TOWARD A SYSTEMS ANALYSIS OF TREATMENT INTEGRITY

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This case study is a performance improvement project focusing on the organizational system and management practices in a center for children with autism. Staff interviews and a process improvement map were used to assess the organization and assist in identifying potential solutions. The analysis led to treatment integrity as the key outcome measure. The center’s administrative team decided to implement treatment delivery process changes to impact treatment integrity measures. This study measured data sheet changes and treatment implementation to determine the impact of process changes on treatment integrity. High levels of variability in treatment integrity across all teams were observed, and results suggest that a process change was not enough to increase treatment integrity. Further study is necessary to investigate measurement and impact of treatment integrity on desired outcomes for children with autism.
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CHAPTER 1

INTRODUCTION

Human services organizations face many challenges while being expected to effectively produce results for their targeted populations. No matter the type of organization (privately funded, nonprofit, and/or state-run program), the issues are very similar: tight budgets, limited support and resources, and staff quality and effectiveness. Although these problems do occur across all organizations, human services providers, such as schools, institutions, and specialized support centers, face a particularly difficult challenge of optimizing results (client progress), while having little control over annual budgets and overhead costs such as staffing and facilities. Owing to these limitations, maximizing the use of resources that such organizations control is very important. In the educational setting, two areas examined by behavior analysis have the potential to greatly affect results: treatment integrity and performance improvement.

In behavior analytic literature, much attention has been placed on the dependent variable and its accurate measurement, the importance of functional relationships between independent and dependent variables, and providing a clear description of the independent variable, as described by Johnston and Pennypacker in 1980:

The independent variable must be represented by some environmental event, the physical parameters of which are known, specified and controlled to the extent required. Such a clear description of the independent variable is essential if any factually accurate statement is to issue from the experimental effort. (p. 39)
However, having a clear description of the independent variable is not the same as assessing the accuracy, also known as *treatment integrity*, with which the independent variable is implemented. Treatment integrity has been defined as the degree to which treatment is delivered as intended (Yeaton & Sechrest, 1981). It is important to evaluate the treatment program as rigorously as the treatment results. Treatment integrity assessment provides a stronger case for the researcher to demonstrate the relationship between experimental procedures and results. Insuring integrity of the independent variable would require researchers to evaluate treatment applications for consistency. If the treatment integrity is low, it is difficult to say that results are directly tied to the procedure, at least as described by the researcher. This limits the knowledge of the functional relationship between the independent and dependent variables, and it becomes difficult to distinguish “between an ineffective treatment and an effective treatment implemented with poor integrity” (Gresham, Gansle, & Noell, 1993, p. 257).

Furthermore, cases that have not been evaluated for treatment integrity in the original application make it difficult to determine why results might differ in a replication study.

In the applied setting, treatment integrity is difficult to ensure. This may be due to the complexities of the natural environment or simply due to lack of emphasis on integrity by practitioners. In the last 20 years, there has been an increased emphasis on addressing treatment integrity by behavior analysts. Several researchers (Gresham, 1989; Noell, 1995; Noell et al., 2000; Sterling-Turner, 1999; Witt, Noell, LaFleur, & Mortenson, 1997) have studied ways to increase and/or maintain increases in treatment integrity, such as performance feedback, follow-up meetings, and direct and indirect
observation. In this research, it has been shown that implementing antecedent and consequence-based procedures contingent on treatment integrity measures can improve integrity measures.

In Noell et al. (2000), the authors targeted teachers’ implementation of a peer tutoring program at an elementary school. Researchers measured whether or not the teachers conducted the session, whether the teachers provided the correct activity for the session, whether the teachers graded the activity, and whether the teachers delivered coupons to students when appropriate. Using a multiple baseline design across teacher–student dyads, the authors saw increases in treatment integrity in two teachers using only a follow-up meeting and increases in treatment integrity for four out five teachers when performance feedback was implemented. Although increases in treatment integrity occurred, integrity measures varied from teacher to teacher in the performance feedback session. The authors also found that all students’ grades improved over baseline. Although treatment integrity varied and sometimes faltered, all five students continued to show improvement over baseline, and three of the five students maintained the higher performance level for several weeks following the study.

These results are representative of other studies in which antecedent and consequence variables were implemented. For example, Witt et al. (1997) evaluated the use of training and performance feedback with teachers to determine if there would be an increase in treatment integrity. They found that training procedures alone did not maintain the treatment integrity of the treatment program, but with daily performance feedback, all four teachers performed with high treatment integrity. Sterling-Turner,
Watson, and Moore (2002) studied the consultative relationship and treatment integrity. They used direct observation of the individual teachers’ implementation of treatment procedures, and they took data on student behaviors that they hypothesized would change as a result of treatment effectiveness. While didactic training was not effective in increasing accurate implementation of the treatment components, direct training (rehearsal and feedback) was effective in increasing treatment integrity to high levels. One out of the four students observed showed behavior changes that seemed to directly correlate to the higher levels of treatment integrity.

The results of a substantial body of research show that it is possible to change the level of treatment integrity with antecedent and consequent variables. A question raised throughout this literature is, What level of treatment integrity is necessary to ensure treatment results and produce desired outcomes? Detrich (1999) wrote, “One of the primary determinants of successful intervention programs for children with autism is the degree to which programs are implemented with precision and consistency; that is, fidelity” (p. 608). While it is true that with high treatment integrity, it is easier to determine that treatment results are functionally related to the treatment program, it still needs to be determined whether those results are desired outcomes, and just how much treatment integrity is necessary to produce those results.

Wilder, Atwell, and Wine (2006) assessed levels of treatment integrity (100%, 50%, and 0%) of a three-step prompting procedure and the effect on the dependent variable of compliance with instructions. For the purposes of this study, the accuracy of the three-step prompting procedure was not compromised, but the authors manipulated
how often the accurate procedure was used. Two instructional assistants were trained on how to conduct the three-step prompting procedure and worked with two students who were identified as likely to comply at low levels to three specific instructions. The study found that 100% integrity levels produced the highest level of responding from the students; 50% treatment integrity produced increases in compliance, although not nearly as high as 100% treatment integrity levels. The 0% treatment integrity level produced the lowest levels of compliance for both students, although performance of one of the students improved over baseline levels.

