BEHAVIOR SKILLS TRAINING

USING VIDEO MODELING

AND SELF-ASSESSMENT

A Thesis

presented to

the Faculty of the Graduate School

at the University of Missouri-Columbia

In Partial Fulfillment

of the Requirements for the Degree

Master of Science in

Applied Behavior Analysis

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by

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MAY 2024

The undersigned, appointed by the dean of the Graduate School, have examined the thesis entitled

BEHAVIOR SKILLS TRAINING USING VIDEO MODELING AND SELF-ASSESSMENT

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a candidate for the degree of Master of Science,

and hereby certify that, in their option, it is worthy of acceptance.

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ACKNOWLEDGEMENTS

I would like to give an immense amount of gratitude and acknowledgment to Dr. Kate Sadler for her direct guidance and expertise she dedicated to this project. Her immense amount of knowledge and skill was invaluable throughout this project. Without her, this project would not have been possible.

I would like to thank my committee members Dr. Jena Randolph and Dr. Rose Mason for the time they dedicated to this project.

Additionally, I would like to thank the BCBAs at the Thompson Center for their continued support and assistance, specifically Alison DuCharme and Devyn Stillwell. Lastly, I would like to thank Kailee Bradshaw and Emily Murphy for their never-ending friendship and support throughout this project, as well as Molly Love for additional assistance and encouragement.

Behavior Skills Training Using Video Modeling and Self-Assessment

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Graduate Thesis Proposal

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April 17, 2024

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Abstract

Behavioral Skills Training (BST) is an evidence-based practice in the field of Applied Behavior Analysis (ABA) to teach skills. This method of teaching has been shown to be effective but can be time intensive for the expert trainers. This study evaluated an automated training package of modified BST with video modeling and self-assessment to teach ABA implementers a novel clinical skill. In this learning package three participants were given written instructions, a video model, recorded self-video, and self-scored implementation fidelity of administering an activity schedule. The results of the study show that this method of instruction is effective in increasing implementation fidelity across all three participants. A social validity measure indicates that participants found the method of instruction helpful, and the supervising trainer agreed that trainer time investment is reduced.

Introduction

Early and effective intervention is crucial for individuals diagnosed with neurodevelopmental disabilities. Effective intervention involves strict adherence to evidence-based practices. In many settings Board Certified Behavior providers utilize registered behavior technicians (RBTs) to carry out treatment protocols on a daily basis. In a clinical setting, staff training can be time-consuming and intensive for those responsible. If the training is not properly conducted it can lead to various errors in the implementation of clinical skills.

Carroll and colleagues (2013) demonstrated the importance of implementation integrity on skill acquisition for individuals with autism spectrum disorder (ASD). The results of this study show that when there are various steps implemented with low fidelity in the natural environment of a classroom, these errors influence the rate of skill acquisition (Carroll et al., 2013). A low-fidelity procedure was defined as following all steps in the treatment protocol less than 90% of the time (Kogel et al., 1977). When exposed to low fidelity conditions, it took twice the number of sessions and training time for students to achieve mastery compared to peers exposed to high-fidelity conditions (Carroll et al., 2013). These results indicate that it is important to train implementors on how to complete each individual step of a skill to prevent disruption in skill acquisition.

One common approach to staff training is behavioral skills training (BST). First described by Miltenberger in 1997, BST consists of four steps: instruction, modeling, rehearsal, feedback. The instruction step consists of a clear and concise task analysis describing how to perform the desired behavior. Modeling is a live or symbolic example of the desired behavior described in the instructions. Following the model, the learner then performs the behavior themselves following the instructions and emulating the

model. Lastly, the instructor provides immediate praise for appropriate behaviors and instructions for incorrect behaviors (Miltenberger, 2016).

Shayne and Miltenberger (2013) used BST to teach parents to administer a functional analysis assessment. In this study eight foster and/or adoptive parents were taught to identify contingencies associated with problem behavior and select function-based interventions after watching videos that depicted scenarios involving disruptive behavior. Data was collected prior to and after the BST intervention. Results indicated that for the skills of accurate ABC data, function identification, and treatment selection, BST was effective at increasing performance for at least one dependent variable for all participants and most participants increased scores on all three dependent variables.

In another study, Sarokoff and Sturmey (2004), used BST to teach staff to implement discrete trial training effectively. In this study, three special education teachers were taught to implement a discrete trial training procedure in a client's home using BST. Results showed that all three teachers demonstrated mastery criteria following the BST intervention and maintained mastery post-treatment.

Matteucci and colleagues (2023) used BST to teach groups of dental students to implement skills with fidelity with individuals diagnosed with intellectual and developmental disabilities. This study examined whether virtual training could be used during the model stage of BST to increase treatment effectiveness. The results were that all participants met mastery criteria (at least 90% fidelity) for the skill following BST training. For six of the seven participants, the skills acquired during remote training were generalized to in-person implementation with a confederate.

Research demonstrates that BST is an effective approach to teach new skills to staff and caregivers (Kranak, et al., 2018; Matteucci et al., 2023; Sarokoff and Sturmey, 2004; Shayne and Miltenberger, 2013). However, when training new skills using BST there is a potential lack of trained experts on the skill that is being taught. Furthermore, live virtual training sessions may be difficult to coordinate with an expert, especially in rural areas. One idea is to video record an expert model demonstrating the skill as part of the BST process. Several studies have combined BST and video models with positive results.

