An Evaluation of the Efficacy of the Consultant Workshop Model in a Human Service Setting

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AN EVALUATION OF THE EFFICACY OF THE CONSULTANT WORKSHOP MODEL IN A HUMAN SERVICE SETTING

by

Nicole E. Gravina

A Dissertation Submitted to the Faculty of The Graduate College in partial fulfillment of the requirements for the Degree of Doctor of Philosophy Department of Psychology Dr. John Austin, Advisor

Western Michigan University Kalamazoo, Michigan December 2008
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ACKNOWLEDGMENTS

I would like to start by thanking my advisor and committee chair, John Austin, for his excellent mentorship on this project and throughout graduate school. He has helped me develop not only academically and professionally, but also personally. I would also like to thank my dissertation committee, Dr. Alyce Dickinson, Dr. Jim Carr, and Dr. Keith Miller, for taking the time to review my work and providing valuable comments. I would like to acknowledge Dr. Miller for his willingness to take part in my committee from a distance and adapt to the challenges that distance presents. In addition to being an important part of my committee, Dr. Dickinson and Dr. Carr have been extremely supportive during my graduate career and I cannot thank them enough for their guidance and willingness to provide additional mentorship.

I would also like to give a special thanks to Anne Cummings, Sarah Kuperschmidt, and the rest of the folks at Kinark. They were very responsive and helpful and without them this dissertation would not have been possible. Next, I would like to thank the members of John Austin’s research lab, old and new, including Joe Sasson, Siggi Sigurdsson, Angie Lebbon, Shannon Loewy, Krystyna Orizondo, James Squires, and Tarek Abousaleh. They are like family to me and I know I can always count on each of them for guidance, support, and feedback. In addition, I would like to give a special thank you to Shannon Loewy who continually expressed her enthusiasm for this project and provided input.

I would also like to express my gratitude to “the Brits.” Howard Lees, Bruce Faulkner, Matthew Strong, Rachel Edwards, and Allison Reynolds have all influenced me greatly since I first met them. They helped me to see the
Acknowledgements – Continued

importance of conducting more “real-world” research like this dissertation and will continue to influence topics I choose for research in the future.

I am grateful to the faculty at Drake University for providing me with professional experience while still supporting the completion of my dissertation. They acknowledged the importance of my dissertation and took steps to make sure I would still have time available for dissertation work. Lastly, I would like to thank my friends, family, and fiancé, John, for their support throughout graduate school. They always took interest in my work and provided encouraging words when needed.

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INTRODUCTION

Organizational Behavior Management (OBM) can be defined as the application of behavior analysis to organizational issues (Daniels & Daniels, 2004). The primary purpose of OBM is to help organizations and their employees achieve their goals and important results more reliably. Organizational Behavior Management interventions and techniques have been repeatedly demonstrated as effective in a plethora of research studies across a variety of settings and performance targets (Nolan, Jarema, & Austin, 1999).

Although these interventions are undoubtedly effective for improving performance, relatively few research studies have demonstrated techniques for maintaining employee behavior after it has been changed. Even fewer studies have illustrated procedures that encourage the spread of the behavior change to other organizational problems or other employees within the organization, or in other words, stimulus generalization and dissemination across participants. Some OBM practitioners suggest that it is through the repeated demonstration of maintenance and generalization that credibility and recognition for OBM can be built (McSween & Matthews, 2004). Organizational Behavior Management has clearly demonstrated that it is capable of producing behavior change in the research literature, but OBM has not adequately demonstrated that it is capable of maintaining behavior change or creating generalization.

Maintenance

The topic of maintenance is not new to behavior analysts. Maintenance was initially discussed shortly after behavior analysis was first applied to everyday
problems (Baer, Wolf, & Risley, 1968) and is still being discussed today (e.g., Boyce & Geller, 2001; Petursdottir & Sigurdardottir, 2006). Yet, despite years of attention to the topic, it appears that scholars differ on its precise definition. For example, Baer (1982) defines maintenance as generalization over time. In other words, maintenance is the extent to which behavior change sustains. Boyce and Geller talk about maintenance as behavior change that sustains after the intervention has been removed. To them, the ideal program would involve the changed behavior coming under control of natural contingencies and those contingencies would maintain the behavior without the intervention in place. Malott (2001) argues against this approach, stating that natural contingencies are often not large or probable enough to maintain the desired performance, which is why programmed contingencies were necessary in the first place. Malott asserts that, when dealing with issues of maintenance, practitioners of OBM should work to institutionalize interventions, or make them a part of the organization, in order to sustain their effects. For the purpose of this dissertation, Malott’s approach to maintenance will be utilized.

**Maintenance as Institutionalization**

Sigurdsson and Austin (2006) described institutionalization as having four components: Internal staff involvement in: 1) Intervention development, 2) Intervention implementation, 3) Data collection, and 4) Consequence delivery. Sigurdsson and Austin coded research articles from the *Journal of Organizational Behavior Management* from 1991-2002 for inclusion of these components in OBM research. Although their sample size was small, a regression analysis found a relation between the number of components included and the effectiveness of the intervention.
This suggests that getting employees involved in the intervention process will improve the effectiveness of the intervention. Of the 31 studies included in the review, seven did not include any of the four components of maintenance and only four studies included all of the components. This suggests that OBM researchers may need to continue to develop strategies for involving organizations and their employees in interventions.

