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A Preliminary Investigation of Performance Assessment Tools Across Job Positions within a Human Service Seting

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A Preliminary Investigation of Performance Assessment Tools Across Job Positions within a Human Service Setting

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Abstract

This study evaluated performance assessment tools in a human service setting using the Performance-Diagnostic Checklist-Human Services (1.1) and the Human Performance System (HPS). Assessments were counterbalanced across direct staff and supervisors to evaluate the tools effectiveness in diagnosing performance issues. Assessment interviews were conducted via video conference. Results displayed that when given the same performance issue, supervisors and direct staff show discrepancies on the indicated domains of the assessments. Additional results displayed low agreement across assessment tools. Implications for future research are discussed.

Keywords: performance assessment; receptive labels; Performance-Diagnostic Checklist-

Human Services (1.1); Human Performance System

Table of Contents

Chapter Page

Chapter Page

List of Tables

Table Page

List of Figures

Figure Page

Chapter I: Introduction and Literature Review

In applied behavior analysis (ABA) clinical work, all staff members contribute to helping clients achieve their best outcomes. However, certain staff behaviors can interfere with client success. For instance, staff may omit or add essential steps in behavioral programming, referred to as omissions or commissions, respectively (St. Peter Pipkin et al., 2010; Vollmer et al., 1999) Additionally, staff may fail to collect accurate data. Clinical leadership is collectively responsible for addressing these concerns related to staff behavior. Performance issues can impact a clinic's financial future (Cymbal et al., 2021). Furthermore, it is important to consider that poorly trained staff can lead to higher turnover rates, which can be costly, and that underperforming staff can result in lower client stakeholder satisfaction (Cymbal et al., 2021; Pritchard et al., 2014).

Addressing performance issues requires a comprehensive assessment before any intervention can commence, akin to the process involved in managing a client's challenging behavior. This assessment, termed *performance analysis* (see also Sasson & Austin, 2003), is valuable for identifying necessary interventions. However, unlike analyzing a client's challenging behavior, conducting an experimental functional analysis of controlling variables for staff performance issues is too time-consuming and expensive to effectively carry out (Austin et al., 1999). Furthermore, clinical staff members usually have strong verbal abilities and can precisely articulate contingences and other aspects of their work environment (Gravina et al., 2021). Due to these characteristics, employee performance analysis has evolved to rely on indirect methods of assessment.

Performance Assessment Tools in Organizational Behavior Management (OBM)

The field of OBM focuses on applying behavioral principles to different business and industry settings (Wilder et al., 2009). Researchers and practitioners have created several performance assessment tools to assist in enhancing behaviors (Gravina et al., 2021). Performance assessment serves multiple purposes including, identifying performance issues (Fellner & Sulzer-Azaroff, 1984), pinpointing environmental factors that contribute to it (Austin, 2000), and selecting interventions that are functionally appropriate (Carr et al., 2013). Several attempts have been made to achieve the purposes of performance assessment. Austin (2000) introduced the Performance Diagnostic Checklist (PDC; see Appendix A), comprising four performance domains: antecedents, equipment and processes, knowledge and skills, and consequences. The PDC, a fast and low-effort tool, aids in formulating hypotheses about target behaviors' functions and guides intervention selection across various settings. It is among the most used performance tool in OBM, with its use showing an increasing trend (Wilder et al., 2018). Several studies in OBM have demonstrated favorable outcomes from PDC results.

For example, Pampino et al. (2004), used the PDC to determine what variables were contributing to the performance issue of staff completing closing duties (i.e., stocking and cleaning) in a coffee shop. Results of the assessment displayed both antecedents and consequences as possible areas to intervene. Antecedent interventions consisted of task clarification (i.e., 95 objectively defined tasks) and a checklist to assist staff in completing closing duties. The consequence-based intervention applied was the opportunity for staff to earn a twenty dollar prize each month. Results showed increased completion of stocking and cleaning by staff. In another example, Rice et al. (2009) analyzed correct greetings (i.e., eye contact, smiling, saying “Good morning,” “How are you today?” or “Welcome to [store]”) and closings

(i.e., eye contact, saying “Goodbye” or “Have a nice day” and thanking the customer) by staff in a grocery store. Results of the PDC revealed the antecedents and information domain along with the consequence domain as possibly contributing to the performance issue. Task clarification (i.e., a script for greetings and closings and additional training) and social praise was introduced as the intervention. After the interventions were implemented staff greetings and closings increased and maintained at a 48-week follow-up.

Despite the PDC's popularity, other performance tools exist in OBM that assess similar variables. Notably, the PDC draws from performance aspects described in Gilbert's (1978) behavior engineering model (BEM), Mager and Pipe's (1997) flowchart, Brethower's (1997) performance system analysis worksheet, and Rummler and Brache's (1995) systems analysis tools. While each tool addresses the same essential domains of performance (i.e., antecedents, equipment and processes, knowledge and skills, and consequences), language and specifications may vary slightly. For instance, Rummler and Brache's (1995) Human Performance System (HPS; see Appendix B), derived from one of their behavioral systems analysis tools, comprises six domains: performance specifications, task support, consequences, feedback, skills and knowledge, and individual capacity. Comparing the HPS to the PDC, the performance specification domain aligns with the PDC antecedent and information domain, while task support encompasses PDC antecedent and information, and equipment, and workflow. Similarly, the HPS feedback domain corresponds to PDC consequences, and the HPS knowledge, skills and individual capacity domain match the PDC knowledge and skills.

Despite these similarities, questions for each performance domain vary across tools. For instance, in the HPS, a task support question such as "Are job procedures and workflow logical?" corresponds to a question in the PDC under the equipment and processes domain, which asks, "Is

the equipment in good working order?" This discrepancy extends to other relevant questions such as whether larger processes suffer from incomplete tasks, if processes are logically arranged, if they are maximally efficient, and if any obstacles hinder task completion. Although the PDC has been predominant in applied behavior analysis (ABA), the literature is lacking in comparing the PDC to other performance assessment tools. Currently, no research compares the PDC's to other tools such as the HPS.

Performance Assessment in Clinical Settings: PDC-Human Service (1.0 and 1.1)

The four domains of the PDC apply to performance across diverse settings; however, the questions are not always sufficient to pinpoint the contingencies at play within certain environments. Consequently, the PDC for Human Services (PDC-HS; Carr et al., 2013; See Appendix C) was formulated to evaluate clinical staff performance. Modifications to the domain titles were changed to training, task clarification and prompting, resources, materials, and processes, and performance consequences. Additionally, Carr et al. delineated the interventions indicated by PDC-HS. For example, Carr et al. used the PDC-HS to examine treatment room cleanliness in a university-based autism treatment center. Results of the assessment indicated the training' and performance consequence domains as possible areas for improvement. Researchers implemented both an-indicated (i.e., training and graphed feedback) and nonindicated (i.e., task clarification and increased availability of materials) intervention. They found that training and graphed feedback was effective while task clarification and material availability was not. In another example, Ditzian et al. (2015) assessed the variables contributing to door closing by technicians in an autism treatment center. Results of the PDC-HS indicated the consequences domain as possibly contributing to the performance issue. Researchers implemented individual verbal and graphed feedback (indicated) and a written prompt (non-indicated). Verbal and

graphed feedback increased the occurrence of door closing by technicians while written prompts did not. While the PDC-HS has been popular for use in clinical settings, unclear instructions for how to conduct the assessment have led to differential implementation by researchers and practitioners.

Due to this notable limitation, Jimenez et al. (2023) revised the PDC-HS to create the PDC-HS (1.1) (see Appendix D). While keeping the same essential domains, researchers made various modifications. Additions include detailed guidelines for conducting the assessment. For example, researchers clarify that the assessment should not be done by the supervisor themselves, but rather someone with a behavior-analytic background. Tips for conducting direct observations were also added. In addition, examples of questions were included. For example, the training domain adds four subsections about the specific type of training the employee may have received (i.e., instructions, demonstration, and rehearsal). Additionally, question wording was modified. Jimenez et al. examined the assessment across different participants' experiences (i.e., master's and undergraduate degrees) using video vignettes. Although there were only slight differences in respondents' scores, participants with a master's degree scored the highest for two vignettes. In contrast, the undergraduate participants had the lowest accuracy score across all three vignettes. Similarly, participants with a master's degree had the highest score for interrater reliability while the undergraduate group scored the lowest. Because the PDC-HS (1.1) was only recently published in the literature, no studies have used the PDC-HS (1.1) in a clinical setting. Additional research is needed on its effectiveness in comparison to other tools.

PDC-HS across Job Positions

The guidelines for administering the PDC-HS explicitly specify that the assessment should be carried out by the employee's direct supervisor (Carr et al., 2013; Jimenez et al.,

2023)**.** Although scarce, previous research has revealed that the results of PDC-HS can differ between target employees and their immediate supervisors. For instance, Merritt et al. (2019) examined the performance issue of tardiness among direct care staff in a school setting serving children with autism. To determine appropriate interventions, the PDC-HS was administered to both direct staff members and their immediate supervisors. The interventions were implemented in an aggregated manner based on the results of the PDC-HS, meaning that all identified issues were addressed in crafting the intervention plan. The results of this research demonstrated that the packaged interventions based on the PDC-HS were effective in reducing staff tardiness. It is important to note that while the PDC-HS results were somewhat similar between the direct staff members and their supervisors, differences were observed in three out of the four pairs of staff members and supervisors. Merritt et al. mentioned that supervisors were likely unaware of many factors influencing performance, as these factors often occurred outside the workplace.

As demonstrated in the study by Merritt et al. (2019), although a supervisor may provide one perspective on why a performance issue is occurring, critical variables can be missed. Supervisors often have additional responsibilities such as managing work schedules, recruiting, training new hires, and organizing workflow processes. Most of the time, supervisors are not directly engaged in the target tasks that direct staff members perform. Since direct staff members frequently engage with the target task, they may identify variables that a supervisor does not. Therefore, it is valuable to investigate the discrepancies in PDC-HS results across different job positions. However, empirical research on this topic remains limited. According to the review of the PDC and its variants by Echeverria and Wilder (2023), only two studies out of twenty-five articles interviewed both supervisors and employees using the PDC (i.e., Gravina et al., 2008; Rodriguez et al., 2005), and only one study included both supervisors and employees using the

PDC-HS (i.e., Merritt et al., 2019). Further research on this topic is warranted to better understand these discrepancies.

Performance issues among staff in ABA clinics can lead to negative outcomes for both clients and clinics. OBM offers various tools to identify these performance issues, enabling the pinpointing of environmental variables and suggesting effective interventions. Although other performance assessment tools exist, the PDC is the most frequently used performance assessment tool within OBM (Wilder et al., 2018). All the performance assessment tools share similar domains but differ in language and specifications. However, the effectiveness of various performance assessment tools has not been evaluated in the literature. Furthermore, studies on the PDC-HS typically involve interviews with supervisors. However, conducting interviews with both supervisors and direct staff can provide a more comprehensive understanding of performance issues. Therefore, the purpose of this applied study is to determine if the assessment tools (i.e., HPS and PDC-HS [1.1]) yield consistent responses for the same performance issue across behavior technicians and their direct supervisors in ABA clinics.

Chapter II: Method

Participants, Settings, and Materials

Two clinics in the Midwest served as the study locations. Participants were recruited from these clinics, which provide ABA services to children with autism. Within each clinic, four participants were recruited, resulting in a total of eight participants. Participants were recruited across job positions (i.e., direct staff, hereafter referred to as behavior technician, and their immediate supervisors, as pairs). Immediate supervisors are responsible for overseeing clients' programming, assessments, and progress in a clinic. Behavior technicians are primarily responsible for implementing written programs, behavior management, and data collection of behaviors and skill acquisition targets.

To identify the target performance, clinical supervisors were also recruited from each clinic. They were recruited only to complete the pre-assessment (i.e., identification of target performance) phase and were not part of the assessment interviews. Clinical supervisors are responsible for overseeing all clients within their clinic and ensuring standards are met through applicable laws.

One research assistant (RA) was recruited to conduct assessment interviews and measure inter-rater reliability. Since the clinics involved in this study were the primary researcher's current work site, the RA was recruited to reduce biases and avoid potential compounding variables related to the learning history with participants. The RA was a female currently enrolled in a master's program majoring in ABA. She had worked in ABA clinics for approximately two years and had also completed an introductory course in OBM.

All assessment interviews (i.e., experimental sessions) occurred over video conference using a laptop computer and digital copies of the assessments (i.e., HPS and PDC-HS tools) and the descriptions of performance issues.

Pre-assessment: Selection of Target Performance

During the pre-assessment stage, the primary researcher sent a questionnaire via email to the clinical supervisor of each clinic. It aimed at asking clinical supervisors about the top two performance concerns that are occurring at their clinic. The scope of assessment for this research was directed towards a single, clearly defined, and easily observable performance (e.g., timely submission of session notes), rather than broader assessments (e.g., analyzing contingencies associated with session note submissions among technicians). Given that this research involved supervisors and direct staff members who have limited experience with performance assessments, this study concentrated on straightforward target performance.

Moreover, while OBM research advocates for the selection of a critical target behavior for performance improvement (e.g., Daniels & Bailey, 2014; Gravina et al., 2021), this study focused on assessing performance issue B. As stated, the objective of this research is to evaluate the comparative effectiveness of assessment tools (i.e., PDC-HS [1.1] and HPS) rather than focus on improving the performance issue with an intervention. To minimize potential confounding effects related to the salience of performance issue A, the research centered on performance issue B.

Specifically, the primary researcher sent an email to the clinical supervisors, including questionnaires requesting them to identify the top two performance issues, noted as A and B, respectively, within their clinic (see Appendix E). Subsequently, after gathering data on the target performance issues, the primary researcher operationally defined target performance issue

B. After defining the target performance, the primary researcher sent an email to the clinical supervisors to obtain agreement on the operational definition, which was then selected as the target performance issue.

The selected performance issue A indicated by Clinic A's supervisor was the number of trials run per session. In this clinic, behavior technicians are required to present fifty trials (i.e., learning opportunities) to clients each hour. The performance issue B was behavior support plan implementation. Behavior support plans are documents that outline a client's challenging behavior and how to appropriately respond when it occurs. These plans consist of knowing the functions of behavior (i.e., attention, escape, tangible, and sensory), identifying and confirming the function of a client's challenging behavior, responding appropriately depending on the function, using safety-care de-escalation strategies (i.e., help, prompt, and wait), and employing safe body positioning and safety stance.

Clinic B's performance issue A, as selected by the clinical supervisor, was the number of trials run per session. In this clinic, behavior technicians are required to present fifty trials (i.e., learning opportunities) to clients each hour. The selected performance issue B was applying function-based strategies. Function-based strategies involve using the function of a behavior to decrease its occurrence. These strategies include knowing the functions of behavior (i.e., attention, escape, tangible, and sensory), identifying and confirming the function of a client's challenging behavior, responding appropriately depending on the function, using safety-care de-escalation strategies (i.e., help, prompt, and wait), and employing safe body positioning and safety stance.

Research Assistant Training

Prior to the performance assessment interview, the RA underwent training using Behavioral Skills Training (BST) in a two-hour meeting conducted via video conferencing. BST is recognized as one of the most effective training methods for equipping staff members with the skills necessary to implement a range of behavioral interventions (Merrit et al., 2018). BST comprises four fundamental components: (1) instructions, (2) modeling, (3) rehearsal, and (4) feedback (Parsons et al., 2012). One day before the RA training, copies of the training materials were provided to the RA. These materials included the performance assessment tools (i.e., HPS and PDC-HS [1.1]) and detailed instructions for how to conduct each assessment (see Appendix F for HPS, Appendix G for PDC-HS [1.1]). Along with these materials, a procedural integrity checklist (Appendix H) was sent to the RA. This checklist outlined the required steps to complete an assessment interview. The RA was encouraged to review the provided materials before the training day.

Before the performance assessment interview training, the primary researcher provided general information on this study, including the purpose of the study, research design, assessment tools, and measurement. Then, using the interview checklist, the primary researcher outlined the general procedure for each interview process. Furthermore, the primary researcher provided operational definitions of performance issues from both clinics (Appendix I). Each step of this procedure included clarification and a question-and-answer session.

Subsequently, the training moved to the BST on the performance assessment tools. Training was provided in two phases: the first BST focused on HPS, and the second focused on PDC-HS (1.1). The training structure was the same for both HPS and PDC-HS (1.1). First, the primary researcher provided background information about each performance assessment tool.