Peterson, Horner, and Wonderlich (1982) explored both temporal and physical components of the independent variable that could lead to inaccurate description or integrity problems. Temporal dimensions included overlap in independent variable components and/or the appropriateness of the time chosen to apply the independent variable. The physical dimension referred directly to the implementation of the independent variable as stated it would be implemented. Peterson et al. (1982) found that only 20% of 539 Journal of Applied Behavior Analysis (JABA) articles between 1968 and 1980 that included behavior interventions for children and adults contained treatment integrity measures. A follow-up article by Gresham et al. (1993) found that only 15% of 25 JABA articles from 1980 to 1990 reported measures of treatment integrity. Wheeler, Baggett, Fox, and Blevins (2006) reviewed intervention studies focusing on children with autism for independent variable definitions and assessment of treatment integrity. Between 1993 and 2003, nine journals and 60 articles were reviewed (36 from JABA), in which only 18% of articles both operationally defined the independent variable and
measured treatment integrity. Of the four studies published in *JABA* that included definitions and measurement of the independent variable, three measured treatment integrity throughout the entire intervention and focused on accuracy of the independent variable in an experimental manipulation.

Research has shown that high levels of treatment integrity are possible, but how can this be attained in applied therapeutic settings that are not participating in a research program? Wolery and Garfinkle (2002) suggested multiple ways of collecting treatment integrity data by having different tools for each component of the treatment program such as checklists for program completion by therapists, self-report from families, and direct observations for teaching practices. They also observed that published autism research is limited in reporting procedural fidelity measures, despite the importance of treatment integrity. It is possible that organizations providing treatment to children with autism are measuring treatment integrity within their systems and not publishing those data as it is just a part of their regular operating procedures. If so, much more treatment integrity data could be available to researchers, or to managers who might want to use it to analyze and improve their therapeutic procedures.

If therapists do not carry out prescribed therapy precisely, many factors could be responsible. One suggestion to assist in the assessment of factors impacting treatment integrity is to borrow staff management ideas from areas such as organizational behavior management (OBM; see Reid, 1998) or the broader human performance technology area. The International Society for Performance Improvement (n.d.), an association dedicated
to improving productivity and performance in the workplace, provides a description of performance improvement:

Performance improvement, also known as Human Performance Technology (HPT) is defined as a systematic approach to improving productivity and competence using a set of methods and procedures. A strategy for solving problems and for realizing opportunities related to the performance of people. It is a process of selection, analysis, design, development, implementation, and evaluation of programs to most cost-effectively influence human behavior and accomplishment. It is a systematic combination of three fundamental processes: performance analysis, cause analysis, and intervention selection, and can be applied to individuals, small groups, and large organizations. (para. 1)

OBM and HPT utilize tools that may help improve management processes that lead to improved treatment integrity within a human services organization. Two common tools include the behavior engineering model (BEM; Gilbert, 1978/1996) and process improvement (Rummler & Brache, 1995). The BEM is used to identify skills and environmental conditions necessary for the individual performer, and thus the whole organization, to perform successfully. The BEM provides an initial opportunity to view the organization from a systems perspective, taking into account the environmental influences to the organization, such as direction (e.g., mission statement, goals, prompts), resources (e.g., job procedures and processes), and contingencies (various consequences contingent on performance), as well as the supports in place that affect the individual performer’s behavior in the organization, such as knowledge (e.g., training systems), capacity (e.g., basic aptitudes of staff and their ability to handle workload), and personal motives (e.g., value of organizational reward to the performers). This model can help identify factors in the organization to change or bolster to improve employee performance. For example, using the model may reveal that more effective prompts are
needed for key behaviors to occur consistently or that training systems within the organization are currently inadequate.

Although the BEM is useful in identifying some organization-wide issues that may impact the individual performer, a more comprehensive systems view may be needed to examine core service processes and management processes across the organization. Rummler and Brache (1995) showed how understanding the organization as a system may help improve organizational functioning. One systems perspective focused on workflow. Rummler and Brache argued that a process-level analysis is important for understanding performance in organizations above the level of the job or individual performer. They described how work flows through organization-wide processes and illustrated techniques for analyzing and improving these processes. Process mapping was one such tool they described; in process mapping, work is analyzed into discrete steps completed by various performers. These steps are mapped in sequence to show the process in sufficient detail to spot areas that contribute to performance problems (referred to in process improvement jargon as process disconnects). For example, a process map might identify a redundant work step that slows the transit of work, or a step in which a lack of accurate information leads to quality errors transmitted to downstream performers.

These OBM and HPT tools can be applied in any organization to look for opportunities to improve performance. In human service organizations that deliver behavior analytic therapy to children with autism, therapeutic outcomes presumably depend to some degree on therapy being delivered as prescribed by therapists. This
organizational case study sought to analyze organizational factors related to treatment integrity in an autism clinic and to determine if changes in those organizational factors could lead to higher levels of treatment integrity. The results of this intervention will be discussed.
CHAPTER 2

METHOD

Employees and Setting

This study took place in a nonprofit private autism treatment center providing early intervention services to children with autism. The center was supported by a local church and was provided physical space contained within the church site, with a small donation of church funds to assist in running the center. At the time of the study, the center was one of two programs in the area dedicated to supporting students with autism and was the only program at the time to offer inclusion opportunities with a typically developing peer group (day care ages 3–5 years). The center’s program used an applied behavior analysis model with an emphasis on play and social skills development. There were seven private tuition clients with autism attending the center at the time of this study, all of whose programs were observed. Therapeutic programs were delivered using a one-to-one direct service model tailored to the individual developmental needs of the children.

The center utilized a traditional organizational management model employing a top-down hierarchy of management and staff. At the top of the organization was an administrator, who was assigned to oversee all financial and day-to-day organizational aspects of the center. This individual did not possess any specific knowledge of behavior analysis or programming skills for children and was an employee of the church.
Responsibilities of this position included payroll, staffing, supply management, and related administrative tasks. The next level in the hierarchy was a part-time consultant position. This position required board certification in behavior analysis (BCBA), and the consultant was responsible for all training and programming decisions. The consultant was available for weekly meetings, scheduled hours to observe programming directly, and as needed to directly interact with case managers and the supervisor to problem-solve concerns in programming decisions or implementation. The next position in the hierarchy was a program supervisor. This was a full-time position; the individual held a bachelor’s degree in behavior analysis and was responsible for providing direct support in the form of modeling programs, observing implementation, providing feedback, and insuring schedule maintenance throughout the day (breaks, coverage, etc.). The bottom level on the hierarchical ladder consisted of 11 direct service providers, called tutors. All tutors worked directly with the children, providing therapy, although seven of the tutors carried additional responsibilities of case management, in which they were assigned a specific child with responsibilities for data collection for that child, updating data sheets, and communicating changes in programming with other tutors. All tutors were part-time employees of the center, working a Monday/Wednesday or a Tuesday/Thursday schedule, plus attending the weekly meetings on Fridays. Most tutors were current or prior students in a behavior analysis program at a local state university.