Maintenance in Safety

Safety research applications have provided us with some examples of institutionalization and maintenance. For example, Cooper, Phillips, Sutherland, and Makin (1994) institutionalized a safety intervention in a factory through manager briefings and including employees in data collection and intervention implementation. The researchers engineered some components of the system and then involved the organization in the development of how the components were implemented and which behaviors would be of primary interest. Observers were recruited from the workforce and 48 individuals were exposed to observer training. After baselines were established, all employees participated in goal-setting meetings. Following goal-setting, employees were provided feedback on their safety performance and it improved while injury rates dropped. All aspects of the intervention and data collection were driven by the organization and it produced favorable outcomes. The results of this study were promising, however data were only collected for a total of 16 weeks and no follow-up data were reported.

Cooper (2006) used a similar procedure in a paper manufacturing plant. This procedure also resulted in substantial improvements in safety behaviors and a
reduction in injuries in this setting. Intervention data were collected for a total of 70 weeks and improvements in safety appeared to maintain, although the data were grouped by year so trends could not be assessed.

In another safety study, Fox, Hopkins, and Anger (1987) aimed at improving safety of employees working in open-pit mines. Safety personnel in the organization provided comprehensive training on identifying, correcting, and avoiding hazards. In addition, a token economy system was developed by the researchers and implemented by employees based on organization-collected data. The tokens (stamps) could be exchanged for merchandise at local stores. Following the intervention, injury data were collected for 11 and 12 years at the two sites. Results indicated that the intervention substantially reduced injury rates and the reductions maintained for the duration of data collection. Costs for injuries were also reduced, even after considering the expense of the token economy. This study illustrates that a straightforward intervention employed by the organization can be maintained for many years.

Maintenance for Non-Safety Organizational Applications

Maintenance has also been demonstrated in a few studies outside of the area of safety. For example, Wilk and Redmon (1990) involved employees and managers in the development of an intervention, data collection, and intervention delivery in a study focused on improving productivity of university admission staff. Employees self-monitored their performance and researchers completed reliability checks to ensure the accuracy of their monitoring. Managers set daily performance goals with employees and provided feedback based on their performance. The intervention
substantially improved productivity and was shown to continue to be effective for 8 weeks for participant 1, 21 weeks for participant 3, and 29 weeks for participant 3.

In another long-term study, LaMere, Dickinson, Henry, Henry, and Poling (1996) employed an incentive program to improve productivity of truck drivers. The incentive program was implemented by the organization and based on measures collected by the organization. Drivers earned incentive pay based on their productivity but lost their incentives for the week if they were involved in a chargeable accident. The program substantially improved productivity, showed some positive effects on vehicle accidents and was maintained for four years or more.

Altus, Welsh, and Miller (1991) employed a staff-maintained system to improve task performance in a student-housing cooperative. Participants were university students who lived together and shared household responsibilities such as cleaning and meal preparation. Previous research demonstrated that researcher-led interventions were effective while the researchers implemented the program at the cooperative, but the effects decreased when the researchers no longer worked with the cooperative. So, in a follow-up study the researchers implemented a program that recognized house members for outstanding task performance. Participants selected other participants on a daily and weekly basis for outstanding work performance and those selected were recognized at weekly meetings. In addition, individuals who were not fined for poor performance were posted on a list each week in the house lounge. Participants selected for good work performance and who were on the no-fines list were entered into a monthly lottery for $20.
After one year of the system being managed by researchers, the researchers removed themselves from the program. Performance dropped for one year until the researchers returned and provided the housing cooperative members with written instructions and information on maintaining the program. Following the instructions, performance improved and the system was maintained by the housing cooperative members for five years of follow-up.

In another study by Welsh, Miller, and Altus (1994), a program was put into place to increase the effectiveness of weekly meetings in a student-housing cooperative with eight years of follow-up evidence. Every three weeks a new meeting chair was selected. Meeting performance was evaluated using a checklist of steps and tasks to be completed during the meeting. The intervention was implemented by the meeting coordinator and included: training with a manual, a checklist, and performance reviews conducted by the meeting coordinator. Across the eight years of data collection, the first and third authors served as meeting coordinators followed later by others who were not trained behavior analysts.

Results suggested that the intervention components remained in place and meeting effectiveness continued above baseline performance across eight years of follow-up data. The researchers suggested that four aspects of the intervention may have contributed to program maintenance. First, the staff was responsible for implementing the intervention, which meant that they could implement the intervention even when the researchers were not present. Second, the intervention was easy to implement and required little effort. Third, the intervention produced natural reinforcers. For example, by implementing the intervention the meetings ran
more efficiently and thus were shorter and more meeting goals were accomplished.
Lastly, the meeting intervention and checklist was designed with input from the staff
and therefore, the intervention was specifically designed to meet the needs and
desires of the group. These studies corroborate the idea that developing systems and
institutionalizing interventions may impact maintenance.

Institutionalization in Human Service Settings

Aspects of institutionalization have also been incorporated in human service
settings. For example, Fleming, Oliver, and Bolton (1996) trained four supervisors
on nine supervisory skills for training staff to teach including: modeling, feedback,
prompting, and providing rationale and instructions. Supervisors were videotaped
while providing training to staff and staff were videotaped while interacting with
clients. Supervisor tapes were scored to determine the number of training skills
employed and staff tapes were scored to determine the number of correct targeted
teaching skills employed. Results indicated that 3 of the 4 supervisors increased the
number of consequence-related skills (e.g., feedback) while the number of
antecedent-related skills was variable. In turn, increases in providing consequences
were associated with improving and maintaining staff teaching skills. This program
was institutionalized to the extent that supervisors were taught skills that affected
staff teaching, which translated to the supervisors intervening on staff teaching
behaviors. The intervention lasted for 9 weeks. However, no follow-up data were
collected.

