EVALUATION OF A BEHAVIOR SKILLS PACKAGE TO TEACH CAREGIVERS

TO MANAGE DISRUPTIVE BEHAVIOR DURING MEDICAL

AND DENTAL APPOINTMENTS

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Thesis Prepared for the Degree of

MASTER OF SCIENCE

UNIVERSITY OF NORTH TEXAS

December 2017

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Kinser, Joshua A. *Evaluation of a Behavior Skills Package to Teach Caregivers to Manage Disruptive Behavior during Medical and Dental Appointments*. Master of Science (Behavior Analysis), December 2017, 51 pp., 5 figures, references, 24 titles.

Adults with developmental disabilities that live in large residential settings experience complications due to problem behavior when attending routine medical/dental appointments. This may result in sedation for clients for even the most routine medical/dental appointments. The purpose of this project was to develop a comprehensive staff training program that incorporated best practices to teach direct-support professionals behavior management techniques and best practices for transporting clients to and from routine medical/dental appointments. 4 direct-support professionals at a large residential care facility participated in this project. Multiple probes were conducted utilizing standard role-play exercises to evaluate caregiver acquisition of 16 specific skills related to client information, best practices for client transport, and behavior management. The results indicated that behavior skills training (BST) resulted in caregiver acquisition of all 16 skills during role-play exercises.

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CHAPTER 1

INTRODUCTION

Access to and the effectiveness of routine dental and medical procedures for individuals with intellectual and developmental disabilities (IDD) are often severely limited due to problem behaviors that interfere with these routines (Conyers et al., 2008). These issues are particularly challenging given that individuals with IDD and behavior problems often present with additional disabling conditions that require frequent interactions with health-care professionals (Anderson et al., 2013). Clients may require daily nursing or other medical attention, which can occasion behaviors such as active noncompliance, tantrums, property destruction, aggression, and even self-injurious behavior. Effectively managing such disruptive behaviors during routine medical and dental appointments requires an understanding of basic behavior principles, as well as knowledge of and ability to carry out intervention procedures specifically designed to improve cooperation and decrease behavioral challenges during medical, dental, and other invasive procedures.

In large residential and/or training facilities that serve hundreds of clients with IDD and can employ thousands of professional and direct-support professional staff, providing caregivers with the training and resources necessary to appropriately manage difficult behaviors is both critically important and tremendously challenging (Shivers, 2014). When responsibility for behavior management for large numbers of clients is distributed across large numbers of caregivers, substantial variability in the techniques and procedures used to manage behavior may occur. This variability might result from unfamiliarity with individual clients and those clients' behavior management programs, differences in caregivers' training or skills, caregiver motivation, or competing duties, among others. Such inconsistency in applying behavior

management strategies can limit the effectiveness of behavior management efforts. Developing competency-based programs for training caregivers and establishing systems to encourage procedural integrity have been shown to increase consistency and improve the outcomes of behavior management efforts with persons with IDD (Parsons & Reid, 1995; Parsons, Rollyson, & Reid, 2012). Such programs may be particularly helpful to provide caregivers with the skills and supports necessary to effectively manage behavior during medical, dental, or other invasive procedures in large, congregate settings.

Competency-based training, or behavior skills training (BST), has been demonstrated to be an effective approach for training caregivers in human services settings (Parsons, Rollyson, & Reid, 2012). BST utilizes multiple-component training that typically includes didactic instruction or lecture (Parsons & Reid, 1995), feedback (Jones, & Eimers, 1975; Parsons & Reid, 1995; Roscoe & Fisher, 2008; Roscoe, Fisher, Glover, & Volkert, 2006; Shivers, 2014), role-play exercises (Gardner, 1972; Jones, Eimers, 1975; Roscoe & Fisher, 2008; Shivers, 2014), modeling (Catania, Almeida, Lui-Constant, & Reed, 2009; Conyers, 2014; Neef, Trachtenberg, Loeb, & Sterner, 1991; Nielsen, Sigurdsson, & Austin, 2009; Shivers, 2014; Tamber, Lambright, & Luiselli, 2017), and rehearsal (Homlitas, Rosales, & Candel, 2014; Miles & Wilder, 2009; Rosales, Stone & Rehfeldt, 2009; Sarkoff & Sturmey, 2008; Shivers, 2014). BST has been used to teach a variety of skills to caregivers for persons with IDD, including the use of general behavior management techniques in large, congregate facilities that serve clients diagnosed with IDD. For example, Shivers (2014) used a four-component BST model including instruction, video modeling, rehearsal, and feedback to train caregivers to implement three general behavior management techniques (use reinforcement, pivot [differential reinforcement of alternative behavior], and protect-redirect [blocking plus differential reinforcement of alternative behavior]).

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The ability to accurately implement the techniques was evaluated using role-play vignettes, and 109 caregivers and 11 behavior service providers were trained to objective competency standards (Shivers, 2014). Following the conclusion of the study, the BST training system was adopted by the facility and was implemented with all new employees at the facility during orientation, as well as with incumbent staff; ultimately, over 1,000 employees have been. A subsequent investigation showed that the skills remained largely intact when caregivers were reassessed up to 2 years after initial training (Harris, 2016).

Didactic instruction is a key component of BST. Didactic instruction employs lecture and supporting materials to help learners understand the rationale underlying the training and to describe the specific skills targeted for acquisition during the training (Parsons, Rollyson, & Reid, 2012). Checklists or other additional materials (e.g., guided notes) have been shown to be useful when incorporated with didactic instruction (Parsons, Rollyson, & Reid, 2012; Shivers, 2014). Checklists provide the learner with written descriptions of all the skills they will be required to perform during training. This enables the learner to reference task instructions during the training program and provides a potentially useful resource following training. The use of such materials may be especially helpful when training must occur quickly and when maintenance of skills is difficult to track, as is often the case in large-residential facilities.

Modeling is another integral component of BST. Modeling has been conducted using an array of procedures, such as in-vivo modeling by the instructor or assistants, in which the skills are demonstrated in-person during training (Catania, Almeida, Lui-Constant, & Reed, 2009; Conyers, 2014; Nielsen, Sigurdsson, & Austin, 2009; Shivers, 2014; Tamber, Lambright, & Luiselli, 2017); peer modeling, in which an individual with similar characteristics to the learner demonstrates the skills (Conyers, 2014; Nielsen, Sigurdsson, & Austin, 2009; Shivers, 2014;

Tamber, Lambright, & Luiselli, 2017); and video modeling, in which learners view video recordings of competent performers (instructors, peers, or others) performing the skills (Catania, Almeida, Lui-Constant, & Reed, 2009; Conyers, 2014; Neef, Trachtenberg, Loeb, & Sterner, 1991; Nielsen, Sigurdsson, & Austin, 2009; Shivers, 2014; Tamber, Lambright, & Luiselli, 2017);. Modeling has been shown to be effective in teaching a variety of skills (Catania, Almeida, Lui-Constant, & Reed, 2009; Conyers, 2014; Neef, Trachtenberg, Loeb, & Sterner, 1991; Nielsen, Sigurdsson, & Austin, 2009; Shivers, 2014; Tamber, Lambright, & Luiselli, 2017).