Procedure

Nature of the problem. The BCBA consultant requested an organizational assessment of the center due to some ongoing concerns. Since the center program’s
inception less than 2 years before, there had been a steady increase in the number of children being supported, employees to support the program, and processes to ensure the continued programming throughout each child’s school day. The consultant identified several concerns about the organization, including discontent among the staff, inconsistent performance within and among the staff, and general inefficiency. The consultant believed it would be beneficial to have an outside assessment of the organization to determine the factors associated with these concerns and offer recommendations for potential solutions.

Assessment. The initial portion of the performance audit was conducted using a formal interview process with each employee of the center. The questions were the same for each staff member, although the order in which they were presented varied based on the individual interviewee’s responses to each previously asked question. All interviews lasted between 30 min and 1 hour in length and were conducted by the author and/or the author and supervising professor together over the course of 1 month. The types of questions proposed to the staff concerned their perceptions of the organizational environment of the center as well as their own individual performance. Questions related to the organizational environment concerned direction, resources, and consequences/feedback. Questions related to their own performance concerned personal knowledge, capacity, and personal motives (see Appendix A). All questions were designed to determine areas of weakness in the organization and identify concerns that had not been previously identified in the initial request for consultation. As the interviews were completed, the responses to each question were compiled in a table based on
Gilbert’s (1978/1996) BEM to assess how many different responses for each question existed and identify inconsistencies between the responses.

After organizing responses in a tabular format (see Appendix A), several organizational issues became clear due to repeated similar responses from individual interviewees. The first area identified was a need for clarification in job roles. Several staff members found it unclear where their role began and another’s ended. For example, several case managers expressed that they were responsible for making changes on data sheets and presenting updated data sheets to the supervisor for review, printing, and distribution. However, the supervisor expressed that the case manager’s responsibility was to make previously discussed changes and have data sheets printed and distributed to the team on Monday mornings. Another identified area of need was training. It was clear following interviews with all levels of staff that that there was no systematic training program in place, that training from employee to employee was inconsistent, and that there was no schedule for skill development training, and one staff member reported that training sessions were perceived as aversive in the past. All tutors indicated that there was not enough feedback on their performance and that the feedback they received was not always helpful in developing or increasing their skills.

Specific to the organizational environment, all staff identified at least one aspect of staffing as a weakness (enough staff, time management, recruiting, retention, opportunities for advancement, and salary). Communication in the center (tutor to tutor, weekly meeting structure, feedback, training, programming changes, scheduling, etc.) was also identified as needing improvement. Although consequences were not perceived
by staff as inappropriate in the organization, they were not perceived as motivators for staff performance either.

In conjunction with the performer-level analysis, it was necessary to look at the center’s mission and key results to understand the service priorities of the organization and to prioritize different aspects of staff performance. The first step was to identify the key customers of the organization. The key customers were determined to be the children with autism and the parents of these children, who paid their tuition and expected positive results. Thus client progress was a key result for the organization, which was in direct alignment with the center’s mission of providing quality therapy to children with autism. In turn, client progress can be considered analogous to the financial bottom-line measure of net profit for a profit-making venture. Given that client progress was determined to be the key outcome, it was necessary to look at those aspects of the organizational system that most directly influence client progress. In essence, what processes are involved in bottom-line results? On the basis of the analysis of key clients and outcomes, the therapy delivered to the children with autism at the center was identified as the process for focus; that is, therapy delivery was identified as a core process to the organizational system that may have the greatest potential impact on the key result of client progress. If therapy resulting in client progress is not carried out effectively, all other organizational problems become secondary. During the interview process, reports indicated that therapy changes or adjustments were not always implemented; therefore treatment integrity was considered a key feature of the therapy delivery process.
Process map. A process map was developed to describe the major steps in the
delivery of therapy (see Figure A.1). This map was created based on information
gathered from employees at all levels in the organization during the interview process.
The process map was then overlaid onto a weekly calendar to show where each step in
the process occurred during the 7-day week (see Appendix A). The process was cyclical,
and completion of one step always led to the next step in the process. There was no final
step in the process that would indicate termination of the process; each step in turn led to
another and continued the cycle. For discussion purposes, we will start with the
beginning of the work week. From Monday through Thursday, tutors were responsible
for implementation of and data collection on therapeutic programming, while case
managers were responsible for implementation, data collection, and identification of any
changes in programming. The supervisor was responsible for observing tutors and case
managers implementing the therapeutic programming and for providing feedback as often
as possible. The consultant was also responsible for observation and feedback functions
as well as addressing behavioral concerns regarding clients’ programming with the case
managers. On Fridays, the weekly meeting was held off-site, without the children present,
to discuss the implementation of therapy for the previous week, make therapy decisions,
and make changes to programs. Tutors, case managers, the supervisor, and the consultant
all participated in this process, which was facilitated by the consultant. During the
meeting, each child’s data were presented by his or her case manager, issues were
discussed, and feedback from the entire team occurred, resulting in a final decision on the
next week’s programming implementation. Following each weekly team meeting, case
managers were required to make changes to the data sheets for each student’s
programming to reflect the program modifications, and these data sheet changes were to
be available for the tutors who worked with the clients on Monday morning. Following
this step in the process, the entire therapy delivery process began again.

The therapy delivery process map was analyzed to determine gaps or disconnects
in the process that could potentially impact the integrity with which therapy was
delivered. Disconnects were summarized into three different categories: meeting
decisions/changes, data sheets as job aids, and implementation of therapy changes.

Performance problems and solutions. Following the assessment, a meeting was
held with the consultant and supervisor to discuss the assessment and how it might be
used to improve treatment integrity, to present the therapy process map, and to explain
the three categories of disconnects identified in the current process. A description of the
disconnects discussed at the meeting follows:

1. Meeting decisions/programming changes
   a. The lag time from the decisions made during meetings to the
      implementation of the changes (Friday to Monday/Tuesday) was too
      extended a period. Tutors could forget to change therapy, as prescribed on
      Friday.
   b. Formal descriptions of programming changes made in the weekly
      meetings were not available to tutors prior to required implementation of
      therapy changes.
c. Although changes were discussed at the meeting, there was no opportunity to demonstrate or model the changes in the meeting format, leaving the tutors to interpret the verbal descriptions of the changes. This may have increased the chance of errors in the therapy.

2. Data sheets as job aids
   
a. Although some data sheets provided cues or notes about how to carry out the programming for each child, none indicated which sections had been updated for the current week’s sessions.
   
b. There was no formal system to ensure that data sheets were updated, which sometimes resulted in data sheets being unchanged, incorrectly changed, or late.

3. Implementation of therapy changes
   
a. It was possible to carry out therapy sessions without implementing some or any of the previously decided programming changes.
   
b. Changes made to programming could be implemented incorrectly due to the lag time and tutors not having practiced the new procedure.
   
c. Tutors’ incorrect implementation of the program changes could continue unnoticed due to an inconsistent observation schedule by supervisors. Having implemented a program incorrectly may make it more difficult for tutors to make changes after receiving corrective feedback.