Then, using the provided written training materials, the primary researcher gave detailed instructions on each assessment question with examples. For the HPS, performance-specific questions were created by the primary researcher to assist the RA. The RA was instructed to use only these performance-specific questions when conducting interview. Furthermore, since the interviews were conducted with different job positions (i.e., supervisors and technicians), the questions for both HPS and PDC-HS (1.1) needed to be revised to align with job positions. Appendix J provides the performance-specific questions for the HPS-technician interview, and Appendix K provides the performance-specific questions for the HPS-supervisor interview. The PDC-HS (1.1) was originally created for the supervisor interview, so it was used as is but was slightly modified for the technician interview (see Appendix L).

After reviewing the materials with detailed instructions, the primary researcher modeled how to complete the interview with the tools in a mock interview format using a hypothetical performance issue (i.e., serving customers in a bar) (see Appendix M). A non-clinical example was used to avoid any biases that the RA might develop. During the modeling, the primary researcher provided information on how to determine "yes," "no," or "not applicable" for each interview question based on the interviewee's answer. Then, the RA practiced implementing the performance assessment interview in a role-play scenario with the primary researcher acting as a server from a restaurant. During each interview question, the primary researcher provided immediate corrective feedback on the RA's questions and marked answers. Finally, the lead researcher answered any questions the research assistant had and provided general positive and corrective feedback on their implementation of the assessments.

A brief one-hour additional training session was conducted after the first day of assessment interviews was completed. Based on the initial interview results, the primary

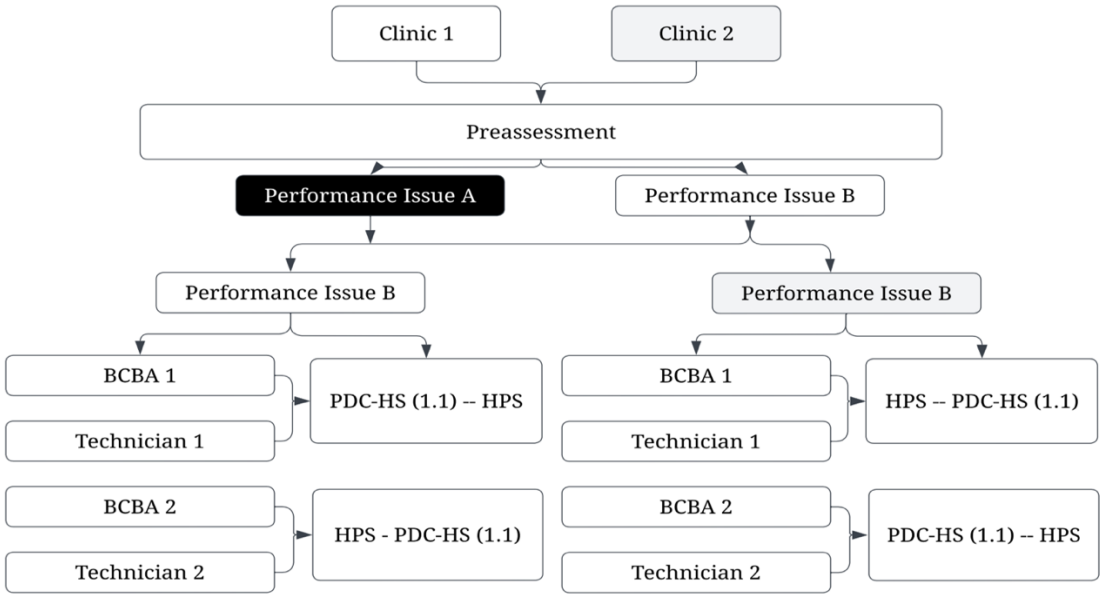
researcher provided additional positive and corrective feedback. Specifically, the primary researcher clarified that the research assistant needed to check the assessment tools with performance-specific questions across various job positions. Additionally, the primary researcher provided instructions on how to access the recorded data during the interview. This ensured that the research assistant did not need to rush while marking answers during the interview process. Furthermore, the primary researcher provided the research assistant with interview practice opportunities for both assessment tools. During these practice sessions, the primary researcher offered positive and corrective feedback to enhance the research assistant's proficiency.

Assessment Tools and Research Design

The HPS and PDC-HS (1.1) were compared to identify variables contributing to the target performance issue. Figure 1 displays how assessments were counterbalanced across participants and describes the comparisons between clinics. Behavior technician-supervisor dyads consisted of an individual behavior technician working directly under the supervision of a designated supervisor. In clinic A, supervisor 1 (AS1) and behavior technician 1 (AT1) initially received the PDC-HS (1.1) followed by the HPS. Conversely, AS2 and AT2 completed these assessments in the reverse order. Clinic B (BS1, BS2, BT1, and BT2) functioned as a replication of Clinic A; however, the presentation of assessment tools will be counterbalanced against Clinic A.

Figure 1

Counterbalancing of Clinics and Performance Issues



Data Collection and Dependent Variables

Data were collected based on the participants' responses to each question within the assessment tools. The primary researcher reviewed all recorded interview sections and categorized responses 'Yes,' 'No,' and 'Not applicable'. In accordance with PDC-HS (1.1) guidelines, the answer of 'Not applicable' were reclassified as 'No' for data analysis.

The first dependent variable was response agreement within the assessment tool (i.e., HPS, PDC-HS [1.1] independently) across job positions. Specifically, the percentage of matched 'No' responses across performance domains for each assessment tool between supervisors and behavior technicians was identified. The domain matching only provided the frequency of 'No' responses between technician and supervisor dyads. For instance, under the task support domain in the HPS, there are four questions. Suppose the supervisor indicated 'No' for the 4th question, whereas the technician indicated 'No' for the 2nd question. Even though the percentage of

agreement of ‘No’ responses between job positions was the same for the domain, the exact question indicated by the participants could vary. Due to this reason, the percentage of agreement for the ‘No’ responses across all assessment tool questions were also compared between technician and supervisor dyads.

The second dependent variable was response agreement across assessment tools within participants. To measure this dependent variable, HPS questions matched to the PDC-HS (1.1) questions were preceded. The HPS has seven performance domains, while the PDC-HS (1.1) has four domains, so the PDC-HS (1.1) questions were matched to the HPS. Questions on each assessment were reviewed by subject matter experts (SMEs) (i.e., a master’s level scholar who also owns a clinic and a Ph.D. level specialist in OBM) to determine which questions on the HPS aligned with the PDC-HS (1.1). Table 1 shows the results of matched questions.

Table 1

Matched Questions between the HPS and PDC-HS (1.1)

HPS	PDC-HS (1.1)
	Domain and Question Number
PS1	TCP 1, 2
PS2	TCP 1, 2
PS3	TCP 1, 2
TS1	T3, TCP4
TS2	TCP5, RMP 6
TS3	RMP 6, 7
TS4	RMP 1, 2, 3, 4, 5; TCP 3
C1	PCEC 3, 4
C2	PCEC 5
C3	N/A
F1	PCEC 1-2
F2	PCEC 1-2
KS1	T1, T3, 4, 5
KS2	TCP 1, 3
IC1	N/A

Note. HPS = Human Performance System, PS = Performance Specification, TS = Task Support, C = Consequences, F = Feedback, KS = Knowledge and Skill, IC = Individual Capacity, PDC-HS (1.1) = Performance Diagnostic Checklist – Human Services (1.1), TCP = Task Clarification, and Prompting, T = Training, RMP = Resources, Materials, and Process, PCEC = Performance Consequences, Effort, and Competition, N/A = Not Applicable

It should be noted that not all the questions were precisely matched to each other. For example, the HPS included the individual capacity domain, but the PDC-HS did not have this domain. Furthermore, the consequence domain, question 3 of HPS (i.e., Are consequences timely?) was not perfectly matched to the PDC-HS (1.1). Additionally, the domain of training question 2 (i.e., Is there evidence that the employee currently responsible for training staff can accurately perform the task being trained?) of PDC-HS (1.1) did not match the HPS. Therefore, even though the data were collected for these questions, they were not included in the dependent variable calculation.

The calculation for the second dependent variable was twofold. First, the performance domain matching was calculated. For example, as seen in Table 1, the performance specification domain in HPS included three questions. These questions were matched to PDC-HS (1.1) questions 1 and 2 of the task clarification and prompting domain. The percentage of agreement of responses was calculated for each domain within HPS. The second analysis involved the agreement of all questions in the HPS that were matched to PDC-HS within participants.

Inter-rater Reliability

Each interview session was recorded to ensure inter-rater reliability. Specifically, 33% of assessment interviews were chosen for reliability checks. The recorded videos were selected randomly using a random number generator. The lead researcher reviewed each recorded video

and used participants transcribed responses to determine “yes,” “no,” or “not applicable.” After completing all independent observations, responses were then compared with those of the assistant researcher. To calculate the percentage of agreement across each assessment, the total number of agreements was divided by the total number of questions and then multiplied by 100.

Procedural Integrity

The primary researcher independently collected data on the procedural integrity of the RA’s implementation of the assessments during 33% of sessions using the interview checklist presented in the training materials. Procedural integrity was calculated by dividing the total number of correct steps implemented by the total number of opportunities. On average, the RA implemented the assessment interviews with 78% integrity. Additionally, integrity on each assessment was calculated. The RA implemented the HPS with 74% integrity and the PDC-HS (1.1) with 74% integrity.

Social Validity and Assessment Tool Preference Questions

After the performance assessment interview, a social validity questionnaire was distributed to each participant via Central Reach (i.e., the clinics' data collection system) using Microsoft forms (Appendix N). This questionnaire aimed to assess which assessment tool participants would be most likely to use given a specific performance issue.

Experimental Procedure

Prior to the study, consent was obtained from the clinics to conduct the project at two locations. Following consent from each organization, participant recruitment began. The first part of recruitment focused on the clinical supervisors. While contacting clinical supervisors for the pre-assessment of selecting target performance issues, participant recruitment was conducted. The primary researcher sent a mass message on Central Reach to all staff within the two clinic

locations. Participants who responded to the message were followed up with by the primary researcher. Interested participants received a consent form along with a link to the demographic survey (see Appendix O). Supervisor-behavior technician dyads were created based on the center location that they were working in and the behavior analyst that they reported working with. Participants completed the demographic survey prior to the experimental session. Concurrently, training sessions for the RA took place during the recruitment period.

The primary researcher scheduled meetings with the RA and participants using Outlook. The Outlook invitations included the scheduled interview time, participants' positions, clinic number, and the assessment tool to be used for the session, ensuring that the RA could conduct the correct interview with each participant. The RA conducted interviews with each participant via video conference, with each session lasting approximately 45 minutes per assessment tool. Due to time constraints and potential sequence effects, assessment interviews for both tools were not conducted on the same day. A minimum of 3 days was maintained between assessments for each participant. Participants were instructed not to share any interview content with other staff members. Upon completing the interview, all participants received the social validity questionnaire.

Chapter III: Results

Demographic Survey

Table 2 displays the demographic information provided by 8 participants who completed the survey. The average age of BTs was 40 and supervisors was 26. Of the total respondents, 100% were female and 89% were white/Caucasian. On average BTs had 17 years of experience while supervisors had 6 years of experience. All BT respondents were not currently enrolled in a master's program while 80% of supervisors were currently enrolled. All BT respondents held their RBT certification. 60% of supervisors held their RBT certification and 40% of respondents had no certification. 33% of BTs had some college experience (not specified), 33% had a master's degree, and 33% had a high school degree. 80% of supervisors held bachelor's degrees, and 20% had a high school degree. The average years worked at the current company was 4 for BTs and 2.5 for supervisors. 33% of BTs were behavior technicians while 67% were senior behavior technicians. The average years in current position for BT's was 3 and for supervisors it was 1. 80% of supervisors were behavior analysts and 20% were program supervisors.

Table 2

Results of Demographic Survey

Participant	Age	Gender	R/E	Experience Years	Currently Enrolled	Certification	Highest Degree	Years Worked at Company	Current Position	Years in Current Position
AT1	20	F	H	1	No	SRRBT	HS	1	SRBT	>1
AT2	55	F	W/C	27	No	RBT	SC	7	BT	5
AS1	23	F	W/C	2	Yes	N/A	B	>1	BA	>1
AS2	27	F	W/C	6	No	BCBA	M	3	CS	>1
BT1	46	F	W/C	24	No	RBT	M	4	SRBT	4
BT2	24	F	W/C	4.5	No	RBT	HS	4	PS	>1
BS1	24	F	W/C	5	Yes	N/A	B	>1	BA	2
BS2	35	F	W/C	14	Yes	RBT	B	4	BA	>1

Note. F = Female, R/E = Race/Ethnicity, W/C = White/Caucasian, H = Hispanic, RBT = Registered Behavior Technician, BCBA = Board Certified Behavior Analyst, BA = Behavior Analyst (In Training), PS = Program Supervisor, CS = Clinical Supervisor, SR BT = Senior Behavior Technician

Agreement of Responses across Job Positions

HPS

Figure 2 shows the HPS results on the target performance behavior support plan implementation for AT1 and AS1 in Clinic A. AT1 identified problems in the following domains: performance specification 67%, task support 25%, consequences 100%, feedback 100%, and individual capacity 100%. Conversely, AS1 identified performance deficits in the task support 25%, knowledge and skill 100%, and individual capacity 100% domains. The overall agreement for the 'No' responses between AT1 and AS1 across domains was 7%. Specifically, the percentage of 'No' responses within the domains was 0% for performance specification, 100% for task support, 0% for consequences, 0% for feedback, 0% for knowledge and skill, and 100% for individual capacity. Furthermore, the percentage of agreement for the 'No' responses between AT1 and AS1 for the matched questions was 0% for performance specification domain agreement, 0% for task support, 0% for consequences, 0% for feedback, 0% for knowledge, and 100% for individual capacity.

Figure 2

HPS results between AT1 and AS1 in Clinic A

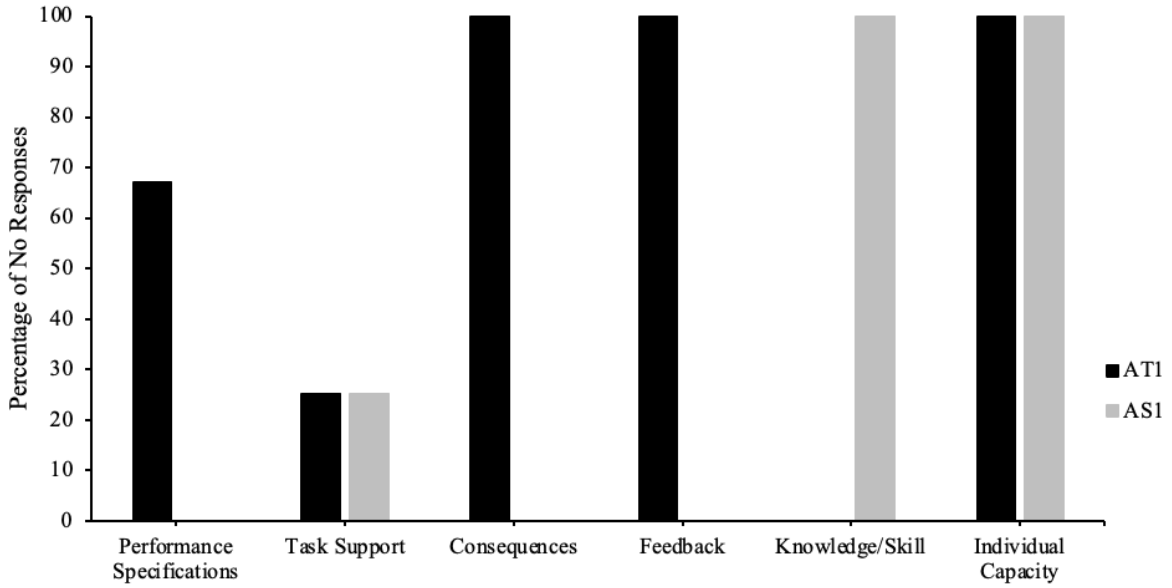


Figure 3 depicts the result of HPS for AT2 and AS 2 in clinic A. AT2 identified problems in the following domains: performance specifications, task support, feedback, and individual capacity, with the percentage of 'No' responses being 67%, 25%, 50%, and 100%, respectively. AS2 indicated the domain of performance specifications 67%, task support 50%, consequences 100%, knowledge and skill 50%, and individual capacity 100%. The overall agreement for 'No' responses between AT2 and AS2 was 27%. Specifically, the percentage of 'No' responses within specific domains was 100% for performance specifications, 25% for task support, 0% for consequences, 0% for feedback, 0% for knowledge and skills, and 100% for individual capacity. The percentage of 'No' responses matching for the specific questions between AT2 and AS2 was 67% for performance specification, 25% for task support, 0% for consequences, 0% for feedback, 0% for knowledge and skill, and 100% for individual capacity.