Role-playing exercises, in which the learner attempts to implement the skill in a "rehearsal" context, are typically included in BST. Role-play exercises employ scripted situations that take place during training. Situations are acted out by the trainer and learner in which the learner can encounter situations in which they can practice targeted skills in a safe environment and receive feedback on their performance. Role-playing allows learners to practice the skills with the trainer in a simulated training environment (Gardner, 1972; Jones, Eimers, 1975; Roscoe, & Fisher, 2008; Shivers, 2014).

Feedback on role-play performances and other aspects of the learner's behavior is another component of BST. Feedback involves observation/measurement of some aspect of the learner's performance and providing constructive and/or corrective information to the learner about that performance (Jones, & Eimers, 1975; Parsons, Reid, 1995; Roscoe, & Fisher, 2008; Roscoe, Fisher, Glover, & Volkert, 2006; Shivers, 2014). Feedback can be provided during or following the activity, by the trainer who assumes one of the roles during the role-play exercises (Rosales, Stone & Rehfeldt, 2009) or others.

The current study sought to determine whether a BST program incorporating instruction, video modeling, rehearsal (role-play exercises) and feedback can effectively teach direct-support professionals to demonstrate a core set of skills designed to promote cooperative client behavior and reduce problem behavior during routine medical/dental appointments.

CHAPTER 2

METHOD

Participants and Setting

Four direct-support professionals (DSPs) working at a large, state-operated residential and training facility for adults with intellectual disabilities (IDD) participated in the current study. Approximately 450 adults diagnosed with IDD received services at the facility and approximately 1500 DSPs and professional staff served the residents. The facility was segmented into 5 semi-independent units, and participants were recruited from a pool of DSPs within one unit located in the facility. The Unit Director identified potential participants based on staff performance, interest, and staffing needs during the times scheduled for training. Age of participants ranged between 18-45 years of age during the time of the study. Prior to this study, all participants received 8-hours of fundamental behavior management training or positive behavior management supports (PBMS), as part of new hire training. Participants had previously demonstrated competence with basic behavior management techniques including using reinforcement to increase positive and adaptive behaviors, pivoting from undesirable but harmless behavior to more appropriate behaviors, and protecting and redirecting when dangerous or severe behavior occurred (Shivers, 2014).

All procedures were conducted by trained graduate students who were experienced data collectors and role-play actors. Training was held at a clinic located on the campus of the facility. The clinic was operated by the Behavior Analysis Resource Center (BARC), a university-based service/learning/research program that provided clinical, caseload, and staff training services for the facility. Staff training procedures were conducted in a conference room, a clinic room with dental chair, a hallway that led to a main office, and an adjacent kitchen. Training took between

1.5 hours and 2 hours and was conducted individually with each DSP during one session per participant.

<div align="center">Structure and Sequence of Training Activities</div>

The course curriculum consisted didactic instruction, modeling, role-playing, and feedback on role-play performances. A multiple-probe analytic arrangement was used to evaluate acquisition of the targeted skills by participants. Participation was initiated with a role-play probe, which provided data on the extent to which participants could demonstrate the targeted skills prior to specific training. Figure 5 shows rationale for the step criteria used.

Phase 1 (pre-appointment) of the training focused on skills associated with preparing clients for upcoming appointments and transporting clients to the appropriate appointment location. These skills included accessing and reviewing the client's behavior support plan, identifying the correct appointment time and location, selecting appropriate client attire, collecting client reinforcers, and behavior management during client transport.

Phase 2 (appointment) focused on how to appropriately manage the dental/medical appointment. This included assisting the dentist/physician as appropriate, prompting client compliance, providing reinforcement as appropriate, blocking dangerous behavior exhibited by the client, and appropriately praising the client when the appointment concludes.

Phase 3 (post-appointment) focused on concluding and documenting the dental/medical appointment. This included gathering all relevant information from medical/dental professional pertaining to the client, transporting the client back to their appropriate location, and completing all necessary documentation for the appointment in the appropriate locations.

A data sheet was developed for staff to document the appointment (see Appendix F for behavior tracking document). The behavior tracking document includes an area where the

participant can record the frequency of client target behavior (designated problem behavior that occurred during the appointment) as well as a space for a brief narrative about the appointment and whether there was any problem behavior that occurred.

A task checklist was developed for participants to use during training (see Appendix B), as well as in the natural environment. This document was attached to the behavior tracking document. The checklist itemized all the steps required during the appointment process. This was done to reduce potential errors during client transport and appointments. The task list was introduced in phases across during training. During the baseline probe, the task checklist was not present. The task list for Phase 1 was introduced following didactic training and video modeling for Phase 1, and prior to the role-play that followed Phase 1. The same arrangement was used to introduce the task list for Phases 2 and 3.

During role plays, one trainer assumed the role of a client while a second trainer assumed the role of a medical/dental professional (see Appendix A for role-play script). The participant was instructed to prepare the client for a dental/medical appointment, accompany the client to the appointment, attend the appointment, and return the client to the initial point of departure. For the purposes of the role-play scenarios, the conference room and front office was used as the home, the hallway was used as a route to and from the appointment, and the clinic was used as the dental/medical office. During the role-play appointment, the trainer who assumed the role of the medical/dental professional pretended to carry out routine medical/dental procedures as scripted. The "client" engaged in behaviors similar to those emitted by clients during medical/dental appointments, as scripted. Specific client responses included compliance or noncompliance with caregiver instructions, as well as disruptive or problematic behaviors.

Participants were not given specific directions or feedback during the role-plays; rather, they were simply instructed to manage the situation to the best of their abilities.

