (range 27-40%)
    - Average agreement: 94% (range 90-100%)

Evaluation of Training (Kirkpatrick, 1967)

- **Reaction**
  - Participants' subjective views of training
  - Social validity questionnaire:
    - Value of goals
    - Satisfaction with knowledge and skills acquired
    - Satisfaction with teaching procedures
    - Rating of workload
    - Evaluation of improvement in knowledge and skills
    - Most helpful training component
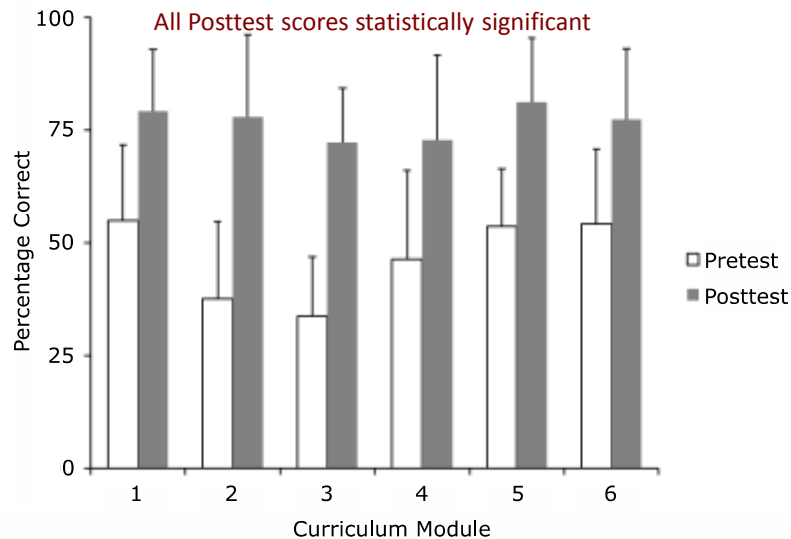   - Preferred teaching method
    - Recommendation for other staff

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Evaluation of Training (Kirkpatrick, 1967)

- **Results: Follow-up Investigation**
  - Tangible results of training for the organization
  - Comparing research activity of participants before and 1-year after training:
    - # of single-case design research projects
    - # presented at professional conferences
    - # published or submitted to peer-reviewed journal

  - 2 of 24 (8%) reported being involved in research
  - 1 of 24 (4%) reported a project presented at a conference

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Were participants able to learn the necessary skills?

All Posttest scores statistically significant

Were participants able to learn the necessary skills?

- In Kirkpatrick's framework, Learning refers only to acquisition of verbal knowledge

- Background knowledge makes it easier for an individual to take part in research
- Need not seek out reference materials to gather all information

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Were participants able to learn the necessary skills?

Bachelor's (n=13) vs. Master's (n=5)

– 2 MANOVA tests

– Significant relationship between degree and performance on pre-tests: $F_{(6,11)}=5.02$, $p=0.01$

– Participants with a Master's degree performed significantly better on Modules 1, 2, 4, 5, & 6

– No significant relationship on post-tests: $F_{(6,11)}=2.56$, $p=0.84$

– Relatively small sample size

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Were participants able to learn the necessary skills?

Bachelor's (n=13) vs. Master's (n=5)

– Participants with a Master's entered training with more background knowledge

– Training brought all performance to a similar level
  • Refresher for participants with previous graduate training
  • New teaching for those without previous graduate training

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Were participants able to learn the necessary skills?

Present vs. Absent from Lecture

– Modules with several absent participants: 1, 2, & 5

– 2 sample t-tests

– No statistically significant differences in performance found (small sample size)

– Absent participants still accessed materials, could discuss with peers, ask questions

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Were participants able to apply the skills?

Table 3. *Performance on Homework Assignments.*

Module #	Assignment	n	Mean Score (SD)
1	Measuring behavior & reporting data	24	90.8 (9.9)
2	Calculating & evaluating IOA	24	98.0 (2.8)
3	Creating a data sheet	24	85.5 (11.3)
4	Matching research questions with designs, formulating example questions for designs	22	84.5 (13.7)
5	Creating several graphs	22	84.8 (14.5)
6	Developing application materials for institutional review board	20	93.8 (4.7)
7	Conduct several research sessions following a protocol	18	85.5 (3.0)
8	Develop a protocol to answer a research question	18	93.6 (2.8)

Were participants able to apply the skills?

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Were participants able to apply the skills?

Bachelor's (n=13) vs. Master's (n=5)

- MANOVA test
- No significant relationship with performance on homework $F(6,11)=2.196$, $p=.122$
- Small sample size

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Were participants able to apply the skills?

Present vs. Absent from Lecture

- 2 sample t-tests
- No statistically significant differences in performance found
- Absent participants still accessed materials, could discuss with peers, ask questions
- Small sample size

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Were participants able to apply the skills?

- Variability across assignments
  - Variation in skills required to complete assignments & difficulty

- Variability between participants
  - Variability in prior experience with material

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Were participants able to apply the skills?

- No pre-training measures of performance on homework
  - Infer that performance was a function of training
  - Some skills may have already been in participants' repertoires

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Were participants satisfied with the training and experience?

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Table 4. *Results of Social Validity Questionnaire.*

Question	Response	# of Participants	Percentage
1 Value of goal	Highly	11	91.7%
	Somewhat	1	8.3%
2 Satisfaction with knowledge and skills	Very satisfied	6	50%
	Somewhat satisfied	6	50%
3 Satisfaction with teaching procedures	Very satisfied	5	41.7%
	Somewhat satisfied	6	50%
	Somewhat dissatisfied	1	8.3%
4 Rating of workload	Heavy	7	58.3%
	Reasonable	5	41.7%
5 Improvement in knowledge and skills	A lot	7	58.3%
	Somewhat	5	41.7%
6 Helpful training component	Lectures	5	41.7%
	Homework	6	50%
	Readings	1	8.3%
	Final projects	5	41.7%
7 Preferred teaching method	Lectures	6	50%
	Rehearsal	4	33.3%
	Feedback	4	33.3%
8 Recommendation for other staff	Definitely	12	100%

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Implications

- Modified BST-approach to staff training was effective in training therapists to design and implement single-case research protocols
- Addresses the lack of this training for staff without formal graduate-level coursework
- Unreasonable to expect all EIBI therapists to acquire graduate training
- Potentially large impact on amount of research published from EIBI settings

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Implications

- Heterogeneous group of staff
- Organizational culture must be considered for external validity
  - Research highly valued
  - Supportive environment
  - Incentives for involvement in research
  - Many staff view opportunity as a reward

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Implications

- Impact on clinical practice

- Relevant to data-based clinical practice outside context of research protocols
  - Operationally defining behavior
  - Creating data sheets
  - Graphing

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Limitations

- Lengthy duration of training: attrition, motivation

- Atypical rehearsal: no direct observation of behavior, feedback based on products

- Labor intensive: development of materials, grading, feedback
  - No treatment integrity measures, but low-risk
  - Replications will require administrative support & resources

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Future Research

- Follow-up investigation
- Video recorded lectures
- Revise curriculum and test in other ABA settings
  - Day programs for adults with DDs
- Evaluate training with more senior staff
  - Current model – provided research question
  - Future model – how to develop questions

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What is it about BST that Works?

COMPONENT ANALYSIS OF BEHAVIOR SKILLS TRAINING IN FUNCTIONAL ANALYSIS

John Ward-Horner[1,2]* and Peter Sturmey[1,2]

[1]The Graduate Center, CUNY, 365 Fifth Avenue, New York, NY 10016, USA
[2]Queens College, 65-30 Kassena Blvd, Flushing, New York, NY 11367, USA

Component Analysis

- Of individual components to determine which most effective or critical
  - Instructions
  - Modeling
  - Rehearsal
  - Feedback

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Results

- Feedback most effective and critical component
  - Modeling also effective for some
  - 2 of 3 rated feedback as favorite
  - 1 rated modeling as favorite

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Does it always work?

- Generalization of skills (Stokes & Baer, 1977)
  - Behavior occurs in novel settings, with novel people, and within skill sets
  - Across responses and skill sets (Fetherston & Sturmey, 2014)
  - Across and within instructional areas (Cordier, Reeve, Reeve, Vladescu, & Sturmey, manuscript in preparation)

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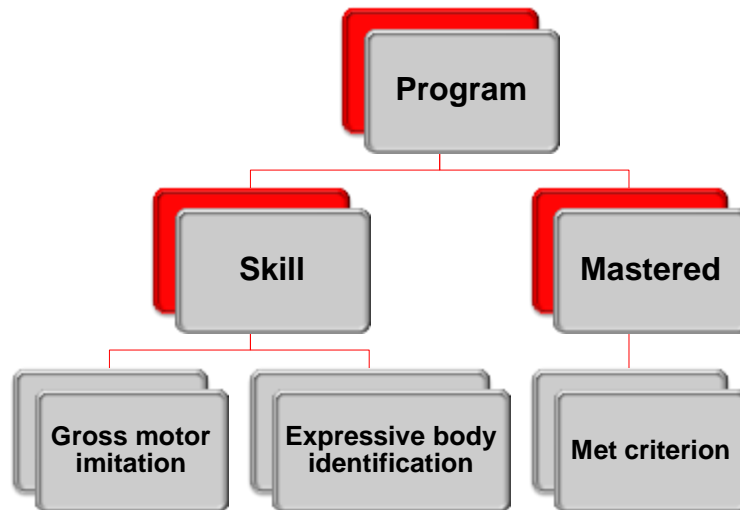# Combining Behavior Skills Training and Generalization Strategies To Train Staff Across and Within Instructional Areas

Jessica L. Cordier, Sharon A. Reeve,
Kenneth F. Reeve, Jason C. Vladescu
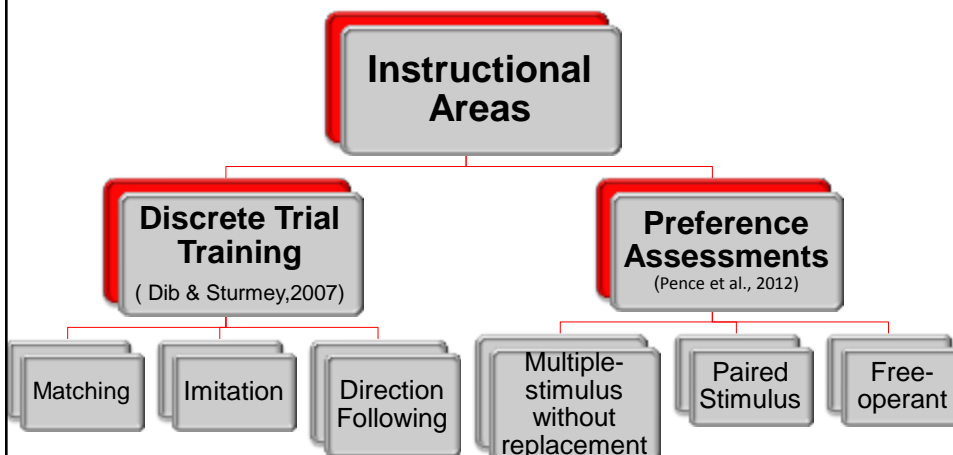*Caldwell University*