Figure 3

HPS Results between AT2 and AS2 in Clinic A

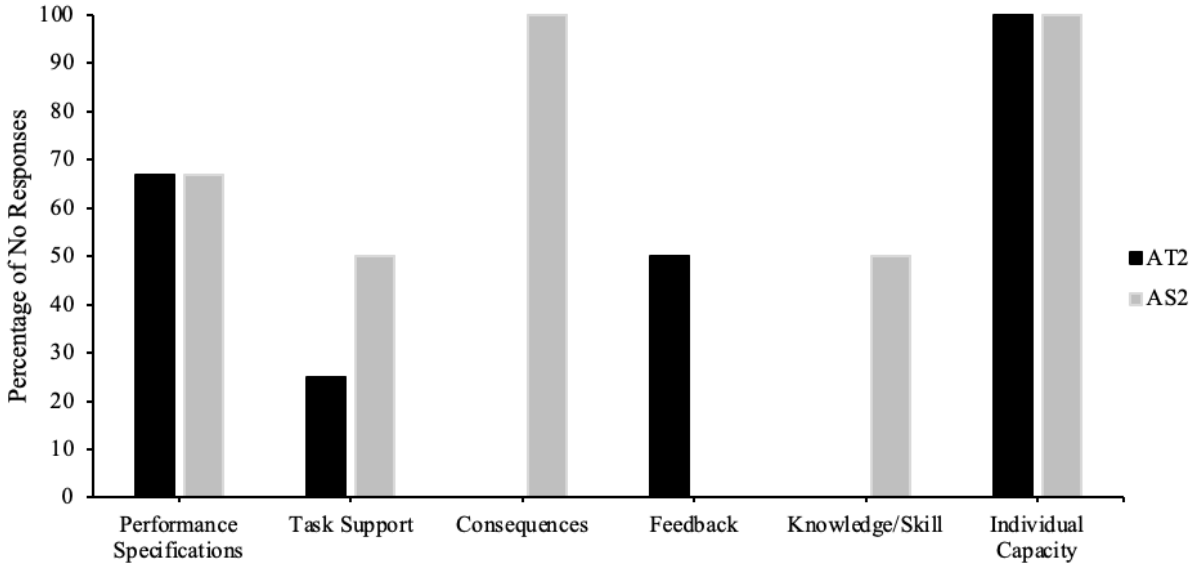


Figure 4 describes the result of HPS for BT1 and BS1 on the target performance issue (i.e., application of function-based strategies). BT1 identified problems in the following domains: performance specifications 100%, task support 75%, consequences 75%, feedback 100%, knowledge and skill 50%, and individual capacity 100%. BS1 identified task support as problematic 25%. The overall agreement for the 'No' responses between BT1 and BS1 was 0%. Specifically, the percentage of 'No' responses within each domain was 0% for performance specification, 25% for task support, 0% for consequences, 0% for feedback, 0% for knowledge and skill, and 0% for individual capacity. The percentage of 'No' responses matching for the specific questions between BT1 and BS1 for performance specification was 0%, task support 0%, feedback 0%, knowledge and skill 0%, and individual capacity 0%.

Figure 4

HPS Results between BT1 and BS1 in Clinic B

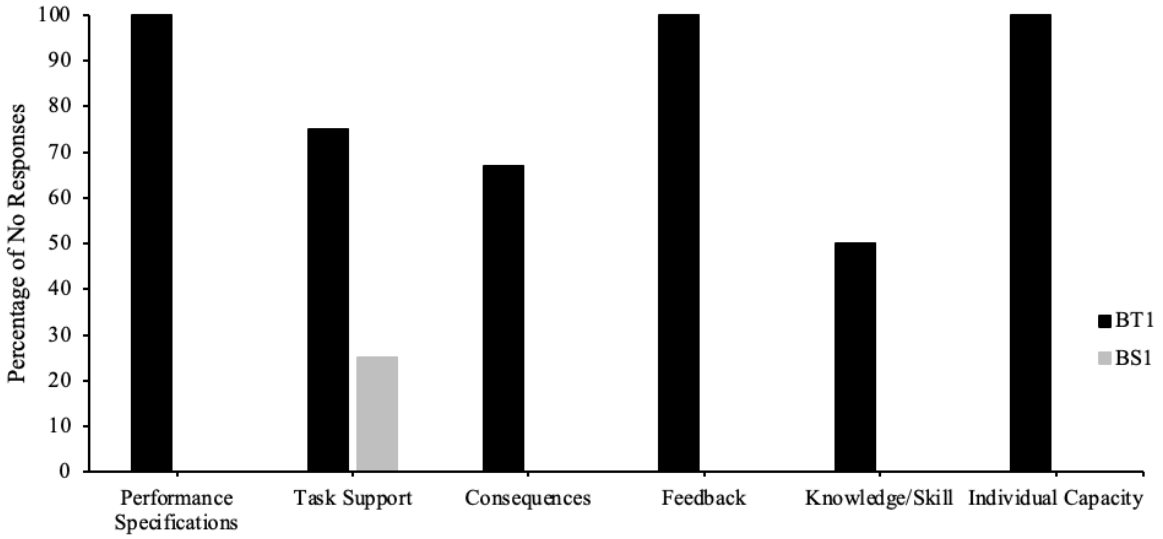
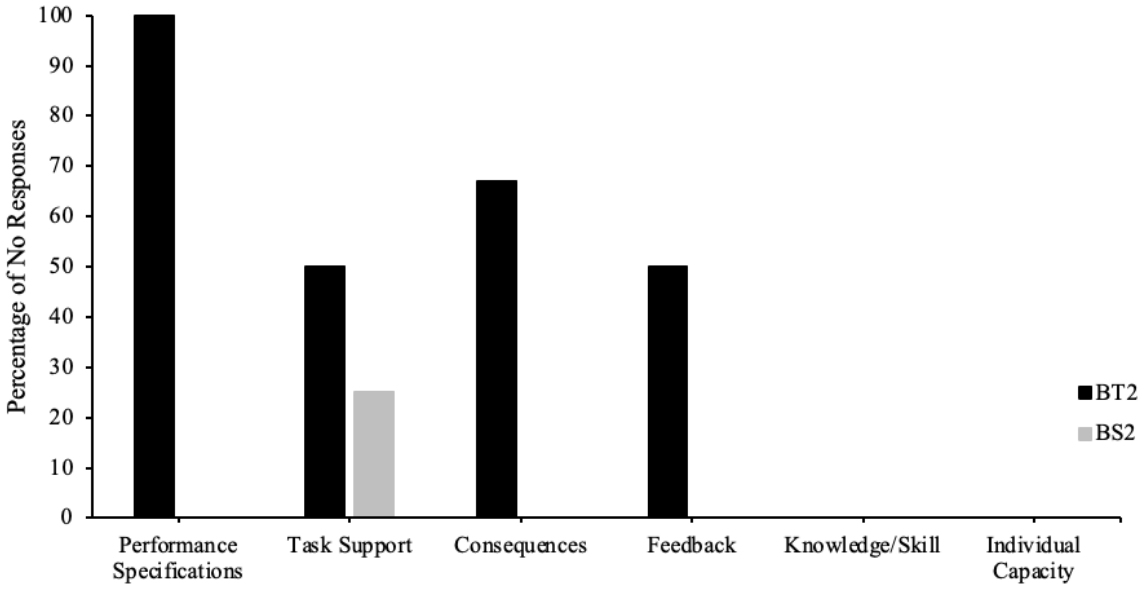


Figure 5 shows the result of HPS for BT2 and BS2 on the target performance. BT2 identified problems in the following domains: performance specifications 100%, task support 50%, consequences 67%, and feedback 50%. BS2 identified only one domain as potentially problematic: task support 25%. The overall agreement for the 'No' responses between BT2 and BS2 was 7%. Specifically, the percentage of 'No' responses within specific domains was 0% for performance specifications, 25% for task support, 0% for consequences, 0% for feedback, 0% for knowledge and skills, and 0% for individual capacity. The percentage of 'No' responses that matched for specific questions between BT2 and BS2 for performance specification was 0%, task support 25%, consequences 0%, feedback 0%, knowledge and skill 0%, and individual capacity 0%.

Figure 5

HPS Results between BT2 and BS2 in Clinic B



PDC-HS (1.1)

Figure 6 illustrates the findings from the PDC-HS (1.1) assessments conducted by AT1 and AS1 in Clinic A on the target performance (i.e., behavior support plan implementation). AT1 reported that 40% of the questions in the training domain indicated a problem. Additionally, 40% of the questions in the task clarification and prompting domain, 40% in the performance consequences, effort, and competition domain, and 29% in the resources, materials, and processes domain suggested issues. Conversely, AS1 identified 20% in training 60%, in task clarification, and prompting, and 71% in the resources, materials, and process domain, and 20% in the performance consequences, effort, and competition domain. The overall agreement for the 'No' responses between AT1 and AS1 across all domains was 27%. Specifically, the percentage of ‘No’ responses within each domain was 20% for training, 40% for task clarification, and prompting, 29% for resources, materials, and process, and 20% for performance consequences,

effort, and competition. The agreement percentages for the 'No' responses for specific questions between AT1 and AS1 were 40% for training, 40% for task clarification and prompting, 29% for resources, materials, and processes, and 20% for performance consequences, effort, and competition.

Figure 6

PDC-HS (1.1) Results between AT1 and AS1 in Clinic A

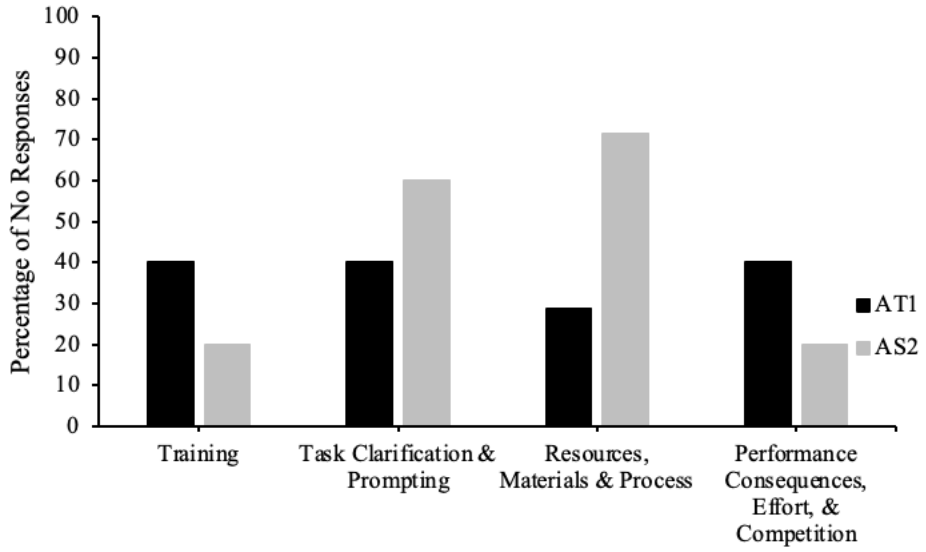


Figure 7 depicts the result of PDC-HS (1.1) for AT2 and AS 2 in clinic A. AT2 identified that 20% of the question in the training domain indicated issues. 40% of questions in the task clarification domain and 57% of the questions in the recourses, materials, and process domain suggested issues. AS2 identified that 14% of the questions in the resources, materials, and processes domain and 20% in the performance consequences effort, and competition 20%. The overall agreement for the 'No' responses between AT2 and AS2 across all domains was 8%. Within each specific domain, the percentage of ‘No’ responses were 0% for training, 0% task clarification, and prompting, and 43% for performance consequences, effort, and competition. Resources, materials, and process matched 0%. Additionally, the agreement percentages of ‘No’

responses for matching specific questions between AT2 and AS2 were 0% for training, 0% for task clarification and prompting, 29% for resources, materials, and processes, and 0% for performance consequences, effort, and competition.

Figure 7

PDC-HS (1.1) Results between AT2 and AS2 in Clinic A

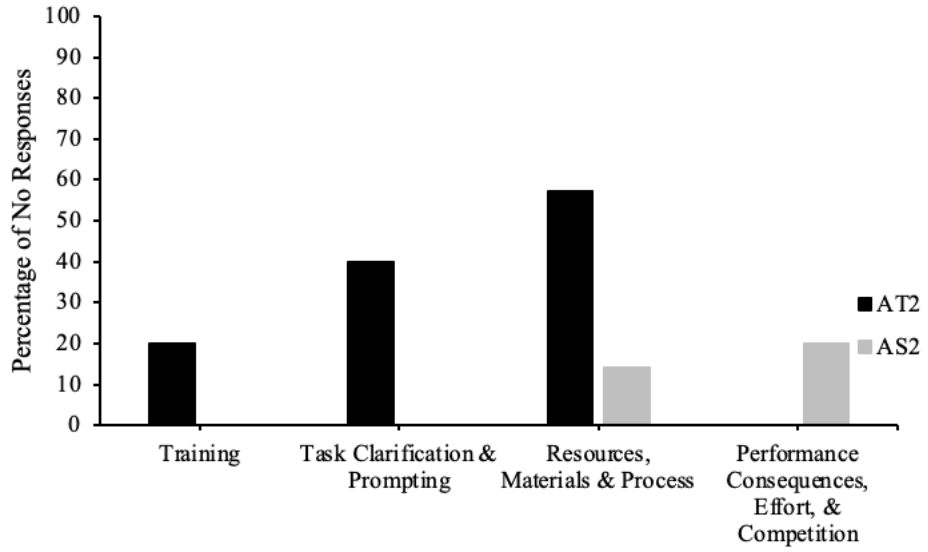


Figure 8 describes the results of PDC-HS (1.1) for BT1 and BS1 on the target performance of applying function-based strategies. BT1 identified 40% in the training domain, 60% in the task clarification and prompting domain, and 57% in the resources, materials, and process domain and 60% in the performance consequences, effort, and competition domain. BS2 identified two domains as problematic, the resources, materials, and process domain at 29% and the performance consequences, effort, and competition domain at 20%. The overall agreement for 'No' responses between BT1 and BS1 across all domains was 12%. Domain matches for 'No' responses were 0% for training, 20% for task clarification and prompting, 29% for resources, materials, and process, and 20% for performance consequences, effort, and competition. Furthermore, the agreement percentages for the 'No' responses on matched

questions between BT1 and BS1 were 0% for training, 20% for task clarification, and prompting, 14% for resources, materials, and process, and 20% for performance consequences, effort, and competition.