A multiple-probe design across units was used to evaluate the effectiveness of training. Following the initial baseline probe, training was initiated for Phase 1. Training for all three phases consisted of a brief lecture including the rationale for and a description of the tasks to be performed by the participant, a prerecorded video presentation in which the tasks to be performed in that phase were modeled by members of the training team. Following each training session, the baseline role-play was repeated. If the participant demonstrated proficiency with the previously taught skills, training on the next component was initiated. If the participant did not demonstrate proficiency with previously taught skills, the trainer provided feedback, brief remedial training and the next component of training was initiated. When participants demonstrated all skills taught in Phases 1, 2, and 3, training was completed. If the participant did not reach 100% correct on all components during the final post-training role-play exercise, retraining was conducted with the participant that included constructional and corrective feedback on the skills addressed in the current phase and an additional role-play exercise. This process of corrective feedback and additional role-play exercises was conducted until mastery was achieved.

Data Collection

Data were collected during the role-play assessments to determine the accuracy with which participants performed the skills taught in the program. Data sheets were developed to record the accuracy of steps in the training program during all role-play exercises. The primary trainer acted as data collector during role-play exercises. Data sheets were developed to score the

fidelity with which the primary trainer implemented the training curriculum. Procedural fidelity data were collected by a trained member of the training team during 100% of training sessions.

Interobserver Agreement

A second observer independently recorded data during 100% of training sessions. Interobserver agreement was calculated on an item-by-item basis. The number of training steps with agreement was divided by the total number of steps assessed, and the result was multiplied by 100 to derive the agreement coefficient. IOA for data on client performances was 92% (range = 92%-93%) for Participant 1, 88% (range = 73%-100%) for Participant 2, 87% (range = 80%-92%) for Participant 3 and 95% (range = 87%-100%).

A second observer independently recorded data for 25% of procedural fidelity checks. Agreement was calculated on an item-by-item basis. The number of agreements was divided by the total number of trainer responses assessed, and the result was multiplied by 100 to derive the agreement coefficient. Agreement on procedural fidelity was 95% (range = 81%-100%) for Participant 2 (Wayne).

CHAPTER 3

RESULTS

Direct-support professionals' (DSPs) performances were scored to determine the accuracy with which the skills targeted during training were implemented during role-play assessments. Figure 1 shows the results of the first participant, Robert. Robert scored a total of 15% correct during the initial baseline probe. Robert scored 20% correct for Phase 1, 0% correct for Phase 2, and 25% correct for Phase 3. Following Phase 1 training, Robert's score for Phase 1 increased to 60% correct. Robert's scores for Phase 2 and Phase 3 remained low at 20%, and 25% correct respectively. Following the role-play assessment for Phase 1, Robert received constructive and corrective feedback about his performance for those skills only – feedback was not provided regarding skills targeted in Phases 2 or 3. After training was conducted for Phase 2, Robert performed both Phase 1 and Phase 2 skills with 100% accuracy. Robert's score for Phase 3 remained at 25% correct. Following the final phase of training, Robert demonstrated all skills at 100% accuracy across all phases of training.

Figure 2 shows the results of the second participant, Wayne. Wayne scored a total of 8% correct during the initial baseline probe. Wayne scored 0% correct for Phase 1, 0% correct for Phase 2, and 25% correct for Phase 3. Following Phase 1 training, Wayne's score for Phase 1 increased to 60% correct. Wayne's scores for Phase 2 increased to 20% correct and Phase 3 increased to 50% correct. Following the role-play assessment for Phase 1, Wayne received constructive and corrective feedback about his performance for those skills only – feedback was not provided regarding skills targeted in Phases 2 or 3. After training was conducted for Phase 2, Wayne performed Phase 1 skills with 100% accuracy. Wayne's scores for Phase 2 increased to 80% correct. Wayne's score for Phase 3 decreased to 25% correct. Following the role-play

assessment for Phase 2, Wayne received constructive and corrective feedback about his performance for those skills only – feedback was not provided regarding skills targeted in Phases 1 or 3. Following the final phase of training, Wayne demonstrated all skills at 100% accuracy across all phases of training.

Figure 3 shows the results of the third participant, Jim. Jim scored a total of 50% correct during the initial baseline probe. Jim scored 40% correct for Phase 1, 60% correct for Phase 2, and 50% correct for Phase 3. Following Phase 1 training, Jim's score for Phase 1 increased to 60% correct. Jim's scores for Phase 2 decreased to 40% correct and Phase 3 remained at 50% correct. Following the role-play assessment for Phase 1, Jim received constructive and corrective feedback about his performance for those skills only – feedback was not provided regarding skills targeted in Phases 2 or 3. After training was conducted for Phase 2, Jim performed Phase 1 skills with 100% accuracy but the score for Phase 2 was 80% correct. Jim's score for Phase 3 decreased to 25% correct. Following the role-play assessment for Phase 2, Jim received constructive and corrective feedback about his performance for those skills only – feedback was not provided regarding skills targeted in Phases 1 or 3. Following the final phase of training, Jim demonstrated all skills at 100% accuracy for Phase 1 but scores for Phase 2 remained at 80% correct. Jim's scores for Phase 3 increased to 75% correct. Following retraining, Jim scored 100% correct across all phases of training.

Figure 4 shows the results of the fourth participant, Bobby. Bobby scored a total of 15% correct during the initial baseline probe. Bobby scored 20% correct for Phase 1, 0% correct for Phase 2, and 25% correct for Phase 3. Following Phase 1 training, Bobby's score for Phase 1 increased to 100% correct. Bobby's scores for Phase 2 and Phase 3 remained low at 20% correct, and 25% correct respectively. After training was conducted for Phase 2, Bobby performed Phase

1 skills with 100% accuracy and Phase 2 skills increased to 80% correct. Bobby's score for Phase 3 remained at 25% correct. Following the role-play assessment for Phase 2, Bobby received constructive and corrective feedback about his performance for those skills only – feedback was not provided regarding skills targeted in Phases 1 or 3. Following the final phase of training, Bobby demonstrated all skills at 100% accuracy for both Phase 1 and Phase 3 but scores for Phase 2 remained at 80%. Following retraining, Bobby scored 100% correct across all phases of training.

CHAPTER 4

DISCUSSION

The current study demonstrated that BST incorporating didactic instruction, video modeling, role-playing, and feedback to teach four direct-support professionals (DSPs) specific skills intended to prepare them to effectively manage client behavior during medical/dental appointments. All four participants showed acquisition of the targeted skills in an orderly fashion as instruction corresponding to three sets of skills was introduced in a sequential fashion. Role-play evaluations followed each phase of instruction, and all participants showed improvement in skills corresponding to the introduction of new curriculum content. That is, all participants earned higher accuracy scores for skills taught in the immediately preceding phase of instruction at every opportunity. Immediate increases to 100% were observed in 5 of 12 (42%) possible instances, and brief remedial training was necessary to produce perfect accuracy in 7 of 12 (58%) of instances. All participants scored 100% correct on all targeted skills at the completion of training.