Video recorded models of therapist actions has been used to teach applied behavior analytic concepts in the past. Moore and Fischer (2007) examined whether staff could learn the steps to support a functional analysis procedure by watching a video recording of an expert staff demonstrating the skills. The results were clear improvements to above mastery criteria (80% implementation fidelity) following video modeling for eight implementations of the nine conducted. For the one participant who did not achieve mastery following video modeling alone, a single trial in which feedback was delivered increased accuracy to exceed the mastery criterion, underscoring the importance of feedback in training.

Erath et al. (2021) sought to decrease the time demand on trainers using video-based training (VBT). The experimenters evaluated the efficacy of VBT on the integrity of implementation of BST by human service staff to train confederates on job skills. Participants were provided with a task analysis of the skills, shown a video model of the skill with text and voice-over narration, asked to take notes on the video, then were asked to complete a quiz. Following this procedure, participants were asked to perform the skill,

implementation of BST, for the experimenter and were provided with feedback. The VBT alone was effective at increasing fidelity of BST implementation for half of the participants. The remaining two participants required experimenter feedback to reach mastery (100% fidelity). This study suggests that video teaching modalities may be useful in training human service staff and again highlights the importance of a feedback component in staff training. An extension of this study could fully automate the training process to further decrease the demand for and time commitment of expert trainers.

One study evaluated an idea that fits into the suggestion to fully automate the training process. Weston and colleagues (2019) evaluated a modified BST package including a video model and video self-monitoring in comparison to traditional performance feedback BST. The experimenters sought to compare the effects of both types of BST on the fidelity outcomes of future Board Certified Behavior Analysts (BCBAs) in conducting multiple-stimulus and paired stimulus preference assessments. Each of four participants who were graduate students pursuing a masters specializing in ABA had reported no prior experience with the skills being taught. A traditional performance feedback and a modified video self-monitoring BST framework were conducted with each participant. The results of the study showed that not only did the traditional and video self-monitoring BST both increase fidelity levels from baseline, but that video self-monitoring conditions resulted in a larger increase in fidelity than their performance feedback counterparts. The authors suggest that the modified BST package utilizing video modeling and video self-monitoring lessen the time requirement for supervisors, although this was not directly measured in the study.

Purpose of the Current Study

The purpose of the present study was to evaluate whether BST using video modeling and self-assessment increases the implementation fidelity of a novel skill while decreasing the time requirement of the training supervisor. We hypothesize that the use of expert video modeling in a modified BST (M-BST) system will improve effectiveness. More specifically, by designing a form of M-BST that can be completed by the individual away from the clinic setting the BCBA will be able to spend less valuable time training staff.

Methods

Participants and Setting

Three students enrolled in a secondary degree in ABA and working with individuals diagnosed with ASD served as participants in this study. Participants were recruited per supervisor recommendation. Inclusion criteria included being an ABA implementor, access to video recording equipment, and had not received training in activity schedules. Exclusion criteria included training in activity schedule implementation, lack of access to video recording equipment, and the individual not working as an ABA implementor. Glenn, a 20-year-old male enrolled in his first year in the university associated ABA master's program had been employed at the clinic for 7 months at the onset of the study. Amy, a second year in the university associated master's program was employed in a residential setting separate from the clinic. Jenny, a Ph.D. student at the associated university had been observing in the clinic for 4 months. All participants reported no prior training or observation of an activity schedule, though Glenn reported hearing of it without knowledge of the procedures.

Sessions were conducted in an outpatient ABA clinic with a table, one chair, and activity schedule materials (binder, two pages with Velcro in the center, ring stacker icon with Velcro attached to the back, reinforcer icon with Velcro attached to the back, reinforcer container, and ring stacker with all rings present). The participant and a confederate were in the room during sessions. The confederate was a second-year graduate student in the associated university ABA master's program who has experience with real clients and was able to portray a realistic treatment scenario. The data recorder was in the room, kept the maximum possible distance from the participant, and did not interact with either the participant or the confederate.

Dependent Variable

The primary dependent variable for this study was implementation fidelity measured in percent per opportunity of activity schedule steps implemented correctly by an RBT following modified BST training. Skill steps were defined and listed on a data sheet provided to the data recorder and participant. Participants and data collectors used paper data sheets to collect data on the percentage of correct implementation of skill steps. Each data collector observed the session and scored a "+" if a step was completed by the RBT per the operational definition and recorded a "-" if the RBT deviated from the operational definition of that step. A secondary dependent variable of percent agreement between the primary data collector and the participant self-assessment to evaluate potential utility in an individual setting without the primary data collector.

Independent Variable

The independent variable in this study was a M-BST package with video modeling and self-assessment modifications. A package consisting of instructions in the

form of a protocol, a model in the form of an expert video model, instructions for practice while video recording, and data sheets for self-assessment were provided to participants. Following completion of the instructions provided in the packet, participants were provided feedback whether they may move on to perform the taught skill two weeks following the completion of the mastery criteria (80% or above across three consecutive sessions) in the maintenance phase. Participants received feedback on their performance during each maintenance session from the primary data collector.