*Intervention.* After reviewing the identified disconnects and the corresponding suggestions, the center’s consultant and supervisor expressed concerns with following
through on several of the proposed changes that included additional financial or staffing
resources. For example, additional supervision would have been helpful but would have
required additional personnel. They stated that they would like to start with a change that
had the lowest impact on resources that could potentially increase treatment integrity.
After reviewing the options, they agreed to make changes to the weekly meeting. They
believed that this change would be easily implemented since the weekly meetings were
under their control, were already a part of the therapy delivery process, and had a high
potential impact on treatment integrity. They agreed with the assessment results relating
to meeting decisions/programming changes and believed that by changing the meeting
format, they could address the concerns. Owing to the timing in the school year when this
decision was made, the center staff determined it would be best to continue their current
meeting format until the end of the school year and make the changes at the beginning of
the summer program.

The new meeting format required each student’s weekly meeting to be held
separately and to be conducted on-site in the middle of the work week. This would
decrease the lag time from meeting decisions to implementation of the programming and
allowed some tutors to go directly from the weekly team meeting to conduct a therapy
session with the child. Changes could be immediately implemented, and the consultant
would be available to answer questions and provide feedback. Tutors who did not
conduct a session immediately would have to wait no more than 24 hours to conduct their
next sessions. Another change to the meeting format included the child attending his or
her own team meeting. This change allowed the tutors to demonstrate the current
procedures, the team to discuss/propose changes, and each tutor to practice new procedures at the meeting. This change permitted feedback and error correction to be given immediately. The final change to the meeting format was that the consultant was the designated note taker for the team meeting. All programming decisions were documented by the consultant and distributed to the tutors immediately following the meeting. The notes for all students were written on the same form and in the same format and distributed to all tutors at the same time. This change was an attempt to make the programming decisions/changes more salient than the ongoing programs with which tutors were already familiar and more practiced.

Design

The study utilized an AB design with 6–8 weeks of baseline measures and 5–6 weeks of intervention data, depending on the particular staff member. Thus this study qualifies as an empirical case study. With the weekly meeting structure as the independent variable, two dependent variables were measured: changes to data sheets based on meeting decisions and carrying out therapy programs according to program changes decided in the meeting. The data sheet changes indicated that changes to therapy programs were being noted on the tools that tutors would use in therapy sessions, and this might serve as a job aid to help remind tutors of new therapeutic procedures. Changes in the actual therapy delivered is a measure of treatment integrity: the correspondence between therapy as delivered and therapy as prescribed. If the revised weekly meeting structure was more effective in communicating therapy changes, one or both of these measures should improve during intervention.
Dependent Variables

Data sheet changes. Data were collected on the correspondence between meeting decisions/notes and changes on the data sheets available for therapy sessions. Each Monday, the author obtained a copy of each client’s weekly data sheet. Each change required on the data sheet would be mentioned in the weekly meeting notes. Then the author used the weekly meeting notes and the previous week’s data sheet to determine if the weekly decisions mentioned in the notes had been integrated into the current week’s data sheet. The criterion for scoring a change was that there was (by insertion or omission) a difference in the specific program from the week before. During baseline, there were six clients, requiring six case managers to attend meetings and follow up with data sheet changes. Each data sheet was scored based on the number of changes made on the data sheets as a percentage of the number of changes identified in the weekly meeting notes. The changes on the data sheets were scored as plus or minus, based on whether they were completed or not completed in the judgment of the author. For example, if the only changes listed in the meeting notes stated, “In the matching program, remove the target ‘car’ and add the target ‘bus,’” then the author would check whether the data sheet was corrected so that “car” was deleted and “bus” was added. This example includes two data sheet changes to be made by the case manager; if the case manager added “bus” but did not remove “car,” then in this example, the score would be 50% of data sheet changes made. Any week in which a case manager did not make an updated data sheet available by the first session following the weekly meeting was scored as 0%, unless weekly meeting notes indicated that no changes were necessary.
Treatment integrity. To assess the impact of the meeting style changes on treatment integrity, data were collected on the implementation of changes identified in weekly meetings. The results of treatment integrity data during baseline were compared to results following the new meeting procedures. Treatment integrity measures were based on assessing whether implementation of a meeting decision was made on the first trial of the program. This measure did not evaluate quality of programming, but whether the programming change identified in the meeting was implemented. Every week, the consultant would identify in the meeting notes specific programming changes to be implemented in the sessions following the meeting. When the tutor was observed implementing those programs, the author observed the first trial and scored if the programming change was implemented. Scores were calculated by dividing the number of correct trials into the total number of trials attempted. For example, if eight changes were identified in the meeting notes for four programs, the author evaluated the first trial of those four programs. If the tutor implemented the changes in three out of the four programs, then the tutor would score 75% for that session. To determine the team score, the individual scores for each week were averaged together. Three children’s programs were observed throughout the entire study, and a total of five tutors participated in the three children’s programs.

Interobserver agreement. A total of 73 sessions were conducted throughout this research project. To ensure reliability of the treatment integrity data, a second researcher observed a portion of the sessions along with the author. Interobserver agreement was calculated by scoring each reliability session (agreements/agreements + disagreements).
and then averaging the scores of these sessions. Of the 17 reliability sessions (23% of total sessions), an overall score of 87% reliability was calculated.
CHAPTER 3

RESULTS

Data Sheet Changes

Case Manager 1 participated throughout the entire study. During baseline, her data sheet changes were inconsistent (range 0% to 100%), with an average of 49% over 8 weeks (see Figure 1). During intervention, she made an average of 43% (range 0% to 100%) of data sheet changes over 4 weeks. During baseline, Case Manager 2’s data sheet updates ranged from 0% to 71% over the course of 7 weeks and averaged 30%. This case manager did not participate during intervention. Case Manager 3 had a range of 0% to 88% for an average of 54% over 6 weeks of baseline. Case Manager 3 participated for 2 weeks during intervention and made 100% of data sheet changes for both weeks. Case Manager 4 participated throughout the entire study and averaged 68%, with a range of 50% to 100% over 6 weeks of baseline. During intervention, Case Manager 4 averaged 56%, with a range of 30% to 100% over 5 weeks. Case Manager 5 participated only in baseline and had an average of 89%, with a range of 67% to 100%, over 6 weeks. Case Manager 6 also participated throughout the study; during baseline, this case manager had an average of 90% data sheet changes completed, ranging from 50% to 100% over 8 weeks. During intervention, Case Manager 6 participated for 5 weeks and had an average of 72% of data sheet changes made, with a range of 20% to 100%.
Figure 1. Percentage of data sheet changes made each week by case manager. Calculated by dividing the number of changes made by the number of identified changes in weekly meeting. Weeks without data points indicate that no programming changes were necessary or that the case manager was not responsible for the data sheet changes.