Figure 8

PDC-HS (1.1) Results between BT1 and BS1 in Clinic B

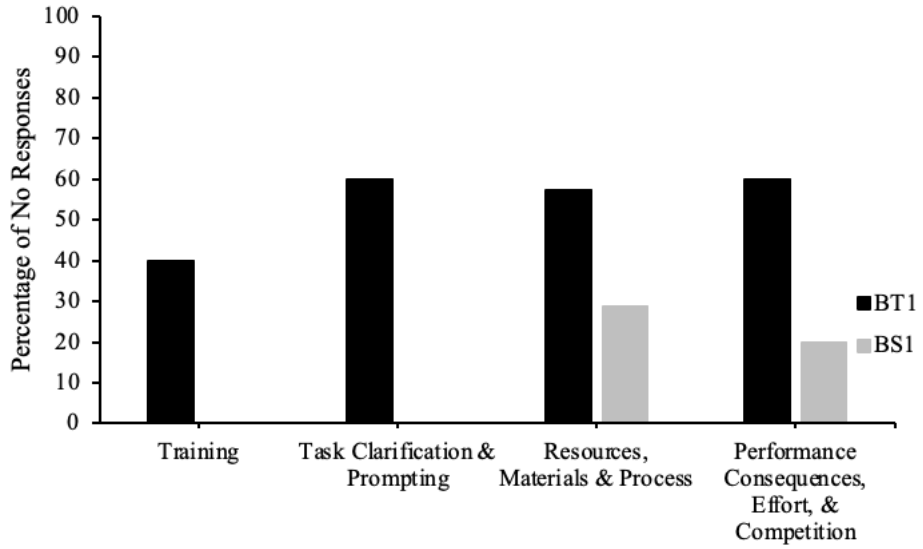
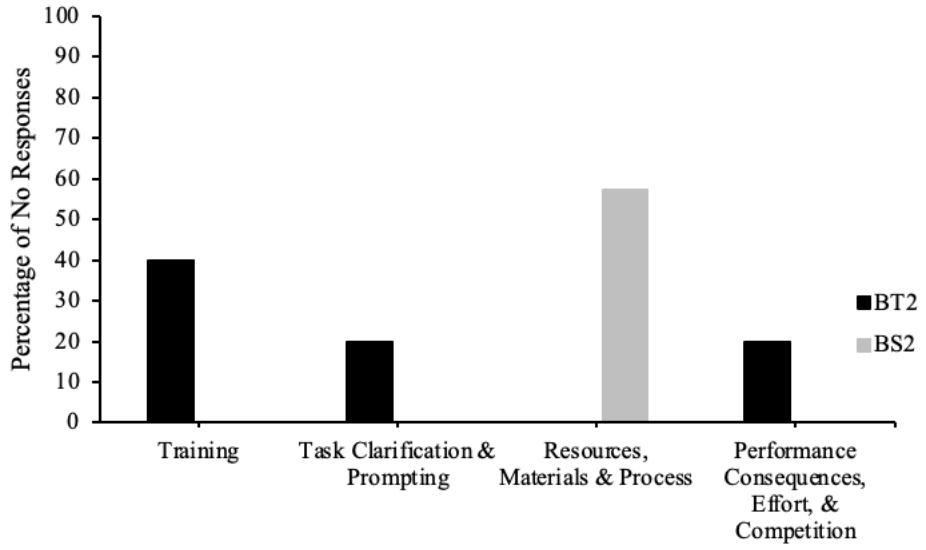


Figure 9 shows the result of PDC-HS (1.1) for BT2 and BS2. BT2 **i**dentified training as an issue in 40% of the questions, task clarification and prompting in 20%, resources, materials, and process in 43%, and performance consequences, effort, and competition in 20%**.** BS2 identified only one domain as potentially problematic: resources, materials, and process at 57%**.** The overall agreement for 'No' responses between BT2 and BS2 was 4% across all domains. ; Also, the agreement percentages for the 'No' responses for specific questions were 0% for the training domain, 0% for task clarification and prompting, 14% for resources, materials, and process, and 0% for performance consequences, effort, and competition.

Figure 9

PDC-HS (1.1) Results between BT2 and BS2 in Clinic B



Agreement Within Supervisors and Technicians

The agreement of supervisors and technicians within clinics across assessments was compared. In clinic A for the HPS, AT1 and AT2 agreed 60%, AS1 and AS2 agreed on "no" responses 53%, For the PDC-HS (1.1) in clinic A, AT1 and AT2 agreed 40% and AS1 and AS2 agreed 54%. In clinic B for the HPS BT1 and BT2 agreed 40% and BS1 and BS2 agreed 87%. For the PDC-HS (1.1) BT1 and BT2 agreed 42% and BS1 and BS2 agreed 66%.

Agreement of Responses Across Assessment Tools

Performance Domains

Based on the previously categorized questions that aligned the HPS with the PDC-HS (1.1), domain matches between these two assessment tools were identified for each participant. For example, in the HPS, the domain of performance specification included three questions, which were matched to questions 1 and 2 in the task clarification and prompting domain of the

PDC-HS. If the participant's responses to these questions were consistent across both tools, the domain was considered a match.

In Clinic A, the analysis revealed the following domain matches: AT1 had zero domain matches; AT2 had one domain match, specifically the feedback domain on the HPS with the performance consequences, effort, and competition domain on the PDC-HS (1.1); AS1 had one domain match, which was the feedback domain on the HPS and the performance consequences, effort, and competition domain on the PDC-HS (1.1); and AS2 had one domain match in the feedback domain on the HPS and the performance consequences, effort, and competition domain on the PDC-HS (1.1).

In Clinic B, the results indicated that BT1 had one domain match, which was consequences on the HPS with performance consequences, effort, and competition on the PDC-HS (1.1). Similarly, BT2 had one domain match in the same areas as BT1. BS1 had three domain matches: performance specifications on the HPS with task clarification and prompting on the PDC-HS (1.1); feedback on the HPS with performance consequences, effort, and competition on the PDC-HS (1.1); and knowledge and skills on the HPS with training on the PDC-HS (1.1). Notably, BS 2 indicated matches across all domains.

Specific Questions

Due to the lack of consistency across domain matches between HPS and PDC-HS (1.1), the agreement of responses across all questions in the HPS that were matched to the PDC-HS was also analyzed. Appendix P provides the raw data for each participant's response matches between HPS and PDC-HS. In summary, the average percentage of matched responses for AT1 across all questions within HPS that were matched to PDC-HS (1.1) was 43%. Similarly, the average percentage of matched responses for AT2 was 71%. AS1's average percentage of

matched responses was 58%, and AS2's average percentage of matched responses was 47%. Furthermore, BT1's average percentage of matched responses across all questions within HPS that were matched to PDC-HS (1.1) was 50%. Likewise, the average percentage of matched responses for BT2 was 44%. BS1's average percentage of matched responses was 78%, and BS2's average percentage of matched responses was 85%.

Inter-rater Reliability

Inter-rater reliability was assessed to determine the consistency of 'Yes', 'No', and 'Not Applicable' responses between the primary researcher and the RA across the assessment tools. 'Not Applicable' responses were recorded as 'No'. A total of 33% of the assessment interviews were evaluated for the reliability. Percentage agreement was calculated. The overall percentage agreement between the raters was 73.6%. Additionally, the agreement for each assessment tool was examined. For the HPS, the percentage of agreement was 74%, and for the PDC-HS (1.1), it was 78%. Inter-rater reliability between supervisors and technicians within clinic A for the HPS was on average 67%, and for the PDC-HS (1.1) it was 50%. In clinic B the inter-rater reliability average between supervisors and technicians was 20% for the HPS and 58% for the PDC-HS (1.1) it was 58%.

Procedural Integrity

The primary researcher reviewed and transcribed each assessment interview to determine if the RA followed the steps of the interview checklist. Percentage of opportunities was calculated. It’s important to note that the four steps at the top of the integrity checklist (i.e., opening the appropriate document, labeling and saving the document, opening the introduction script, and correct performance issue document) were reminders for the RA but not included in the assessment integrity calculation. For all assessments the RA implemented them with an average

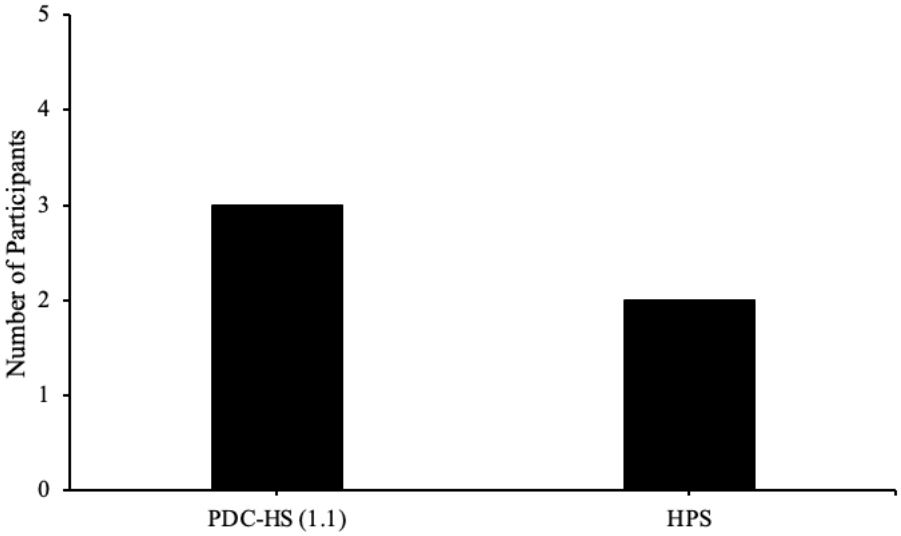
of 98.4% integrity. For the PDC-HS (1.1) she implemented them with 100% integrity, and the HPS 93.9% integrity.

Social Validity

Out of eight participants, five provided information on their preferred assessment tool for addressing specific performance issue. Figure 10 displays the results of the social validity survey. Three participants preferred PDC-HS (1.1), while two participants preferred the HPS to assess the hypothetical performance issue.

Figure 10

Results of Social Validity Survey



Discussion

The purpose of this research was to determine whether the performance assessment tools (i.e., HPS and PDC-HS [1.1]) indicated the same variables for targeted performance issue across job positions (i.e., supervisors and behavior technicians). Overall, the findings reveal significant insights into the variability in identifying variables of performance issues between job positions, and across the different assessment tools.

The results for the agreement of responses across job positions using the HPS indicated significant discrepancies between behavior technician and supervisor dyads. Specifically, the agreement on 'No' responses across domains for the HPS within Clinic A for technician-supervisor dyads 1 and 2 was 7% and 27%. Within Clinic B, the agreement on 'No' responses for dyads 1 and 2 was 0% and 7%, respectively. On average, the agreement of 'No' responses in the HPS across all technician-supervisor dyads was 10.25% (*SD* = 10.08). Moreover, the agreement of 'No' responses across job positions using the PDC-HS (1.1) showed relatively better agreement compared to the HPS. In Clinic A, the agreement for technician-supervisor dyads 1 and 2 was 27% and 8%, respectively. In Clinic B, the agreement for dyads 1 and 2 was 12% and 4%, respectively. The average agreement of 'No' responses in the PDC-HS (1.1) across technician-supervisor dyads was 12.75% (SD = 8.7)

The implication of these results is that notable discrepancies exist in responses between job positions when conducting indirect performance assessments. The PDC-HS has recommended that performance assessment interviews be conducted only with the employee's direct supervisor (Carr et al., 2013; Jimenez et al., 2023; Wilder et al., 2018). However, the results of this study suggest differing outcomes when conducted across different job positions, highlighting a potential limitation of the PDC-HS recommendation. As Merritt et al. (2019) emphasized, this study substantiates that critical variables for a target performance may be overlooked when interviews are conducted solely with supervisors. Figures 2 through 9 illustrate a tendency for technicians to respond with 'No' more frequently than supervisors. This trend indicates gaps between supervisors and technicians regarding the environmental variables impacting target performance. In other words, even if supervisors provided comprehensive supports for target performance (e.g., training, task support, consequences, feedback), these

supports were not effective from the technicians' perspective. By conducting interviews across different job positions, these discrepancies can be more comprehensively evaluated and addressed.

When performance issues were analyzed using the HPS between technician-supervisor dyads, significant discrepancies were identified between supervisors and behavior technicians regarding the factors contributing to the performance issue, compared to the PDC-HS (1.1). The original questions in the HPS are designed for consultants and practitioners with advanced knowledge in behavioral systems analysis (Rummler & Brache, 1995). To address this requirement, the primary researcher created performance-specific questions for each HPS item for the RA. However, in some cases, additional questions were needed to accurately determine deficits. The RA was specifically required to ask questions based on the provided script, which may have restricted the collection of sufficient information about the variables affecting target performance. Conversely, the PDC-HS (1.1) was relatively user-friendly, including instructions and specific clarification of question examples, and was created for an interview format. These differences in the tools may have impacted the discrepancies observed between the analyses across job positions.

The second dependent variable for this research was the agreement of domain and specific question matches between the HPS and PDC-HS (1.1) tools. There was notable variability in identifying performance issues between the two assessment tools. In Clinic A, AT1 had no domain matches. AT2, AS1, and AS2 each had one match between the feedback domain on the HPS and the performance consequences, effort, and competition domain on the PDC-HS (1.1). In Clinic B, BT1 and BT2 each had one match between the consequences domain on the HPS and the performance consequences, effort, and competition domain on the PDC-HS (1.1).

BS1 had three matches: performance specifications, feedback, and knowledge and skills on the HPS with matching domains on the PDC-HS (1.1). BS2 had matches across all domains. Furthermore, the percentage agreement of responses on matched specific questions for each participant is summarized as follows: AT1 and AT2 both had 34% agreement, AS1 had 58% agreement, AS2 had 47% agreement, BT1 had 50% agreement, BT2 had 41% agreement, BS1 had 82% agreement, and BS2 had 85% agreement.

As seen in the results, there was notable variability in identifying performance issues between the two assessment tools. Only one participant (i.e., BS 2) showed significant matching of domains and specific questions using these two assessment tools. However, cautious interpretation of this result is necessary. This result may indicate that, even though these two assessment tools measure similar environmental variables on target performance, the way questions are presented matters more than the domain itself. In other words, the creation of questions impacts the measurement of target performance. When SMEs matched the questions between the HPS and PDC-HS (1.1), they noted that the questions were not well aligned. Consequently, SMEs matched the questions based on performance domains.

The differing origins and characteristics of these tools can explain the variations in question styles. The HPS, developed by Rummler and Brache (1995), is intended for analyzing entire organizational systems, including organizational, process, and performer levels of analyses. The HPS checklist is designed for consultants and practitioners conducting comprehensive systems analysis, with the HPS addressing performer-level issues. The implementation guidelines for HPS suggest that consultants first use the checklist based on behavioral result measurements. If evidence for a question is lacking, they then ask the target performers or groups of performers. Eventually, the purpose of the HPS is to help create new

processes for the job task by identifying performer-level disconnects during the process validation session and documenting the job changes required once the new process is designed (Rummler & Brache, 1995). In contrast, the PDC-HS (1.1) is specifically designed for performance issues, focusing not only on the performer's behavior but also on questions related to behavioral results. This difference in focus means that the questions were not perfectly suited to each other, which impacted the results of this study.

Furthermore, the results cannot conclusively indicate that these two tools show different outcomes in assessing environmental performance variables. In this research, the interviews were conducted by an RA with a novice level of knowledge in performance management. If the interviewer had better knowledge in performance management, they could ask specific questions based on the interviewees' responses. Therefore, the interviewer's understanding of performance management may significantly influence the assessment results.

The results within supervisors and technicians were compared. Overall, supervisors had a higher percentage of agreement across assessments. This could be due to supervisors typically in a behavior analyst position. To be in a behavior analyst position at this company you must be currently enrolled in a master's ABA program. In clinic A for the HPS, AT1 and AT2 had a higher percentage of agreement then supervisors. For the PDC-HS (1.1) supervisors had higher agreement than technicians. In clinic B for the HPS, supervisors had higher agreement than the technicians. For the PDC-HS (1.1) supervisors had higher agreement than the technicians.

Another implication is that the PDC-HS did not include individual capacity variables. However, out of 16 respondents, 10 indicated issues related to individual capacity. Specifically, participants noted that they experience physical, mental, and emotional challenges while performing their tasks. Additionally, from the demographic survey, it's noted that the average

number of years worked at their current company was 3 for BT's and 1 for supervisors. This data speaks to the high turnover rates of staff in ABA clinics. Turnover is when employees permanently leave a company either voluntarily or involuntarily (Wine et al., 2020). The two performance issues indicated for this study both typically involve dealing with challenging behavior. Clients can engage in a range of challenging behaviors from slightly disruptive and not harmful to severely harmful (Kazemi et al., 2015). Kazemi et al. (2015) stated that BTs reported that challenging behavior is an influential factor in their ability to deliver ABA services. Ralston and Brown (2023) found that RBT's reported that few of them received ongoing training after working with a client that engaged in challenging behavior. Additionally, Ralston and Brown (2023) suggest assessing RBT comfortability prior to working with a client that engages in challenging behavior. Additional recommendations include additional training to help staff develop competence in managing challenging behaviors (Ralston & Brown, 2023). Given the nature of the job, technicians work directly with clients and their caregivers, which significantly impacts their mental and emotional well-being. The two clinics that served as locations for this study, both include a debrief shortly after a challenging behavior occurs. During this debrief, the supervisor discusses with the technician what went well, what could've gone better and how they are feeling about the event. Beyond that no additional resources are offered to techs, should they need them. Ultimately, neglecting this variable contributes to larger problems such as high turnover rates. Therefore, future iterations of the PDC-HS should consider including an individual capacity domain as part of staff performance analysis.

The results of the social validity survey indicated that out of five responses, three participants preferred using PDC-HS (1.1) for their performance assessments, while two participants favored the HPS. The preference of assessment tools for the participants were

inconclusive. Additionally, an informal exit survey with the RA revealed a preference for using PDC-HS (1.1) when conducting interviews. The RA noted that the PDC-HS (1.1) provided clearer guidance for asking questions, making the assessment process more straightforward and effective. This preference highlights the importance of clarity and user-friendliness in performance assessment tools for the interviewers.