In another study by Parsons, Schepis, Reid, McCarn, and Green (1987), 21
classrooms across four locations serving individuals with profound mental retardation
were included to determine the effects of a large-scale staff behavioral management program. Researchers observed whether students in each classroom were engaging in activities that were “functional” (useful living skills, e.g., operating a cassette player, vocational tasks) or “non-functional” (not a useful living skill, e.g., putting pegs in a peg board). Staff members were also taught to conduct observations. Following baseline, classroom teachers and aids were taught to discriminate between functional and non-functional activities and were provided ideas for increasing the amount of time spent engaging in functional activities. After the training, the principal visited each classroom at least once per week and asked the teachers to describe the functional activities they had planned and provided feedback and praise accordingly. The intervention dramatically increased the percentage of time spent on functional activities in all of the classrooms and was maintained for two years. The teachers reported that they liked the program and found it valuable.

Choosing valuable projects and maintaining behavior change is extremely important in human service settings. Methot, Williams, Cummings, and Bradshaw (1996) found that changing supervisor behaviors resulted in the supervisors influencing staff behaviors, which impacted client outcomes in a human service setting. In this study the authors trained supervisors about the importance of goal-setting and feedback and provided them with guidelines about setting goals and delivering feedback effectively. Researchers observed the supervisors' interactions with staff and scored them for indications of observation or work sampling and contingent consequences. Client target behaviors were also observed. Supervisors were exposed to a comprehensive training program that described 10 key components
of effective feedback delivery and included videos on examples and non-examples of appropriate staff-supervisor interactions. Results indicated all supervisors increased the amount of work sampling and contingent consequences delivered during meetings and, in turn, the majority of client targets improved. These results were maintained for up to 29 weeks.

In summary, some research efforts have been made to demonstrate institutionalization of behavioral interventions in human service setting studies. The reviewed studies all included components of institutionalization including training employees to implement the intervention. However, maintenance of these interventions is difficult to evaluate considering that data were collected for less than a year. Therefore, the likelihood of these interventions creating lasting impact in these organizations and with their clients is unknown.

Generalization

Few studies have demonstrated maintenance of behavior change, but even fewer have demonstrated generalization. For the purposes of this study, generalization can be defined as the spreading of the effects of a behavior change procedure to other situations, behaviors, or people (Stokes & Baer, 1977). There is little evidence of stimulus generalization in the OBM literature but some research has demonstrated generalization across responses and dissemination across participants. In a study by Anderson, Crowell, Hantula, and Siroky (1988), the researchers posted feedback for one group’s performance, and found a subsequent, but slightly less dramatic increase in performance for the other two groups before they were directly exposed to the intervention, suggesting “dissemination” (or spread of effect, in this case) had
occurred across groups of people. Although the other two groups had not yet been
directly exposed to the intervention, they could view the publicly posted feedback of
the first group and this may have contributed to the performance improvement.

There is also some limited evidence of response generalization in the safety
literature, particularly when employees were involved in the intervention. For
example, Streff, Kalsher, and Geller (1993) used promise cards to increase the use of
safety glasses by machine operators and also saw an increase in a non-targeted
behavior, safety belt use. The intervention consisted of a brief safety discussion
regarding using personal protective equipment followed by asking employees to
pledge their commitment to wearing safety equipment for two months. Results
indicated safety glasses use increased from 84.7% to 93% and safety belt use
increased from 12.8% to 35.1%. Both showed a return to baseline during a one and
two month follow-up.

In a study by Ludwig and Geller (1997), response generalization was
demonstrated with pizza delivery drivers. One store location targeted improving
complete stops, another turn signal use, and the last store served as a control group.
The intervention consisted of participatory goal setting and feedback for the complete
stop group and assigned goal setting and feedback for the turn signal target group.
Results indicated that both groups demonstrated improvements in the target
responses, but the participatory goal-setting group also showed improvements in non-
targeted behaviors, turn signal use and seat belt use.

In another study conducted by Ludwig and Geller (1999), a community-based
intervention was employed to encourage safety belt use through a pizza delivery
restaurant. A local radio station announced the program several times each day, reminder cards were posted on pizza box tops, customers were in the running to win a free pizza if they displayed the safety reminder card in their car window and were buckled up, and customers received $1.00 off of their pizza order if they asked the dispatcher to remind the deliverer to buckle up. The buckle up reminders for the delivery drivers were large BUs written on the receipts that also contained the customer’s address. Customers reminded delivery drivers to buckle up on average 13 times per day. Results of the study indicated that the pizza delivery drivers (i.e., the intervention agents) not only increased their seat belt use, but also improved their turn signal use following the intervention, and the effects maintained for 24 weeks following the conclusion of the intervention.

Stephens and Ludwig (2005) noted generalization effects to non-targeted anesthesia safety behaviors (e.g., removing gloves from the inside out, wearing gloves when discarding waste) when an intervention was implemented for targeted anesthesia behaviors (e.g., hand sanitizing, immediate needle disposal). Interestingly, one of the targeted behaviors did not significantly improve but all of the untargeted safety-related behaviors improved during the intervention phase.

Researchers, however, have not always been so successful in programming for generalization. For example, one study that directly examined whether public, verbal feedback would produce generalization to other similar behaviors found no generalization to untargeted behaviors (Fredriksen, Richter, Johnson, & Solomon, 1982). The researchers measured four types of client chart errors in a psychological clinic setting. Prior to the intervention all employees were exposed to verbal and
written instructions for accurate chart keeping and two model charts were in the therapist work area. During the intervention one group was provided public individual feedback on two charting errors during a weekly meeting. Praise was provided only when no charting errors were made, otherwise, the feedback was neutral. The second group was provided feedback on the other two errors in the same manner. Results of the study demonstrated that, although feedback improved the targeted types of charting error, no improvement occurred for the non-targeted charting errors for either group.