Using a single, standard role-play scenario to assess acquisition of the targeted skills provided an objective way to measure competency for all phases of the appointment process. By presenting the same role play repeatedly, using a multiple-probe format, it was possible to observe acquisition of each set of skills as those sets were taught. A potential limitation of using a single role-play to evaluate the effectiveness of BST is that the potential effects of mere repetition, or practice, cannot be eliminated. However, presenting the role-plays using a multiple-probe format permitted repeated opportunities to observe potential practice effects. In the current study, there were 12 opportunities to observe potential order effects (i.e., following the initial baseline probe, there were 12 instances in which skills were probed that had not previously been

addressed in the training curriculum). Indeed, improvement was observed in 5 instances (42%).

There were 8 instances in which "no instruction" probes (probes for skills that had not been

addressed in the curriculum) followed one prior probe; of those, 4 scores (50%) were higher than

the previous score, 3 scores (38%) were equal to the immediately previous score, and 1 score

(12%) was lower than the immediately previous score. There were 4 instances in which no-

instruction probes followed 2 prior probes; scores increased relative to the immediately previous

probe once (25%), were equal twice (50%), and decreased once (25%). Of the four participants,

Wayne's results showed the most evidence of potential practice effects, with increasing accuracy

scores associated with each successive no-instruction probe. Conversely, Jim's results showed

that his scores were equal to prior probes in one instance and decreased in two instances. Overall,

the influence of repeated testing on role-play scores appears to have been minimal, if it occurred

at all. Therefore, acquisition of the skills targeted in this study appear to have resulted largely

from the BST training process.

Although BST is largely recognized as best-practice for training caregivers, a limitation

to this model is that it often requires extensive time to conduct (Parsons, Rollyson, & Reid,

2012). In the current project training took approximately one and a half hours for each

participant. In addition, the current training was designed to be implemented on an individual,

rather than group basis. Individualized instruction requires that learners must be relieved from

client coverage or attend trainings outside of their typical schedule. This could be a potential

limitation to the adoption of multiple-component BST models for training in contexts in which

training opportunities are limited. Future efforts should examine opportunities to reduce the

amount of time necessary to effectively train the types of skills targeted in this study. For

example, component analyses might identify necessary and sufficient components of training.

Also, if a series of replications shows the current training to be effective across a large number of caregivers, it may be possible to reduce the number or extent of role-play assessments.

The current study was conducted in a contrived training environment, which limits generality of the results. Although the current training curriculum was designed to be implemented within a large residential/training facility, logistical considerations limited the use of more naturalistic conditions during the current evaluation. For example, in the Pre-Appointment phase, one of the tasks involves staff identifying the time and location of the appointment for the client. This task was excluded from the current evaluation because all training and testing occurred in the contrived environment. Similarly, a task in the Appointment phase of training involved insuring that the participant arrived at the appointment site no later than 5minutes prior to the scheduled appointment. This task was omitted from measurement during training because the participant had no control over the timing of the role-play during training. Other aspects of the training environment, such as the occurrence of all procedures in one building (thus eliminating the need to insure that the client is appropriately dressed for weather and decreasing issues that might be encountered when transporting clients over longer distances), further limit the extent to which strong conclusions about the ecological validity of this training program. Future research will be needed to determine the effectiveness of this training for preparing participants to accompany and assists clients during actual medical/dental appointments.

The results of the current study represent the initial evaluation of a program that will use BST to train teams of DSPs who will have primary responsibility for transporting, accompanying, and assisting in routine medical and dental procedures with residents of the large, residential/training facility at which this project took place. BSTs will be recruited for training

from each home; therefore, individuals with specialized skills and knowledge – and who are familiar with the residents for whom they will be responsible – will be located on each home of the facility. It is anticipated that, by increasing the skills of caregivers who are responsible for managing client behavior during routine medical/dental procedures, the effectiveness of those procedures will be enhanced, instances of challenging behaviors will be reduced, as will be the need to use intrusive procedures such as sedation and anesthesia. Several areas of future inquiry will be necessary for further investigation. Determination of the extent to which the skills targeted in the current training are exhibited in the natural environment, whether those skills are necessary and/or sufficient to produce improvements in client behavior, and whether it is possible to sustain such a program in the context of a large residential/training facility are among the questions that remain to be addressed in order to validate the contributions of this project toward improvements in the quality of the lives and health of individuals with intellectual/developmental disabilities.

Participant 1

			Baseline	Phase 1	Phase 2	Phase 3
PHASE 1 Pre-Appointment	Step 1					
	Step 2					
	Step 3					
	Step 4	N/A				
	Step 5					
	Step 6					
PHASE 2 Appointment	Step 7	N/A				
	Step 8					
	Step 9					
	Step 10					
	Step 11					
	Step 12					
PHASE 3 Post-Appointment	Step 13					
	Step 14					
	Step 15					
	Step 16					