Peter Sturmey
Queens College

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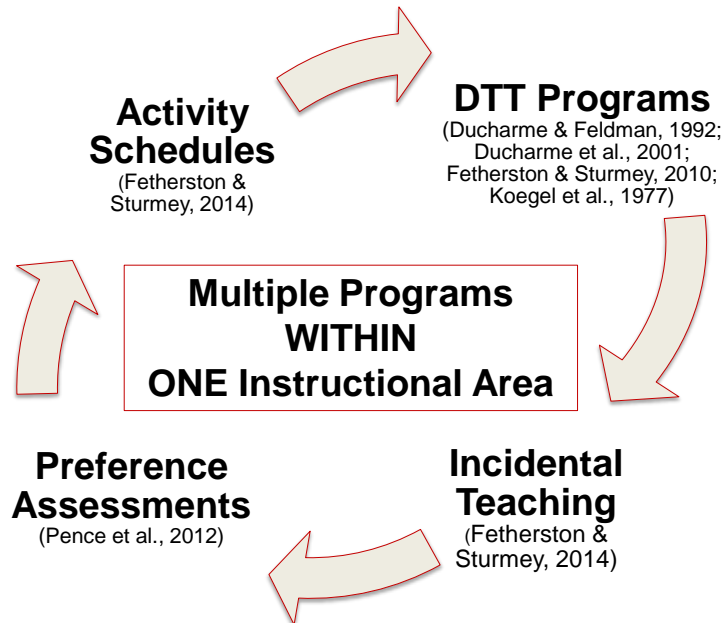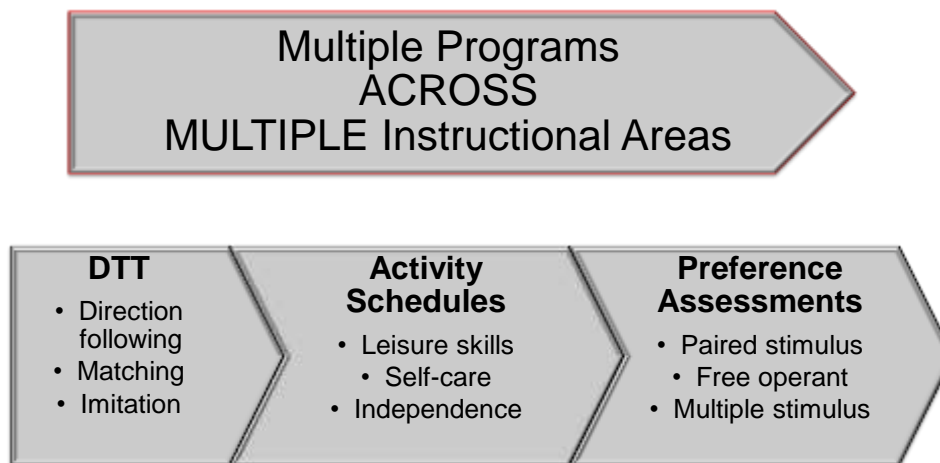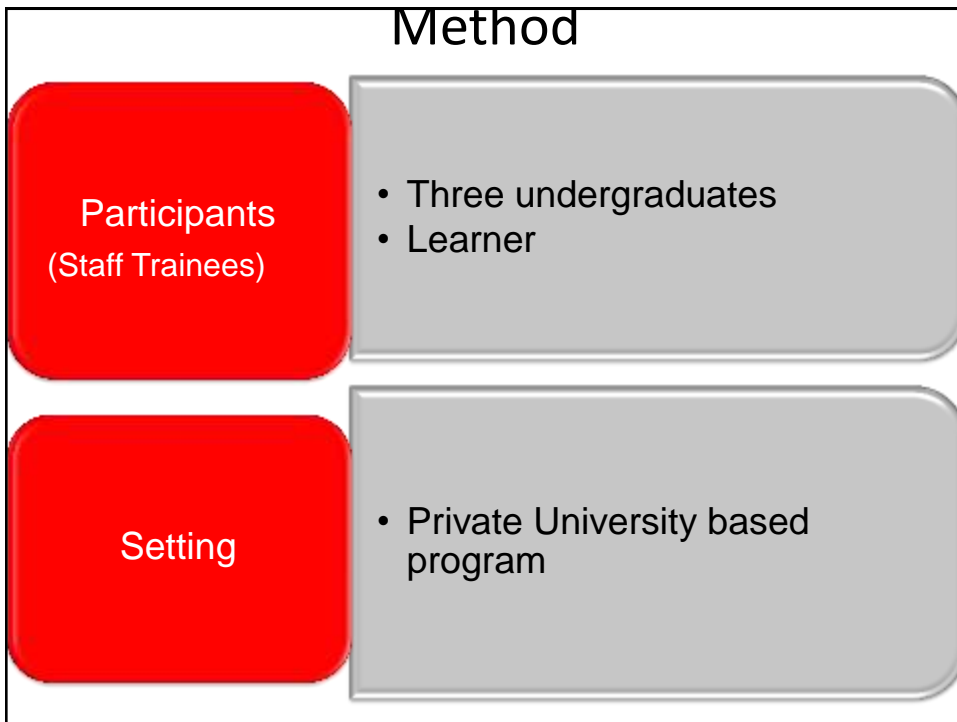| Procedure	Research
Assessment	Gianoumis, Seiverling, & Sturmey, 2012; Iwata, Wallace, Kahng, Lindberg, Roscoe, Conner, Hanley, Thompson, & Worsdell, 2000; Lambert, Bloom, & Kunnavatana, 2013; Lavie & Sturmey, 2002; Moore, Edwards, Sterling-Turner, Riley, DuBard, & McGeorge, 2002; Pence, Peter, & Tetreault, 2012
Language	Gianoumis et al. 2012; Madzharova, Sturmey, & Jones, 2012; Nigro-Bruzzi & Sturmey, 2010; Rosales, Stone, & Rehfeldt, 2009; Ryan, Hemmes, Sturmey, Jacobs, & Grommet, 2008; Seiverling, Pantelides, Ruiz, & Sturmey, 2010; Wood, Luiselli, & Harchik; 2007
Discrete trial training	Dib & Sturmey, 2007; Fetherston & Sturmey 2014; Koegel, Russo, & Rincover, 1977; Sarokoff & Sturmey, 2004; Sarokoff & Sturmey, 2008
Activity Schedules	Fetherston & Sturmey, 2014

Learner Programs

```
                    Program
                   /        \
               Skill        Mastered
              /     \            |
   Gross motor   Expressive    Met criterion
   imitation     body
                 identification
```

Instructional Areas and Programs

```
                  Instructional
                     Areas
                  /          \
        Discrete Trial      Preference
        Training            Assessments
        ( Dib & Sturmey,2007)  (Pence et al., 2012)
       /     |      \         /        |        \
 Matching Imitation Direction  Multiple-  Paired   Free-
                    Following  stimulus   Stimulus operant
                               without
                               replacement
```

Instructional Areas and Programs

Activity Schedules
(Fetherston & Sturmey, 2014)

DTT Programs
(Ducharme & Feldman, 1992;
Ducharme et al., 2001;
Fetherston & Sturmey, 2010;
Koegel et al., 1977)

**Multiple Programs
WITHIN
ONE Instructional Area**

Preference Assessments
(Pence et al., 2012)

Incidental Teaching
(Fetherston & Sturmey, 2014)

Instructional Areas and Programs

Multiple Programs
ACROSS
MULTIPLE Instructional Areas

DTT
• Direction following
• Matching
• Imitation

Activity Schedules
• Leisure skills
• Self-care
• Independence

Preference Assessments
• Paired stimulus
• Free operant
• Multiple stimulus

8/1/2016

Method

Participants (Staff Trainees)	• Three undergraduates • Learner
Setting	• Private University based program

Instructional Area	Programs	Within-Instructional Area Probe	Across Instructional Area Probe
DTI	•Identification of Colors •Identification of Body parts •One-Step Directions	GMI	
Activity Schedule	•Self-Help •Independent Activity •Build a model	Leisure	
Preference Assessment	•Multiple Stimulus Without Replacement •Single Stimulus •Free Operant	1 Untrained Program	
Token Economy			Check Marks

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Instructional Area	Programs	Within-Instructional Area Probe	Across Instructional Area Probe
DTI	•Identification of Colors •Identification of Body parts •One-Step Directions	GMI	
Activity Schedule	•Self-Help •Independent Activity •Build a model	Leisure	
Preference Assessment	•Multiple Stimulus Without Replacement •Single Stimulus •Free Operant	Paired Choice	
Token Economy			Check Marks

Instructional Area	Programs	Within-Instructional Area Probe	Across Instructional Area Probe
DTI	•Identification of Colors •Identification of Body parts •One-Step Directions	GMI	
Activity Schedule	•Self-Help •Independent Activity •Build a model	Leisure	
Preference Assessment	•Multiple Stimulus Without Replacement •Single Stimulus •Free Operant	Paired Choice	
Token Economy			Check Marks

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Instructional Area	Programs	Within-Instructional Area Probe	Across Instructional Area Probe
DTI	•Identification of Colors •Identification of Body parts •One-Step Directions	GMI	
Activity Schedule	•Self-Help •Independent Activity •Build a model	Leisure	
Preference Assessment	•Multiple Stimulus Without Replacement •Single Stimulus •Free Operant	Paired Choice	
Token Economy			Check Marks

Dependent Measures

DTI Components

(Adapted from Dib & Sturmey, 2007; Fetherston & Sturmey, 2014; Sarokoff & Sturmey, 2004)

- Attending behavior
- Present the task and verbal instruction
- Deliver a prompt
- Error correction
- Praise statement and access to snack
- Score data
- Wait 5 s
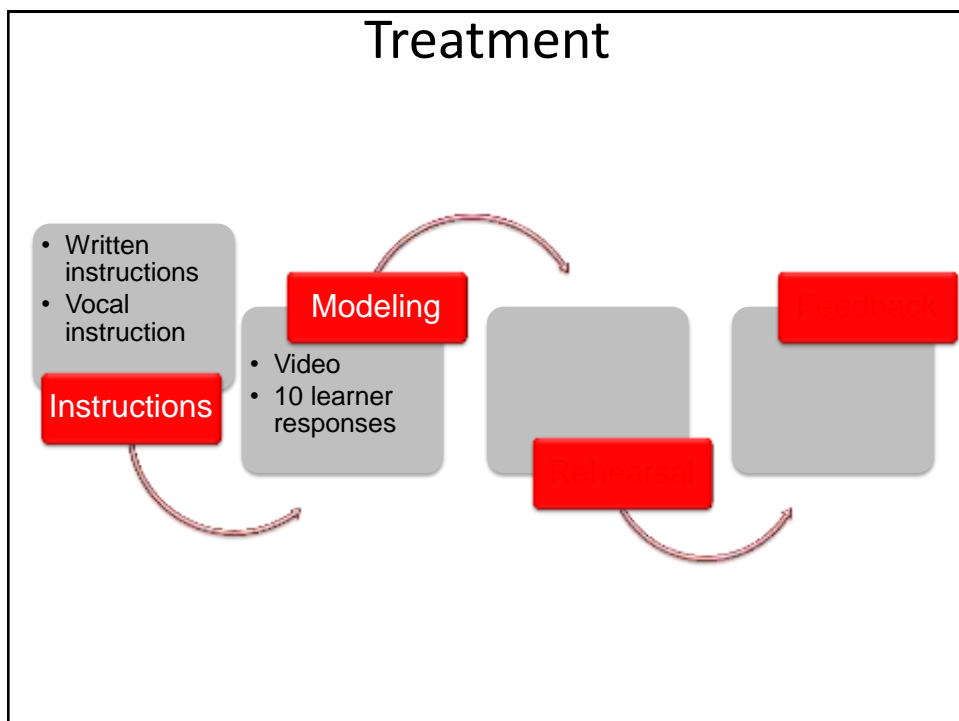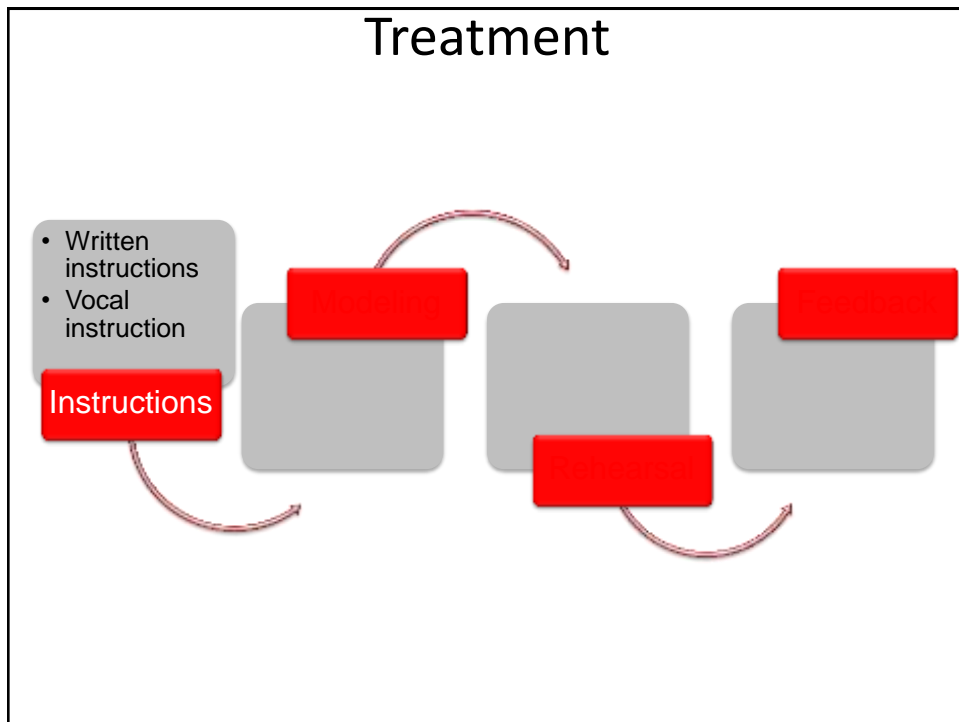- Score data
- Ignore off task behavior