Research Design

This study was conducted in a multiple baseline design across participants. A multiple baseline design was chosen because the goal of the present study is to teach and improve a skill which cannot be reversed. The current study measured the effects across three participants to evaluate whether the treatment package has the same or similar effect across all three participants.

Procedures

This study included three phases: baseline, M-BST including mastery feedback, and maintenance. The baseline phase lasted until the data showed a stable or decreasing trend remaining below 30% fidelity and the prior participant showed a trend in intervention. The M-BST phase lasted until the participant met the mastery criteria of three consecutive sessions at 80% fidelity or greater. The maintenance phase began two weeks after mastery was met and continued once per week as time permitted.

Phase 1: Baseline

Baseline sessions were conducted in individual therapy rooms in an outpatient ABA university affiliated clinic. Each session consisted of one implementation of an

activity schedule. Prior to implementation, the investigator provided the participant with the written instructions for the clinical skill in the form of a protocol provided at the clinic prior to the beginning of the present study. No other instruction or M-BST steps were be provided in this phase. The participant implemented the skill with a second-year graduate student in the associated university ABA master's program acting as a confederate. The experimenter instructed the participants to complete the activity schedule with the confederate, verbally indicating when they were beginning implementation and when finished. Baseline continued until at least three sessions were conducted and a pattern of behavior had been established. Instructions were available to participants throughout all phases of the intervention and freely accessible throughout sessions outside of implementation.

Phase 2: BST

After baseline, the participants moved into the M-BST phase. Participants were provided with the same instruction sheet for the skill as in baseline. In addition, each participant was asked to watch a video model depicting two implementations of a BCBA (an expert) performing the target skill with a confederate. This filled the model role in a traditional BST structure. Participants were given free access to the video until they verbally stated that they were ready to begin session. The practice aspect of traditional BST was completed by each participant then videotaping themselves implementing the skill with a provided confederate using their preferred method of video collection (e.g., phone or tablet). A tablet was provided to all participants. The confederates were trained by the investigator and created a simulated client experience including noncompliance and mistakes. The confederates were provided a script and practiced first with the

primary investigator to ensure continuity of practice experience among participants. Scripts detailing which steps an error was to be made were consistent across participants. The participants then used the video they recorded of themselves to score their own implementation fidelity using the data sheet provided. These data sheets served as a permanent product for the feedback role of a traditional BST system. These practice sessions were performed in the clinic and scored by the primary investigator to evaluate accuracy of the participant. After three sessions at 80% correct implementation or higher, participants were informed of their performance meeting master criteria and told they could move on to a final maintenance phase.

Phase 3: Feedback and Maintenance Phase

Two weeks after the M-BST mastery criteria was met, a maintenance phase was conducted with a confederate. The participant was asked to implement the skill with only the same instruction protocol provided that was available in the other phases. The participant did not watch the video model or complete a self-assessment of implementation. A data recorder was present in the room, maintained distance and did not interact with the participant or confederate. The primary investigator collected data on the same data sheet utilized in previous phases and provided feedback following completion of the implementation. Feedback took the form of the primary investigator informing the participant of their score immediately following the session. One session was conducted each week following the first two-week delay. This phase continued for two sessions for all participants as time permitted.

Interobserver agreement (IOA)

A second trained observer was present in the room or provided with video recordings for 39% of sessions. When present, the second observer did not interact with the participant, confederate, or primary data recorder. Prior to data collection, the primary investigator worked with the second observer to ensure understanding of the protocol. The second observer took data on the same data sheets provided to the participant and the primary observer. Agreement was calculated between the primary observer and the secondary observer using total agreement. In this calculation the number of agreements on the data sheets was divided by the sum of agreements plus disagreements. This number was then multiplied by 100 to yield a percentage. The percentage agreement was averaged for each participant. Overall, mean agreement across all participants and phases was 94% (range, 83% to 100%).

Social Validity

A social validity measure was collected using a 5-point Likert Scale for both the participant and the BCBAs who were not part of the study but supervise the participants in the study. The participants were asked the following questions: (1) I found this method of instruction (video modeling and self-assessment) helpful, (2) I could complete this method of instruction outside of the work environment, (3) I would use this method of instruction again. The BCBA supervisors will be asked the following questions: (1) The participant acquired the targeted skill using this method of instruction, (2) The method of instruction decreased the amount of direct instruction required of me during training, (3) I would use this method of instruction again, for other learners, (4) I would use this method of instruction again for other skills.

Results

The results of the primary dependent variable are demonstrated in Figure 1 across baseline, video modeling and self-assessment, and maintenance. Baseline continued until data were stable or decreasing and below 30% fidelity and the previous participant displayed an increasing trend or stable data representing a treatment effect. Baseline data maintained a low level across all participants. Jenny's baseline was more variable than the others which were stable. All three participants displayed an increase in level in intervention with high stability. High stability and level remained for Glenn and Jenny in maintenance while Amy's responding dropped in level and increased in variability.