PROBES

Correct ■ Incorrect □

Figure 1. Percent correct for role-play steps for all phases for Robert.
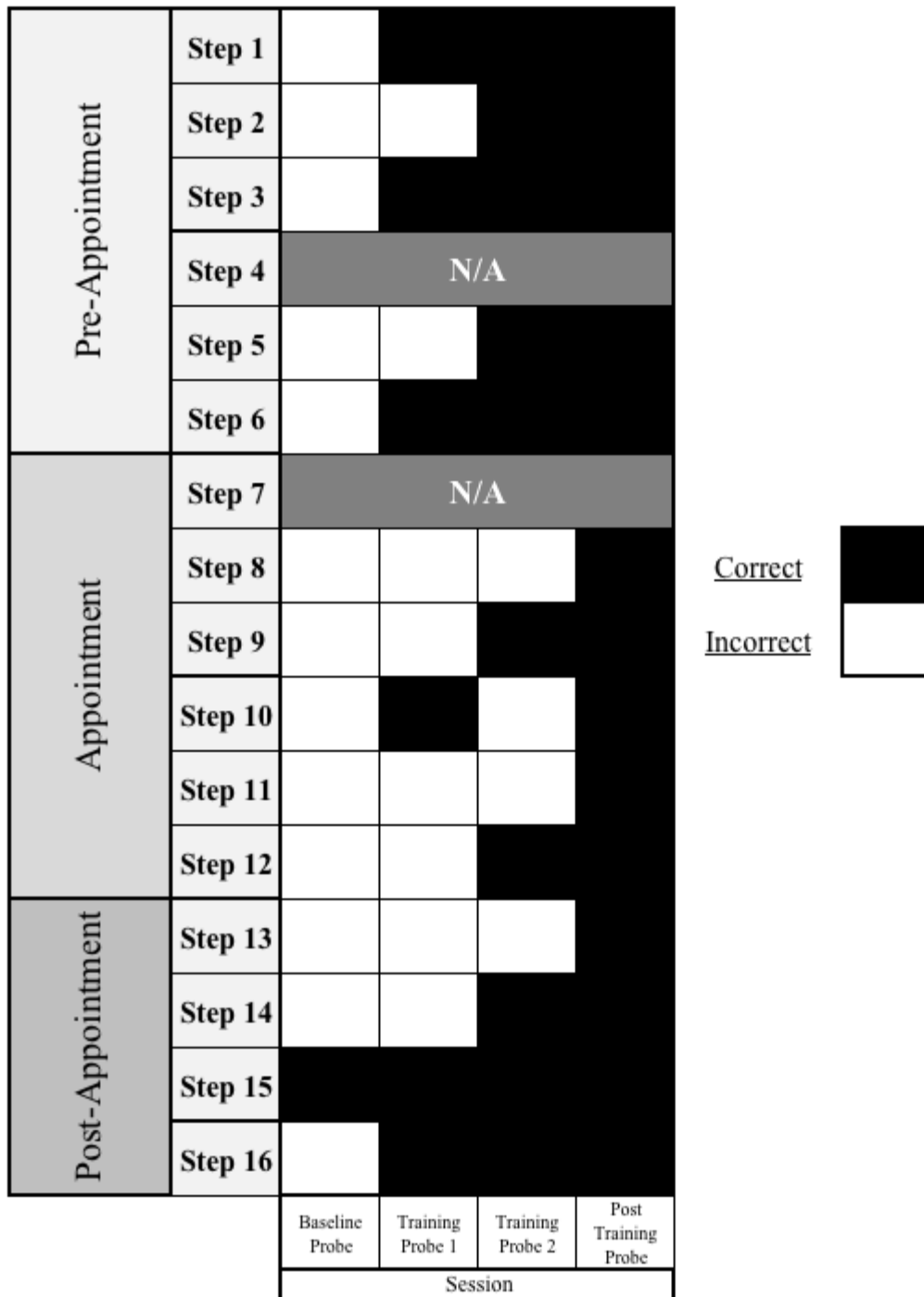
Figure 2. Percent correct for role-play steps for all phases for Wayne.

Participant 3

		Baseline Probe	Training Probe 1	Training Probe 2	Post Training Probe	Re Training
Pre-Appointment	Step 1	Incorrect	Incorrect	Correct	Correct	Correct
	Step 2	Incorrect	Correct	Correct	Correct	Correct
	Step 3	Incorrect	Correct	Correct	Correct	Correct
	Step 4	N/A				
	Step 5	Correct	Incorrect	Correct	Correct	Correct
	Step 6	Correct	Correct	Correct	Correct	Correct
Appointment	Step 7	N/A				
	Step 8	Correct	Incorrect	Correct	Correct	Correct
	Step 9	Incorrect	Correct	Correct	Correct	Correct
	Step 10	Correct	Correct	Correct	Correct	Correct
	Step 11	Incorrect	Incorrect	Correct	Correct	Correct
	Step 12	Correct	Incorrect	Incorrect	Incorrect	Correct
Post-Appointment	Step 13	Incorrect	Incorrect	Incorrect	Incorrect	Correct
	Step 14	Incorrect	Correct	Incorrect	Correct	Correct
	Step 15	Correct	Correct	Correct	Correct	Correct
	Step 16	Correct	Incorrect	Incorrect	Correct	Correct

Session

Correct ■ Incorrect □

Figure 3. Percent correct for role-play steps for all phases for Jim

Participant 4

|		Baseline Probe	Training Probe 1	Training Probe 2	Post Training Probe	Re Training
Pre-Appointment	Step 1					
	Step 2					
	Step 3					
	Step 4	N/A				
	Step 5					
	Step 6					
Appointment	Step 7	N/A				
	Step 8					
	Step 9					
	Step 10					
	Step 11					
	Step 12					
Post-Appointment	Step 13					
	Step 14					
	Step 15					
	Step 16					