Experimental Design

- **Multiple-baseline across instructional areas**
  - DTI
  - Preference assessments
  - AS
  - Token Economies

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Experimental Conditions

Baseline

Vocal instruction only

Baseline with written instructions

Vocal instruction & written instructions

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Treatment

- Written instructions
- Vocal instruction

Instructions

Modeling

Rehearsal

Feedback

Treatment

- Written instructions
- Vocal instruction

Instructions

Modeling

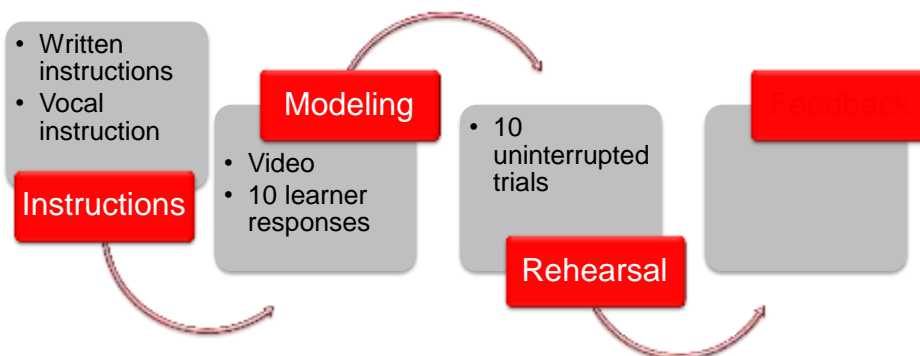- Video
- 10 learner responses

Rehearsal

Feedback

Learner Responses

A. Oriented in the absence of off task behavior

B. Not oriented and engages in off task behavior

C. Did not engage in the task when presented

D. Incorrect response

E. Requested or touched another item in the room unrelated to the task

F. Tolerated the prompt or representation of the trial

G. Resisted the prompt by attempting to leave the instructional area

H. Independent correct response

I. Independent correct response followed by an incorrect response

J. Independent correct response followed by off task behavior

Learner Responses

A. Oriented in the absence of off task behavior

B. Not oriented and engages in off task behavior

C. Did not engage in the task when presented

D. Incorrect response

E. Requested or touched another item in the room unrelated to the task

F. Tolerated the prompt or representation of the trial

G. Resisted the prompt by attempting to leave the instructional area

H. Independent correct response

I. Independent correct response followed by an incorrect response

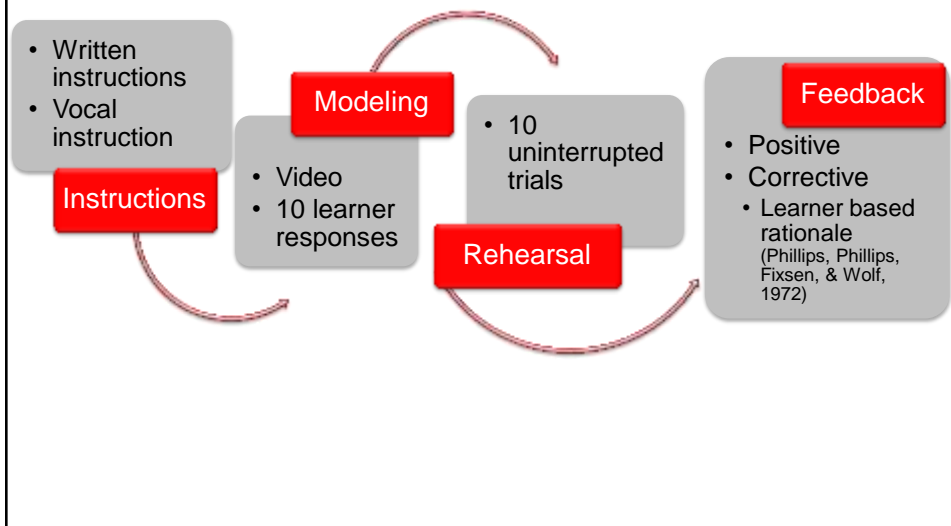J. Independent correct response followed by off task behavior

Learner Responses

A. Oriented in the absence of off task behavior

B. Not oriented and engages in off task behavior

C. Did not engage in the task when presented

D. Incorrect response

E. Requested or touched another item in the room unrelated to the task

F. Tolerated the prompt or representation of the trial

G. Resisted the prompt by attempting to leave the instructional area

H. Independent correct response

I. Independent correct response followed by an incorrect response

J. Independent correct response followed by off task behavior

Treatment

- Written instructions
- Vocal instruction

Instructions

Modeling

- Video
- 10 learner responses

- 10 uninterrupted trials

Rehearsal

Feedback

Treatment

- Written instructions
- Vocal instruction

Instructions

Modeling

- Video
- 10 learner responses

- 10 uninterrupted trials

Rehearsal

Feedback

- Positive
- Corrective
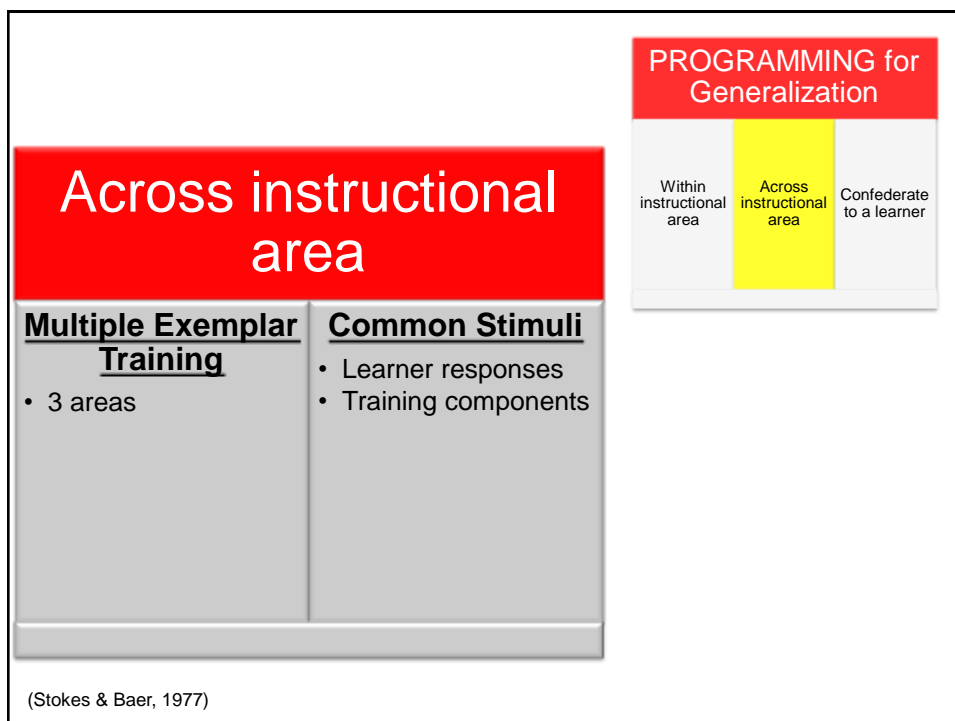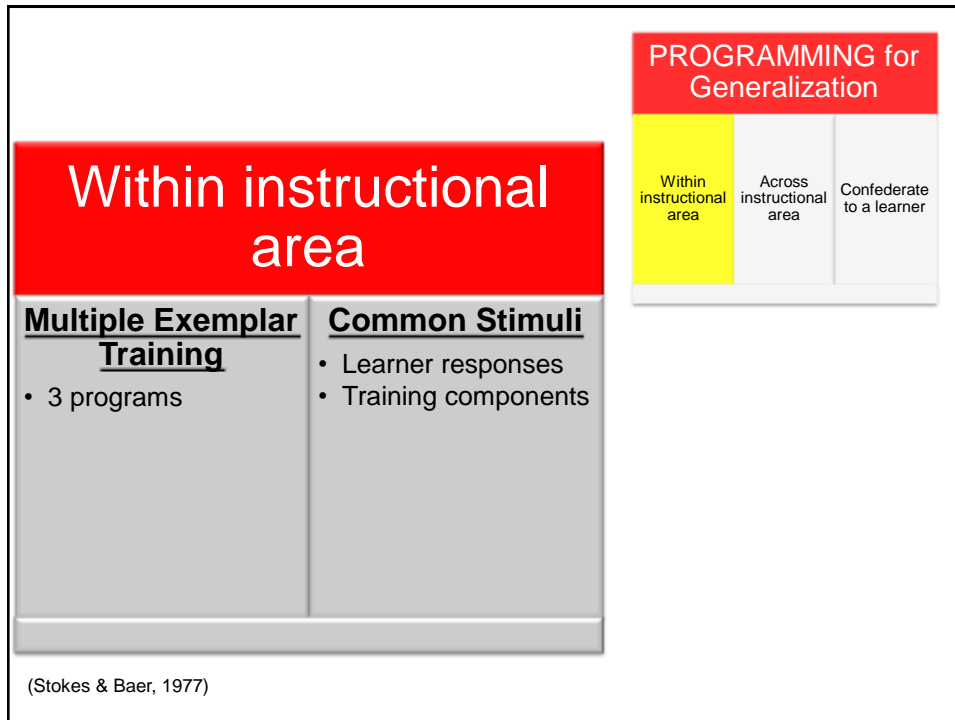 - Learner based rationale (Phillips, Phillips, Fixsen, & Wolf, 1972)

PROGRAMMING for Generalization

Within instructional area

Across instructional area

Confederate to a learner

Within instructional area

PROGRAMMING for Generalization

Within instructional area	Across instructional area	Confederate to a learner

Multiple Exemplar Training
- 3 programs

Common Stimuli
- Learner responses
- Training components

(Stokes & Baer, 1977)

Across instructional area

PROGRAMMING for Generalization

Within instructional area	Across instructional area	Confederate to a learner

Multiple Exemplar Training
- 3 areas

Common Stimuli
- Learner responses
- Training components

(Stokes & Baer, 1977)

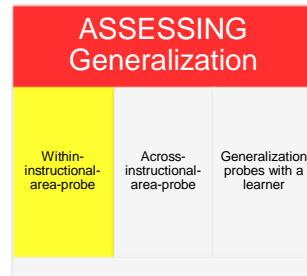| Components	DTI	Preference Assessment	Activity Schedule	Token Economy
Attending behavior	X	X	X	X
Present the task and instruction	X	X	X	X
Prompt	X		X	
Error correction	X		X	
Praise	X	X	X	X
Wait 5s	X			
Ignore off task behavior	X	X	X	X
Block attempts		X		
Access to item	X	X	X	X
No selection		X		
Remove unselected items		X		
Rotate items		X		
Reset				X
Prompt to remove picture				X
Score data	X	X	X	X