Participant 1, Glenn, completed an average of 4.3% of steps correctly during the baseline phase. Following M-BST with video modeling and self-assessment, Glenn completed an average of 100% of activity schedule steps correctly. Glenn met mastery criteria in three sessions. During maintenance, Glenn completed an average of 99% of steps correctly, 1% below his average for intervention.

Participant 2, Amy, completed an average of 5.7% of steps correctly in the baseline condition. After the intervention package of modified BST, Amy implemented an average of 95.7% of steps correctly. Amy also met mastery criteria in three sessions. During maintenance, Amy completed an average of 83.5% of steps correctly, a decrease by 12.2% from intervention.

Jenny, Participant 3, correctly completed an average of 16.3% of activity schedule steps during the baseline phase. Following the M-BST package intervention, Jenny completed an average of 96.7% of steps correctly. Jenny met mastery criteria in three sessions. In the maintenance phase, Jenny correctly implemented an average of 96.5% of steps. This is a decrease by 0.2% from her average in intervention.

The results of the secondary dependent variable are displayed in Figure 3. The percent agreement between the primary data collector and the participant self-assessment was calculated by dividing intervals of agreement by all intervals for all implementations during intervention. This was three sessions for each participant. The percent agreement for each of the three implementations The primary data collector and Glenn agreed on 100% of intervals between the self-assessment and the primary data. Percent agreement between Amy was 71% averaged between her three intervention sessions. Jenny and the primary data collector agreed for 93% of intervals.

Social Validity

All scores for social validity questions were between 4 (agree) and 5 (strongly agree). Overall, scores on the Likert type questions averaged 4.6 for participants and 5 for BCBAs. All participants indicated being satisfied across all three questions. Question one averaged a score of 4.7, indicating they found this method of instruction helpful. The average score on question two was 5, indicating agreement that this method of instruction could occur outside the clinic. Finally, question three averaged a score of 4, indicating a willingness to use this method of instruction again. Comments reported by the participants included the following: “I appreciate how to the point sessions were ran,” “Utilizing this approach to learn a new skill or behavior is valuable. It’s practical, functional, and cost-efficient to replicate. I’m also a visual learner so this method of instruction is most beneficial for me,” and “The availability of video examples is great for me to see and learn how it is supposed to be done.”

The four Likert type questions were administered to one BCBA who oversees the training of activity schedules in the university associated clinic. The scores for the BCBA

questions were 5, 5, 5, and 5 respectively. These scores indicate that the BCBA found this method of instruction effective, time requirement reducing, and a willingness to use it again or with a novel skill.

Discussion

This study evaluated whether M-BST using video modeling and self-assessment increased the fidelity of RBT implementation of a novel skill while decreasing the time requirement of the training supervisor. All three participants displayed increased fidelity of implementation of an activity schedule following intervention. On average the increase in steps completed correctly in baseline to intervention was 88.7%. These data suggest that the currently presented M-BST package with video modeling and self-assessment followed by an in-clinic fidelity check with feedback can be an effective training tool for teaching correct implementation of clinical skills for RBTs. This is important because implementation fidelity is a key component of effective intervention. In future applications the videos and data sheets could be distributed to RBTs to complete the system at home. This would decrease the time demand on BCBAs for staff training.

This study extends the literature by automating the training process and training a novel skill. The present study attempts to address the suggestion made by Erath et al. (2021) to automate all steps of training to decrease time demand on expert trainers. Furthermore, the present study replicates the video self-monitoring condition implemented in Weston and colleagues (2019), which was found to be more effective than the performance feedback condition, and extends by teaching a novel skill.

The author selected activity schedule implementation as the target skill due to a current requirement for formal training at the university associated ABA clinic before implementation with a client is permitted. Prior to the study there was a lack of activity

schedule training happening due to BCBA time requirement and a resulting lack of implementation with clients in the clinic. The social validity results indicate participant satisfaction and even greater training BCBA satisfaction, suggesting this method of instruction may be meaningful in reducing time demand on BCBAs while remaining effective. This would allow activity schedules to be reintroduced into client programming and open the possibility for use of this method in the future for other skills. The present study required the use of a confederate for the skill selected, however applications in the future teaching novel skills (e.g., discrete trail training (DTT), error correction, token delivery, etc.) could avoid this necessity, easing implementation.

For two of the participants, Glenn and Jenny, implementation fidelity remained high throughout maintenance, with Jenny's average percent of steps implemented correctly remaining constant from intervention. Amy's fidelity fell below mastery criteria in the first maintenance session. Notably, Amy made one mistake three times which affected multiple steps each time. Following feedback, Amy's second maintenance session returned to high levels at 100% implementation fidelity.

There were limitations present in the study. Primarily, no generalization phase was conducted to ensure that implementation fidelity remained high when the participants implemented with a client. The decision to remove the planned generalization phase was made due to client attrition. At the outset of the study a generalization phase was scheduled, but due to clients discontinuing services or graduating from the program in the university associated clinic, no clients remained who had an activity schedule in their programming. It was decided that it would be unethical for ABA implementors who do not work with the clients in the clinic to introduce a novel

program. Future studies could include a phase implanting with clients post-training to ensure the skill is generalized from a contrived setting to a natural one where real-life implementation will be taking place.