Baer (1982) recommends that in order to increase the likelihood of transfer of training, an intervention program should involve: Training loosely, employing indistinguishable contingencies, programming in common stimuli, and generalization. Training loosely means reinforcing behaviors in the presence of various stimuli. In OBM, this could mean training individuals to use behavioral techniques to solve various types of performance problems, rather than focusing on one specific type of problem. Programming common stimuli refers to including stimuli from the actual environment into the training environment. In training OBM skills, if learners use actual performance problems during training, the likelihood of transfer may improve. Lastly, mediating generalization involves providing trainees with rules for applying the skills. So, it is important that training involve providing individuals with a set of general guidelines that can be used to address a wide range of performance concerns.

Consultant Workshop Approach

One OBM approach that appears to be using the guidelines suggested by Baer (1982) is the consultant workshop model. This model requires extensive employee
participation, which seems to be important to maintenance and generalization. This model teaches managers to conduct their own performance improvement projects, equipping them with the knowledge to continue improving performance after the consultation period and potentially for other performance targets.

For example, Aubrey Daniels International employs a program they call the Precision Leadership ® (PL) process ("Precision Leadership", 2007). The program trains and coaches internal performance managers to pinpoint performance issues, measure, provide feedback, reinforce improvements, and monitor the program. Consultants train and coach managers in the process until they reach competence. Similarly, the Continuous Learning Group's Performance Catalyst™ approach involves training supervisors to target important results, measure, provide feedback, remove barriers and employ performance enablers ("Performance Catalyst", 2007). Their consultants also train internal consultants who can continue the process and make improvements last. The idea behind this approach is to equip organizations with basic OBM knowledge, so they may be more readily able to adequately modify the performance management program according to organizational needs and sustain an OBM program (e.g., Snyder, 2006).

This approach has also been used to teach university students performance management skills. For example, Ackley and Bailey (1995) described a two-semester course that teaches students how to apply behavior analysis in organizations and coaches them through an actual performance improvement project. Students were required to locate an organization for the project, identify opportunities for performance improvement, develop and implement a measurement plan and create
and employ an intervention. Ackley and Bailey reported that many students used these projects to *demonstrate* their skills to future employers, some went on to graduate school in a related field, and others obtained related internships or become consultants. They found that many students develop a strong commitment to OBM and behavior analysis following the course, which is also part of the goal when training employees in organizations to complete projects through this model.

The effects of teaching managers performance management skills have been examined in some studies. For example, Godat and Brigham (1999) taught 35 employees in a mid-sized organization to use behavioral self-management strategies for work-related issues using an eight-week training course for two hours per week. A control group, consisting of nine employees, was exposed to no training. Projects included behaviors related to assertiveness, positive comments, question asking, negative reactions, organization, and health, among others. Thirty-three participants implemented self-management projects and 31 reported successful outcomes. No follow-up data were collected to determine if participants continued their projects following training or if they created new projects without direction from the consultants.

Nordstrom, Lorenzi, and Hall (1990) taught 32 managers in city government to conduct OBM projects in their workplace. Training consisted of 16 hours of training for Group 1 across three weeks and 12 hours of training for Group 2 across two weeks. The training content for each group was the same. Topics covered included: antecedents, consequences, punishment, reinforcement, management
styles, pinpointing, measurement, feedback, ABC analysis, simulation exercises, graphing, and experimental designs. Training was evaluated using pre-post tests.

Participants were also encouraged and coached to conduct a behavior change project. Nineteen total projects were completed and the dependent variables included customer service behaviors, quality and accuracy measures, productivity, and safety. Data were informally presented at weekly meetings and the researchers coached the trainees on their projects. All of the projects yielded improvements and for 14 out of 19 of the projects, the improvements were 100% or greater. No follow-up data were collected to determine if the projects continued or if the skills were employed to conduct new projects. The researchers suggested that future investigators should find a way to improve the follow-up of projects to help increase maintenance and generalization.

In another example, Maher (1984) taught school administrators to implement OBM projects. Training was conducted across five three-hour sessions and included information about pinpointing, measuring, experimental designs, feedback, and reinforcement, among other things. Following training nine support sessions were provided during which administrators could ask questions. All seven administrators who were trained completed their projects and three used A-B experimental designs while the other four used more complex experimental designs. All of the projects included inter-rater reliability checks. Results of all seven projects were favorable.

In addition, seven superintendents were randomly chosen from the school district and were asked to rate the importance of each of the projects. The projects received an average rating of 4.7 out of 5, with 5 being extremely important. This suggests that
the training was not only successful at helping school administrators implement OBM projects, but also that they chose valuable projects. However, no maintenance or generalization data were collected.

In summary, developing intervention programs that produce maintenance and generalization is important to the field of OBM. Institutionalization appears to produce more effective interventions and it is possible it could also improve maintenance and generalization. Maintenance has been demonstrated in a limited number of OBM research studies, particularly in the area of behavioral safety. However, very few OBM studies have clearly demonstrated generalization. The consultant workshop model contains components of institutionalization as well as some factors Stokes and Baer (1977) deemed important for maintenance and generalization. A limited number of studies have demonstrated that this approach is effective at teaching employees to develop effective project intervention strategies but none have done so in a human services organization. In addition, no OBM workshop studies have attempted to evaluate whether the projects were maintained or whether the behavior generalized to new performance issues or untrained employees. Organizations are more likely to find this approach valuable if maintenance, generalization, and dissemination can be demonstrated.