Components	DTI	Preference Assessment	Activity Schedule	Token Economy
Attending behavior	X	X	X	X
Present the task and instruction	X	X	X	
Prompt	X		X	
Error correction	X		X	
Praise	X	X	X	X
Wait 5s	X			
Ignore off task behavior	X	X	X	X
Block attempts		X		
Access to item	X	X	X	X
No selection		X		
Remove unselected items		X		
Rotate items		X		
Reset				X
Prompt to remove picture				X
Score data	X	X	X	X

Generalization of Skills from Confederate to a Learner

PROGRAMMING for Generalization

Within instructional area	Across instructional area	Confederate to a learner

Multiple Exemplar Training
- 3 programs
- Learner responses

Common Stimuli
- Data sheets
- Program materials
- Training components

(Stokes & Baer, 1977)

Ongoing Generalization Probes

ASSESSING Generalization

Within-instructional-area-probe	Across-instructional-area-probe	Generalization probes with the learner

Ongoing Generalization Probes

Within Instructional Area

- Baseline conditions (i.e., without written instructions)

- Every three sessions

- Novel program with confederate

ASSESSING Generalization		
Within-instructional-area-probe	Across-instructional-area-probe	Generalization probes with a learner

Ongoing Generalization Probes

Across Instructional Area

- Baseline with written instructions

- Every fourth session

- Novel instructional area with confederate

ASSESSING Generalization		
Within-instructional-area probe	Across-instructional-area-probe	Generalization probes with a learner

Ongoing Generalization Probes

Generalization Probes with a Learner

- After training probes

- Baseline conditions (i.e., without written instructions)

ASSESSING Generalization

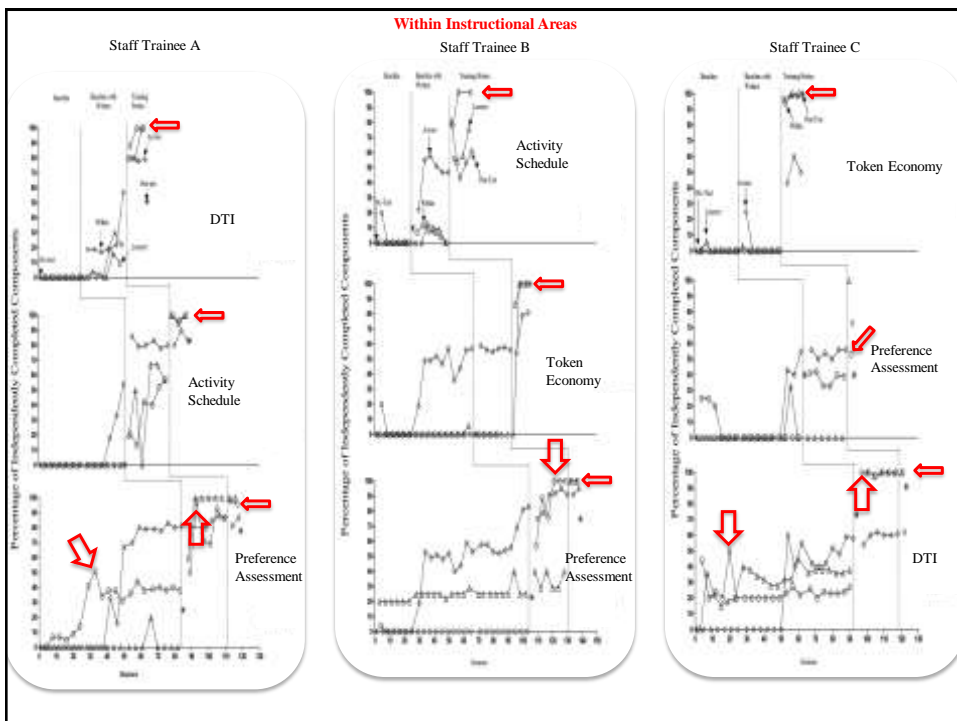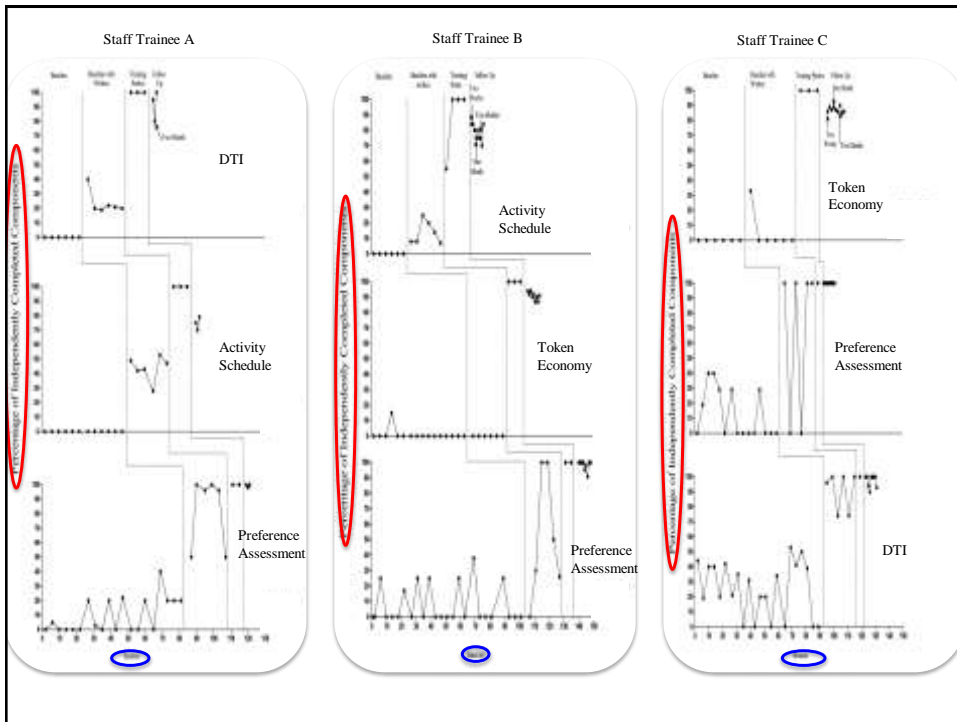| Within-instructional-area-Probe	Across-instructional area-probe	Generalization Probes with a Learner

Data Collection and Analysis

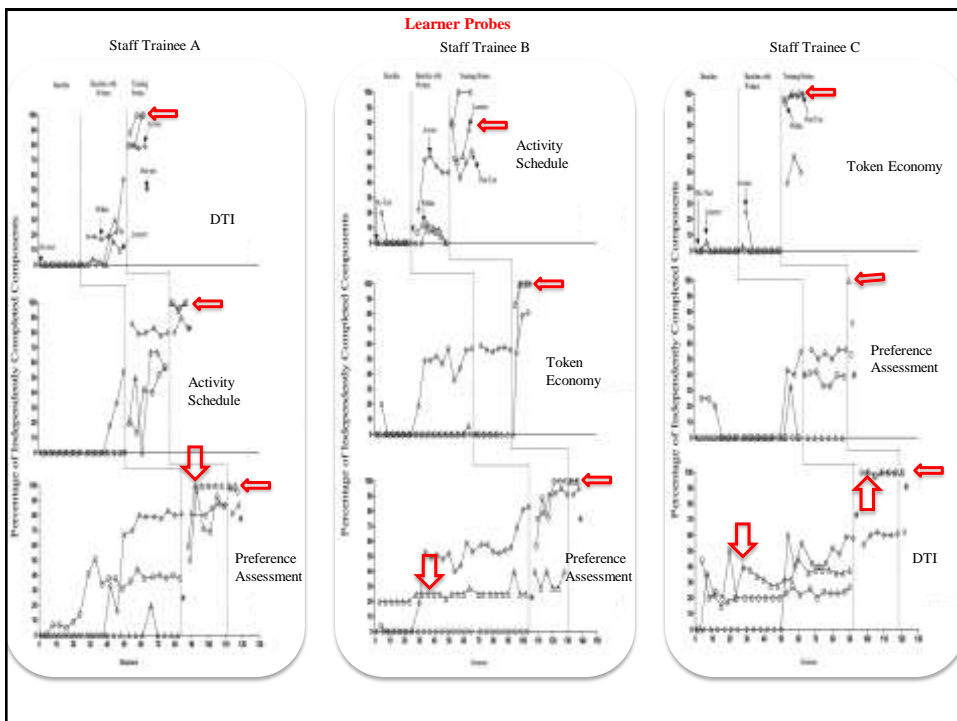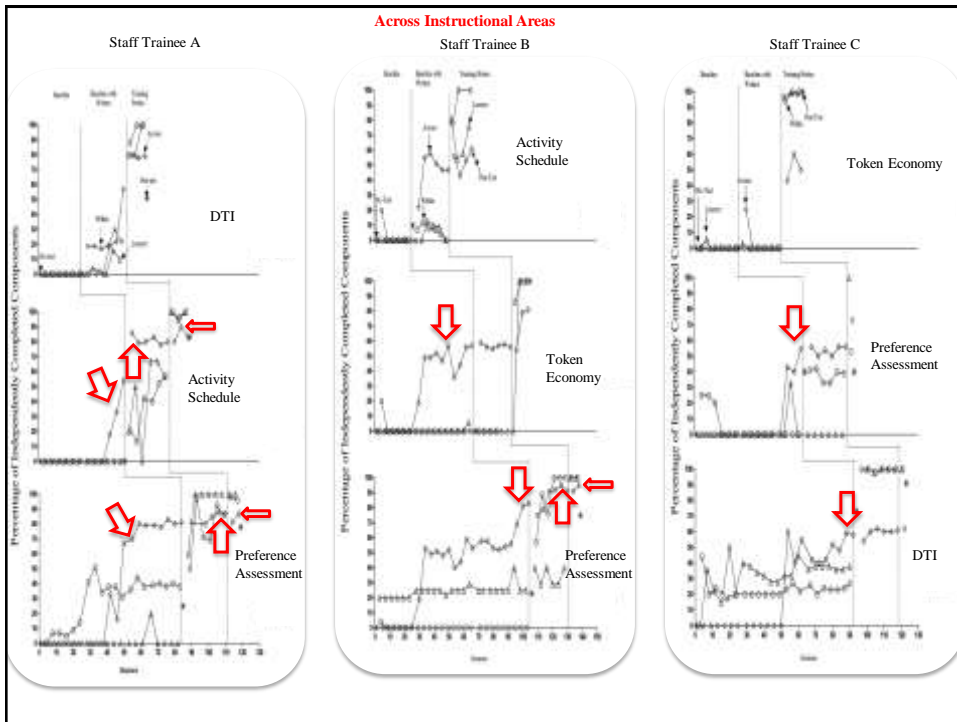## Inter-observer agreement

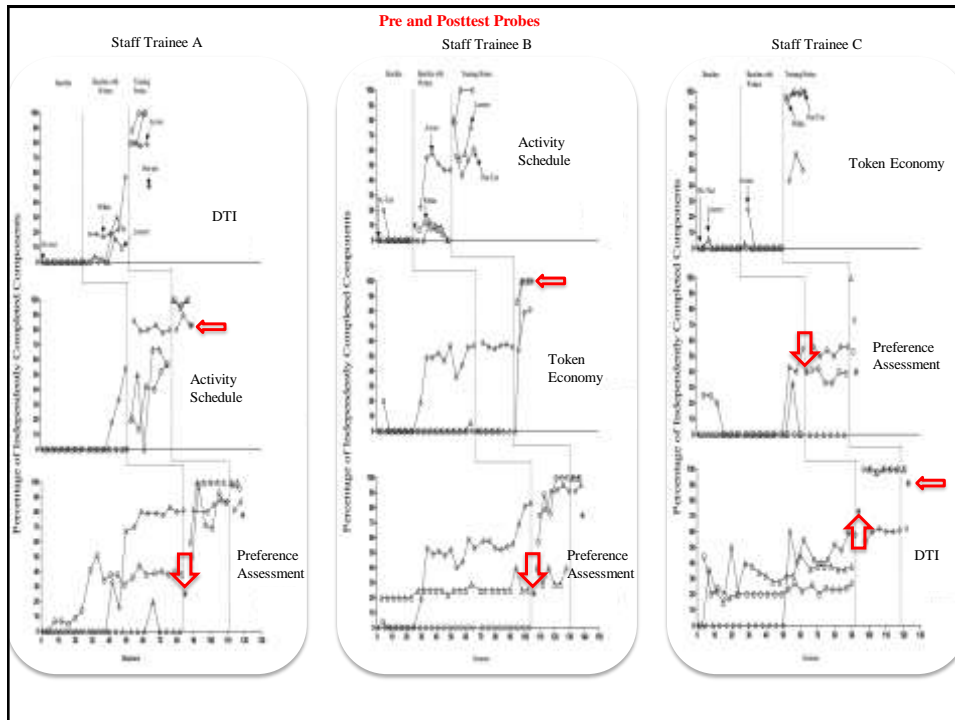| Staff Trainee	Baseline	Baseline with written instructions	Training
A	100%	99.8% ←	100%
B	100%	99.9%	100%
C	100% ←	100%	100%