The second limitation of the study is the length of the maintenance phase. Due to participant recruiting barriers combined with experimenter, confederate, and participant scheduling conflicts, maintenance was conducted as time permitted, shortening the last phase for participants 2 and 3. Future studies could conduct weekly maintenance for longer and consider monthly follow-up after that. This would provide supporting evidence for the effectiveness of the intervention.

The third limitation of the study is the lower than anticipated level of agreement between the primary data collector and Amy's self-assessment. Amy's agreement was over 20% lower than the other two participants. This could indicate a lack of understanding of the data collection system. Amy experienced confusion after the initial session, which she resolved upon reviewing the instructions during her second intervention session. In the future a check for understanding following the delivery of the data sheet could be conducted. This could take the form of a quiz or short questionnaire or even a practice to ensure participant understanding of data collection before self-assessment. This piece is important because if this method of instruction were delivered outside the clinic setting, Amy would not have met mastery by her self-scores in three sessions so a check for understanding could ensure participants are ready to perform the skill in the clinic for a supervisor even if no one else is scoring their intervention sessions. A check for understanding could help close the gap between the behavior displayed and the data that was collected.

A future direction for this study that has not been suggested previously to address a limitation is the administration of this method of instruction to individuals at home to complete without clinical personnel involvement. The purpose of the current study was to evaluate this method of instruction which required a clinic setting and personnel present. To fully address the purpose of the study to decrease time demand on BCBAs for training RBTs and ABA implementors, the completion of the package away from the clinic could be evaluated with a fidelity check following mastery determined by self-assessment. This in person fidelity check would be followed by feedback and even further practice if the BCBA determined fidelity is below acceptable levels and will continue until fidelity is met. This procedure would more closely mimic a fully automated training process suggested by Erath and colleagues (2021). A fidelity check in the clinic following completion of this method of instruction would resemble a trainee implementing with BCBA supervision after acquiring a novel skill.

Another future study could evaluate the separate pieces of the present intervention in a component analysis. The present study suggests that this method of instruction is effective as a package, but it cannot be determined which pieces are responsible for the effects. A component analysis would investigate whether the interactions between the pieces is what makes the package effective or if a certain step is responsible for the level increase observed in the present study.

Research has shown that BST is an effective intervention for staff training (Kranak, et al., 2018; Matteucci et al., 2023; Sarokoff and Sturmey, 2004; Shayne and Miltenberger, 2013). The present study showed that this modification of BST is effective and social validity results suggest it has the potential for decreased trainer time

investment. Overall, this study suggests that this method of instruction can meet the same need as traditional BST while lessening the demand on expert trainers.

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Figure 1

Percentage of Steps Implemented Correctly following BST with video modeling and self-assessment