Due to difficulties recruiting participants, one clinical supervisor (AS2) was part of assessment interviews and provided insight into the top two performance issues within clinic A. Additionally BT2 was currently employed as a program supervisor. Program supervisors do not have additional schooling or training beyond the RBT 40-hour requirement, in this position they typically manage staff schedules, have frequent interaction with client caregivers, and provide positive and corrective feedback to staff on their implementation of programs. Due to this and the above-mentioned reason, she was labeled as a BT for the purpose of this research.

This study is not without limitations. First, the inter-rater reliability for the responses between the RA and the primary researcher was very low. As a result, calibration of the recorded interview responses was conducted to prevent any potential issues with the dependent variables. As mentioned above, the RA had limited knowledge in performance management. The training was provided only twice, which may not have been sufficient for the RA to accurately rate the interview answers. Additionally, the RA did not continue modeling until she met mastery criteria of implementing the assessments. It is possible that if the RA met mastery prior to implementing the assessments, inter-rater reliability would’ve been higher. The logic behind hiring such a novice interviewer was that the characteristics of the current RA would match those of typical practitioners working in clinics, thereby ensuring the external validity of the research. Indeed, many practitioners conduct performance assessments using the PDC-HS without having

extensive knowledge of performance management. As mentioned by Jimenez et al. (2023), this result indicated that when conducting interviews using performance assessment tools, an understanding of the components of performance management is a prerequisite.

The second limitation of this research is the method of matching domains and questions between the two assessment tools. As previously mentioned, the comparison of the tools may not be meaningful without adjusting the tool questions. The current research directly compared the tool questions and domains to identify the indicated variables, which may have contributed to the lack of universal results. Future research should analyze matching domains and questions with standardized methods across tools to facilitate objective comparison.

The purpose of this research was not to identify the correct indication of the performance variables but rather to find consistent responses between job positions and assessment tools. Consequently, the current research did not implement direct observation to verify the evidence of the participants' responses. Both the HPS and PDC-HS (1.1) recommend that direct observation accompany the assessments. If direct measurement had been included, more concise results could have been achieved, potentially mitigating the discrepancies between responses. Future research should consider incorporating direct observations when comparing responses between assessment tools and job positions.

Finally, the current research did not implement treatments for the indicated issues based on the responses from technicians and supervisors. Even though there were discrepancies in responses between these job positions, the effectiveness of treatment may vary when practiced. Therefore, future research should compare supervisor-indicated treatments and technician-indicated treatments to assess their effectiveness.

Analyzing how close the responses were between the responses of supervisors and direct staff for the HPS and PDC-HS (1.1) is beyond the scope of this paper. Future research should analyze how close the responses were to decrease the discrepancy between the two tools.

Although much remains to be done to investigate the implementation of performance assessment tools, the main contribution of this study is that it is the first research to our knowledge that compares performance assessment tools. As stated in the introduction, none of the previous studies have directly compared the response answers of HPS and PDC-HS. Furthermore, this research provides evidence of the implementation of performance interviews with all relevant performers to achieve the best results.

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Appendix A

PERFORMANCE DIAGNOSTIC CHECKLIST			
ANTECEDENTS and INFORMATION		YES	NO
1	Is there a written job description telling exactly what is expected of the employee?		
2	Has the employee received adequate instruction about what to do? (not training – explicit instructions like "I want you to do this, this, and this before we leave today…")		
3	Are employees aware of the mission of the department/organization? Can they tell you what it is?		
4	Are there job or task aids in the employees' immediate environment? Visible while completing the task in question? Reminders to prompt the task at the correct time/duration?		
5	Is the supervisor present during task completion?		
6	Are there frequently updated, challenging, and attainable goals set that employees are comfortable with/feel are fair?		
EQUIPMENT and PROCESSES			
1	If equipment is required, is it reliable? In good working order? Ergonomically correct?		
2	Is the equipment & environment optimally arranged in a physical sense?		
3	Are larger processes suffering from certain incomplete tasks along the way (process disconnects)?		
4	Are the processes arranged in a logical manner, without unnecessary repetition? Are they maximally efficient?		
5	Are there any other obstacles that are keeping the employee from completing the task?		
KNOWLEDGE and SKILLS			
1	Can the employee tell you he/she is supposed to be doing and how to do it? Have they mastered the task? If fluency is necessary, are they fluent?		
2	Can the employee physically demonstrate completion of the task? Have they mastered the task? If fluency is necessary, are they fluent?		

3	Does the employee have the capacity to learn how to complete the job?		
CONSEQUENCES			
1	Are there consequences delivered contingent on the task? - Frequency (list) _____ - Immediacy (list) _____ - Consistency/Probability? (List) _____ - Positive or Negative? (circle one) - Are there premack reinforcers?		
2	Do employees see the effects of performance? (How? Natural/arranged)		
3	Do supervisors deliver feedback? (How? Written/verbal; direct/indirect)		
4	Is there performance monitoring? (Self/supervisor direct/supervisor indirect)		
5	Is there a response effort associated with performing?		
6	Are there other behaviors competing with the desired performance?		

Appendix B

HUMAN PERFORMANCE SYSTEM			
PERFORMANCE SPECIFICATIONS		YES	NO
1	Do performance standards exist?		
2	Do performers know the desired output and performance standards?		
3	Do performers consider the standards attainable?		
TASK SUPPORT			
1	Can performers easily recognize the input requiring action?		
2	Can the task be done without interference from other tasks?		
3	Are job procedures and workflow logical?		
4	Are adequate resources available for performance (time, tools, staff, information)?		
CONSEQUENCES			
1	Are consequences aligned to support desired performance?		
2	Are consequences meaningful from performer's viewpoint?		
3	Are consequences timely?		
FEEDBACK			
1	Do performers receive information about their performance?		
2	Is the information they receive: - Timely? - Relevant?		

	- Accurate? - Constructive? - Easy to understand? - Specific?		
KNOWLEDGE/SKILL			
1	Do performers have the necessary skills and knowledge to perform?		
2	Do performers know why desired performance is important?		
INDIVIDUAL CAPACITY			
1	Are performers physically, mentally, and emotionally able to perform?		

Appendix C

PERFORMANCE DIAGNOSTIC-HUMAN SERVICES CHECKLIST			
TRAINING		YES	NO
1	Has the employee received formal training on this task? If yes, check all applicable training methods: o Instructions o Demonstration o Rehearsal		
2*	Can the employee accurately describe the target task and when it should be performed?		
3	Is there evidence that the employee has accurately completed the task in the past?		
4*	If the task needs to be completed quickly, can the employee perform it at the appropriate speed?		N/A
TASK CLARIFICATION & PROMPTING			
1	Has the employee been informed that he/she is expected to perform the task?		
2*	Can the employee state the purpose of the task?		
3*	Is a job aid (e.g., a checklist, data sheet) for completing the task visibly located in the task area?		
4	Is the employee ever verbally, textually, or electronically reminded to complete the task?		
5	Is the task being performed in an environment well-suited for task completion (e.g., not noisy or crowded)?		
RESOURCES, MATERIALS & PROCESS			
1	Are there sufficient numbers of trained staff available in the program?		
2*	If materials (e.g., teaching stimuli, preferred items) are required for task completion, are they readily available (e.g., easy to find, nearby)? If no materials are required, proceed to question 5. List materials below and indicate their availability.		

	Item 1: Item 2: Item 3: Item 4:		N/A
3*	Are the materials necessary to complete the task well designed for their intended purpose?		N/A
4*	Are the materials necessary to complete the task well organized for their purpose?		N/A
5	Is performance suffering from other tasks not being completed first? If so, indicate those tasks below. Task 1: Task 2: Task 3: Task 4:		
6	If you answered YES for Question 5, are other employees responsible for completing any of the earlier tasks in the process? If so, indicate the employee(s) below. Task 1: Task 2: Task 3: Task 4:		N/A
	PERFORMANCE CONSEQUENCES, EFFORT, & COMPETITION		
1	Is the employee ever directly monitored by a supervisor? If so, indicate the frequency of monitoring. hourly daily weekly monthly other:		
2	Does the employee ever receive feed about the performance? If yes, indicate below.		

	By whom? How often: Delay from task? Check all that apply: Feedback Focus: Positive Corrective Feedback Type: Written Verbal Graphed Other:		
3	Does the employee ever see the effects of accurate task completion? If yes, how? _____		
4	Is the task particularly difficult or effortful?		
5	Do other tasks appear to take precedence over the target task? If yes, indicate these tasks below. Task 1: Task 2: Task 3: Task 4:		

Appendix D

PERFORMANCE DIAGNOSTIC CHECKLIST-HUMAN SERVICES (1.1)			
TRAINING		YES	NO
1	Has the employee received formal training on this task? If YES, when did the employee receive formal training?		
If the supervisor answered NO to Question 1, proceed to Question 2. If the supervisor answered YES to Question 1, check all applicable training methods below:			
1a	Instructions *The employee received step-by-step instructions on how to perform the task.* o Vocal instructions o Written instructions o Both vocal and written instructions		
1b	Demonstration/Modeling *The employee was shown how to perform the task.* o Live modeling o Video o Both live and video modeling		
1c	Rehearsal/Practice *The employee had opportunities to practice the task correctly during training*. o Practiced with trainer o Practiced alone o Practiced with coworkers		
1d	Feedback Yes No *The employee received feedback about performance during training.* Vocal feedback o Positive feedback for steps performed correctly o Corrective feedback for steps performed incorrectly Written feedback o Positive feedback for steps performed correctly o Corrective feedback for steps performed incorrectly		

2	Is there evidence that the employee currently responsible for *training staff* can accurately perform the task being trained?		
3*	Can the *employee* accurately describe the target task and when it should be performed?		
4	Is there evidence the *employee* has accurately completed the task in the past?		
5*	If the task needs to be completed quickly, can the employee perform it at the appropriate speed? *(i.e., if you asked the employee to perform the task, can they do so quickly and finish it before a certain amount of time has elapsed? For example, if a therapist had five minutes to pick up all the toys on the floor before the start of the next session, could they do so within the allotted time?*		N/A
TASK CLARIFICATION & PROMPTING			
1	Has the employee been informed that they are expected to perform the task?		
2*	Can the employee state the purpose of the task?		
3*	Is a job aid (e.g., a checklist, data sheet, step-by-step instructions, pictures, prompts) for completing the task visibly located (if appropriate) in the task area? (e.g., visibly posted, located with the instructional or data collection materials).		
4	Is the employee ever verbally, textually, or electronically reminded to complete the task? (*e.g., reminder emails, text messages, phone alerts, group messaging apps, calendar invites, verbal reminders/prompts*) If YES, how frequently is the employee reminded to complete the task? o Hourly o Daily o Weekly o Monthly o Other		
5	Is the task being performed in an environment well suited for task completion? (*i.e., has the employee told you they cannot perform the task because there is some aspect of the work environment prohibiting them from doing so. For example, if the task requires a quiet environment has the employee ever mentioned that there is too much noise, or if the task requires there to be a lot of physical space, has the employee ever stated that their work area is too crowded?)*		

RESOURCES, MATERIALS & PROCESS			
1	Are there sufficient numbers of trained staff available in the organization to complete the task?		
2*	If materials (e.g., teaching stimuli, preferred items) are required for task completion, are they readily available (e.g., easy to find, nearby)? *If no materials are required, (i.e., N/A) proceed to Question 6* List materials below and indicate their availability. Item 1: Item 2: Item 3: Item 4:		N/A
3	Are there times during the day when the materials required for task completion are not available? List times at which materials are unavailable: Item 1: Item 2: Item 3: Item 4:		N/A
4*	Are the materials necessary to complete the task well designed for their intended purpose? (*i.e., has the employee ever told you that the materials provided to complete the task are not appropriate or useful? For example, employees may be using materials that are old and worn down and no longer suitable for efficient completion of the task, or the data sheet may be overly complicated and takes too long to complete.)*		N/A
5*	Are the materials necessary to complete the task well organized for their intended purpose? (*i.e., has the employee ever told you that they cannot easily and readily find and/or locate the materials needed to complete the task, or that the materials needed to complete the task are not organized in a way that assist task completion?)*		N/A

6	Can the task be completed without first completing other tasks? If NO, indicate below the tasks that must be completed first: (*i.e., has the employee ever told you that they cannot complete this task because they have to first complete other tasks? For example, the employee cannot graph the data regarding client behavior prior to calculating the daily percentages.).* Task 1: Task 2: Task 3: Task 4:		
7	If you answered NO for Question 6, are other employees responsible for completing any of the earlier tasks in the process? If so, indicate the employee(s) below: (*i.e., the employee cannot complete this task without another employee completing a prior task. For example, the employee is unable to file paperwork on time because another employee has to complete proofreading and editing*). Task 1: Task 2: Task 3: Task 4:		
	PERFORMANCE CONSEQUENCES, EFFORT, & COMPETITION		
1	Is the employee ever directly monitored by a supervisor when the target task is to be performed? If YES, indicate the frequency of monitoring: Hourly Daily Weekly Monthly Other:		
2	Does the employee ever receive feed about their performance? If YES, indicate below: By whom? How often: How long after the task? Check all that apply:		

	Feedback Focus: Positive Corrective Feedback Type: Written Verbal Graphed Other:		
3	Does the employee ever see the effects of accurate task completion? If YES, how? (*i.e., once the employee has completed the task as required, do they see the final product or are they provided with any reports about the effects of their work [e.g., happier clients, increased skills, reduction of client problem behavior?)* If YES, how? _____		
4	Is the task simple or does it involve relatively low response effort?		
5	From your perspective as the supervisor, does the task generally take precedence over other potentially competing tasks? (*i.e., has the employee ever told you they could not complete the task because completing another task was a higher priority for them, or does the employee tend to choose to complete certain tasks over others when given a choice?)* If NO, indicate these competing tasks below: Task 1: Task 2: Task 3: Task 4:		

Appendix E

Hello, my name is Dez, and I am currently a BA at Northway Academy – South. I am conducting my thesis project: A preliminary analysis of performance assessment tools and experience comparisons. I am looking at performance concerns at your clinic to learn more about performance assessment tools (i.e., Human Performance System, Performance-Diagnostic Checklist- Human Services, and Performance-Diagnostic Checklist- Human Services [1.1]). I am seeking your insight to assist with pinpointing specific performance issues to be assessed using the above tools.

Answer the below questions about performance concerns at your clinic as specifically as possible.

Sample Question	Non-Specific Answer	Specific Answer
"What is wrong with your car?"	*"It isn't driving right."*	*"The wheel-bearing is bad."*
"What do you want to eat for dinner?"	*"Pasta"*	*"Chicken alfredo pasta"*

1. What is the top performance concern among direct staff at your clinic?

2. What is the second most concerning performance issue among direct staff at your clinic?

Depending upon your answers, you may be asked follow-up questions about the specific performance issue via email.

If you have any questions, you can contact myself, the principal investigator at dawelle@stcloudstate.edu

Thank you!

Appendix F

HPS (Human Performance System; Rummler & Brache, 1995)

Direct Staff

1. The HPS is one of many performance assessment tools. A performance assessment tool is an indirect way to gather data on why specific performance issues might be occurring at a workplace. Performance issues are tasks or activities that staff struggle with (e.g., taking customers' orders correctly). The rationale for this assessment is ensuring environmental factors support successful performance, enabling performers to achieve their job goals.
2. The HPS uses an interview format, with the assessor (i.e., you) reading through the questions with the respondent and writing down their answers.
3. Respondents' answers can be **Yes, No, Unsure**, or a listing of relevant items related to the task.
4. If you cannot find the answer right away, **review the recorded video and answer the tool questions.**
5. The HPS consists of 4 different areas that might affect staff's performance of a job:

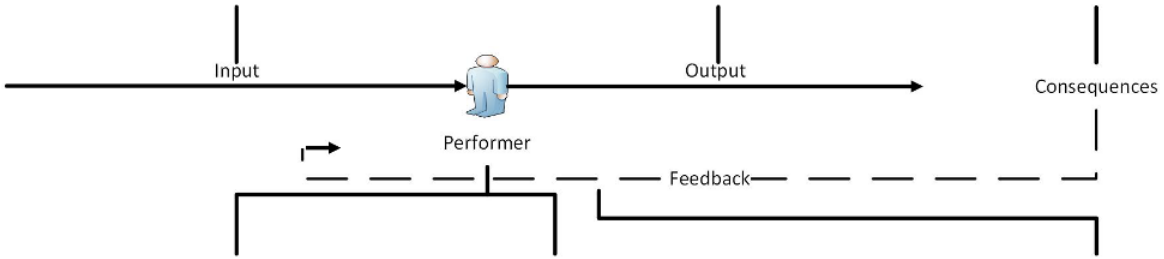
    a) Performance Specifications (The outputs and standards that comprise the job goals: requirements of the task such as input required situation, workflow efficiency, resource availability including staff members)
    b) Task Support (partially addressed by job design. Materials needed, other staff support)
    c) Consequences (What happens after you do the task correctly or incorrectly?)
    d) Feedback (Given after correct or incorrect responses)
    e) Knowledge/Skill (Prerequisite knowledge, skills, and ability on the performance, training requirement and effectiveness, etc.)