Procedural Integrity

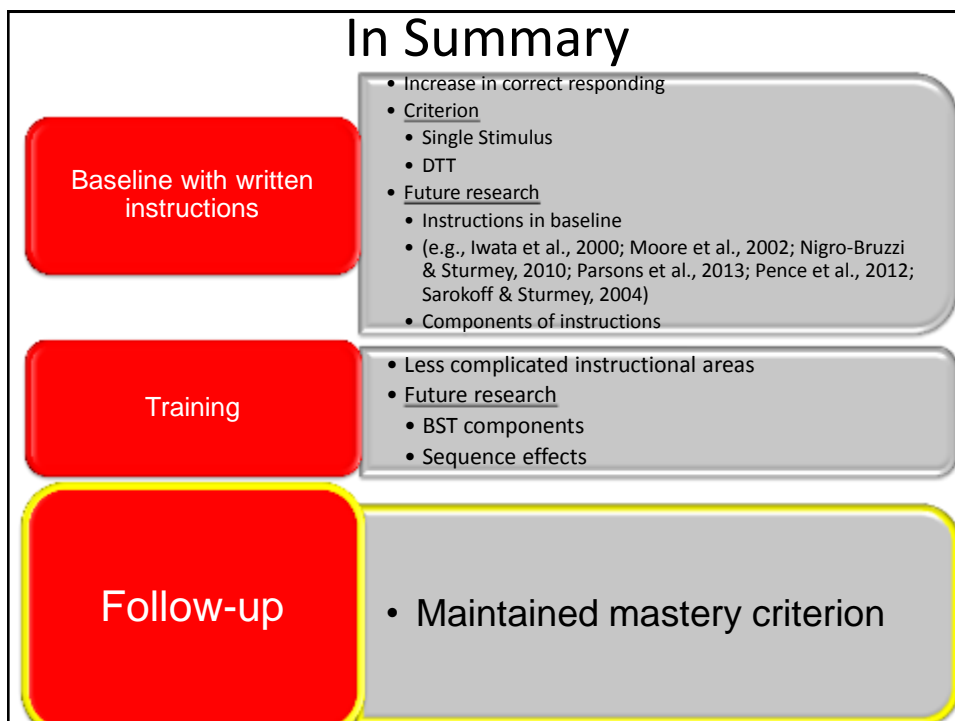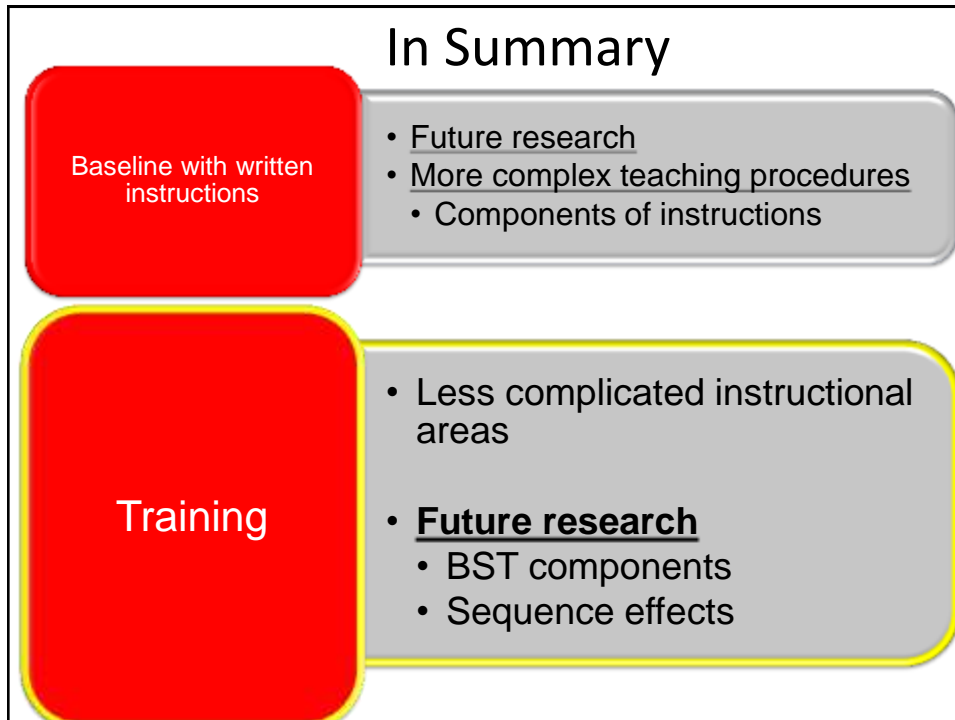| Staff Trainee	Baseline	Baseline with written instructions	Training
A	99.8% 100%	99%, 100%	100% 100% ←
B	→ 100% 100%	→ 98.7%, 100%	100% 100%
C	100% 100%	99.7%, 100%	100% 100%

Within Instructional Areas

Across Instructional Areas

Learner Probes

Pre and Posttest Probes

In Summary

Baseline with written instructions

- **Future research**
  - More complex teaching procedures
  - Components of instructions

In Summary

Baseline with written instructions

- Future research
- More complex teaching procedures
  - Components of instructions

Training

- Less complicated instructional areas

- **Future research**
  - BST components
  - Sequence effects

In Summary

Baseline with written instructions

- Increase in correct responding
- Criterion
  - Single Stimulus
  - DTT
- Future research
- Instructions in baseline
- (e.g., Iwata et al., 2000; Moore et al., 2002; Nigro-Bruzzi & Sturmey, 2010; Parsons et al., 2013; Pence et al., 2012; Sarokoff & Sturmey, 2004)
- Components of instructions

Training

- Less complicated instructional areas
- Future research
  - BST components
  - Sequence effects

Follow-up

- Maintained mastery criterion

Generalization

Within instructional areas	• Written instructions alone • <u>Future research</u> • Generalization strategies

Generalization

Within instructional areas	• Written instructions alone • <u>Future research</u> • Generalization strategies

Across instructional areas	• Generalized repertoire
	• <u>Future research</u>
	  • Complex areas
	  • Other strategies

Generalization

Within instructional areas	• Written instructions alone • Future research • Generalization strategies

Across instructional areas	• Generalized repertoire
	• Future research
	  • Complex areas
	  • Other strategies

Learner probes	• Variety of learner responses • Controlled environment

Generalization

Within instructional areas	• More complex areas • Future research • Generalization strategies

Across instructional areas	• Generalized repertoire
	• Future research
	  • Complex areas
	  • Other strategies

Learner probes	• Variety of learner responses • Controlled environment
Pre- and Posttest probes	• Mastered programs to novel programs • Learner responses • Increased repertoire

Limitations of BST

- Trained supervisor
- Travel to trained supervisor
- Time consuming?

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Video Modeling (VM)

- Might address some limitations of BST

- Show a video model of behavior such that it can be imitated in appropriate contexts (Catania et al., 2009)
  - Might limit need for trained professional
  - Convenience
  - Less costly
  - Less time consuming?

- Addition of voiceover instruction likely makes important components more salient
  - Parent training (e.g., Webster-Stratton, 1990)
  - Staff training (e.g., Catania et al., 2007; Lipschultz et al., 2015; Vladescu et al., 2012)

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What Can VM be used for?

- Still scratching the surface of VM benefits
- Teach staff a variety of skills
  - Direct teaching procedures (Giannakakos, Vladescu, Kisamore, & Reeve, 2015)
  - Preference assessments (Lipschultz, Vladescu, Reeve, Reeve, & Dipsey, 2015)
  - Focus on generalization, maintenance, and social validity

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A|B A I

EMPIRICAL REPORT

Using Video Modeling with Voiceover Instruction Plus Feedback to Train Staff to Implement Direct Teaching Procedures

Antonia R. Giannakakos[1] & Jason C. Vladescu[1] & April N. Kisamore[1] & Sharon A. Reeve[1]

- Direct teaching procedures
  - Most-to-Least, Least-to-Most, Prompt delay

- Utility of prompting procedures (Demchak, 1990)

- Staff preference (McDonnell & Ferguson, 1989)

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Video Modeling with Voiceover Instruction (VMVO)

- Demonstrates for the viewer behavior she is expected to engage in

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Article
Catania et al. (2009)
Lipschultz et al. (2015)
Neef et al. (1991)
Macurick et al. (2008)
Moore et al. (2007)
Rosales et al. (2015)
Vladescu et al. (2012)
Weldy et al. (2014)

Performance Feedback

- Increase staff treatment integrity (e.g.,Casey & McWilliam, 2011; Ward-Horner & Sturmey, 2012)

- Decrease in trainer presence and training duration (DiGennero-Reed & Henley, 2015)

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Purposes

- Evaluate VMVO as a prelude to in vivo training

- Evaluate generalized responding
  - Untrained direct teaching procedures
  - Actual consumer

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Participants & Setting

- Three female graduate students (staff trainees)

- Actual consumer with autism spectrum disorder (ASD)

- Simulated consumer

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Design and Dependent Variable

- Multiple baseline across participants (Baer, Wolf, & Risley, 1968)

- Percentage of correctly completed steps

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Direct Teaching Procedures

- Trained Procedures
  – Most-to-Least (MTL)

- Untrained Procedures
  – Least-to-Most (LTM)
  – Prompt Delay (PD)

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Steps	MTL	LTM	PD
Fill out the data sheet	X	X	X
Establish attending	X	X	X
Present clear instruction	X	X	X
Present correct prompt -Physical, model, verbal	X		
Present correct prompt -Verbal, model, physical		X	
Provide immediate prompt (0 s)			X
Wait 5 s for response	X	X	X
Increase/ decrease intrusiveness of prompts	X	X	X
Immediate reinforcement for correct response	X	X	X
Manage errors and inappropriate behaviors	X	X	X
Record data	X	X	X
Calculate data	X	X	X

Simulated Consumer Skill Programs

Leisure
(Playing with blocks, completing a puzzle)

Self-help
(Zipping a jacket, buttoning a shirt)

Educational
(Receptive ID of body parts, following one step directions)

Actual Consumer Skill Programs

Stuffing envelopes

Folding towels

Simulated Consumer Scripts

Trial	Simulated Consumer
1	• Provide eye contact • Correct response (prompted)
2	• Do not provide eye contact • Correct response (prompted)
3	• Provide eye contact • Incorrect response
4	• Provide eye contact • No response
5	• Provide eye contact • Correct response (prompted)
6	• Provide eye contact • Correct response (prompted)
7	• Provide eye contact • Stereotypy
8	• Provide eye contact • Correct response
9	• Provide eye contact • Problem behavior
10	• Provide eye contact • No response