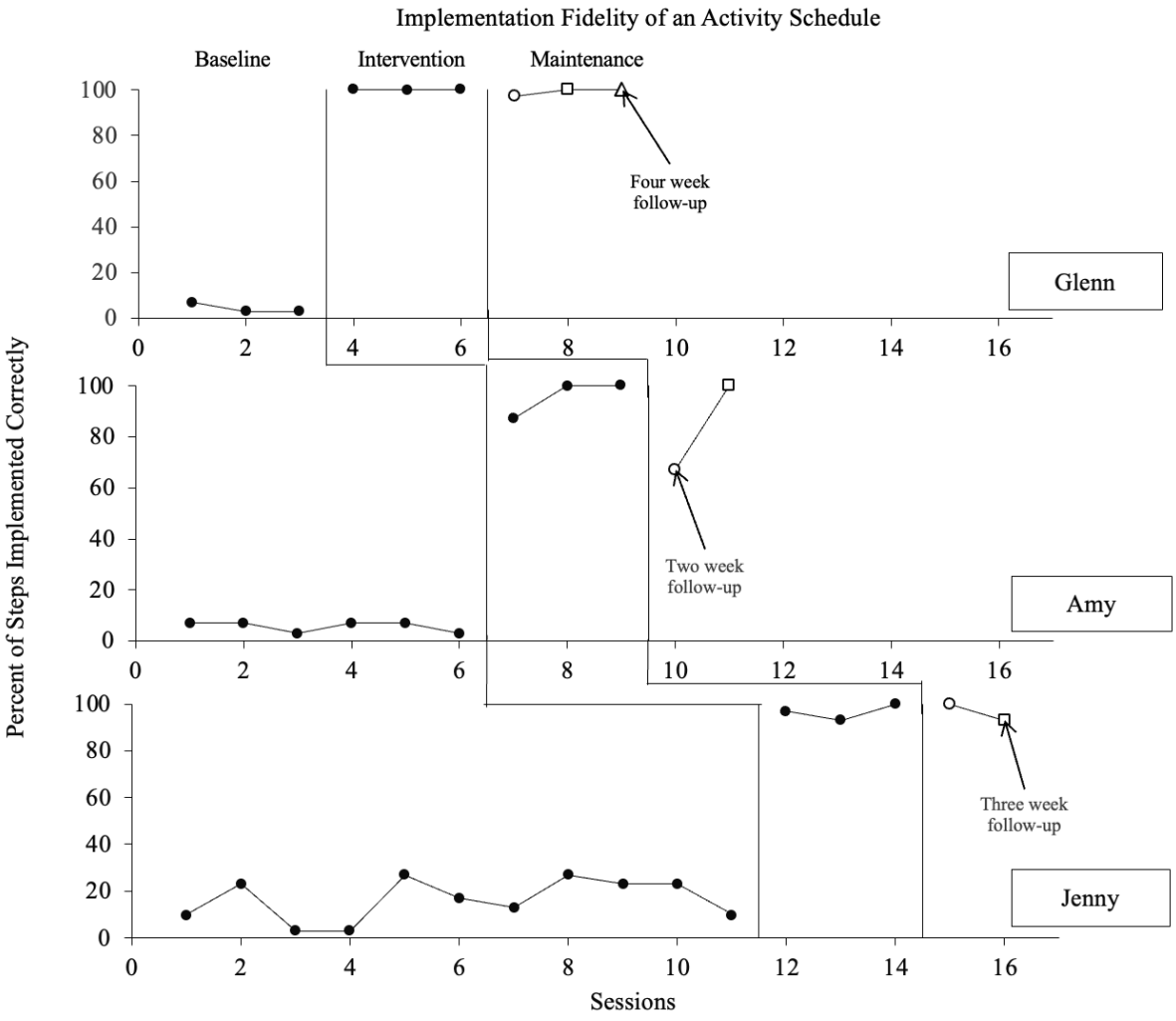


Figure 2

Implementation Fidelity Including Self-Assessment Scores

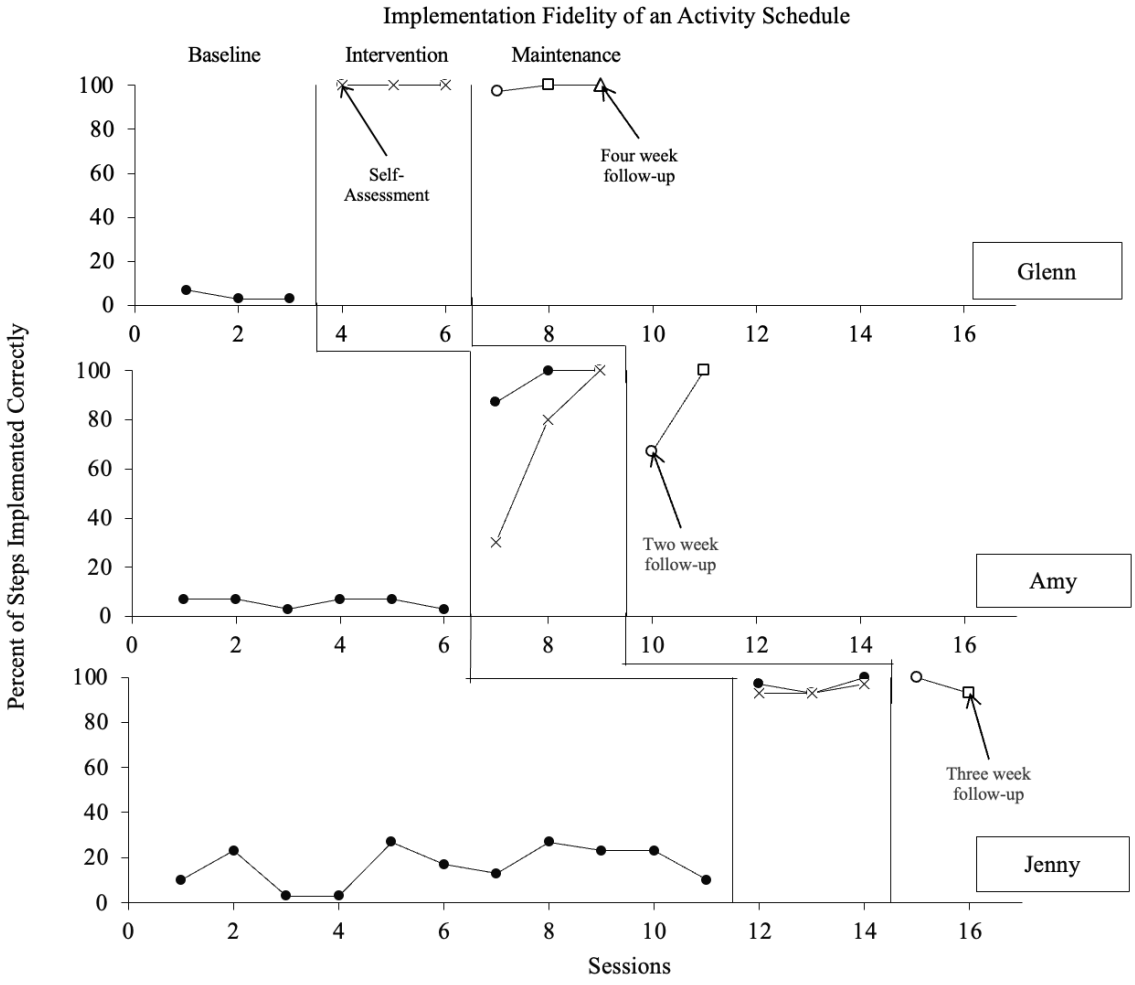
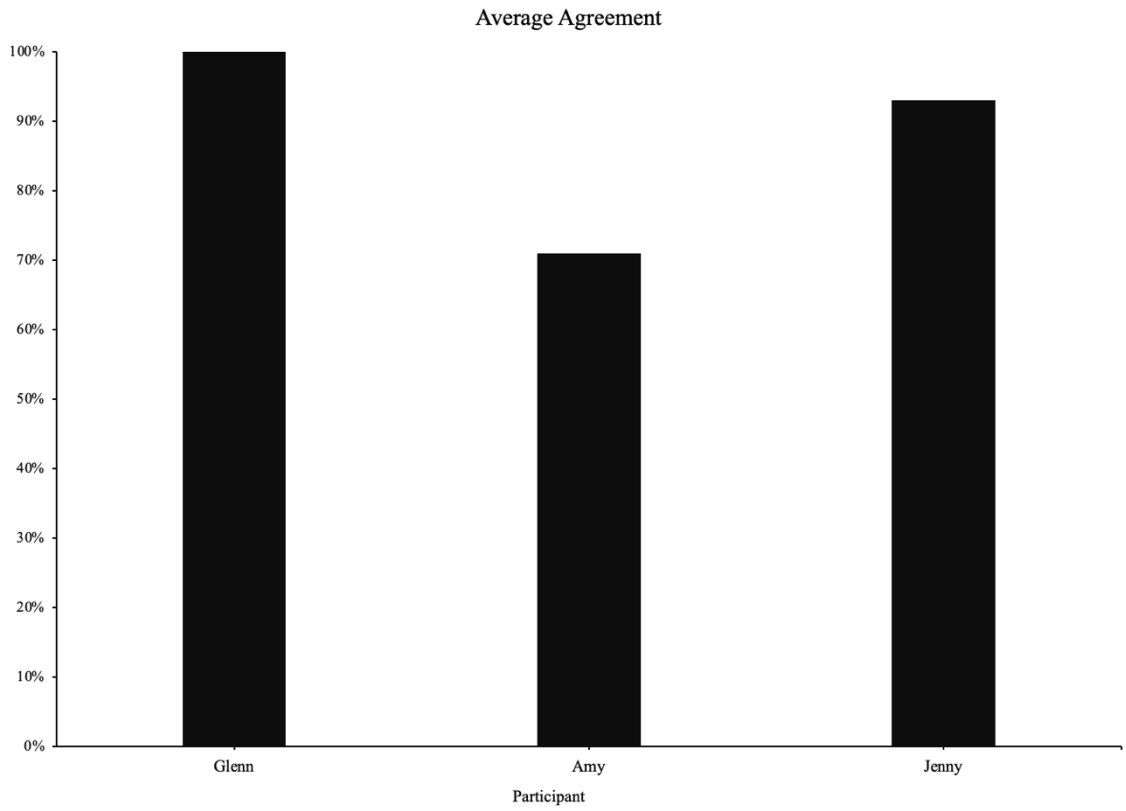