Purpose

Therefore, the purpose of Studies 1 and 2 was to evaluate the impact of training supervisors to develop and implement performance management projects. The evaluation extended previous research on training in performance management by evaluating the workshop model in a human service organization and examining
maintenance as well as stimulus generalization and generalization across subjects. The goal of Study 1 was to document and evaluate the typical consultant model of implementing OBM in organizations. Study 2 aimed at assessing the impact of the training on management style by comparing reported management behaviors of individuals who were exposed to the training to those that were not. The information gathered was then leveraged to make recommendations for improving the consultant workshop model.

STUDY ONE

Method

Participants and Setting

The target organization was a governmentally funded agency that provided behavioral autism services. At the time of this study, the organization delivered services to over 300 individuals and had over 500 on the waiting list. Workshop training sessions were completed in the organization's training facility. The training facility included a computer with a projector for projecting Power Point slides, a white board, tables, and chairs.

Thirteen senior therapists (STs), each of whom supervised a team of 6 to 8 instructor therapists (ITs), in the organization participated in the training three years ago (February 2005 to June 2005). One of the STs was a male and the rest were female. Nine projects were completed; six were conducted individually and the rest were completed in teams of two or three. Nine of the senior therapists who took the training are still employed at the agency and six agreed to participate in the study. Of those STs that agreed to participate in the study, they reported having worked in their
current position for 3-5 years when this study was conducted and are currently employed in the same position. Five of the six held a bachelor’s degree and one held an associate’s degree. Five of the six participants had previous behavior analysis experience prior to obtaining their current position. None held a BCBA or BCAB credential. Participation in the program was required by the center director. Participation in the current study was voluntary.

A Clinical Supervisor (CS) was assigned to be the contact person for the study and assist with information collection. Participants were recruited during a staff meeting by the CS. Those that did not attend the staff meeting due to weather conditions met in small groups or individually with the CS. The CS read a script (Appendix A) explaining the study to the potential participants. Then, two copies of the consent form (Appendix B) were distributed to each employee and each person had the opportunity to choose to sign or not sign one of the consent forms. Employees were instructed to keep the second for their records. All of the consent forms, signed or unsigned, were placed in an envelope and then the envelope was sealed and mailed to the student investigator. This procedure was used for confidentiality purposes so that the CS would not know whether the employees chose to sign or not sign the consent form. In addition, company officials were informed of the potential risks of releasing the data for publication and agreed to allow the use of the data for these purposes (See Appendix C). Therefore, information available to the organization for projects of employees that left the organization after the training but before the current study was initiated or did not consent to participate was included in the study, but no additional information could be gathered for those projects.
Consultant Workshop Program

The program was delivered by a consultant and professor of psychology who has had extensive experience improving employee performance in organizations. The program consisted of four full-day workshops provided at the agency across five months. During these sessions, senior therapists were trained to design and implement an OBM project with their staff. The consultant reported that the training included approximately 50% lecture and 50% discussion/activity. During the training sessions participants completed worksheets individually or in small groups and turned them into the consultant who provided feedback electronically shortly after the workshop session. At the end of each training session day, participants were given a homework assignment that they turned in via email half way between meetings. The structure of the program was as follows -

Day 1 (January 28, 2005). Senior therapists were provided an introduction to OBM and measurement. The six steps of the PM process (i.e., define the mission, pinpoint, measure, diagnose, develop and implement a solution, evaluate) were described in detail. A heavy focus was placed on pinpointing and characteristics of effective pinpoints were discussed. Then, the STs broke into groups and developed potential pinpoints for their projects. The consultant visited each group to make sure the STs were on track. Next, measurement systems were discussed in detail and each ST developed a measurement system for their pinpoint. Using experimental designs to evaluate the intervention was discussed and basic designs such as the reversal and multiple baseline were explained. As homework, STs were instructed to email their final pinpoint and measurement plan by the following Friday (February 4, 2005) and
to copy their supervisor on the email. In addition, STs were asked to email an update with baseline data by February 25th, 2005. The STs were told to contact their supervisor, the program director, or the consultant right away if they ran into any problems. For the next meeting, STs were directed to bring at least 3 baseline data points graphed on a transparency to present to the group.

Day 2 (March 11, 2005). On this workshop day, STs presented their pinpoints and any data they had available. They were asked to describe their pinpoint and measurement system in detail and the experimental design they planned to use. The group was encouraged to ask questions about each project. In addition, STs learned about the purpose and procedures for implementing experimental designs. Then, STs learned about the Performance Diagnostic Checklist (PDC) (Austin, 2000) and practiced diagnosing performance problems and developing interventions. Senior therapists completed the PDC from various perspectives and the information gathered was used to determine potential causes of the performance problem. This information was used to select and develop potential interventions. Senior therapists were also taught to evaluate their pinpoint using an ABC analysis and from a systems perspective. Next, four categories of interventions were discussed: antecedents, goal-setting, feedback, and reinforcement. This was followed by a review of experimental designs. The goal of this workshop session was for each ST to have diagnosed their pinpoint and identify possible interventions to improve the performance.

Senior therapists were asked to email their updated graphs and intervention plan to the consultant (with their supervisor copied on the email) by the following
Friday (March 18, 2005). A second update, again with the supervisor copied on the email, was required to be sent by April 1st, 2005. Senior therapists were asked to bring their graphed data on a transparency to present it to the group for the next session.