General Procedure

- Provide materials

- 10 minutes to review

- Provide instruction

- Sessions consisted of up to 10 trials

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Procedure

<mark>Baseline</mark>

VMVO plus Feedback

Generalization

    Feedback

    Video Feedback

- No video

- No feedback

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Procedure

Baseline

<mark>VMVO plus Feedback</mark>

Generalization

    Feedback

    Video Feedback

- First session
  - Viewed video
  - No feedback

- 26 min 47 s

- MTL procedure

- Voiceover instruction

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Procedure

Baseline

<mark>VMVO plus Feedback</mark>

Generalization

    Feedback

    Video Feedback

- Subsequent sessions
  - Feedback only

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Procedure

Baseline

VMVO plus Feedback

<mark>Generalization</mark>

    Feedback

    Video Feedback

- Untrained direct teaching procedures
  - Least-to-Most
  - Prompt Delay

- Actual consumer

- No video or feedback

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Procedure

Baseline

VMVO plus Feedback

Generalization

  <mark>Feedback</mark>

  Video Feedback

- No video

- Feedback provided

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Procedure

Baseline

VMVO plus Feedback

Generalization

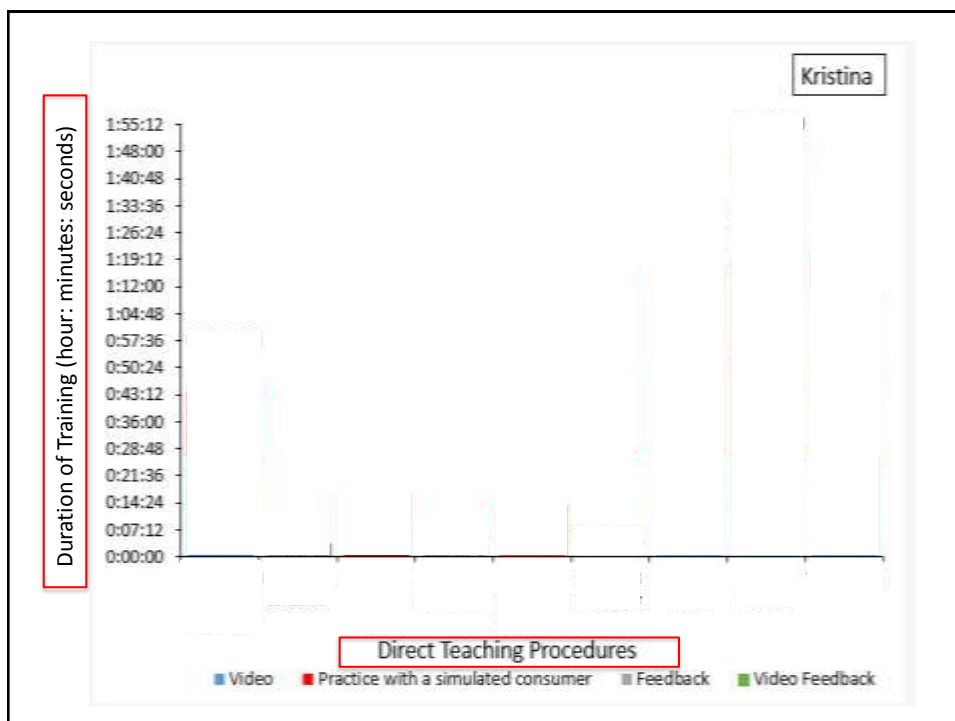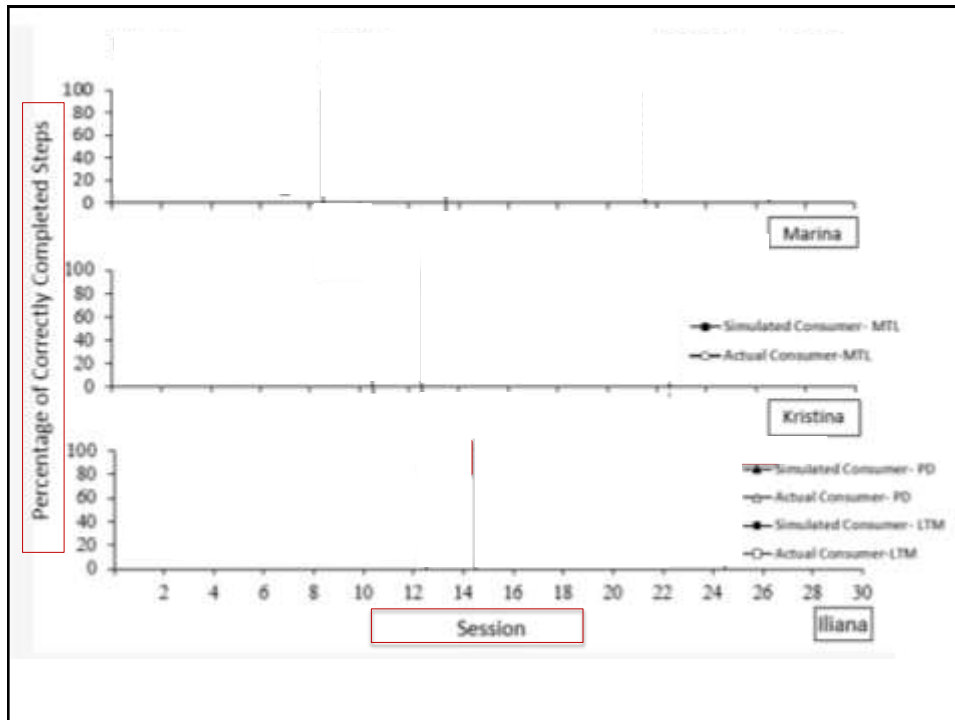 Feedback

  <mark>Video Feedback</mark>

- No video

- Video of previous session
  - Feedback provided simultaneously

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Conclusions

- VMVO plus feedback was effective
  - Generalization to untrained procedures
  - Generalization to an actual consumer

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Conclusions

- VMVO as prelude to in vivo training
  - Feedback as needed
  - Reduced training times

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ORIGINAL ARTICLE

Using Video Modeling with Voiceover Instruction to Train Staff to Conduct Stimulus Preference Assessments

Joshua L. Lipschultz[1] & Jason C. Vladescu[1] &
Kenneth F. Reeve[1] & Sharon A. Reeve[1] &
Casey R. Dipsey[1]

Assessing Preferences of Individuals With Developmental Disabilities:
A Survey of Current Practices
Richard B. Graff, New England Center for Children
Amanda M. Karsten, Western New England University

Preference Assessment Type	Percentage
Paired-Stimulus	70
Multiple-Stimulus with Replacement	34
Free Operant	34
Single-Stimulus	27
Multiple-Stimulus without Replacement	20

Implementing Assessments

1. Choose SPA
2. Identify stimuli
3. Implement assessment
4. Score/interpret results

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Video Modeling

- Might not require trainer

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Reference	Assessment Trained	Components Taught			
		Select SPA	Identify Stimuli	Implement SPA/ collect data	Score/interpret results
Rosales et al. (2015)	PS, MSWO, FO	No	No	Yes	Yes
Weldy et al. (2014)	Brief MSWO, Brief FO	No	No	Yes	Yes

Table 1
Steps for Completing Single-Stimulus, Paired-Stimulus, and MSWO Preference Assessments

Step	Preference assessment		
	Single stimulus	Paired Stimulus	MSWO
Choose appropriate SPA to conduct	X	X	X
Identify correct items to use in SPA	X	X	X
Present correct items	X	X	X
Present items appropriate distance from consumer	X	X	X
Present items in correct location		X	X
Present items spaced evenly apart and/or equidistant from consumer		X	X
Deliver instruction		X	X
Block attempts to approach more than one item		X	X
Allow 10 s to approach item	X	X	X
Provide access to approached item	X	X	X
Allow time to manipulate or consume item	X	X	X
If no item is approached within 10 s, re-present item(s)	X	X	X
Remove items that were not approached		X	X
Record response	X	X	X
Rotate items before presenting next trial			X
Ignore problem behavior	X	X	X
Correctly calculate percentage of approaches	X	X	X
Rank items correctly	X	X	X
Identify item to use during teaching	X	X	X

Purposes

- Train staff to conduct three types of preference assessments (SS, PS, MSWO) using a single video

- Train staff in the four identified components discussed earlier

- Generalization/Follow-up and Content and Social Validity

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Staff trainees, Instructors, & Consumers

Staff Trainees		• 4 individuals •Limited experience	
Instructors	Simulated	5 staff members	Baseline, Video Modeling, Follow-up, Generalization sessions
	Actual	Actual consumers' teachers	Generalization sessions
Consumers	Simulated	Experimenter	Baseline, Video Modeling, Follow-up, Generalization sessions
	Actual	1 male with autism	Generalization sessions

Single-stimulus	
Trial	**Response**
1	Hands on desk/ Typical response
2	Typical response
3	No response/ No response
4	Typical Response/ Stereotypy

MSWO	
Trial	**Response**
1	Consecutive selection/ Typical response
2	Typical Response w/ Problem behavior
3	Hands on desk/ Typical response
4	No response/ no response

Paired-stimulus	
Trial	**Response**
1	Consecutive selection/ Typical response
2	Typical response
3	Hands on desk/ Simultaneous selection/ simultaneous selection
4	Typical response
5	Typical response
6	Hands on desk/ No response/Typical response

Design and Measurement

- Multiple baseline across staff trainees

- Dependent variable
  - Percentage of correctly implemented steps

- Two consecutive sessions above 90%

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Baseline

•Materials to conduct session

•Choose SPAs to conduct with hypothetical consumers

•Instructed to implement each of the preference assessments with a simulated consumer

•No feedback

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Baseline

- Three BCBAs were surveyed

- Rated the video to have all the steps necessary to implement the three SPAs
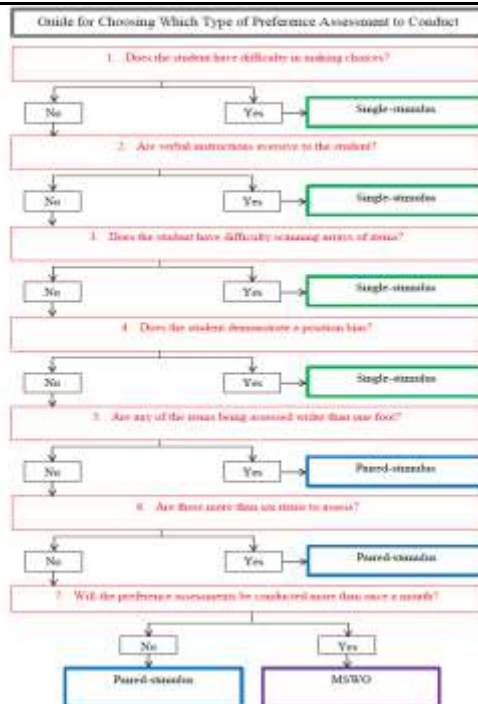
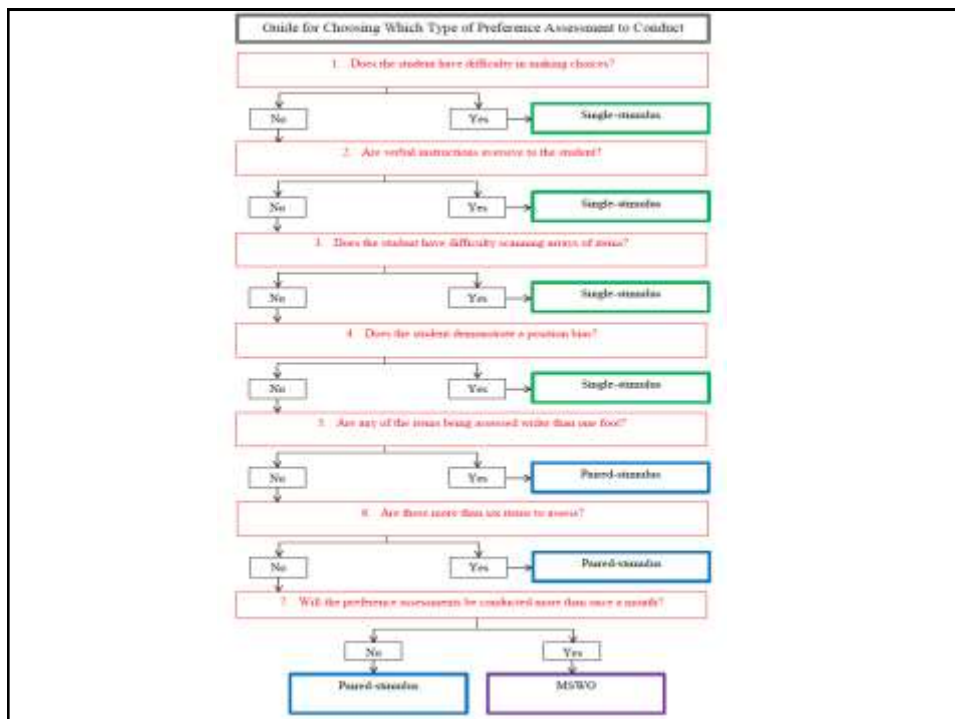- Additional information