Figure 3

Average percent agreement between primary data collector and participant self-assessment



Intervention Steps

Appendix A

Phase 1: Baseline

Instructions

- Activity schedule protocol provided to participant
- This is all that is provided during the baseline phase
- Instructions are available throughout all phases

Phase 2: BST

Model

- Next screen is a video of an expert and a confederate implementing the skill with 100% fidelity
    - Expert model

Practice

- Confederate will be available in the room
- Participant will start video recording with view of entire necessary area
- Participant will set up activity schedule materials
- Participant will implement an activity schedule with the confederate based off the video model
- Participant will end video

Self-Monitoring

- Participant will score their video on a new copy of the same data sheet as the primary data collector according to operational definitions
- Participant will repeat until they achieve 80% or higher fidelity for 3 consecutive implementations with the confederate
- Following 3 implementations with 80% or higher fidelity, the participant will be given feedback, by the primary investigator that they are ready to move on to the maintenance phase

Phase 3: Feedback and Maintenance Phase

- Two weeks after the participant reached mastery criteria
    - Continuing weekly after first session
- Participant will implement an activity schedule with a confederate
    - Access to the protocol
    - No access to the video model
- Feedback will be provided by the primary investigator on their performance using the same fidelity data sheet used in previous phases.

Activity Schedule Protocol

Appendix B

NAME: Client
CURRICULUM AREA: Play
TARGET SKILL: Independent Play
Objective: Client will use an activity schedule to independently complete 1 close ended play activity.
S^D: Tell Client "Follow your schedule"
R: Client will independently complete one target activity and one reinforcement activity in his activity schedule.
Materials: items necessary to complete each activity in the schedule, activity schedule binder, activity schedule data sheets.
Session Procedures*:*

1. Arrange the environment so that activities and activity binder are in the appropriate location
2. Place activity icons in the binder (one per page.)

Note: Vary the order and selection of activities across trials.

3. Tell Client "Follow your schedule"
4. Follow appropriate prompt level to complete each step of the schedule
    - See data sheet for list of steps appropriate to current level.
5. Record data after completion of each step in the sequence according to the instructions on the data sheet.
6. After completion of final step in the sequence provide identified reinforcer and social praise.