Day 3 (May 16, 2005). During this session, participants were asked to present all of the data they had collected to date, describe their intervention, and answer any questions. Interventions were reviewed and STs revised and finalized their intervention plans. Then, the consultant reviewed plans for maintenance with the STs. Senior therapists were instructed to email the consultant and their supervisor with all of their data including three intervention data points by June 3rd, 2005 along with a two-paragraph description of their project. In addition, STs were asked to bring their final graphs including all of the data they collected to the final session to present to the group.

Day 4 (June 10, 2005). This session started with an overview of the PM process learned during the previous workshops. Next, STs presented their projects using PowerPoint to the group and other organization stakeholders including the program director. The presentations lasted approximately 10-15 min and included information about the pinpoint, information about the measurement system, data, pictures, and in some cases, a plan for maintenance.

Research Procedure

The workshop program was evaluated on several factors to determine its effectiveness and to assess the maintenance and generalization of these types of programs. Information about each project was gathered through PowerPoint
presentations obtained from the consultant, emails with the STs and the contact CS, and by phone interviews with the STs.

Dependent Measures

*Projects.* The data previously gathered from the STs' performance improvement projects were the primary dependent variables for the study. The data gathered varied across STs depending on the goal of their project they completed. STs selected the dependent variables for their projects based on their needs and preferences. None of the data provided contained any identifying client information and individual staff members were not identifiable from the data. Participants were encouraged to collect interobserver agreement data and to employ experimental designs, but it was not feasible to require these features.

The consultant provided the final day Power Points, with the permission of the organization, as a source of information for the projects. Additional information was gathered through email and phone conversations between the student investigator and STs that agreed to participate in the project. When feasible, effect sizes were summarized using the *d* statistic (Cohen, 1969).

*Pinpoint type.* Pinpoints were categorized by type. Categories included: paperwork (e.g., accuracy, completion), program compliance (e.g., completing programs daily), and program quality (e.g., meeting behavior competencies).

*Pinpoint impact.* Pinpoints were rated by the employees who participated in the program using an anonymous survey (Appendix D) with a 1-5 Likert scale by participants in terms of whether or not they were likely to save the organization money, impact client care, or improve parent-staff or staff-staff relationships, which
were all deemed important to the organization during early interviews for the current study.

*Intervention type.* Interventions were categorized by type (e.g., expectation/task clarification) to determine which components were most and least frequently used.

*Experimental control.* The percentage of projects that included experimental controls was evaluated. This was measured by dividing the number of projects that employed an experimental design by the total number of projects. An experimental design was defined as a multiple baseline, reversal, alternating treatments, or changing criterion design that included at least three data points in the baseline phase and one intervention phase.

*Maintenance.* Maintenance was evaluated by determining the number of projects with evidence of continued data collection and/or intervention implementation. Participants were encouraged to collect follow-up data to assess maintenance. Participants submitted this information to the student investigator via email.

*Generalization.* Generalization was measured in three ways: Number of new pinpoints measured and intervened upon that were not part of the original program, number of interventions that were implemented by STs (both those trained and not trained in the initial consultant training workshops) other than the senior therapist that initially implemented the intervention, and number of untrained employees that conducted performance management projects. This information was also submitted.
by participants to the student investigator via email and was also collected through a
phone interview.

**HSIRB Approval**

Approval from the Human Subjects Institutional Review Board was obtained
prior to the start of the study (see Appendix E for the approval form).

**Results**

**Project 1**

Project 1 was completed together by three STs. Two of the STs agreed to
participate in the study and the third ST was no longer with the organization. Six
instructor therapists (ITs) participated in the project.

*Pinpoint.* Three pinpoints were selected because they were expected to
improve the quality of service delivery. Those three pinpoints were accurate delivery
of: instructions, reinforcement, and error correction. Pinpoints were measured by
having staff videotape one session once per week with different clients each week.
The videos were scored by senior therapists using the Regional Evaluation Form
(Appendix F).

*Experimental design.* The STs used an AB design to evaluate the pinpoints.
The intervention was implemented after six weeks of data collection for all
participants and remained in place for 5 to 7 weeks. In addition, they anecdotally
compared the performance of ITs that participated in the project to those that did not.

*Intervention.* The intervention consisted of STs providing individual verbal
and written feedback to ITs once per week using the Regional Evaluation Form.
Then, the STs reviewed the videotaped session with the IT and they scored the tape together until 100% IOA was achieved. Once ITs achieved a mastery criterion of 90% or greater on five consecutive sessions, the ITs scored their tapes without the STs.

Results. The STs reported that the intervention resulted in improvements for all three pinpoints for all six ITs shortly after implementation and all ITs met the mastery criterion. However, only some of the data were still available for inclusion in this study. One set of data (i.e., one pinpoint) was available for each of the six ITs.

Figure 1.

Data for project 1, ITs 1 and 2.

Figure 1 depicts the percentage of instructions delivered accurately across sessions for two ITs. During baseline performance averaged 45.8% (SD: 44.7; range: 0% to 100%) and 58.3% (SD: 30.3; range: 0% to 75%) for ITs 1 and 2, respectively. After the invention was implemented performance for IT 1 improved to 81.4% (SD:
Figure 2 depicts performance for two ITs for the second pinpoint, accurate delivery of reinforcement. IT 3's performance averaged 60% (SD: 45.4; range: 0 to 100) during baseline and improved to 90.9% (SD: 18.4; range: 50% to 100%) after the intervention was implemented. IT 4’s performance averaged 30% (SD: 11.2; range: 25% to 50%) during baseline and improved to 75.2% (SD: 23.6; range: 25% to 92%) after the intervention was implemented.