Video Modeling Content Validity

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Baseline

- Viewed video (19 min, 28 s)

- Session with simulated consumer within 5 min

- No feedback

- Instructions on job aid

Video Modeling

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Guide for Choosing Which Type of Preference Assessment to Conduct

1. Does the student have difficulty in making choices?
No — Yes → Single-stimulus

2. Are verbal instructions aversive to the student?
No — Yes → Single-stimulus

3. Does the student have difficulty scanning arrays of items?
No — Yes → Single-stimulus

4. Does the student demonstrate a position bias?
No — Yes → Single-stimulus

5. Are any of the items being assessed wider than one foot?
No — Yes → Paired-stimulus

6. Are there more than six items to assess?
No — Yes → Paired-stimulus

7. Will the preference assessment be conducted more than once a month?
No → Paired-stimulus
Yes → MSWO

Sample Description

Gale is a 14-year-old female diagnosed with autism. She has been in an ABA program since she was 3 years old, so she has lots of experience learning in a discrete-trial training format. Throughout her schooling, she has never showed signs of a positional bias, nor has she had issues scanning and picking items out of an array. She is very good at staying in her seat, but she sometimes has tantrums that disrupt the classroom. **She does not seem to have difficulty making choices during school.** She frequently screams during tantrums that she does not want to work anymore, and she wants to go home. Her teachers don't believe that instructions are aversive to her. Her teachers are concerned that she has no motivation to work in school, and they feel like they can never figure out what she wants to work for during class. All of her toys that she plays with are less than 1 foot wide, and her teachers want to assess her preference for five toys. Her teachers want to conduct preference assessments with her about twice a month so she remains interested in working during school.

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Guide for Choosing Which Type of Preference Assessment to Conduct

- Actual and simulated consumers

- Materials to conduct session

- Choose SPAs to conduct with hypothetical consumers

- Instructed to implement each of the preference assessments with a simulated consumer
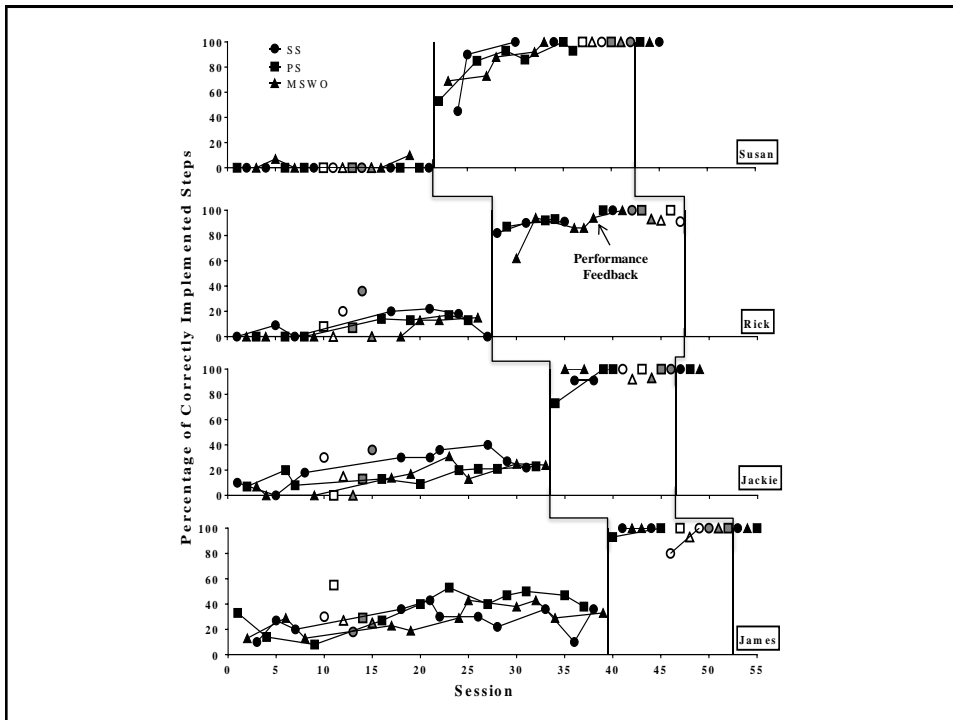
- No feedback

- Job aid was provided

Generalization

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- 1 week

- Materials to conduct session

- Choose SPAs to conduct with hypothetical consumers

- Instructed to implement each of the preference assessments with a simulated consumer

- No feedback

- Job aid was provided

Follow-up

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Social Validity (Outcome)

• Graduate students watched pre- and post-treatment video clips

•Post-treatment clips rated as more competent

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Items	P1	P2	P3	M
How clear is your understanding of the procedure?	6	6	6	6
How acceptable do you find the training you received?	6	5	7	6
How willing are you to implement the training you received?	7	7	6	6.7
To what extent do you think there might be disadvantages in following this treatment?	2	4	2	2.7
How cost effective do you think it will be to implement this strategy to train staff?	7	7	6	6.7
How easy do you think it will be to implement the suggested training?	4	5	7	5.3
How likely is this training to make a permanent change in your behavior?	6	3	6	5
How much do you like the training you received?	5	4	6	5
How comfortable were you during the training?	4	4	6	4.7
How effective do you believe this training will be to train staff to implement stimulus preference assessments?	6	3	6	5

Conclusions

- Except for one session with Rick, performance feedback was not necessary
  - Trainer was not required while staff watched the training video

- Staff trainees were trained to implement the four components seemingly necessary to independently implement SPAs

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Conclusions

- Training to implement three different types of SPAs using a single video

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Conclusions

- Staff trainees demonstrated generalized responding

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Conclusions

- Extend previous research
  - Follow up
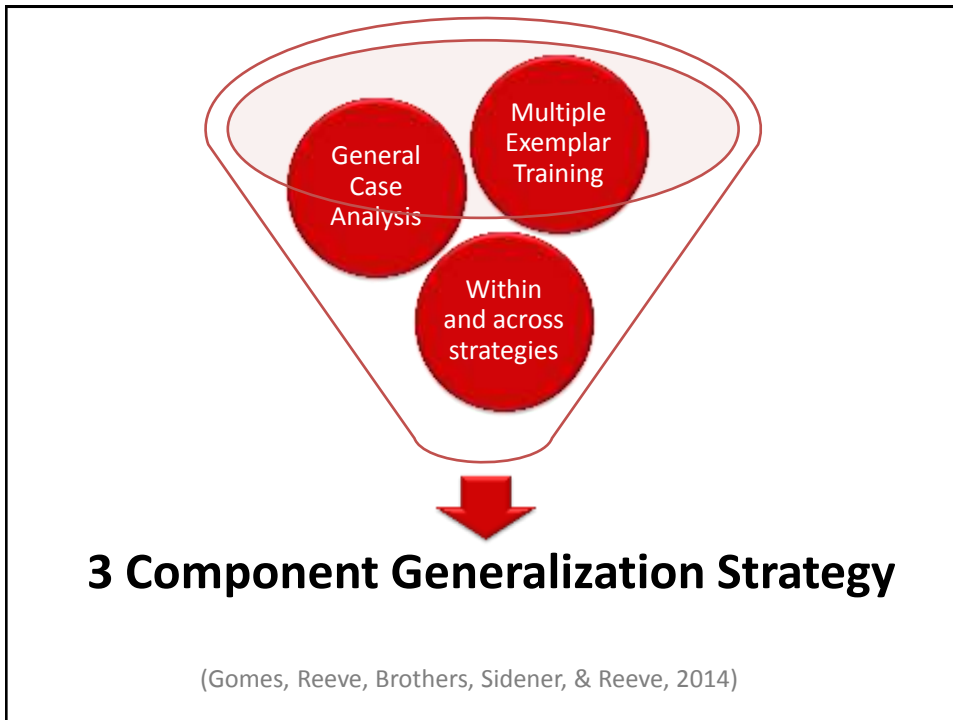
  - Content validity

  - Social validity

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Conclusions

- Train staff to identify relevant characteristics of hypothetical consumers

- Select SPA based on those characteristics

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Clinical Recommendations for Staff Training

- Consider how you are going to program for and assess generalization
  - Across time (i.e. response maintenance)
  - Across settings (i.e. setting/situation generalization)
  - Across behaviors (i.e. response generalization)
  - Across subjects

  - Use a three component generalization strategy

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3 Component Generalization Strategy

(Gomes, Reeve, Brothers, Sidener, & Reeve, 2014)

Clinical Recommendations for Staff Training

- Program for maintenance
  - Thin the schedule of reinforcement
  - Teach meaningful skills

- Consider social validity
  - Train meaningful skills
  - Train in interesting ways
  - Train both verbal and performance skills
  - Think about staff needs and motivating operations

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Research Recommendations for Staff Training

- Social validity
  - What are the barriers to implementation?
  - What do staff prefer during training?

- More research on complex skills
  - Communication, data-based decision-making

- Maintenance
  - Do the results hold up over time?

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Why train parents?

- Spend a large amount of time with their children
- Manage current and future problem behavior
- Teach new skills to their children
- Family priorities increase social validity and implementation of intervention (Moes & Frea, 2002)
- Evaluate claims about interventions
- Advocate/communicate effectively for their children

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Benefits of Parent Training

•Family norms + priorities

•Parent nominated tasks

•Savings of time & money

•Decrease in family stress (travel, scheduling)

•Parents' increased quality of life

_____

Increased social validity

(Symon & Boettcher, 2008; Tarbox, Persicke, & Kenzer, 2013; National
Research Council, 2001)

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Challenges Related to Parent Training

• Do children come with a handbook?

Challenges Related to Parent Training

- Is each child the same?

Challenges Related to Parent Training

- Unique problems make it difficult to follow through or perform with high integrity

- Parents are people too!
  - Must consider role of covert verbal behavior and rules
    - Live up to society's expectations
    - Negative reinforcement cycle (Carr, Taylor, & Robinson, 1991;Berberich, 1971;Stocco & Thompson, 2015)
    - Negative self-talk

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Problems Associated with Parent Implementation of Interventions
(Allen & Warzak, 2000)

- Establishing operations (EOs)
- Acquisition
- Generalization
- Consequent events

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Acquisition Challenges

- One procedure might work for one parent but not another
- Unclear which components of training are essential
- Training takes too long
- Training is not meaningful to the parent

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Addressing Acquisition Challenges

- Do verbal and performance training
- Conduct component analyses
- Make training brief
  - Gather data on training time

- Evaluate social validity of the procedures

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EO Challenges

- Restricted resources (e.g., time, finances, assistance)
  - Need fast procedures that result in fast improvement
  - Needs to be easily available and inexpensive
  - Needs social support
- Social disapproval
  - Training and subsequent procedures might not be socially valid

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Addressing EO Challenges

- Use cost effective training that can be done in a short period of time

- Make sure training procedures are socially valid

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Generalization Challenges

- Failure to transfer control from training environment to home

- Weak rule following repertoires

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Addressing Generalization Challenges

- Program for generalization!
  - General-case analysis (Sprague & Horner, 1984; Reeve, Reeve, Townsend, & Poulson, 2007)
  - Multiple exemplars (Stokes & Baer, 1977)
  - Common stimuli (Stokes & Baer, 1977)
  - Within and across strategies (Gomes, Reeve, Brothers, Sidener, & Reeve, 2014)
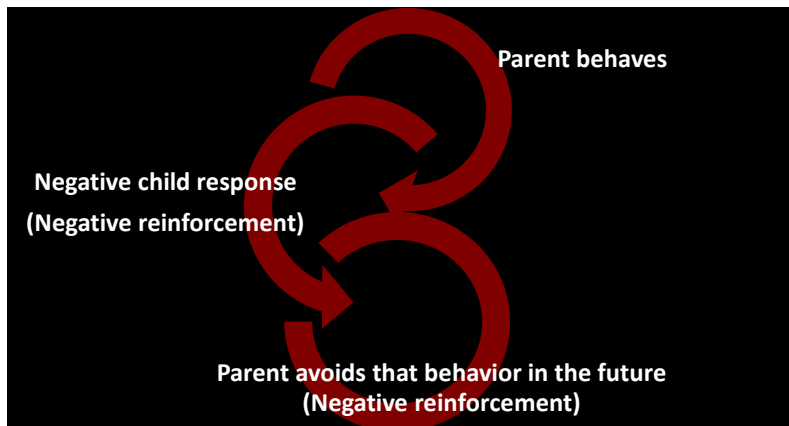 - Focus on teaching effective rules in terms parents can understand

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Consequent Challenges

- Competing contingencies
  - Other responsibilities
  - Other more potent reinforcers
  - Response effort
- Negative reinforcement cycle

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Negative Reinforcement Cycle

(Carr, Taylor, & Robinson, 1991;Berberich, 1971;Stocco & Thompson, 2015)

Addressing Consequent Challenges

- Use cost effective training that can be done in a short period of time

- Help parents contact other reinforcers
  - Support groups
  - Set up reinforcing contingencies

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How Do We Train Parents?