6. Within each area, there are specific questions that you will ask the BCBA, BA, or BT to learn more details about the performance issue.

B. Task Support	
1. Can performers easily recognize the input requiring action?	Yes/No
2. Can the task be done without interference from other tasks?	Yes/No
3. Are job procedures and workflow logical?	Yes/No
4. Are adequate resources available for performance (tools, staff, information, equipment)?	Select

A. Performance Specifications	
1. Do performance standards exist?	Yes/No
2. Do performers know the desired output and performance standards?	Yes/No
3. Do performers consider the standards attainable?	Yes/No

C. Consequences	
1. Are consequences aligned to support desired performance?	Yes/No
2. Are consequences meaningful from performer's viewpoint?	Yes/No
3. Are consequences timely?	Yes/No



F. Individual Capacity	
1. Are performers physically, mentally, and emotionally able to perform?	Yes/No

E. Knowledge/Skill	
1. Do performers have the necessary skill and knowledge to perform?	Yes/No
2. Do performers know why desired performance is important?	Yes/No

D. Feedback	
1. Do performers receive information about their performance?	Yes/No
2. Is the information they receive...	
Timely?	Yes/No
Relevant?	Yes/No
Accurate?	Yes/No
Constructive?	Yes/No
Easy-to-Understand?	Yes/No
Specific?	Yes/No

Appendix G

PDC-HS 1.1 (Jimenez et al., 2023)

Direct Staff

1. The PDC-HS is another performance assessment tool.
2. The PDC-HS also uses an interview format with the assessor (i.e., you) reading through the questions with the respondent and writing down their answers.
3. Respondents' answers can be a yes, no, not applicable, or listing off relevant items related to the task.
4. The PDC-HS consists of 4 different areas that might affect staff's performance of a job:
    a. Training
    b. Task Clarification & Prompting
    c. Resources, Materials & Process
    d. Performance Consequences, Effort, & Competition
5. Within each area there are specific questions that you will ask the BCBA, BA or BT to learn more details about the performance issue

Instruction of PDC-HS 1.1

1. Conduct as an interview with the employee's direct supervisor. Do not simply hand it to the supervisor and ask them to complete by themselves, unless they are well trained in completing the PDC-HS.
2. Answer the questions below about the employee's specific performance concern (not the employee in general). The problem should be operationally defined as either a behavioral excess or deficit.
3. Complete for only one performance concern at a time. Conduct a new PDC-HS for a different performance concern if needed.
4. Answer the questions in the order in which they appear.
5. Items with an asterisk (*) should be answered only after the information is verified through direct observation or interview with the employee. Tips for conducting direct observations:
    - Attempt to conduct observations during typical conditions (e.g., the employee is not sick or unduly affected by factors like low staffing or unfamiliar clients or tasks)
    - Conduct observations during times when the employee is typically expected to be performing the task
    - Be aware of employee reactivity; employees may behave differently when they know they are being observed
    - Conduct only as many observations as necessary to obtain reliable information
6. If the direct supervisor is unsure about what is being asked in a question, provide clarification or examples.
7. Answering NO vs. N/A.
    - Answer NO when the information required by the question is not an obvious/immediate "Yes"
    - Answer N/A when the information required by the question does not apply or is irrelevant to the performance concern being assessed PDC-HS (1.1)

PERFORMANCE DIAGNOSTIC-HUMAN SERVICES CHECKLIST (1.1)			
	TRAINING	YES	NO
1	Has the employee received formal training on this task? If YES, when did the employee receive formal training?		
If the supervisor answered NO to Question 1, proceed to Question 2. If the supervisor answered YES to Question 1, check all applicable training methods below:			
1a	Instructions *The employee received step-by-step instructions on how to perform the task.* o Vocal instructions o Written instructions o Both vocal and written instructions		
1b	Demonstration/Modeling *The employee was shown how to perform the task.* o Live modeling o Video o Both live and video modeling		
1c	Rehearsal/Practice *The employee had opportunities to practice the task correctly during training*. o Practiced with trainer o Practiced alone o Practiced with coworkers		
1d	Feedback Yes No *The employee received feedback about performance during training.* Vocal feedback o Positive feedback for steps performed correctly o Corrective feedback for steps performed incorrectly Written feedback o Positive feedback for steps performed correctly o Corrective feedback for steps performed incorrectly		

2	Is there evidence that the employee currently responsible for *training staff* can accurately perform the task being trained?		
3*	Can the *employee* accurately describe the target task and when it should be performed?		
4	Is there evidence the *employee* has accurately completed the task in the past?		
5*	If the task needs to be completed quickly, can the employee perform it at the appropriate speed? *(i.e., if you asked the employee to perform the task, can they do so quickly and finish it before a certain amount of time has elapsed? For example, if a therapist had five minutes to pick up all the toys on the floor before the start of the next session, could they do so within the allotted time?*		N/A
TASK CLARIFICATION & PROMPTING			
1	Has the employee been informed that they are expected to perform the task?		
2*	Can the employee state the purpose of the task?		
3*	Is a job aid (e.g., a checklist, data sheet, step-by-step instructions, pictures, prompts) for completing the task visibly located (if appropriate) in the task area? (e.g., visibly posted, located with the instructional or data collection materials).		
4	Is the employee ever verbally, textually, or electronically reminded to complete the task? (*e.g., reminder emails, text messages, phone alerts, group messaging apps, calendar invites, verbal reminders/prompts*) If YES, how frequently is the employee reminded to complete the task? o Hourly o Daily o Weekly o Monthly o Other		
5	Is the task being performed in an environment well suited for task completion? (*i.e., has the employee told you they cannot perform the task because there is some aspect of the work environment prohibiting them from doing so. For example, if the task requires a quiet environment has the employee ever mentioned that there is too much noise, or if the task requires there to be a lot of physical space, has the employee ever stated that their work area is too crowded?)*		

	RESOURCES, MATERIALS & PROCESS		
1	Are there sufficient numbers of trained staff available in the organization to complete the task?		
2*	If materials (e.g., teaching stimuli, preferred items) are required for task completion, are they readily available (e.g., easy to find, nearby)? *If no materials are required, (i.e., N/A) proceed to Question 6* List materials below and indicate their availability. Item 1: Item 2: Item 3: Item 4:		N/A
3	Are there times during the day when the materials required for task completion are not available? List times at which materials are unavailable: Item 1: Item 2: Item 3: Item 4:		N/A
4*	Are the materials necessary to complete the task well designed for their intended purpose? (*i.e., has the employee ever told you that the materials provided to complete the task are not appropriate or useful? For example, employees may be using materials that are old and worn down and no longer suitable for efficient completion of the task, or the data sheet may be overly complicated and takes too long to complete.)*		N/A
5*	Are the materials necessary to complete the task well organized for their intended purpose? (*i.e., has the employee ever told you that they cannot easily and readily find and/or locate the materials needed to complete the task, or that the materials needed to complete the task are not organized in a way that assist task completion?)*		N/A

6	Can the task be completed without first completing other tasks? If NO, indicate below the tasks that must be completed first: (*i.e., has the employee ever told you that they cannot complete this task because they have to first complete other tasks? For example, the employee cannot graph the data regarding client behavior prior to calculating the daily percentages.).* Task 1: Task 2: Task 3: Task 4:		
7	If you answered NO for Question 6, are other employees responsible for completing any of the earlier tasks in the process? If so, indicate the employee(s) below: (*i.e., the employee cannot complete this task without another employee completing a prior task. For example, the employee is unable to file paperwork on time because another employee has to complete proofreading and editing*). Task 1: Task 2: Task 3: Task 4:		
	PERFORMANCE CONSEQUENCES, EFFORT, & COMPETITION		
1	Is the employee ever directly monitored by a supervisor when the target task is to be performed? If YES, indicate the frequency of monitoring: Hourly Daily Weekly Monthly Other:		
2	Does the employee ever receive feedback about their performance? If YES, indicate below: By whom? How often: How long after the task? Check all that apply:		

	Feedback Focus: Positive Corrective Feedback Type: Written Verbal Graphed Other:		
3	Does the employee ever see the effects of accurate task completion? If YES, how? (*i.e., once the employee has completed the task as required, do they see the final product or are they provided with any reports about the effects of their work [e.g., happier clients, increased skills, reduction of client problem behavior]?)* If YES, how? _____		
4	Is the task simple or does it involve relatively low response effort?		
5	From your perspective as the supervisor, does the task generally take precedence over other potentially competing tasks? (*i.e., has the employee ever told you they could not complete the task because completing another task was a higher priority for them, or does the employee tend to choose to complete certain tasks over others when given a choice?)* If NO, indicate these competing tasks below: Task 1: Task 2: Task 3: Task 4:		

Appendix H

Integrity Checklist				
Date:	Participant:	Performance Concern:		
Before Meeting				
Opens the appropriate *Supervisors* or *Direct Staff* assessment tool document for the participant the assistant is interviewing				
Label and save the document as follows: BCBA/BT#_STC/S/_HPS/PDC-HS (1.1) _060924				
Open the introduction script				
Open the appropriate performance issue document				
During Meeting			Yes	No
1. Introduces self to participant				
2. Reads introduction script with appropriate assessment name and # of domains				
3. Confirms if participant filled out demographic survey				
a. If participant has not filled out the demographic survey, follow the link and fill out together				
4. Allows participant time to review operational definition				
a. Provides participant opportunity to ask questions				
b. Answers participants questions about the operational definition of the performance issue.				
c. Starts assessment after participant is finished reviewing performance issue				
5. Assistant maintains a neutral expression and tone when asking assessment questions				
6. Assistant maintains a neutral expression and tone when listening to participant's answers.				
7. Assistant responds with a neutral confirmation statement (i.e., "okay," after participant provides answer to the question)				
8. Assistant refrains from interrupting participant				
9. After the assessment is complete, thanks participant for their time				

% Correct	

Appendix I

Clinic A

Performance Issue: Behavior support plan implementation. This can consist of some or all the items below:

a. Know the functions of behavior (i.e., attention, escape, sensory, tangible)
b. Identify the function of a client's challenging behavior
c. Confirm the function of a client's challenging behavior.
d. Respond appropriately to an attention-maintained behavior.
e. Respond appropriately to an escape-maintained behavior.
f. Respond appropriately to a sensory maintained challenging behavior.
g. Respond appropriately to a tangible maintained behavior.
h. Reinforcing appropriate alternative behaviors.
i. Use safety-care escalation strategies (i.e., help, prompt, wait).
j. Use Safe body positioning and safety stance.
k. Use antecedent based strategies before challenging behavior occurs.

Clinic B

Performance Issue: Applying function-based strategies to safely and effectively work through challenging behaviors. This can consist of some or all the items below:

a. Know the functions of behavior (i.e., attention, escape, sensory, tangible)
b. Identify the function of a client's challenging behavior
c. Confirm the function of a client's challenging behavior.
d. Respond appropriately to an attention-maintained behavior.
e. Respond appropriately to an escape-maintained behavior.
f. Respond appropriately to a sensory maintained challenging behavior.
g. Respond appropriately to a tangible maintained behavior.
h. Reinforcing appropriate alternative behaviors.
i. Use safety-care escalation strategies (i.e., help, prompt, wait).
j. Use Safe body positioning and safety stance.
k. Use antecedent based strategies before challenging behavior occurs.

Appendix J

HPS Performance Specific Questions (Direct Staff)		
A. Performance Specifications	1. Can you tell me more about how you do _____? What does _____ require you to do? 2. Is there a right or wrong way to do _____? 3. What, if any, specific standards, or goals are there for _____? 4. Have you ever done _____ incorrectly? If so, when is that most likely to happen?	**Participant Responses**
1. Do performance standards exist?		☐ Yes ☐ No ☐ Unsure
2. Do performers know the desired output and performance standards?	1. How do you know you have done _____ correctly? Would you know just by observing other staff or would you not know until someone tells you? Why or why not? 2. Why is correct _____ important to you, your clients, and your clinic? 3. What do you understand to be the goal for _____?	☐ Yes ☐ No ☐ Unsure
3. Do performers consider the standards attainable?	1. Do you think it is reasonable to expect that direct staff do _____ correctly ____% of the time? Why or why not? 2. If you do not think it is reasonable, what would you consider to be reasonable percentage correct for doing _____? What makes the particular percentage reasonable? 3. What factors affect your ability to achieve the goal?	☐ Yes ☐ No ☐ Unsure
B. Task Support		☐ Yes ☐ No ☐ Unsure

1. Can performers easily recognize the input requiring action?	1. When should you do _____? Is this always the case?	
2. Can the task be done without interference from other tasks?	1. Are you ever interrupted while doing _____? If so, how often does that happen? 2. What causes the interruptions?	☐ Yes ☐ No ☐ Unsure
3. Are job procedures and workflow logical?	1. Does the way you are asked to do _____ make sense? If not, what would be a better way to do it?	☐ Yes ☐ No ☐ Unsure
4. Are adequate resources available for performance (tools, staff, information, equipment)?	1. What specific equipment or materials do you need in order to do _____? 2. Do you consistently have everything you need in order to _____ correctly? If not, what don't you have and how often is that a problem?	☐ Yes ☐ No ☐ Unsure
C. Consequences 1. Are consequences aligned to support desired performance?	1. How does doing _____ correctly benefit you? Does anything good happen to or for you as a result of doing _____ correctly? If so, what? 2. Does anything bad happen when you do _____ incorrectly? If so, what? 3. Does management recognize when you do a good job at _____? How do they recognize your success? 4. Do they acknowledge incorrect _____? 5. How? What do they do when you do _____ incorrectly? What happens to you?	☐ Yes ☐ No ☐ Unsure
2. Are consequences meaningful from the performer's viewpoint?	1. Which, if any, of the things that happen to you or for you as a result of doing _____ correctly or incorrectly affect your behavior? 2. Have any of the things that happen to you had a significant and long-lasting impact on	☐ Yes ☐ No ☐ Unsure

	_____? If so, which and why/how did it affect you?	
3. Are consequences timely?	1. How soon after you _____ do you experience the effects of correctly or incorrectly doing _____? 2. How often do you experience them (every time, most of the time, sometimes, infrequently, or not at all)?	☐ Yes ☐ No ☐ Unsure
D. Feedback 1. Do performers receive information about their performance?	1. How do you know if you are doing a good job or a bad job when doing _____? 2. Do you ever get to see data related to your performance on _____? If so, how is it presented? If not, would you like to?	☐ Yes ☐ No ☐ Unsure
2. Is the information they receive timely, relevant, accurate, constructive, easy to understand, and specific?	1. Thinking about how you know whether you are doing a good or bad job, do you get this information or feedback about _____ right away or after a delay? 2. How relevant is the information you get to your actual performance of _____? 3. Is the feedback related to your actual performance of the task? 4. Is the feedback accurate as to whether you completed the task correctly or incorrectly? 5. Is the feedback easy to understand? 6. Is the feedback specific?	☐ Yes ☐ No ☐ Unsure ☐ Yes ☐ No ☐ Unsure ☐ Yes ☐ No ☐ Unsure ☐ Yes ☐ No ☐ Unsure ☐ Yes ☐ No ☐ Unsure ☐ Yes ☐ No ☐ Unsure
E. Knowledge/Skill		☐ Yes ☐ No ☐ Unsure

1. Do performers have the necessary skill and knowledge to perform?	1. Do you know how to do _____ the correct way? How do you know this? 2. Were you trained on _____? Did you feel capable of doing _____ without help after being trained? 3. If your manager told you tomorrow that you had to do _____, would you need or want any help to do so?	
2. Do performers know why desired performance is important?	1. In your opinion, is _____ important? Why or why not?	☐ Yes ☐ No ☐ Unsure
F. Individual Capacity 1. Are performers physically, mentally, and emotionally able to perform?	1. Do you feel that you are physically, mentally, and emotionally able to _____ correctly? If not, what aspect or aspects of _____ do you feel you are not capable of doing? Why?	☐ Yes ☐ No ☐ Unsure (If participant wishes not to answer, check unsure)