Figure 3 depicts data for the third pinpoint in this project, accurate delivery of error correction procedures. Baseline performance averaged 16.7% (SD: 12.9; range 0% to 25%) for IT 5. Performance improved to 95% (SD: 6.1; range: 85% to 100%) when the package intervention was implemented. During baseline, IT 6’s average...
performance was 0% (SD: 0; range 0% to 0%). After the intervention was implemented, average performance improved to 92% (SD: 11.7; range 70% to 100%).

Figure 3.

Data for project 1, ITs 5 and 6.

Follow-up. Prior to this study the STs rarely, if ever, used video to evaluate staff performance. Currently, the STs still maintain some components of this intervention. They score one videotaped session per month (or more often if an IT did not pass his/her evaluation) but they do not have the ITs score the sessions as well. In addition, the clinical director has recently implemented a protocol that videotaped sessions will be randomly selected and evaluated for each team. No follow-up data were provided but it was reported that staff performance on these pinpoints remains high.

The STs stated that it was difficult to maintain the project because it required time away "out of chair" (i.e., not completing therapy sessions) and due to staff
shortages that time was not available. The two STs who are still with the organization and consented to participate in the study stated that they have not specifically followed the steps of the PM process since the training. However, they also reported that they have not identified any serious performance concerns that they felt warranted such a systematic and intensive approach. For their project, they watched each IT’s session for 1-3 hours. The STs reported that they felt the observation process was extremely time consuming and this is also part of the reason they have not used the PM process. The STs reported that they found the training to be interactive and personalized but would have liked to learn about a shorter version of the process.

Project 2

Project 2 was conducted by two STs. One of the STs agreed to participate in the study. Two different teams consisting of 7 ITs each participated in the project.

Pinpoint. Accuracy and completeness of treatment documents in the treatment binder was selected as the project pinpoint. This pinpoint was important because it could ensure more consistency across teams and improve communication across staff, supervisors, and outside agencies. The pinpoint was measured weekly during staff meetings by the ST using a 5-item checklist. Checklist items included having: an updated table of contents, program information complete, graphs filled out accurately, data sheets completed accurately and filed appropriately, and programs updated. Interobserver agreement was collected by a second ST every other week but percentage agreement was not available.
Experimental design. The participants used an AB design to evaluate the pinpoint. The intervention was implemented after 9 weeks of baseline data collection for both teams.

Intervention. At the start of the intervention the expectations for accuracy and completeness were discussed during the weekly team meeting. Then, a brightly colored copy of the checklist was placed in each binder. During team meetings the binders were scored using the checklist and ITs were provided public verbal feedback. ITs that scored 100% on the checklist received 15 minutes of “free time” each week. Fifteen minutes of “free time” was selected based on a stimulus preference survey administered to ITs. During the 15 minutes of free time, those who did not score 100% were required to update their binders and staff who did receive 100% could take a personal break (e.g., make a personal phone call, have a coffee, chat).

Results. The intervention resulted in improvements in the pinpoint for both teams after implementation. Average percentage of binder accuracy and completeness was 50% (SD: 10.7; range: 37% to 73%) for team 1 and 43.6% (SD: 10.3; range: 33% to 60%) for team 2 during baseline. After the intervention was implemented performance improved to 89.7% (SD: 11.1; range: 70% to 100%) and 91.4% (SD: 7.7; range 80% to 100%) for teams 1 and 2, respectively.
Follow-up. Currently the checklist is not being used by the ST who agreed to participate in the study, however, she reported that it is not necessary because binder accuracy and completion is adequate. If accuracy and completion were inadequate, the ST reported she would re-implement the intervention. In addition, she reported she gave the checklist to two other STs in the organization. They used the checklist at that time but it is unknown if it is still being used.

She reported that she found the training interactive and engaging. She enjoyed the fact that it was tailored to each ST’s needs at the time and that the topics covered were very relevant to their position. She also stated that the consultant was very accessible for feedback and consultation over email. However, she felt that the expectation for project completion was for after work hours and she would have preferred if the organization would have designated time during work hours. In addition, she reported that she would have been more likely to continue using
performance management techniques if ongoing training was available for new
pinpoints and if regular sharing of data was required.

Project 3

Project 3 was completed together by two STs. One of the STs agreed to
participate in the study and the other ST was no longer with the organization. Ten
ITs, five on each team, participated in the project.

Pinpoint. The pinpoint for the study was submitting the Intensive Behavioral
Intervention (IBI) time reports by the weekly deadline for each client. This pinpoint
was chosen because the ITs were not submitting the information in time, which in
turn meant the STs could not produce their monthly report to the government on time.
If the government did not receive the reports by the deadline, the services provided
were not funded. Therefore, obtaining the reports was imperative and at the end of
each month STs had to spend additional time and resources to try to retrieve all of the
information for the month from each IT. This resulted in schedules having to be
rearranged and less time being spent with clients. Obtaining reports was especially
challenging for the STs involved in this project because their teams were more widely
spread out than the average team. Some ITs worked two hours away and only came
into the office once per week, making turning in the reports more difficult.

The pinpoint was measured by self-report. ITs checked off their name when
they submitted their report on a data sheet in the box where reports were submitted.
Then, the STs double-checked the report submission at the weekly team meetings.