- Identify skills that need to be taught

- Identify barriers specific to parents

- Use evidence-based interventions
  - BST
  - VM

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BST and Parent Training

- DTT (Charlop-Christy & Carpenter, 2000)
- Incidental teaching (Charlop-Christy & Carpenter, 2000; Hsieh, Wilder, & Abellon, 2011)
- Guided compliance (Miles & Wilder, 2009; Tarbox, Wallace, Penrod, & Tarbox, 2007)
- Natural language paradigm (Laski, Charlop, & Schreibman, 1988)
- Vocal play initiations (Reagon & Higbee, 2009)

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EFFECTS OF BEHAVIORAL SKILLS TRAINING ON PARENTAL
TREATMENT OF CHILDREN'S FOOD SELECTIVITY

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KEITH WILLIAMS

PENNSYLVANIA STATE UNIVERSITY, HERSHEY MEDICAL CENTER

PETER STURMEY

THE GRADUATE CENTER AND QUEENS COLLEGE,
CITY UNIVERSITY OF NEW YORK

AND

SADIE HART

PENNSYLVANIA STATE UNIVERSITY, HARRISBURG
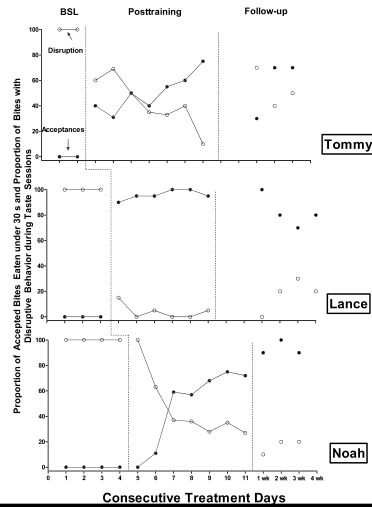
BST for Parent Training of Food Selectivity Intervention

- Parents of 3 children with ASD and food selectivity
- Home-based intervention
  - Taste exposure, escape extinction, and fading
- Maintenance assessed via parent report
- Lack programming and assessment of generalization

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Table 1
Average Percentage of Correct Steps Performed

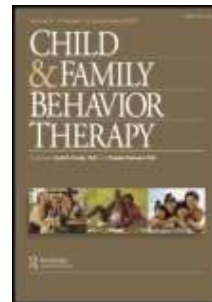|	Baseline TS	Posttraining TS	Follow-up TS	Baseline PM	Posttraining PM	Follow-up PM
Tommy's mom	40	95	91	85	94	89
Lance's mom	44	98	86	86	92	90
Noah's mom	29	99	94	70	97	94

Note. TS = taste sessions; PM = probe meals.

Video Modeling and Parent Training

- Compliance (Webster-Stratton (1990, 2000, 2001)

- Skill acquisition (Koegel, Glahn, & Nieminen, 1978)

- Maternal play, assistance, and provision of consequences (Phaneuf & McIntyre, 2007)

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The Effects of Video Modeling with Voiceover Instruction and On-Screen Text on Parent Implementation of Guided Compliance

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Jason C. Vladescu
Caldwell University

Amanda M. Karsten
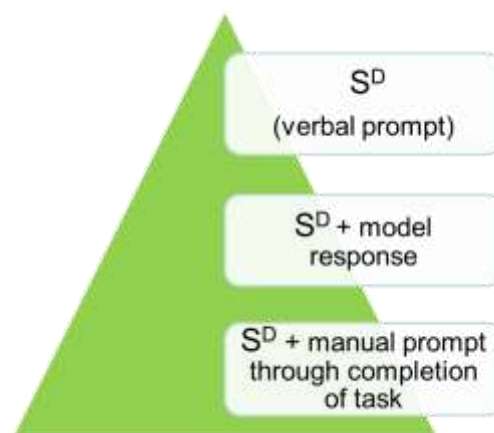*Western New England University*

Noncompliance

- Failure to initiate a task or complete a task; behave in accordance to a request, direction, or rule; or interact socially (McMahon & Forehand, 2003; Wilder, 2011)

- Interferes with skill acquisition (Luiselli, 2009)

- Affects caregiver interactions with child (Luiselli, 2009)

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Noncompliance Research

- Noncontingent access to preferred items (Cote et al., 2005)

- Advance notice (Wilder et al., 2006)

- Rationales (Wilder et al., 2010)

- Decreased response effort (Fischetti et al., 2012)

- Hi-P instructional sequence (e.g., Belfiore et al., 2008; Mace et al., 1988; Smith & Lerman, 1999; Wilder et al., 2010)

- Guided compliance (e.g., Horner & Keilitz, 1975)

- Time out (Rortveldt & Miltenberger, 1994)

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Guided Compliance

Teaching Guided Compliance

- Previous research evaluated behavioral skills training with caregivers (Miles & Wilder, 2009; Smith & Lerman, 1999)
  - Effective
  - Limited information about generalization of parent behavior to untrained tasks/locations
  - Requires trained professional

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Purpose

- Evaluate video modeling with voiceover instruction (VMVO) on parent implementation of guided compliance procedures
- Teach parent-selected targets to enhance implementation and social validity
- Program for and assess generalization to children with autism and untrained tasks and locations

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	Participant 1	Participant 2	Participant 3
Sex:	Male	Female	Female
Age:	43	47	40
Marital Status:	Married	Married	Married
Education:	MBA	MBA	MA Ed
Employment:	Full-time; outside home	Full-time; at-home	Full-time; outside home
Income:	>$105K/yr	>$105K/yr	>$105K/yr
Children:	8 y female - ASD; 7 y male - ADHD, dyslexia	9 y male - ASD, cystic fibrosis	6 y female - ASD

Method

- Setting
  - Participants' homes
  - Participant, their children, experimenter, and research assistant present
    - Experimenter served as a confederate during training
    - Generalization sessions took place with their own children

- Dependent Variable
  - Percentage components implemented correctly
  - 90% = mastery

- Multiple baseline design
  - Across participants

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Training Targets

- Identified via parent interview
- Multiple exemplars
  - 3 training locations
  - 5 tasks per location

Participant 3	Set 1: Bedroom and Kitchen
Task 1	Put clothes in laundry basket
Task 2	Throw in garbage
Task 3	Put pillows on bed
Task 4	Get a napkin
Task 5	Close closet door

Materials

- Scripted responses
  - Confederate followed scripted responses to provide exposure to multiple types of responses

- Written instructions
  - 1-page description of guided compliance procedures
  - Written at 5th Grade reading level

- Guided compliance training video
  - 12 min 34 s in length
  - Video model with voiceover instruction (VMVO)
  - On-screen text
  - Multiple exemplars of responses to directions

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Baseline

- Participants given a list of tasks
- No prompts or feedback provided

Please ask your child to perform the following tasks. Give directions and respond to your child as you normally would without a researcher present.

1. Get a clean shirt	6. Get a snack
2. Get a cup	7. Put laundry in the basket
3. Get a spoon	8. Put dishes in the sink
4. Put your pillows on the bed	9. Get a drink from the fridge
5. Put clean socks in the drawer	10. Get your shoes

Written Instructions

- Given instructions

- Told to read instructions

- Given list of tasks and instructed to provide directions
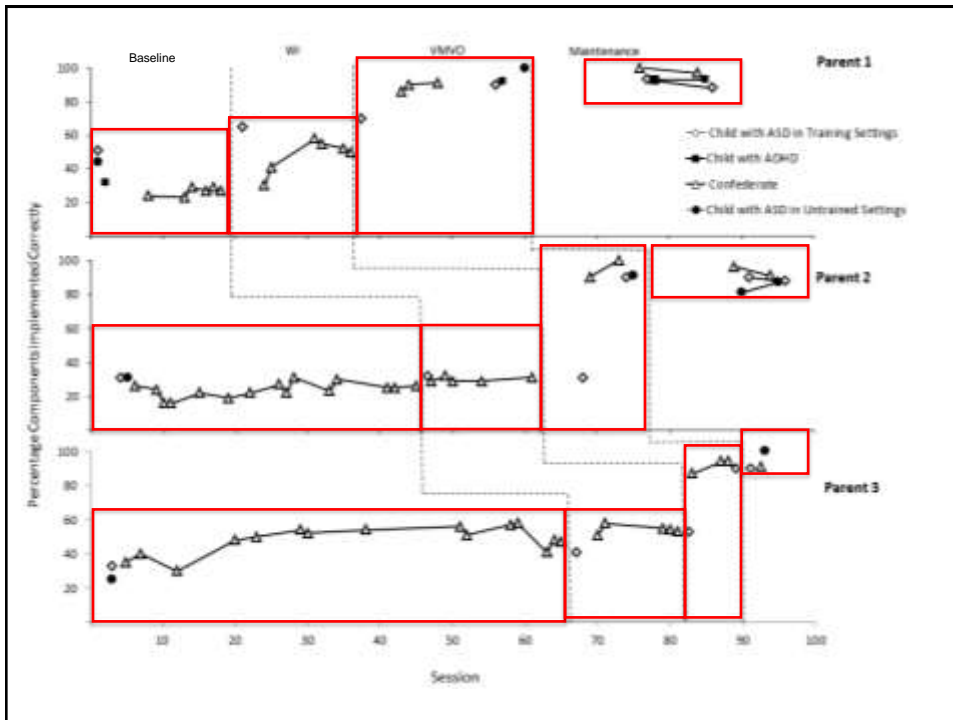
- No prompts or feedback provided

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VMVO

- Instructed to watch video at beginning of session

- Given list of tasks and instructed to provide directions

- No prompts or feedback given

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Generalization

- Programmed via training across a variety of
  - Settings
  - Tasks
  - Child responses

- Assessed
  - With child with autism during baseline, training, and maintenance
    - With a child with ADHD (for Participant 1)
  - In untrained locations and with untrained tasks
  - During maintenance at 1 and 2 months

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Social Validity Results

How do you feel about watching a video model to learn new skills?	$M = 4.9$ (range: 4-5)
How do you feel about guided compliance to help your child follow directions?	$M = 4.6$ (range: 4-5)
Overall, how would you rate the outcomes of your training?	$M = 4.7$ (range: 4-5)

(Reimers et al., 1992)

Conclusions

- VMVO is effective for teaching parents how to implement guided compliance procedures
- Implementation of the procedures generalized to untrained locations and tasks
- Participants rated the procedures highly

- Use of how-to videos is common
- Required up-front work on part of researcher, but easy implementation after

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Clinical Recommendations for Parent Training

- Consider issues related to parent implementation and training

- Program for and assess generalization

- Program for and assess maintenance
- Evaluate social validity

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Future Parent Training Research

- Train parents how to conduct research
  - Evaluate claims about interventions (Love et al., 2013)
- Secure appropriate medical and related services
  - Advocate with schools and other organizations
- Train to train other caregivers (Symon, 2005)

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Innovations in Parent and Staff Training

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