There is variability in the number of weeks data sheet changes were evaluated for each case manager due to vacation schedules or shifting responsibilities for certain weeks (e.g., the supervisor took responsibility for data sheet changes). When data sheet changes were evaluated across all six clients, the average over the course of 8 weeks of baseline was 63% of data sheet changes corresponding to meeting decisions. In comparison, during 5 weeks of intervention (i.e., following the revision of meeting procedures) with four clients, the team averaged 65% of data sheet changes made per week. Of the four case managers who participated in both phases of this study, three case managers’ data sheet change averages decreased under the new meeting style, and one (Case Manager 3) improved to 100%. The process change did not seem to have an effect on making data sheet changes.
Treatment Integrity

*Client 1.* During baseline, the team averaged 62% of programming decisions implemented, as compared to an average of 59% of programming decisions implemented during intervention (see Figure 2). Performance across weeks was variable. Tutor 9, the case manager, produced high integrity scores often in baseline but showed a decreasing trend across the intervention phase. Baseline includes an observation date that had 0% meeting decisions implemented. On this date (May 5), the case manager did not provide an updated data sheet, and the two tutors followed the previous week’s data sheet and did not implement the most recent meeting note decisions. Owing to the variability with

![Figure 2](image-url)

*Figure 2.* Weekly team average of treatment integrity and breakout of individual scores for each week: Client 1. Client 1 had minimal programming changes made in weekly meetings during the intervention phase.
Figure 3. Weekly team average of treatment integrity and breakout of individual scores for each week: Client 2. Client 2 had minimal programming changes during the baseline phase.

which staff members were observed week to week, the data were also examined with the case manager removed to determine if the individual responsible for participating in the programming decisions and making the data sheet changes would make an impact on the team’s implementation of the programming decisions. For Client 1, this assessment resulted in a lower overall average implementation score during baseline conditions (52%), while in intervention, it produced a slightly higher average of 68%.

Client 2. During baseline, Client 2’s team implemented 31% of final meeting decisions on their first trial (see Figure 3). Because there were few changes in this client’s program from week to week, only 3 weeks of data were collected during baseline. During
intervention, an increase in the number of programming changes was observed, and over 5 weeks of implementation, the team averaged 57% of programming changes implemented. During baseline, few tutors worked with this client, so the implementation score without the case manager was either nonexistent or the score of a single tutor. Three tutors (Tutors 4, 9, and 10) showed 100% integrity scores for at least one session during intervention, whereas none had shown a perfect score in baseline.

Client 3. The team implementation programming during baseline for Client 3 averaged 83% of meeting decisions implemented (see Figure 4). The number of tutors who worked with this client varied from week to week, ranging from one to four, and the case manager was not observed each week with the client. When the case manager was observed, the team’s scores were compared with and without case manager.
implementation scores, and there was little change (80% without the case manager) in the overall team implementation of meeting decisions. During intervention, 82% integrity implementation occurred across the entire team, while a slight increase to 85% was seen when the case manager’s data were not considered. It is interesting to note that the case manager produced the lowest integrity score of anyone working with this client during the intervention. This client’s team produced the highest amount of treatment integrity in implementing the meeting note decisions as well as the least amount of variability among the three clients.

Social Validity

Meeting procedures were changed in an attempt to improve treatment provided to the children with autism in the center, but if staff were not content with the new meeting style, additional performance management issues might arise. To assess staff reactions to the new meeting format, a five-question anonymous survey was administered to staff. Six staff returned the survey, and overall, staff responded positively to the new meeting (see Appendix B). When asked, “How do you feel about the current meeting style compared to the previous meeting style?,” three staff members marked “much more preferred,” one staff member had “no preference,” one staff member marked that the new procedures were “less preferred,” and one staff member did not answer the question. A separate survey was developed to examine the consultant’s reaction to the new meeting format. These results were generally positive, and she marked that she preferred the new meeting style over the old meeting style. When asked how she believed her staff felt about the change, she believed they had “no preference” between the old and new systems. Staff
were provided with an opportunity to provide written comments at the end of the survey, and although answers to the questions were generally positive, all staff provided at least one written comment that identified a weakness in the new meeting procedures. The most common concern expressed was inconsistency of staff attendance at meetings. The consultant was also provided an opportunity to give written feedback and did give comments, although she identified only positive aspects of the new system.

In summary, treatment integrity for two clients was erratic; only for Client 3 was integrity somewhat less variable, with frequent scores of 100%. After implementing the changes to the meeting format, none of the three programs monitored throughout the study showed significant improvement in treatment integrity.
CHAPTER 4

DISCUSSION

Treatment integrity continues to be an important topic in the field of autism therapy. This study yielded highly variable integrity data, as measured by proper changes to data sheets and correct therapy delivery. The intervention examined in this case (changes to therapy planning meetings) was not sufficient to improve or stabilize treatment integrity. Although the new meeting format was designed to address several gaps in organizational processes identified by the analysis, it was also the lowest cost, easiest to implement option chosen by the upper management of the center. Although previous research suggests that increasing treatment integrity may require antecedent and/or consequence manipulations as components of the intervention, several factors affected the center’s decision to implement a process-only change. Intervention options continued to be limited by resources of consultant’s time to train and provide direct feedback to staff outside of the weekly meeting setting due to the limited hours that could be afforded by the center. This made it difficult to include additional feedback and meaningful consequences (e.g., praise from the BCBA consultant or contingent monetary bonuses) as part of the recommended intervention. Additionally, as baseline data were collected, the center was researching opportunities to replicate another teaching model. Thus the amount of energy the center management was able to commit to intervention
was severely limited, and the team decided to try a low-cost and easy-to-implement solution.

The procedure used to identify the primary dependent variable for this study (treatment integrity) was straightforward: conduct interviews, identify areas of need, and map out the organization’s key inputs/outputs to determine on which aspect of the organization to focus. Measurement of the dependent variable, however, was not so straightforward. Determining the aspects of treatment implementation to measure across up to six simultaneously running client programs was a difficult task. In terms of process, it would be important to determine the effectiveness of the weekly meeting in which treatment plan decisions were made. Once that was determined, it became necessary to observe treatment implementation following the weekly meetings and wrestle with the logistical issue of how to observe six clients’ tutors who were implementing treatment simultaneously. Thus weekly sampling of each client’s weekly programming changes was determined to be the system in which data collection would occur. This has its inherent drawbacks in the amount of data and variations in which tutors were observed week to week. Because it was not possible to observe each tutor implementing each client’s programming during baseline (six clients), it became necessary to sample the tutors implementing programming. It may have been better to identify one or two clients from the beginning to follow through the entire study and capture all programming changes being implemented with a permanent second researcher.

