Comparative Analysis of Module-based training and Behavioral Skills Training

Steven Silva David Rosenberg M.Ed BCBA LABA Darlene Crone-Todd PhD BCBA-D LABA,

INTRODUCTION

- Inefficient staff training can lead to burnout and high turnover rates.
- Previous research suggests that behavior skills training is more effective than computer-based instruction when training staff new skills. (Nosik, et al., 2012)
- In this study, module-based training and behavioral skills training for staff are evaluated using a comparative analysis.
- The purpose is to assess which method is more effective in staff skills acquisition
- Prediction is that BST will be more effective in skill acquisition than module-based instruction

METHOD

Participants:

- Three behavior therapists with less than 6 months experience at a center that services children diagnosed with ASD
- Participants were 1 male and 2 females ranging from ages 19 to 23.

Setting:

- A behavior therapy center in Massachusetts

Materials & Equipment:

- Written pre- and posttest
- Slide presentations (incidental teaching: 16 slides, DTT: 30 slides)
- Procedural fidelity checklist
- Social Validity Survey

Research Approach:

- Comparative Analysis

Variables:

- Independent Variable: Type of training: Modules and Behavior Skill Training
- Dependent Variables: Performance Scores and Test Scores
- **Measurement:**
- Percent of occurrence

PROCEDURE

Choice of teaching method: Participants were given a choice to either learn how to implement incidental teaching or discrete trial teaching (DTT).

Pre-test: Participants were given a pre-test to assess their knowledge of the chosen content area with questions that directly relate to the slide deck presented later.

Baseline: Participants were observed and asked to perform the appropriate skill. They were not given feedback or additional training during this phase.

Slide presentation: After Baseline conditions, participants were presented with a slide presentation training of the appropriate teaching methods.

Behavior skills training: Participants were trained using instruction, modeling, rehearsal and feedback.

Social Validity Questionnaire: A 5-point Likert scale was used to assess acceptability and preference of assessments.

Figure 1. Experimental Results of study

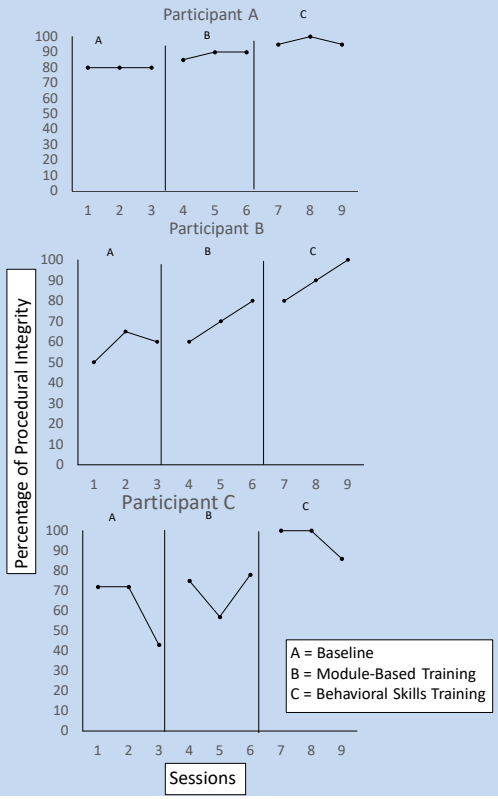
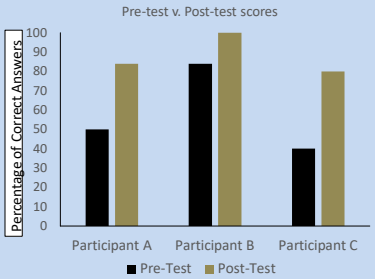


Figure 2.Pre-test and Post-test scores



RESULTS

- Fig. 1 indicates that baseline performance for participants B and C baseline was below 80% occurrence, and participant A had an average of 80% occurrence
- Participants A and B steadily increased performance during Phase B, while Participant C's performance is more variable.
- All three participants performed at the highest levels during Phase C, as compared with Phases A and B.
- **Outcomes:**
- Participant A: Baseline: average 80% occurrence, Modules: average 88% occurrence,
  BST: average 96%
- Participant B: Baseline: average 58% occurrence, Modules: average 70% occurrence, BST: average 90% occurrence
- Participant C: Baseline: average 62% occurrence, Modules: average 70% occurrence, BST: average 95% occurrence
- Figure 2 shows that the participants' knowledge of the teaching methods increased between the pre- and post-tests with an average of a 30% increase across participants. This suggests that the modules also increased fluency in terminology.

DISCUSSION

- BST was an effective method for teaching staff the appropriate method.
- Participants agreed that BST was an acceptable means of training and felt it improved their training.
- They also agreed that BST was more time consuming than module-based.
- While some participants increased performance during the module-based training, all increased during BST.

Limitations:

- The limited number of participants
- Possible sequencing effects

Future Research:

- Using a concurrent multiple baseline design

REFERENCES

Nosik, M., Williams, W., Garrido, N., & Lee, S. (2012). Comparison of computer-based instruction to behavior skills training for teaching staff implementation of discrete-trial instruction with an adult with autism. *Research in Developmental disabilities, 34,* (2013) 461-468