Appendix K

HPS Performance Specific Questions (Supervisor)		
G. Performance Specifications	1. Is there a right or wrong way for direct staff to _____?	**Participant Responses**
4. Do performance standards exist?	2. What constitutes a "correct" vs "incorrect _____? 3. What, if any, specific standards or goals have you set for _____? 4. When errors occur, why might they happen? How often do errors occur? Do you have data and, if so, could you share them with us?	☐ Yes ☐ No ☐ Unsure
5. Do performers know the desired output and performance standards?	6. How do you know whether the direct staff have done _____ correctly? 7. How do they know? 8. Would you know just by observing direct staff or would you not know until someone tells you? Why or why not? 9. Why is _____ important to you, your staff, your clients and your clinic? 10. You indicated that the goal for _____ is _____% correct. Do direct staff know and understand this goal? If so, how do you know that? If not, why don't they know this?	☐ Yes ☐ No ☐ Unsure
6. Do performers consider the standards attainable?	4. Do you think that direct staff can reasonably be expected to achieve the _____% correct goal? Why or why not? 5. Do you believe that they think it is reasonable? What makes you say that? 6. Have direct staff ever told you that they do or do not find the goal reasonable?	☐ Yes ☐ No ☐ Unsure

H. Task Support 5. Can performers easily recognize the input requiring action?	1. When should direct staff be doing _____, if at all?	☐ Yes ☐ No ☐ Unsure
6. Can the task be done without interference from other tasks?	3. Are direct staff ever interrupted while doing _____? If so, how often does that happen? 4. What causes the interruptions? Is there a way to control those interruptions?	☐ Yes ☐ No ☐ Unsure
7. Are job procedures and workflow logical?	2. Does the way direct staff are asked to do _____ make sense? If not, what would be a better way to do it?	☐ Yes ☐ No ☐ Unsure
8. Are adequate resources available for performance (tools, staff, information, equipment)?	3. What specific equipment or materials do direct staff need in order to _____? 4. Do direct staff have everything they need in order to do _____? How do you know? If not, what don't they have and how often is that a problem?	☐ Yes ☐ No ☐ Unsure
I. Consequences 3. Are consequences aligned to support desired performance?	6. Do you recognize when direct staff do a good job at _____? How do you recognize their success? How often/how consistently do you do that? 7. Do you ever take any actions when direct staff do _____ incorrectly? If so, what actions do you take? How often/consistently do you do that? 8. Has your recognition of correct _____ and actions regarding incorrect _____ improved performance in a measurable way? If not, are you sure that the servers consider your recognition actions to be valuable?	☐ Yes ☐ No ☐ Unsure
4. Are consequences meaningful from the performer's viewpoint?	11. Which, if any, of the things that you do when direct staff correctly and incorrectly do _____ affect their behavior? Have	☐ Yes ☐ No ☐ Unsure

	any of the things that you have said or done had a significant and long-lasting impact on their order entering? If so, which and why/how did it affect their performance?	
12. Are consequences timely?	3. How soon after direct staff _____ do you acknowledge correct performance or take action on incorrect performance? 4. How often do you do this? (every time, most of the time, sometimes, infrequently, or not at all)?	☐ Yes ☐ No ☐ Unsure
J. Feedback 3. Do performers receive information about their performance?	3. How do direct staff know if they are doing a good or bad job when it comes to _____? 4. Do you ever show direct staff data related to their performance on _____? If so, how is it presented? If not, would you consider doing this?	☐ Yes ☐ No ☐ Unsure
4. Is the information they receive timely, relevant, accurate, constructive, easy to understand, and specific?	7. Thinking about how you know whether you are doing a good or bad job, do you get this information or feedback about _____ right away or after a delay? 8. How relevant is the information you get to your actual performance of _____? 9. Is the feedback related to your actual performance of the task? 10. Is the feedback accurate as to whether you completed the task correctly or incorrectly? 11. Is the feedback easy to understand? 12. Is the feedback specific?	☐ Yes ☐ No ☐ Unsure ☐ Yes ☐ No ☐ Unsure ☐ Yes ☐ No ☐ Unsure ☐ Yes ☐ No ☐ Unsure ☐ Yes ☐ No ☐ Unsure

		☐ Yes ☐ No ☐ Unsure
K. Knowledge/Skill 3. Do performers have the necessary skill and knowledge to perform?	4. Do direct staff know how to do _____ the correct way? How do you know this? 5. Do direct staff _____? If not, why do you think they don't? Could they do it if they were required to? 6. Were direct staff trained on _____? Did they demonstrate competence in _____ without help at the end of or after being trained? 7. If you told direct staff tomorrow that they had to do _____, do you think they would need or want any help to do so?	☐ Yes ☐ No ☐ Unsure
4. Do performers know why desired performance is important?	2. Do direct staff know why _____ is important? How do they know?	☐ Yes ☐ No ☐ Unsure
L. Individual Capacity 2. Are performers physically, mentally, and emotionally able to perform?	5. Do you feel that you are physically, mentally, and emotionally able to _____ correctly? If not, what aspect or aspects of _____ do you feel you are not capable of doing? Why?	☐ Yes ☐ No ☐ Unsure (If participant does not wish to answer, check unsure)

Appendix L

PDC-HS (1.1) Performance Specific Questions (Direct Staff)		
M. Training	1. Did you receive training on how to do _____? 2. When did you receive training on how to do _____?	**Participant Responses**
7. Has the employee received formal training on this task? If YES, when did the employee receive formal training?		☐ Yes ☐ No ☐ Unsure
1a. Instructions *The employee received step-by-step instructions on how to perform the task* • Vocal instruction • Written instructions • Both vocal and written instructions	1. What type of instructions did you receive for completing _____? 2. Have you received vocal, written, or both vocal and written instructions on how to do _____?	☐ Yes ☐ No ☐ Unsure ☐ Vocal ☐ Written ☐ Both
1b. Demonstration/Modeling *The employee was shown how to perform the task.* • Live modeling • Video • Both live video and modeling	1. Did the person that trained you model or demonstrate how to do _____? 2. Did the person that train you to do _____ model how to do it in person, did you watch a video of someone showing you how to do it, or both?	☐ Yes ☐ No ☐ Unsure ☐ Live ☐ Video ☐ Both
1c. Rehearsal/Practice *The employee had opportunities to practice the task correctly during training.* • Practiced with trainer • Practiced alone • Practiced with coworkers	1. During your training did you have an opportunity to rehearse or practice _____? 2. During your training did you practice doing ____ with the person that trained you, did you practice alone or both?	☐ Yes ☐ No ☐ Unsure ☐ with trainer ☐ alone ☐ with coworkers

1d. Feedback Yes No *The employee received feedback about performance during training.* Vocal feedback • Positive feedback for steps performed correctly • Corrective feedback for steps performed incorrectly Written feedback • Positive feedback for steps performed correctly • Corrective feedback for steps performed incorrectly	1. During your training did receive feedback on how well you did _____? 2. Did you receive any vocal feedback that was positive/corrective or both? 3. Did you receive written feedback that was positive/corrective or both?	☐ Yes ☐ No ☐ Unsure ☐ Vocal Feedback ☐ Positive ☐ Corrective ☐ Written Feedback ☐Positive ☐ Corrective
8. Is there evidence that the employee currently responsible for *training staff* can accurately perform the task being trained?	1. Do you think the person that trained you to do ____ can perform the task well?	☐ Yes ☐ No ☐ Unsure
9. *Can the employee accurately describe the target task and when it should be performed?	1. Can you describe _____ and when you are supposed to do it?	☐ Yes ☐ No ☐ Unsure
10. Is there evidence the employee has accurately completed the task in the past?	1. Is there any direct result you see from completing the task correctly?	☐ Yes ☐ No ☐ Unsure
11. *If the task needs to be completed quickly, can the employee perform it at the appropriate speed? *(i.e., if you asked the employee to perform the task, can they do so quickly and finish it before a certain amount of time has elapsed? For example, if a therapist had five minutes to pick up all the toys on the floor before the start of the next session, could they do so within the allotted time?*	1. Can you implement _____ quickly enough without reading through it first? 2. Do you remember details of the support plan without having to read it first?	☐ Yes ☐ No ☐ Unsure
Task Clarification & Prompting		☐ Yes ☐ No ☐ Unsure

9. Has the employee been informed that they are expected to perform the task?	1. Have you been told by your supervisor that you are expected to do _____?	
10. *Can the employee state the purpose of the task?	1. What is the purpose of doing _____?	☐ Yes ☐ No ☐ Unsure
11. *Is a job aid (e.g., a checklist, data sheet, step-by-step instructions, pictures, prompts) for completing the task visibly located (if appropriate) in the task area? (e.g., visibly posted, located with the instructional or data collection materials).	1. Is there anything visible in the work area to remind you to complete _____? Examples of this are checklists, data sheets, step-by-step instructions, pictures, and prompts).	☐ Yes ☐ No ☐ Unsure
12. Is the employee ever verbally, textually, or electronically reminded to complete the task? (*e.g., reminder emails, text messages, phone alerts, group messaging apps, calendar invites, verbal reminders/prompts*) If YES, how frequently is the employee reminded to complete the task? • Hourly • Daily • Weekly • Monthly • Other	1. Are you ever reminded to complete ____? Examples of this could be reminder emails, text messages, phone alerts, group messaging apps, calendar invites, verbal reminders/prompts etc. 2. If yes how often would you say you are reminded to do _____?	☐ Yes ☐ No ☐ Unsure ☐ Hourly ☐ Daily ☐ Weekly ☐ Monthly ☐ Other:
13. Is the task being performed in an environment well suited for task completion? (*i.e., has the employee told you they cannot perform the task because there is some aspect of the work environment prohibiting them from doing so. For example, if the task requires a quiet environment has the employee ever mentioned that there is too much noise, or if the task requires there to be a lot of physical space, has the employee ever stated that their work area is too crowded?)*	1. Do you think that the work environment for completing _____ allows you to more easily do the task? 2. One example of this is a work task that needs to be completed in a quiet environment but there is too much noise. 3. Another example of this is if the task requires a lot of	☐ Yes ☐ No ☐ Unsure

	physical space but it is too crowded.	
Resources, Materials & Process 5. Are there sufficient numbers of trained staff available in the organization to complete the task?	1. Do you think that there are enough trained staff here at your clinic to do _____?	☐ Yes ☐ No ☐ Unsure
6. *If materials (e.g., teaching stimuli, preferred items) are required for task completion, are they readily available (e.g., easy to find, nearby)? *If no materials are required, proceed (i.e., N/A) proceed to Question 6* List materials below and indicate their availability. Item 1: Item 2: Item 3: Item 4:	1. If there are materials required to complete _____, are they readily available? 2. Can you list some of the most common materials you use to do _____? How available are each of them?	☐ Yes ☐ No ☐ Unsure Item 1: (always/most of the time/sometimes/never) Item 2: (always/most of the time/sometimes/never) Item 3: (always/most of the time/sometimes/never0
7. Are there times during the day when the materials required for task completion are not available? List times at which materials are unavailable: Item 1: Item 2: Item 3: Item 4:	1. Are there certain times of the day when certain materials that you need to do _____ are not available? 2. Can you list different times when materials might not be available to complete?	☐ Yes ☐ No ☐ Unsure Item 1: Item 2: Item 3: Item 4:
8. *Are the materials necessary to complete the task well designed for their intended purpose? (*i.e., has the employee*	1. Do you think that the materials that you are required to use for	☐ Yes ☐ No ☐ Unsure

ever told you that the materials provided to complete the task are not appropriate or useful? For example, employees may be using materials that are old and worn down and no longer suitable for efficient completion of the task, or the data sheet may be overly complicated and takes too long to complete.)	____ are well designed to help you do _____? 2. One example of this is the materials being old and worn down and not helpful for completing the task. 3. Another example of this is a data sheet that is too complicated and takes a long time to complete.	
9. * Are the materials necessary to complete the task well organized for their intended purpose? (*i.e., has the employee ever told you that they cannot easily and readily find and/or locate the materials needed to complete the task, or that the materials needed to complete the task are not organized in a way that assist task completion?)*	1. Thinking about the materials that you need to do _____, are they well organized within the work area? 2. While completing the task do you ever find yourself needing to locate materials?	☐ Yes ☐ No ☐ Unsure
6. Can the task be completed without first completing other tasks? If NO, indicate below the tasks that must be completed first: (*i.e., has the employee ever told you that they cannot complete this task because they have to first complete other tasks? For example, the employee cannot graph the data regarding client behavior prior to calculating the daily percentages.).* Task 1: Task 2: Task 3: Task 4:	1. Are you able to do _____ first before completing other tasks that you might need to do? 2. Do you first have to do other tasks before you are able to do _____? 3. One example of this is an employee unable to graph data about client before calculating the daily percentage. 4. If no, what are some tasks that you have to do first before doing _____?	☐ Yes ☐ No ☐ Unsure Task 1: Task 2: Task 3: Task 4:

7. If you answered NO for Question 6, are other employees responsible for completing any of the earlier tasks in the process? If so, indicate the employee(s) below: (*i.e., the employee cannot complete this task without another employee completing a prior task. For example, the employee is unable to file paperwork on time because another employee has to complete proofreading and editing*). Task 1: Task 2: Task 3: Task 4:	1. Are other employees responsible for doing any of the earlier tasks in the process? 2. One example of this is an employee unable to file paperwork on time because another employee has to complete proofreading and editing first. 3. If yes, can you list employees (their job title) that are responsible for completing earlier parts of the process?	☐ Yes ☐ No ☐ Unsure Task 1: Task 2: Task 3: Task 4:
Performance Consequences, Effort & Competition 1. Is the employee ever directly monitored by a supervisor when the target task is to be performed? If YES, indicate the frequency of monitoring: • Hourly • Daily • Weekly • Monthly • Other:	1. Are you ever directly observed by a supervisor when doing _____? 2. If yes, how often would you say you are observed?	☐ Yes ☐ No ☐ Unsure ☐ Hourly ☐ Daily ☐ Weekly ☐ Monthly ☐ Other:
2. Does the employee ever receive feedback about their performance? If YES, indicate below: By whom? How often: How long after the task?	1. Do you ever receive feedback about your performance on _____? 2. Who gives you feedback? 3. How often would you say that you receive feedback? 4. How long after doing _____ correctly or incorrectly do you receive feedback?	☐ Yes ☐ No ☐ Unsure By whom? How often? How long after the task?