Prompting-

- Graduated guidance will be used as needed to prompt correct responding to each step.
- **Graduated guidance**- provide physical guidance as needed (give the student 3s to respond independently before prompting) and immediately start to fade out physical prompts to transfer stimulus control. (most-least)
- Follow Client' s movements closely with your hands without making physical contact. Use physical guidance to prompt Client to make the correct response as necessary. Fade out physical prompts by gradually changing the location the prompts are given (i.e. Hand over hand > Wrist> Elbow prompt> Shoulder prompt> Shadow.)
- If Client appears to be about to make an error in the step use a physical prompt to guide him to the correct response.
- If an error occurs in the step, prompt him to complete the task correctly with physical guidance.
- Avoid gestural and vocal prompts.

Activity Schedule Fidelity
Appendix C

Instructions: For each step of the activity schedule circle whether the therapist implemented the step correctly. Circle a "+" if the therapist completed all parts of the target step with no extraneous parts. Circle a "-" if the therapist implements the skill incorrectly (e.g., does not complete all parts of the step, adds extraneous parts to the step not mentioned in the protocol, etc.). In the last row, write the number of "+" scored in the table.

General Implementation

Step		**Data**
Setup	Binder and ring stacker are placed in an appropriate location	+ -
	Binder contains appropriate activity icon and reinforcer icon placed on separate pages with the reinforcer icon last	+ -
Instruction	Performer tells client "Follow your schedule" or something functionally similar	+ -
	Performer stands behind or at the designated distance from client	+ -
Reinforcement	After completion of final step in the sequence, performer provides social praise immediately	+ -
Number Correct		**/5**

Prompting

Instructions: For each step the client completes, score the performer on proper usage of the prompting procedures:

- Performer gives the client 3 s to respond independently before prompting.
- Performer follows client' s movements closely with your hands without making physical contact.
- Performer uses physical guidance to prompt Client to make the correct response as necessary AND does not prompt when not necessary.
- Performer fades out physical prompts by gradually changing the location the prompts are given using the following sequence:
    - Hand over hand → Wrist → Elbow prompt → Shoulder prompt → Shadow
- If, and ONLY if, Client appears to be about to make an error in the step, performer uses a physical prompt to guide them to the correct response.
- If an error occurs in the step, performer prompts them to complete the task correctly with physical guidance.
- Performer avoids gestural prompts
- Performer avoids vocal prompts

If Performer using the above prompting procedure correctly for the current step (e.g., uses the correct prompt OR does not prompt when not necessary), score a "+" for that step. If Performer does not follow the prompting procedure (e.g., uses an incorrect prompt OR prompts when not necessary), score a "-" for that step. In the last row write the number of "+" scored in the table.

Number	Step	Data	
1	Client walks to activity schedule binder	+	-
2	Client picks up binder but does not open it	+	-
3	Client carries binder to table without opening it	+	-
4	Client places binder on table and opens the cover to the first page	+	-
5	Client points to/touches ring stacker icon	+	-
6	Client walks to ring stacker	+	-
7	Client picks up ring stacker but does not move the pieces	+	-
8	Client carries ring stacker to table without moving pieces	+	-
9	Client removes pieces of ring stacker	+	-
10	Client completes the ring stacker in the correct order	+	-
11	Client carries ring stacker back to shelf without moving pieces	+	-
12	Client walks back to table where binder sits	+	-
13	Client turns one page	+	-
14	Client points to/touches reinforcer icon	+	-
15	Client walks to container holding reinforcer	+	-
16	Client picks up container but does not open it	+	-
17	Client carries container to table without opening it	+	-
18	Client sets container on table and opens lid	+	-
19	Client eats reinforcer	+	-
20	Client replaces lid on container without leaving table	+	-
21	Client carries container to shelf while leaving lid in place	+	-
22	Client walks back to table	+	-
23	Client turns one page in binder	+	-
24	Client closes binder	+	-
25	Client carries binder back to shelf	+	-
Number Correct			**/25**

Percent Correct Implementation

Write the number of steps scored "+" from both tables in the "Number Correct" column and add them together in the "Overall Total Correct" row. Divide the number by 30 and multiply by 100% to yield a percentage.

Table	Number Correct
General Implementation	
Prompting	
Overall Total Correct	**/30**
Percent Correct Implementation	**%**

Social Validity

Appendix D

Participant:

Please indicate the degree to which you agree with the following statements by placing an "X" in one box per row:	**1** - Strongly Disagree	**2** - Disagree	**3** - Neutral	**4** - Agree	**5** - Strongly Agree
1. I found this method of instruction (video modeling and self-assessment) helpful.					
2. I could complete this method of instruction outside of the work environment.					
3. I would use this method of instruction again.					
Comments:					

BCBA:

Please indicate the degree to which you agree with the following statements by placing an "X" in one box per row:	**1** - Strongly Disagree	**2** - Disagree	**3** - Neutral	**4** - Agree	**5** - Strongly Agree
1. The participant acquired the targeted skill using this method of instruction					
2. The method of instruction decreased the amount of direct instruction required of me during training.					
3. I would use this method of instruction again, for other learners.					
4. I would use this method of instruction again for other skills.					
Comments:					