Session
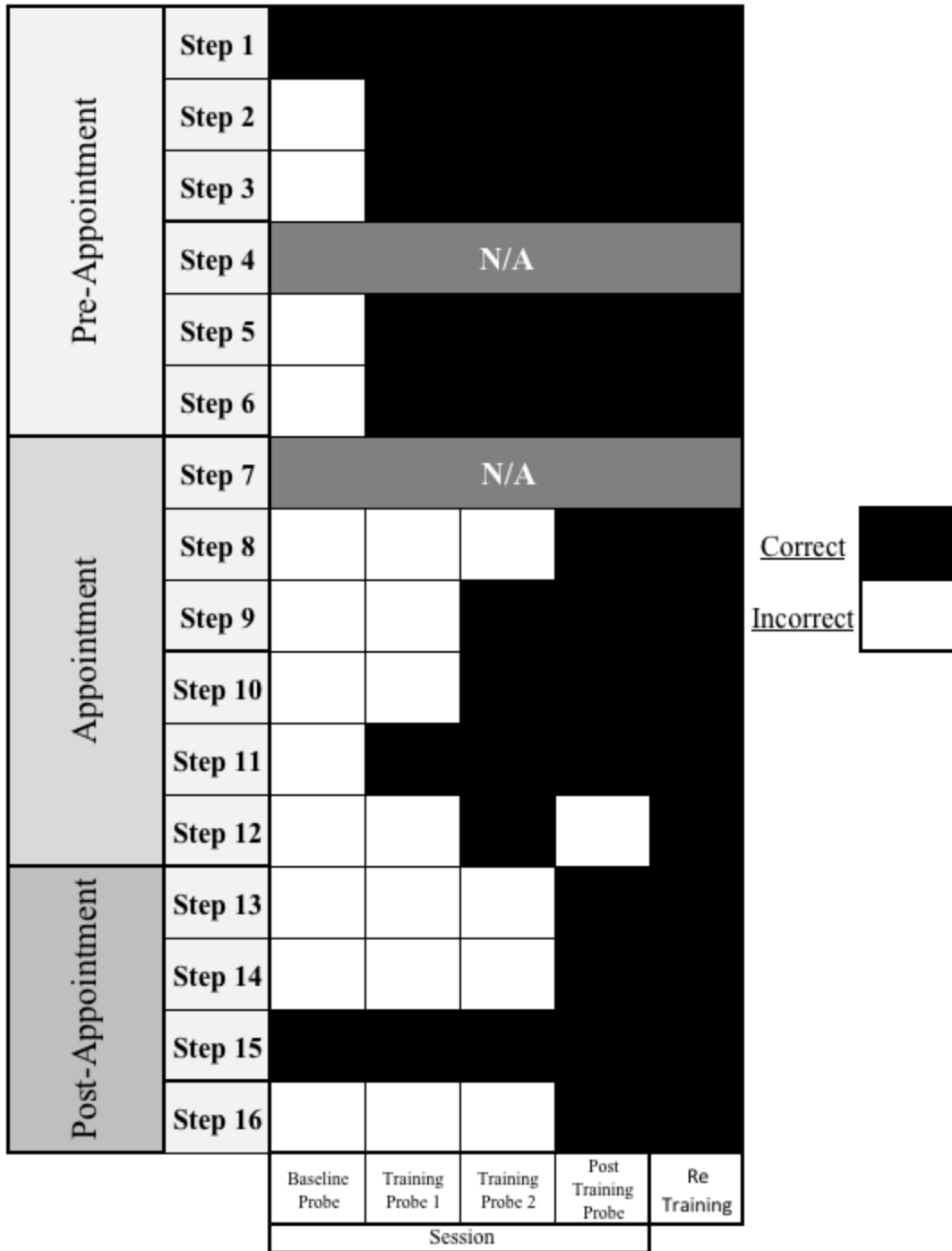
Correct ■
Incorrect □

Figure 4. Percent correct for role-play steps for all phases for Bobby.

Step #	Phase	Step Criteria	Rationale
1	Pre-Appointment	Staff identify location of client PBSP & Restraint Plan and state whether client is NPO.	Staff should know where to locate the specific client documents to better serve the client.
2	Pre-Appointment	Staff obtain Behavior Tracking Document to fill out during appointment.	This document will help the DSP record behavioral data throughout the appointment.
3	Pre-Appointment	Staff select attire for client that is appropriate for appointment.	Client's should wear appropriate attire depending on the weather.
4	Pre-Appointment	Staff state **when** and **where** client appointment is held	Knowing when and where the client appointment is limits the time required for client to be away from scheduled programming.
5	Pre-Appointment	Staff obtained client reinforcers for appointment.	Obtaining the appropriate reinforcer for the client will ensure proper maintenance of behavioral program.
6	Pre-Appointment	Staff Pivot from Junk behavior during transport.	Not attending to problem behavior will ensure it does not get reinforced.
7	Appointment	Staff/client arrive no later than 5-minutes prior to scheduled appointment.	Arriving on time for an appointment ensures the client stays on schedule.
8	Appointment	Staff verbally praises client for appropriately waiting. Delivers reinforcer if applicable.	Delivering reinforcement during times the client is appropriately responding may increase appropriate responding in the future.
9	Appointment	Staff inform medical/dental staff of their involvement with procedures.	Informing medical/dental staff of the DSP involvement will help alleviate redundancy in behavioral intervention.
10	Appointment	Staff intermittently reinforce client for appropriate behavior during appointment.	Intermittently reinforcing for appropriate behavior may effectively maintain appropriate behavior during the appointment.
11	Appointment	Staff block dangerous behavior during appointment.	Staff should block dangerous behavior to protect them and the client's during episodes of aggression.
12	Appointment	Staff verbally praise client for attending their appointment. Deliver reinforcer if applicable.	Delivering positive praise after the client's appointment may increase appropriate responding by the client during their appointments.
13	Post-Appointment	Staff discuss any relevant information related to client with medical/dental staff.	Discussing relevant information related to the client's appointment will ensure the DSP has all the necessary information to record once back in the client's apartment.
14	Post-Appointment	Staff place Behavior Tracking Document in BARC binder located in the unit apartment.	Staff should return the Behavioral Tracking Document so BARC can collect the data.
15	Post-Appointment	Staff escorts client to appropriate location after appointment.	Staff should get the client back to their home or workshop so they can return to their normal schedule.
16	Post-Appointment	Staff Document in Caretracker any post-appointment instructions from medical/dental professionals.	Documenting the appointment will ensure proper tracking of not only the appointment but the client's behavioral progress.

Figure 5. Step list and rationale for step criteria.

APPENDIX A

ROLE-PLAY SCRIPT FOR DESENSITIZATION STAFF TRAINING PROGRAM

Materials required for role-plays:

- Client PBSP/Restraint Plan binder

- Client appointment sheet

- Behavior Tracking Document

- Sealed cup of pudding

- White Lab coat

- IV line, pressurized spray, cotton swab and Band-Aid

Set-up

- Place the binder labeled Client PBSP/Restraint Plan, appointment schedule, a sealed cup of pudding, and a Behavior Tracking Document on the table in the room.

- Inform staff: *"You are going to participate in a set of role-play scenarios that will cover simulated experiences that could occur during transporting and attending medical/dental appointments with clients"*.

- Trainer will not provide any instruction or allude to what will occur during the role-play scenarios. If staff ask what they should do, inform them to act how they typically do during routine medical/dental appointments with clients.

- Inform staff,

    o *"The role-play scenario will take place in the BARC conference room, the front office, the hallway and the dental clinic"* (quickly show them each room).

    o *"Once you have gathered all the necessary information and materials the client will be waiting in the front office where you will prepare them for transport"*.

- o *"Once ready, you will take the client down the hall to the dental clinic where there will be a row of chairs representing the waiting room".*
- Inform Staff that the role-play scenario will begin and inform them:
  - o *"You are going to be taking a client to their blood-draw appointment at 3pm, located in the BARC medical/dental clinic located in ETC".*
- During the Appointment component of training, the **TRAINER** will assume the role of **DOCTOR**.

Pre-Appointment Role-Play for - TRAINER

- Score Pre-Appointment checklist before moving on to Appointment.

Appointment Role-Play for - TRAINER

- Trainer will put on the white lab coat and assume the role of the Doctor

Appointment Role-Play for - DOCTOR

- Doctor will walk into the BARC dental clinic and introduce yourself as Dr. (Your Name) and inform the staff you are ready to conduct the blood-draw appointment with the client.
- Once the client is seated, the doctor will simulate conducting a blood-draw using the IV line, spray, cotton swab and Band-Aid.
  - o Client will at some point engage in Attempted Physical Aggression to Others (APAO), which you will pivot from while it occurs.
- Score Appointment checklist before moving on to Appointment.