Check all that apply: Feedback Focus: Positive Corrective Feedback Type: Written Verbal Graphed Other:	5. Do you receive feedback that is positive/corrective or both? 6. Do you receive feedback that is written, verbal, graphed, any of these or something else?	☐ Positive ☐ Corrective ☐ Written ☐ Verbal ☐ Graphed ☐ Other:
3. Does the employee ever see the effects of accurate task completion? If YES, how? (*i.e., once the employee has completed the task as required, do they see the final product or are they provided with any reports about the effects of their work [e.g., happier clients, increased skills, reduction of client problem behavior]?)* If YES, how? _____	1. If you do _____ correctly, is there a positive outcome that you get to see? 2. Some examples of this are happier clients, increased skills for clients and reduced challenging behavior.	☐ Yes ☐ No ☐ Unsure If YES, how?
4. Is the task simple or does it involve relatively low response effort?	1. Do you think the task is simple and requires a low response effort from you to complete? 2. Do you think that the behavior support plan is simple and easy to implement? 3. What does the process look like?	
5. From your perspective as the supervisor, does the task generally take precedence over other potentially competing tasks?	1. From your perspective do you think doing _____ is more	☐ Yes ☐ No ☐ Unsure

(*i.e., has the employee ever told you they could not complete the task because completing another task was a higher priority for them, or does the employee tend to choose to complete certain tasks over others when given a choice?)* If NO, indicate these competing tasks below: Task 1: Task 2: Task 3: Task 4:	important than other tasks you might need to complete? 2. If you were given a choice between doing ____ and another task, which would you choose to do first? 3. If no, what are other tasks that you might need to do first?	Task 1: Task 2: Task 3: Task 4:

Appendix M

Working as a Server

Answers are server perspective

S: Server

I: Interviewer

HPS

Performance Specifications

1. I: Do performance standards exist?
    a. **S: What does performance standards mean?**
    b. *I: Is there a right or wrong way to take a customer's order?*
    c. **S: We write down orders as customers give them, walk to and enter the order into the PoS system.**
    d. **I: Is there a wrong way to take a customer's order?**
    e. *S: If you forget something that they ordered, or sometimes you bring them the wrong food,*
2. I: Do performers know the desired output and performance standards? How do you or your staff know you have done _____ correctly?
    a. **S: What is an output?**
    b. *I: An output is the result of the task you are completing, so for taking customer's orders it could be the completed order.*
    c. **S: When you double check the order on the PoS, when the customer thanks you for their order or tells us that they had really great service.**
3. Do performers consider the standards attainable?
    a. *I: Do you think it's reasonable to expect that servers enter orders correctly 100% of the time?*
    b. **S: Yes I think it is, we don't want to make any mistakes with customer's orders.**

Task Support

1. Can performers easily recognize the input requiring action?
    a. *I: When should you or staff write down the customer order and enter it into the PoS?*
    b. **S: Most of the time we write down the customer's order right away, but when it's busier we have to try and remember it and enter it into the PoS later.**
2. Can the task be done without interference from other tasks?

   a. *I: Are you ever interrupted while writing down orders or entering them into the PoS?*
   b. S: No we are interrupted a lot while taking customers' orders and entering them into the PoS, usually it's by other staff to tell us that we need to seat another customer at a table, take another order,
3. Are job procedures and workflow logical?
   a. *I: Does the way you are asked to write and enter orders make sense? If not, what would be a better way to do it?*
   b. S: Sometimes we use shorthand or abbreviations for different orders, they can be confusing and difficult to remember, and I get them mixed up with other orders a lot.
4. Are adequate resources available for performance (time, tools, staff, information)?
   a. *I: What specific equipment or materials do you need in order to write and enter orders?*
   b. **S: We access to the PoS Station to be able to successfully take orders. Since we only have one PoS station we have to wait to enter orders when the bar is busier so its not always available for us.**

Consequences

1. Are consequences aligned to support desired performance?
   a. *I: How does entering orders correctly benefit you or your staff*?
   b. S: If we take customer's orders right then we won't get yelled at by our boss.
2. Are consequences meaningful from performer's viewpoint?
   a. *I: Do the consequences of correctly or incorrectly entering orders affect your behavior in any way?*
   b. S: We get yelled at if we enter orders incorrectly, so we try to be careful about making mistake.
3. Are consequences timely?
   a. *I: How soon after you take and enter orders do you experience the effects of correctly or incorrectly entering orders?*
   b. S: If we made a mistake with a special instruction, we are usually told by the kitchen/bar staff when they make the order. Sometimes we find out earlier if the cook or bartender sees the order before they make it. Other times we only find out when the customer is angry that they got the wrong order or something was wrong with their order.

Feedback

1. Do performers receive information about their performance?
   a. *I: How do you know if you are doing a good job or bad job when it comes to entering orders correctly?*
   b. S: Our managers are really busy running the bar so they don't really tell us whether we are doing good or not.
2. Is the information they receive:
   a. *I: Do you get information or feedback about how you enter orders right away or after a delay?*

b. ***S:*** **Sometimes we are told we did well by the customer but that's usually only right before they leave.**

c. Timely?

I: How relevant is the information that you get to your actual order entering?

d. S: What do you mean by relevant?

e. I: Are you ever told specifically what you did well or didn't do well while taking customers' orders.

f. S: Sometimes the customer tells us that they don't like how we took their order.

g. Relevant?

h. I: How accurate and specific is the information or feedback that you get about taking customer's orders?

i. S: The managers and kitchen staff tell us exactly what was wrong with the order so that it can be remade.

j. Accurate?

k. I: Does management or supervisors ever tell you how you could do better at taking customers' orders?

l. S: They usually tell us all the things that we are doing wrong

m. Constructive?

n. I: When you do get feedback from managers or supervisors is it easy to understand?

o. S: Not always,

p. Easy to understand?

q. I: Do you get specific details about the feedback that you do receive?

r. S: Usually, they just tell us that we got that customer's order wrong, or we didn't clean off a table fast enough.

s. Specific*?*

Knowledge/Skill

1. Do performers have the necessary skills and knowledge to perform?
    a. I: Do you know how to take and enter orders the correct way? How do you know this?
    b. S: We do know how to take and enter orders correctly because we were taught how to do it by staff that already worked here.
2. Do performers know why desired performance is important?
    a. I: In your opinion, is taking and entering orders correctly important? Why or why not?

   b. **S: It is important because incorrect orders lead to unhappy customers and our goal is to make our customers happy.**

Individual Capacity

1. Are performers physically, mentally, and emotionally able to perform?
   a. **S: Yes one of the job requirements was that we are able to lift a certain weight, be able to walk around and be on our feet most of the day, we also have to be able to handle customers that aren't nice when there order is incorrect**

Appendix N

This time we will only be using one tool to assess the performance issue of trials ran per session (i.e., not enough trials are being ran per session). Of the two tools you have viewed, which would you like to use to identify why this performance issue might be occurring in an ABA center? (Performance Diagnostic Checklist [1.1] or Human Performance System).

Appendix O

1. What is your age?

2. What is your preferred gender?

3. What is your race/ethnicity? (select all that apply)
    a. Native American or Alaska Native
    b. Asian
    c. African American
    d. Native Hawaiian or Pacific Islander
    e. White/Caucasian
    f. Two or more
    g. Other (please specify): _____
    h. Unknown
    i. Prefer not to say

4. How many years of experience do you have working in the helping profession?

5. Are you currently enrolled in or graduated from a master's behavior analysis program?

6. If you are certified, what is your level of certification?
    a. Registered Behavior Technician
    b. Board Certified assistant Behavior Analyst
    c. Board Certified Behavior Analyst
    d. Board Certified Behavior Analyst - Doctoral

7. What is the highest level of school you have completed or the highest degree you have received?

8. How many years have you worked with your current company?

9. What is your current position job title?

10. How many years have you worked in your current position?

Appendix P

Raw Data of Participants' Responses

Participant	HPS		PDC-HS (1.1)		% Match
AT1	1PS	No	1TCP	Yes	0
			TCP2	Yes	
	2PS	No	TCP1	Yes	0
			TCP2	Yes	
	3PS	**Yes**	TCP1	**Yes**	100
			TCP2	**Yes**	
	1TS	Yes	T3	No	0
			TCP4	Unsure	
	2TS	***Yes***	TCP5	***Yes***	100
			RMP6	***Yes***	
	3TS	***Yes***	RMP6	***Yes***	50
			RMP7	Unsure	
	4TS	***Unsure***	RMP1	Yes	29
			RMP2	***No***	
			RMP3	Yes	
			RMP4	Yes	
			RMP5	Yes	
			TCP3	***No***	
	1C	***No***	PCEC3	Yes	50
			PCEC4	***No***	
	2C	***No***	PCEC5	***No***	100
	3C		N/A		
	1F	Unsure	PCEC1	Yes	0
			PCEC2	Yes	
	2F	No	PCEC1	Yes	0
			PCEC2	Yes	
	1KS	***Yes***	T1	***Yes***	75
			T3	No	
			T4	***Yes***	
			T5	***Yes***	
	2KS	***Yes***	TCP1	***Yes***	50
			TCP3	No	

Note. HPS = Human Performance Assessment, PS = Performance Specification, TS = Task Support, C = Consequences, F = Feedback, KS = Knowledge and Skill, PDC-HS (1.1) = Performance Diagnostic Checklist (1.1), TCP = Task Clarification and Prompting, T = Training,

RMP = Resources, Materials, and Process, PCEC = Performance Consequences, Effort, and Competition.

Participant	HPS		PDC-HS (1.1)		% Match
AT2	1PS	***Yes***	1TCP	***Yes***	50
			TCP2	No	
	2PS	***No***	TCP1	Yes	50
			TCP2	***No***	
	3PS	***Yes***	TCP1	***Yes***	50
			TCP2	No	
	1TS	***Yes***	T3	***Yes***	100
			TCP4	***Yes***	
	2TS	***No***	TCP5	***No***	100
			RMP6	***No***	
	3TS	***Yes***	RMP6	No	50
			RMP7	***Yes***	
	4TS	***Yes***	RMP1	***Yes***	50
			RMP2	No	
			RMP3	***Yes***	
			RMP4	No	
			RMP5	No	
			TCP3	***Yes***	
	1C	***Yes***	PCEC3	***Yes***	100
			PCEC4	***Yes***	
	2C	***Yes***	PCEC5	***Yes***	100
	3C		N/A		
	1F	***Yes***	PCEC1	***Yes***	100
			PCEC2	***Yes***	
	2F	No	PCEC1	Yes	0
			PCEC2	Yes	
	1KS	***Yes***	T1	***Yes***	75
			T3	***Yes***	
			T4	***Yes***	
			T5	No	
	2KS	***Yes***	TCP1	***Yes***	
			TCP3	***Yes***	100

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Participant	HPS		PDC-HS (1.1)		% Match
AS1	1PS	***Yes***	1TCP	No	50
			TCP2	***Yes***	
	2PS	***Yes***	TCP1	No	50
			TCP2	***Yes***	
	3PS	***Yes***	TCP1	No	50
			TCP2	***Yes***	
	1TS	***Yes***	T3	***Yes***	50
			TCP4	No	
	2TS	***No***	TCP5	Yes	50
			RMP6	***No***	
	3TS	Yes	RMP6	No	0
			RMP7	No	
	4TS	***Yes***	RMP1	No	33
			RMP2	No	
			RMP3	***Yes***	
			RMP4	***Yes***	
			RMP5	Unsure	
			TCP3	No	
	1C	***Yes***	PCEC3	***Yes***	50
			PCEC4	No	
	2C	***Yes***	PCEC5	***Yes***	100
	3C		N/A		
	1F	***Yes***	PCEC1	***Yes***	100
			PCEC2	***Yes***	
	2F	***Yes***	PCEC1	***Yes***	100
			PCEC2	***Yes***	
	1KS	***Unsure***	T1	***No***	
			T3	Yes	25
			T4	Yes	
			T5	Yes	
	2KS	***Unsure***	TCP1	***No***	100
			TCP3	***No***	

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Participant	HPS		PDC-HS (1.1)		% Match
AS2	1PS	No	1TCP	Yes	0
			TCP2	Yes	
	2PS	No	TCP1	Yes	0
			TCP2	Yes	
	3PS	***Yes***	TCP1	***Yes***	100
			TCP2	***Yes***	
	1TS	No	T3	Yes	0
			TCP4	Yes	
	2TS	***No***	TCP5	Yes	50
			RMP6	***No***	
	3TS	***Yes***	RMP6	No	50
			RMP7	***Yes***	
	4TS	***Yes***	RMP1	***Yes***	67
			RMP2	***Yes***	
			RMP3	***Yes***	
			RMP4	No	
			RMP5	No	
			TCP3	***Yes***	
	1C	***No***	PCEC3	Yes	50
			PCEC4	***No***	
	2C	No	PCEC5	Yes	0
	3C		N/A		
	1F	***Yes***	PCEC1	***Yes***	100
			PCEC2	***Yes***	
	2F	***Yes***	PCEC1	***Yes***	100
			PCEC2	***Yes***	
	1KS	***Yes***	T1	***Yes***	100
			T3	***Yes***	
			T4	***Yes***	
			T5	***Yes***	
	2KS	No	TCP1	Yes	0
			TCP3	Yes	

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Participant	HPS		PDC-HS (1.1)		% Match
BT1	1PS	***No***	1TCP	***No***	50
			TCP2	Yes	
	2PS	***No***	TCP1	***No***	50
			TCP2	Yes	
	3PS	***No***	TCP1	***No***	50
			TCP2	Yes	
	1TS	***No***	T3	***No***	100
			TCP4	***No***	
	2TS	***No***	TCP5	***No***	50
			RMP6	Yes	
	3TS	***Unsure***	RMP6	Yes	50
			RMP7	***No***	
	4TS	***Yes***	RMP1	No	50
			RMP2	No	
			RMP3	***Yes***	
			RMP4	***Yes***	
			RMP5	No	
			TCP3	***Yes***	
	1C	***No***	PCEC3	Yes	50
			PCEC4	***No***	
	2C	Yes	PCEC5	No	0
	3C		N/A		
	1F	***No***	PCEC1	Yes	50
			PCEC2	***No***	
	2F	***No***	PCEC1	Yes	50
			PCEC2	***No***	
	1KS	***No***	T1	Yes	50
			T3	***No***	
			T4	Yes	
			T5	***No***	
	2KS	***Yes***	TCP1	No	50
			TCP3	***Yes***	

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Participant	HPS		PDC-HS (1.1)		% Match
BT2	1PS	***No***	1TCP	Yes	50
			TCP2	***No***	
	2PS	***No***	TCP1	Yes	50
			TCP2	**No**	
	3PS	***Unsure***	TCP1	Yes	50
			TCP2	***No***	
	1TS	***Yes***	T3	No	50
			TCP4	**Yes**	
	2TS	***No***	TCP5	Yes	50
			RMP6	***No***	
	3TS	Yes	RMP6	No	0
			RMP7	Unsure	
	4TS	***Unsure***	RMP1	Yes	17
			RMP2	Yes	
			RMP3	***No***	
			RMP4	Yes	
			RMP5	Yes	
			TCP3	Yes	
	1C	***Yes***	PCEC3	***Yes***	50
			PCEC4	No	
	2C	No	PCEC5	Yes	0
	3C		N/A		
	1F	***Yes***	PCEC1	***Yes***	100
			PCEC2	***Yes***	
	2F	No	PCEC1	Yes	0
			PCEC2	Yes	
	1KS	***Yes***	T1	***Yes***	50
			T3	No	
			T4	No	
			T5	***Yes***	
	2KS	***Yes***	TCP1	***Yes***	
			TCP3	***Yes***	100

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Participant	HPS		PDC-HS (1.1)		% Match
BS1	1PS	***Yes***	1TCP	***Yes***	100
			TCP2	***Yes***	
	2PS	***Yes***	TCP1	***Yes***	100
			TCP2	***Yes***	
	3PS	***Yes***	TCP1	***Yes***	100
			TCP2	***Yes***	
	1TS	***Yes***	T3	***Yes***	50
			TCP4	No	
	2TS	***Yes***	TCP5	***Yes***	50
			RMP6	No	
	3TS	***Yes***	RMP6	No	50
			RMP7	***Yes***	
	4TS	***Unsure***	RMP1	Yes	17
			RMP2	Yes	
			RMP3	Yes	
			RMP4	Yes	
			RMP5	***No***	
			TCP3	*Yes*	
	1C	***Yes***	PCEC3	***Yes***	50
			PCEC4	No	
	2C	***Yes***	PCEC5	***Yes***	100
	3C		N/A	***Yes***	
	1F	***Yes***	PCEC1	***Yes***	100
			PCEC2	***Yes***	
	2F	***Yes***	PCEC1	***Yes***	100
			PCEC2	***Yes***	
	1KS	***Yes***	T1	***Yes***	100
			T3	***Yes***	
			T4	***Yes***	
			T5	***Yes***	
	2KS	***Yes***	TCP1	***Yes***	100
			TCP3	***Yes***	

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Participant	HPS		PDC-HS (1.1)		% Match
BS2	1PS	***Yes***	1TCP	***Yes***	100
			TCP2	***Yes***	
	2PS	***Yes***	TCP1	***Yes***	100
			TCP2	***Yes***	
	3PS	***Yes***	TCP1	***Yes***	100
			TCP2	***Yes***	
	1TS	***Yes***	T3	***Yes***	100
			TCP4	***Yes***	
	2TS	No	TCP5	Yes	0
			RMP6	Yes	
	3TS	***Yes***	RMP6	***Yes***	50
			RMP7	Unsure	
	4TS	***Yes***	RMP1	No	50
			RMP2	No	
			RMP3	***Yes***	
			RMP4	No	
			RMP5	***Yes***	
			TCP3	***Yes***	
	1C	***Yes***	PCEC3	***Yes***	100
			PCEC4	***Yes***	
	2C	***Yes***	PCEC5	***Yes***	100
	3C		N/A	***Yes***	
	1F	***Yes***	PCEC1	***Yes***	100
			PCEC2	***Yes***	
	2F	***Yes***	PCEC1	***Yes***	100
			PCEC2	***Yes***	
	1KS	***Yes***	T1	***Yes***	100
			T3	***Yes***	
			T4	***Yes***	
			T5	***Yes***	
	2KS	***Yes***	TCP1	***Yes***	100
			TCP3	***Yes***	

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