The manner in which treatment integrity was observed and measured for this study was from a systems perspective. This meant treatment was evaluated for
implementation of the programming decisions, as determined in the weekly meeting. At the process level, it was important to identify the effectiveness of the weekly meeting as there were resources of time and monetary compensation being expended to maintain the meeting style without knowledge of the value postmeeting. As this study shows, there is a question as to the effectiveness of the weekly meeting as a communication style with team members, both during baseline and intervention. With the variability in implementing program decisions even when data sheets held cues to identify the programming changes, it is unclear what it would take to have an effective communication system that would ensure implementation of meeting decisions. Surely some form of feedback to tutors regarding treatment integrity would be the most logical addition to the meeting style changes. An even more powerful variable might be to include treatment integrity measures as one of the measures by which employees would be evaluated for raises and promotions. Additional manipulations that could be examined might include (a) no weekly meeting, with all in vivo training; (b) an alternate weekly meeting format; (c) daily team meetings; and (d) consistently having data sheets as salient job aids following meetings. Additional dependent variables might include finer grained measures of the quality of therapy delivered.

No matter what level of treatment integrity is to be targeted as an area of need, there still remains an overlying problem of measuring the impact on the ultimate outcome indicator: client progress. Since children with autism progress at different rates and there are no commonly accepted benchmarks for acceptable performance, it is difficult to determine the effect of treatment integrity on child progress. From a performance
improvement perspective, this is a difficult issue with which to work. When dealing with a profit-making organization, any determined key output would be measurable, and the ability to set a benchmark or goal is relatively easily accomplished (e.g., revenue, sales, return on investment, net profit, and share values might be common financial outcomes used to determine the success of the enterprise). If an independent variable is added to the organization (e.g., a new training program), the corporation can identify measures that reflect the impact of that variable. Additionally, companies can set goals for any of these measures based on past performance measures or competing companies’ performance and act accordingly when goals are achieved or missed. If goals are achieved, the company may retain or expand the program; if goals are not met, programs may be cut, additional programs may be added, goals may be lowered for the next year, and so on.

When working with children with autism, it is difficult to identify appropriate progress goals that could be used as outcome measures due to the variability in progress from one skill to the next as well as rate of overall progress. Though there is not a consensus at this time among practitioners in the autism therapy field as to which measures or benchmarks to use, some studies have attempted to tackle this difficult subject. Researchers such as McGee, Feldman, and Morrier (1997), Meyer and Janney (1989), and Wolery and Garfinkle (2002) have suggested measures that should be included to determine meaningful outcomes. Without such outcome measures in place, it is impossible to determine how much treatment integrity is truly necessary, how valuable increased treatment integrity is, and therefore what organizational changes may be necessary to produce that level of integrity.
Although, at present, there is no agreed-on way to measure what level of treatment integrity is necessary to increase child progress, it does not mean that there should not be a standard to meet when presenting treatment to a child with autism. It stands to reason that ensuring progress happens at the best rate possible requires that treatment plans be implemented with consistency (assuming the treatment being provided is the correct treatment plan) within and between tutors on a child’s therapy team. Inconsistency may slow the progress of a child’s learning, unless we consider the possibility that changes to treatment plans are often flawed, or that tutors might discover more effective therapeutic techniques unrecognized by those in the weekly meetings. These latter possibilities, were they true, would suggest that the means to more effective therapy might be inhibited by weekly meetings with upper management, or that changes to treatment plans should be based on an entirely different process within the organization. Again, only outcome data on client progress could tell whether changes to treatment plans lead to better outcomes even when they are perfectly implemented. Future research on process-level treatment integrity in autism should attempt to identify measures of child progress as a dependent variable by which to determine therapeutic, and thus organizational, success.
APPENDIX A

INTERVIEW QUESTIONS, INTERVIEWEE SUMMARY,
AND THERAPY DELIVERY PROCESS MAP
Staff Interview Questions

Background

1. How long have you worked here?
2. What is your job?

Motivation

1. What expectations did you have about working here? Are they being met?
2. Is your workload acceptable?
3. What motivates you to work here? What’s valuable to you? What would you like to have or be able to do that would make working here more productive and enjoyable? (How important is the money vs. the experience?)
4. What is the most frustrating/demotivating thing about working here?
5. How are you treated by the consultant and supervisor? Do you have any interactions with the top administrators?
6. What changes would you suggest?

Resources

1. What resources do you need (stuff or access to people) to do your job? Are you getting these in a timely manner?
2. How well does the staff scheduling system work?
3. What changes would you suggest?
Direction

1. *Communication/information flow:* Do you get critical information (e.g., policies, procedures, scheduling, program changes, etc.) when you need it?

2. Are there clear policies and procedures? What needs to be put into policy?

3. What modes of communication are used? Meetings productive or not? What other means could be used to communicate?

4. How often do you get feedback on your performance? How often do you need it?

Knowledge and Skills

1. Is the training for tutors appropriate and timely?

2. Any changes you would make to the training?

Other

1. Anything else that could be done to help you do your job better?
Interview Summary

<table>
<thead>
<tr>
<th>Interviewee</th>
<th>Performance problems</th>
<th>Direction, Information, and FB</th>
<th>Resources</th>
<th>Contingencies and motivation</th>
<th>Knowledge and training</th>
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<tbody>
<tr>
<td>Consultant/supervisor</td>
<td>Programs not being implemented quickly or properly.</td>
<td>Info may not be getting from F meetings to staff next week.</td>
<td>Administrative resources stretched thin—supervisor is both office mgr and training person, and sub to cover when short-staffed. Could use admin help here (maybe volunteer could help with paperwork).</td>
<td>At first, consultant and supervisor noticed that staff don’t like meetings—why? Too long? No perceived value?</td>
<td>Like to change training to tiered competency-based levels. Maybe tie in to promotions since no standard for promotion. Training sometimes slow cause of supervisor’s time.</td>
<td>Supervisor sounds overcapacity here—impact on training, etc.</td>
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Consultant/supervisor—Programs not being implemented quickly or properly. Not enough administrative resources. Staffing short-handed.

At first, consultant and supervisor noticed that staff don’t like meetings—why? Too long? No perceived value?

Like to change training to tiered competency-based levels. Maybe tie in to promotions since no standard for promotion. Training sometimes slow cause of supervisor’s time.

Capacity

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Interview Summary (continued).