Post-Appointment Role-Play for DOCTOR

- Staff should discuss with the medical/dental staff any relevant information related to the client.

  o   If the participant does not ask questions, simply say goodbye and walk away. (wait 15-30 seconds).

  o   If the participant asks the doctor about any information they need to know, the "doctor" will say:

  "Everything should be okay for Rick-Bob after the blood draw. He should have some sugar like a soda when he gets home and make sure he does not do anything that could tire him out".

- Remove white lab coat and re-assume the role of the TRAINER

- Score Post-Appointment checklist before moving on to Appointment.

Role-Play Script for Desensitization Staff Training Program

Client

Materials required for role-plays:

- Heavy coat or sweatshirt

- Wheelchair

_____

Set-up

- The client role-play actor should put on either a heavy jacket or sweatshirt prior to training beginning.

- The client role-play actor should retrieve the BARC wheelchair and place it in the BARC BCBA office.

Pre-Appointment Role Play for – Client

- Client will be seated in the BARC wheelchair in the BARC BCBA office waiting for staff to enter.

- When staff transport you to the BARC dental clinic, engage in junk behavior (yell and bang your arms on the wheelchair) for 15 seconds.

Appointment Role Play for – Client

- Client will be seated calmly in the BARC dental clinic waiting room.

- Once in the dental chair, and the doctor begins the blood-draw procedure, client will begin engaging in Attempted Physical Aggression to Others (APAO) with the doctor for 15 seconds.

Post-Appointment Role Play for – Client

- Client will be seated calmly while staff fill out documents.

APPENDIX B

ROLE PLAY CHECKLISTS

Pre-Appointment Checklist

Date_____

Staff name & apartment _____

Data Collector _____

Scenario – Making sure you are ready for client's appointment

Step	Baseline Probe			Training Probe 1			Training Probe 2			Post Training Probe			Retraining			
	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Comments
1. Staff identify location of client PBSP & Restraint Plan and state whether client is NPO.																
2. Staff obtain Behavior Tracking Document to fill out during appointment.																
3. Staff select attire for client that is appropriate for appointment.																
4. Staff state **when** and **where** client appointment is held																
5. Staff obtained client reinforcers for appointment.																
6. Staff Pivot from Junk behavior during transport.																
Met Criteria (Yes/No)																

Appointment Checklist

Date_____

Staff name & apartment _____

Data Collector _____

Scenario – Ensuring client's appointment runs smoothly

Step	Baseline Probe			Training Probe 1			Training Probe 2			Post Training Probe			Retraining			Comments
	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	
7. Staff/client arrive no later than 5-minutes prior to scheduled appointment.																
8. Staff verbally praises client for appropriately waiting. Delivers reinforcer if applicable.																
9. Staff inform medical/dental staff of their involvement with procedures.																
10. Staff intermittently reinforce client for appropriate behavior during appointment.																
11. Staff block dangerous behavior during appointment.																
12. Staff verbally praise client for attending their appointment. Deliver reinforcer if applicable.																
Met Criteria (Yes/No)																

Post-Appointment Checklist

Date _____

Staff name & apartment _____

Data Collector _____

Scenario – Helping the client get back home

Step	Baseline Probe			Training Probe 1			Training Probe 2			Post Training Probe			Retraining			Comments
	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	
13. Staff discuss any relevant information related to client with medical/dental staff.																
14. Staff place Behavior Tracking Document in BARC binder located in the unit apartment.																
15. Staff escorts client to appropriate location after appointment.																
16. 3																
Met Criteria (Yes/No)																

APPENDIX C

TREATMENT INTEGRITY CHECKLIST

Staff Treatment Integrity for Desensitization Staff Training Program

Trainer Conducting Role Play: _____   Date: _____

TI Data Collector: _____

Staff (trainee): _____

Role-play #_____

Step	Yes	No	N/A	Comment
1. Trainer has room set up with Client PBSP & Restraint Plan binder along with Behavior Tracking Document and client reinforcers				
2. Trainer has role-play actors recruited: • Client • Doctor				
3. Trainer provides the participant with the preliminary instructions • location of role-plays • appointment information • where to transport the client				
4. Client is waiting in a wheelchair in the front office wearing either a jacket or sweatshirt.				
5. Equipment is staged next to dental chair for blood-draw • Cotton swabs • Water spray or mist • IV-line tubing				
6. "Doctor" conducts the blood-draw appointment while "client" is sitting in dental chair.				
7. Trainer provides post-appointment information to the participant if and only if the participant asks for it.				
8. Trainer begins training session following the role-play unless it is the final role-play following training session 3.				

APPENDIX D

DIRECT SUPPORT PROFESSIONAL TRAINING MATERIALS PACKET

Client Supports and Behavior Management Training for Medical/Dental Appointments

Developed by Josh Kinser, B.S.
Behavior Analysis Resource Center

Overview

Your concerns
o   A questionnaire asking you about potential roadblocks that happen when you take clients to their medical/dental appointments

Behavior Management
o   A quick refresher on Reinforcement, Pivot & Protect-Redirect (PBMS)

Data Collection
o   How to take data during a medical/dental appointment

Pre-Appointment
o   Best practices for preparing the client for their appointment

Appointment
o   Best practices for helping the client through their medical/dental appointment

Post-Appointment
o   Learning what information to take back and document in Caretracker or chart.

6 Steps to Reinforcement

1.   Tell the person what behavior you _____.

2.   Provide a _____ that matches the value of the behavior.

3.   Provide the consequence within _____ seconds of seeing the behavior.

4. Use _____ and _____ facial expressions, tone of voice and relaxed body language.

5. Ignore _____ behavior.

6. Avoid _____ and punishment.

5 Steps to Pivot

1. Say _____ about the junk behavior and do not react to the junk behavior.

2. Immediately attend to another _____ or _____.

3. Use _____ for the behavior of the individual who was doing junk behavior when their behavior improves.

4. Respond to that person's improved behavior within _____ seconds.

5. Stay _____ (avoid coercion).

6 Steps to Protect-Redirect

1. Get within arms-reach of the person and _____ _____ to stop/block the dangerous behavior within 10s.

2. Say stop/phrase _____ and continue blocking without talking.

3. Stay _____ and Cool (avoid coercion).

4. Ignore _____ Behavior.

5. When you see calm or _____ behavior, use _____.

6. Offer a new _____.

Phase 1 – 5 Steps to Pre-Appointment

1.   Staff identify location of client PBSP & Restraint Plan and state whether client is NPO

Positive Behavior Support Plans (PBSP)
- Apartment _____   _____
- Book shelf
- Cabinet
- "All about me book"

Restraint Plans are kept in the same area but may be in a different binder.