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<td>Data mgr, since May 2000</td>
<td>–Her role to offload work from CMs—she monitors data every day and gives FB sheets to CMs with changes. Value-added?? But she likes it! –Also reports implementation failures/delays. –Need to increase number of programs and correspondence bw program and data needs to be high. Should do everything on sheet—not doing data sheet. What is mechanism for getting tutors to do whole sheet?</td>
<td>–Role clarity—job responsibilities –Info from F to Monday getting dropped—maybe meet Monday? –Time before 9 A.M.—maybe tutors and CMs not know supposed to look over program changes? –C provides FB to CMs—she thinks it works well. But no FB on program/data correspondence! –Each data sheet looks different—stimulus confusion?</td>
<td>–Could use more volunteers—maybe practicum as extra people –What is the system for getting materials and resources??</td>
<td>–Pay up to $13/hour. Not clear what criteria tied to pay increases, or promotions—that’s demotivating. –Benefits of working there: Supervised by BCBA, mult kids, less driving, getting to manage</td>
<td>–Supervisor’s time constraints are causing delays. –Some training things need to be checked in an ongoing fashion, rather than just once. –No systematic way at present of telling CMs what to do—need to know Excel, celeration chart, graphing data, how to pick targets. C doing some training now.</td>
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| T & CM, August 2002 (only 30-min interview!) | −Data sheet changes—communication not clear who supposed to do
−Role confusion—what supposed to do as CM?
What are roles of supervisor and data manager?
−Would like more FB—no system for regular FB. She said data manager started giving FB 2 weeks ago. | −Like the community and experience, and research opps, likes working there
−CM is lot of work! Maybe easier with practice | −Like for consultant to be the one to give FB regarding skills.
−Difficulty scheduling trainers for observation in training |

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<td>CM, August 2002, but had worked there before as a zone manager</td>
<td>–Not happy with supervisor’s roles. –Feels like not trusted—data manager’s role as data manager took over data analysis, so J feels why graph? Why C doing this when Jane knows data best? Redundant. Questions value added of data manager’s job. –She’s not in zone (1 on 1 only), not aware of structure of programs in zones</td>
<td>She has sent revised data sheets, but there was confusion over whose job it was to save and print out—supervisor didn’t do it sometimes –Comm between staff and supervisors not good. Staff meetings not addressing program procedures. She would like to discuss with consultant, not data manager –She would like more FB posttraining on her performance! –Program details are in the book, but doesn’t go to it to look it up. (Where should info on program changes be?)</td>
<td>Access to materials—have to buy timers and donate other stuff but it gets taken. She has asked for things but too late in responding (supervisor or administrator?)</td>
<td>–Wants to learn more from consultant, but not learning enough about administrative side (consultant’s role) –Vacation time at Xmas important—if doesn’t get it, may leave.</td>
<td>–No training for case manager (training checklist is for tutors). Need training on where to find graphs on computer. –Another checklist for CMs—graphs, how book organized, who responsible for materials? –FB on training very slow—took 3 weeks. Several people handed off parts of it.</td>
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<td>CM, since June (update graphs weekly, data sheets)</td>
<td>–Not clear what benefit she gets from data manager’s role (and data manager gets more money) –Zones so short (15 min), not enough time to make impact, especially for lower functioning kids.</td>
<td>–Meetings are long, useful if you take notes. Wait until Friday to change procedures –Maybe problems cause 4 work with Gp A kids and 4 work with Gp B kids –Like more FB on goals and targets in language arts and 1 to 2 zones.</td>
<td>–Access to consultant and supervisor pretty good –Getting materials is difficult, need a procedure</td>
<td>–Opp to work with consultant and get FB important –More work than expected it to be –Pay a factor affecting whether stay there. Access to raises an issue</td>
<td>–More standardized procedures and training. Supervisor overloaded—another supervisor might be needed (data manager take on?) –Training on how to be effective in zones, especially 1 to 2. Sometimes not clear what supposed to be doing, like in play zone –Additional/ongoing training: Consultant observes and gives feedback</td>
<td>Need more staff to do bathroom help. Short staff takes supervisor away from her duties. (Can get more UNT volunteers?)</td>
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<td>CM, September</td>
<td>–Standardizing data sheets—working on that now</td>
<td>–If in 1 to 2 and have question, not sure what to do</td>
<td>Doesn’t know procedure for getting materials!</td>
<td>Experience is great, supervision, research opps, interaction with peers.</td>
<td>No training for CMs</td>
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<td>–Organization in the morning, at 8:45, who gets data sheets ready; 15 mins not enough time to get set up, unless supervisors got everything ready</td>
<td>–Can get info on kids from books, but not sure that actually looking at books</td>
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<td>–For other people, low pay may be a problem</td>
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<td>–Organization of room and noise level not good.</td>
<td>–Data sheets trying to be job aids now too, with Friday changes—probably need separate job aid</td>
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<td>–Dividers tip easily—safety issue</td>
<td>–Need job description of CM! Could use packet with examples</td>
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<td>–Suggested alternate meeting structure, like everyone stay 1 hour at beginning of week and see whether program changes implemented</td>
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<td>–Like more FB, especially for beginners. Consultant gives best FB. Like at least twice a week in each zone.</td>
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<td>CM (joint with another CM)</td>
<td>– Note: said hired a permanent sub today (11/1/02)! (Solve some problems) – Data manager’s appointments not working for her, rather find time during the day to talk to cam or supervisor</td>
<td>– Problem getting critical info; 1 week lag. – Not clear what supposed to be doing during the 1 hour outside, could break up into tasks daily, weekly, monthly. – Meetings—B Group people have to stay but A Group leaves after done; she might be more interested if worked with kids from both groups. Unclear what final decision is in meeting! End up putting program info on data sheet when should be on goal sheets in book but that in office and not updated enough. – Gets FB from data manager on program, not a lot on her performance Prefer to be observed by consultant, FB on data and paperwork from supervisors</td>
<td>CM needs computer—only one working and supervisor on that!</td>
<td>– Expectations being met, learning experience is great – May leave for more money, hope to stay a year</td>
<td>No training for CM—Excel, graphing—need more intensive training, not just offering help</td>
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</table>
| Undergraduate tutor | –Rationale for why and what steps not always clear to her  
–Likes FB she getting now! | –No real problems  
–Likes to have one person on call to help out. | –9 out of 10 for expectations being met.  
–Experience more important than money | Training done by four people! Little confusing—better if got FB from just one or two during training | Overloaded on data sheets—like 10 data sheets too much to score |
| Used for work there for 2 years | –Changes in programming not getting implemented is a problem! (Future: Is this going to be a high-turnover organization, or can they should they try to keep people?)  
–What is recruiting strategy?  
–Competition from other places may pull people away.  
–What is succession plan for each position (including consultant)? | –Communication breakdowns area problem  
–Needed FB: For tutors, need observation and FB daily (trainer).  
For CMs: FB on curric dev from consultant or BCBA, data analysis, and making data-based decisions. Supervisors: Need FB from consultant  
–Need to clarify supervisor role | No system for getting resources | –Promotions may not be purely skill-related, should be though  
–Pay lousy, but trade-off for experience. Also opp for administration may be important |

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| CM, August 2002 | –Unclear as to necessity of data manager’s role  
–Meetings are too long and inefficient  
–Would like to see feedback by consultant or supervisor on case manager skills, not tutor skills | –Unclear of how to get info on kids’ programs (outside of meetings)  
–Has only received feedback one time, and it was on tutor skills  
–Feedback sheets are redundant  
–Unsure of benefit of case mgr meetings | –Materials missing or unable to get unless done on own  
–Break schedule is chaotic | –Expectations: working with other case managers, new experience, supervision of case manager skills  
–Are expectations being met? NO, feels untrusted with case disorganization in general | –No training has been received, felt “thrown in”  
–Walked through programs by non case manager (tutor)  
–Training (ideal)—case managers train their tutors on their programs  
–Training (2nd choice)—case mgers train supervisor on their kids’ program, who in turn trains all staff |
## Interview Summary (continued).

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<td>CM undergrad, August 2002</td>
<td>–Initial transition to new data sheets each week is difficult, suggests that maybe they could be ready on Friday so that what they talk about in the meeting is how to walk through the programs and changes to the program &lt;br&gt;–Unsure of what progress kids have made from 1 on 1 session to the next &lt;br&gt;–Since graphs are not updated daily, suggests working daily graphs updated by each therapist &lt;br&gt;–Would like to see weekly feedback</td>
<td>–Never received a schedule for program review meetings, only had 1 week notice to prepare, although he knows schedule existed for more than a month &lt;br&gt;–Meeting information is lost between Friday and Monday &lt;br&gt;–Has received a little feedback from data manager &lt;br&gt;–Never has received feedback from supervisor or consultant &lt;br&gt;–Never has received feedback in 1 on 2 room</td>
<td>–Essential materials missing &lt;br&gt;–Has to acquire anything for programs on own &lt;br&gt;–Need kids’ toys &lt;br&gt;–Scheduling is inconsistent; maybe there could be a backup plan for when people are sick? (This may be fixed based on permanent sub)</td>
<td>Unannounced observation on Monday morning with new data sheet was found to be aversive and not representative of skills</td>
<td>–Would like training in naturalistic/social teaching &lt;br&gt;–Not enough case manager training, was left to find out on own how to do the job &lt;br&gt;–Would like to see data being taken on staff in regards to working with the kids</td>
<td>–Would like to see weekly feedback</td>
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Figure A.1. Treatment delivery process map.
APPENDIX B

SOCIAL VALIDITY SURVEY QUESTIONS

AND RESULTS
Staff Survey-Results

1. How do you feel about the current meeting style compared to the previous meeting style?
   - 3 Much more preferred
   - 2 More preferred
   - 1 No preference
   - 1 Less preferred
   - 1 Much less preferred
   - 1 Not comparable

   Evaluate the effectiveness of the current meeting style compared to the previous meeting style.
   2. Much more effective
   2. More effective
   1. Same level of effectiveness
   1. Less effective
   1. Much less effective
   1. Not comparable

2. How do you believe other staff feel about the previous meeting style compared to the previous meeting style?
   - 4 Much more preferred
   - 1 More preferred
   - 1 No preference
   - 1 Less preferred
   - 1 Much less preferred
   - 1 Not comparable

3. Would you recommend this meeting format again in this environment?
   - 5 Yes, try this format again
   - 1 No, try a different format
   - 1 No, do not conduct meetings

4. Do you feel the current meeting style had a greater impact on the children's progress than the previous meeting style?
   - 3 Yes
   - 2 No
   - 2 No difference

Comments
1. Current Meeting Style is more effective for the child but less effective for staff issues
2. Find a way to cover both staff and child.
3. Like that the child is present and the opportunity to practice and ask questions.
4. Feel that there is less employee discussion/input.
   In current meeting style the goal was to have team members present, felt that rarely was entire team present.
5. Had no exposure to program development/discussion.
6. Like the smaller group in meeting, that child was present, people were focused on meeting and changes being made.
7. More effective way to update data sheet and brainstorm about problems.
If someone was not available to cover sometimes not everyone on team could attend meeting

10 Didn't like that datasheets had to be ready next morning no matter what

11 Since the parent was present since it was not possible to be "open" about problems

12 Didn't like that there was no employee to employee meeting time

13 Not all staff were always able to attend meetings

Consultant Survey Results

1 What factors led you to make changes in the meeting format?

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<thead>
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<tbody>
<tr>
<td>X</td>
<td>Time</td>
</tr>
<tr>
<td>X</td>
<td>Money</td>
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<tr>
<td></td>
<td>Staff Preference</td>
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<td>Scheduling Issues</td>
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<tr>
<td>X</td>
<td>Ease of communication</td>
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<td>Other</td>
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2 Do YOU prefer the current meeting style over the previous meeting style?

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<tbody>
<tr>
<td>X</td>
<td>Yes</td>
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<tr>
<td></td>
<td>No</td>
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<tr>
<td></td>
<td>No preference</td>
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Evaluate the effectiveness of the current meeting style compared to the previous meeting style.

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<table>
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<tbody>
<tr>
<td></td>
<td>Much more effective</td>
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<td>X</td>
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<td>Same level of effectiveness</td>
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<td>Less effective</td>
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<tr>
<td></td>
<td>Much less effective</td>
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<tr>
<td></td>
<td>Not comparable</td>
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</tbody>
</table>

3 Would you use this meeting format again in this environment?

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<tbody>
<tr>
<td>X</td>
<td>Yes, try this format again</td>
</tr>
<tr>
<td></td>
<td>No, try a different format</td>
</tr>
<tr>
<td></td>
<td>No, will not conduct meetings</td>
</tr>
</tbody>
</table>
How do you believe the staff feels about the current meeting style compared to the previous meeting style?

- Much more preferred
- More preferred
- No preference
- Less preferred
- Much less preferred
- Not comparable

Do you feel the current meeting style had a greater impact on the children's progress than the previous meeting style?

- Yes
- No
- No difference

Comments:
Liked that the meetings were more often in relation to the child, lasted longer and child was present
REFERENCES


International Society for Performance Improvement. (n.d.). *What is HPT?*. Retrieved 2007, September 17, from [http://www.ispi.org/info/about.htm#HPT](http://www.ispi.org/info/about.htm#HPT)