NPO is a Latin acronym for "_____ ____ _____".
- Which means the client can have nothing to eat or drink until authorized by the doctor.
- Ask _____ or _____ if not sure client is NPO.

2.   Staff obtain Behavior Tracking document to fill out during appointment

Behavior Tracking Documents can be found in the BARC documents binder located in the _____.

Behavior Tracking Sheet
Resident Medical/Dental Appointment

Staff Name: _Mike Ehrmantraut_____ Date: _01/25/17_____

Resident Name: _Vito Corleone_____ Apt Number: _501A____

Appointment Location: _Dental Clinic_____

Medical/Dental Professional Name: ___Dr. Hannibal Lecter____

Did problem behavior occur?

Yes	No
/	

What did it look like?

During the procedure, Vito pushed the dentist's arm away a
few times but we said nothing about it and he did not do it
again. We praised him for better behavior after that.

How many times did it happen? (Use tally marks in the box below)

Total times it occurred | 4 |

Did it interfere with the appointment?

Yes	No
/	

How did it interfere with the appointment?

The dentist had to stop for a couple of minutes but was fine
after that.

3. Staff select attire for client that is appropriate for appointment.

Check the _____ conditions prior to leaving.
- Jackets for cold weather
- Short sleeves for hot weather

Check whether the clothes will _____ with the appointment.
- Not wearing boots for podiatry appointment.
- Loose fitting t-shirts for blood-draw appointment.

4. Staff state <u>when</u> **and** <u>where</u> client appointment is held.

If you do not know, contact the QIDP for your apartment.
- Or the _____ _____

5. Staff obtained client reinforcers for appointment.

Reinforcers are listed in the PBSP but are subject to change over time. Become familiar with where _____ are located.
- Fridge
- Client's closet

Check with QIDP if you are not sure about client reinforcers.

6. Staff Pivot from Junk behavior during appointment/transport

You should pivot from all _____ behavior at any time during the appointment or _____

Phase 2 – 5 Steps to Appointment

7. Staff/Client arrive no later than 5 minutes prior to scheduled appointment time.

Arrive _____.
This helps keep the clinic schedule on time.
Which helps clients have _____ problem behavior.

8. **Staff verbally praises client for appropriately waiting. Delivers reinforcer if applicable.**

_____ client when they arrive at their appointment.
If they have edible items, deliver them as per the PBSP or unit level strategies.

9. **Staff inform medical/dental staff of their involvement with procedure.**

Let the medical/dental staff know you will be
_____ in the procedure.
Ask them if there is anything you need to do during the appointment that will help.

10. **Staff intermittently reinforce client for appropriate behavior during appointment.**

Follow the client's _____ or _____   _____
_____ during the entire appointment.

11. **Staff block dangerous behavior during appointment.**

If dangerous behavior occurs during appointment, ensure you
_____ within _____ seconds. Say _____
about the behavior. Stay calm and _____. Praise for
_____ behavior.

12. **Staff verbally praise client for attending their appointment. Deliver reinforcer if applicable.**

When the procedure is complete, provide _____ and or reinforcer to the client
The praise should be significant since it is for the entire appointment

---

Phase 3 – 4 Steps to Post-Appointment

13. Staff discuss any relevant information related to client with medical/dental professional.

Medical/dental staff will provide _____ about the client after the appointment
If they do not, _____ _____ if there is anything you need to know about the client
Document in the Home Shift Log **and** into Caretracker when you _____ to the apartment

14. Staff fill out the Behavior Tracking Document and place it in the BARC Binder.

Fill out Behavior Tracking Document and return it to the _____
_____ located in the _____ _____.

15. Staff escorts client to appropriate location after the appointment.

Take client back
*   Apartment
*   Workshop
*   Canteen

16. Staff document in Caretracker any post-appointment instructions from medical/dental staff.

Document the appointment
- Home shift-log
- _____

Include information about
- Behavior during appointment
- _____ / _____ related information

Summary

Know your client's documention:
- PBSP
- Restraint plans
- NPO status

Remember Reinforcement Pivot and Protect Re-Direct

Grab a Behavior Tracking sheet and client reinforcer prior to heading to appointment

Reinforce often
- Go big when appointment ends!

Document appointment

APPENDIX E

DIRECT SUPPORT PROFESSIONAL SURVEY

Staff Questionnaire
BARC Desensitization Training Program

Staff Name: _____ **Date**:_____

1.   What or who gets in the way of you getting ready to take residents to their medical/dental appointments?

_____
_____
_____
_____

2.   Once at the appointment, what do you need to keep the resident from having problem behavior?

_____
_____
_____
_____

3.   If you could change anything about how you are supposed to get residents to their appointments, what would it be?

_____
_____
_____
_____

4.   Do you feel like you have all the necessary training to manage problem behavior while residents attend medical/dental appointments?

        Yes   ◯
       No   ◯
I am not sure   ◯

If not, why?

_____
_____
_____
_____

5.   Do you have any other comments or concerns?

_____
_____
_____
_____

APPENDIX F

BEHAVIOR TRACKING SHEET AND TASK CHECKLIST

Behavior Tracking Document

Resident Medical/Dental Appointment

Staff Name: _____   Date: _____

Resident Name: _____   Apt Number: _____

Appointment Location: _____

Medical/Dental Professional Name: _____

Did problem behavior occur?	Yes	No

What did it look like?

_____

_____

_____

How many times did it happen? (Use tally marks in the box below)

Total times it occurred [   ]

Did it get in the way of the appointment?	Yes	No

How did it get in the way of the appointment?

_____

_____

_____

Task Checklist
Resident Medical/Dental Appointment

Pre-Appointment:

Check the client's:

_____PBSP

_____Restraint Plan (if applicable)

_____NPO status (nothing by mouth)

_____Grab a Behavior Tracking Document

_____Select proper attire for appointment

_____Know the time and location for appointment

_____Grab client reinforcers

_____Pivot from Junk Behavior

Appointment:

_____Arrive no later than 5 minutes prior to appointment time

_____Verbally praise client for appropriately waiting

_____Inform Medical/Dental staff about your role during appointment

_____Intermittently reinforce client for appropriate behavior during appointment

_____Block dangerous behavior

_____Verbally praise client for attending their appointment

Post-Appointment:

_____Discuss relevant information with medical/dental staff regarding client

_____Fill out Behavior Tracking Document, return to unit BARC binder

_____Escort client to appropriate location

_____Document the appointment in Home Shift-Log and Caretracker

Behavior Analysis Resource Center (BARC)   Developed 2/26/17 Josh Kinser

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