Experimental design. The STs employed a multiple baseline design across
groups. The groups were pre-divided because the ITs worked for one of the two STs
completing the project. The intervention was implemented with group 1 after 7
weeks of baseline data were collected and with group 2 after 10 weeks of baseline
data were collected.

**Intervention.** The intervention consisted of STs providing publicly posted
graphic feedback bi-weekly depicting the percentage of reports submitted for the
group. The graph was posted next to the mailbox where reports were submitted. In
addition, each IT who submitted his/her report on time each week for a month
received a $20 gift certificate to a restaurant offering coffee, baked goods, and
sandwiches.

**Results.** Baseline performance for groups 1 and 2 averaged 15% (SD: 19.4;
range: 0% to 40%) and 27.5% (SD: 24.7; range: 0% to 80%), respectively, for
percentage of IBI reports turned in on time each week. After the intervention was
implemented, performance for group 1 increased to 80% for the first three weeks and
then stabilized at 100% for 7 weeks averaging 94% for the phase (SD: 9.7; range 80%
to 100%). Performance for group 2 increased to 100% after the intervention was
implemented (SD: 0; range 100% to 100%).
Follow-up. The ST who consented to participate in the study has changed positions in the organization but still worked in the same location. Therefore, she was able to gather three weeks of follow-up data from the teams that participated in the intervention at the time of this evaluation. She reported that the intervention remained in place for some time after the completion of the project but eventually was discontinued. However, the percentage of IBI reports completed remained high over two years later. On-time reports were still at 100% for both groups for all three weeks of follow-up data collection.
The ST indicated that, although she found the project and process extremely valuable, she has not followed the same steps again. She reported that the PM process seemed to take a long time and when performance issues are identified she preferred to take action immediately. She stated that she may have been more likely to continue to use the PM process if there was less time between workshops and if practical tips for making the process faster and less time-consuming would have been discussed. In addition, she believes she would be more likely to follow the PM process if data sharing was required at ST meetings.

Project 4

Project 4 was completed by one ST who is still working for the organization and consented to participate in the study. Six ITs were included in the project.

Pinpoint. The pinpoint for this project was completing data sheets completely and accurately. This pinpoint was selected because accurate and complete data points would improve the value of the data and in turn, more accurate and complete data could result in making more precise decisions regarding service delivery. Five different aspects/pinpoints of the data collection sheets were measured including recording the response, prompt, condition, schedule of reinforcement, and mastery criteria. These sections were chosen because they seemed to have the most errors. Data were collected for an entire day of data sheets 1 to 4 times per week by taking a frequency count of data sheet errors. The data sheets for two clients were measured for this study.

Experimental design. The experimental design was a two-leg multiple-baseline design across clients and pinpoints with one data point of overlap.
Error analysis. Prior to designing the intervention, an error analysis of all of the baseline data was completed to determine the specific section of the data sheet most in need of improvement (see Figure 6). Mastery criteria and the reinforcement schedule seemed to present difficulties and were very important to decision making so they were selected as the pinpoints.

Figure 6.

Data for project 4, error analysis.

Intervention. The intervention consisted of three components, a checklist, role-playing and graphic feedback. Role-playing and practices consisted of watching videos of clients at weekly team meetings and using the data sheet. Then, the ITs compared their data sheets and discussed errors with the ST. Graphic feedback also occurred at monthly meetings and was presented in group format. The intervention was implemented for one of the five aspects of the data sheet for each client (condition for client 1 and mastery criteria for client 2).
However, the other aspects continued to be measured and spread of effect was evaluated.

Figure 7.

*Data for project 4, clients 1 and 2.*

*Results.* The intervention improved the percentage complete and accurate for both pinpoints and with both clients. Figure 7 depicts the data for each dependent variable exposed to the intervention. For client 1, the percentage of the condition section of the data collection sheets complete averaged 66.4% (SD: 15.0; range: 40% to 88%) during baseline and improved to 82.8% (SD: 17.9; range: 50% to 100%) after
the package intervention was implemented. For client 2, the percentage of the mastery criteria section of the data collection sheets complete averaged 71.3% (SD: 18.2; range: 50% to 100%) during baseline and improved to 100% (SD: 0; range: 100% to 100%) during the intervention.

Figure 8.

Data for project 4, secondary measures.

Figure 8 depicts the dependent variables that were not directly exposed to the intervention for each client. Although they were not directly exposed to the intervention, some of the dependent variables showed corresponding improvements.
For client 1, the response measure improved from 84.6% (SD: 14.5; range: 60% to 100%) to 100% (SD: 0; range: 100% to 100%), prompt improved from 82.1% (SD: 10.8; range: 67% to 100%) to 97.5% (SD: 7.1; range: 80% to 100%), and schedules of reinforcement improved from 83.2% (SD: 11.4; range: 67% to 100%) to 89.5% (SD: 16.6; range: 50% to 100%). Mastery criteria dropped from 94.9% (SD: 12.0; range: 63% to 100%) to 86.63% (SD: 25.8; range: 33% to 100%).

For client 2, response improved from 84.6% (SD: 30.7; range: 0% to 100%) to 100% (SD: 0; range: 100% to 100%), prompt improved from 81.3% (SD: 19.5; range: 50% to 100%) to 100% (SD: 0; range: 100% to 100%), and schedule of reinforcement improved from 76.2% (SD: 19.6; range: 50% to 100%) to 100% (SD: 0; range: 100% to 100%). Condition averaged 97.4% (SD: 6.0; range: 83% to 100%) and 100% (SD: 0; range: 100% to 100%) before and after treatment.

**Follow-up.** After the conclusion of the study the checklist remained in the binder for approximately three months but the other components of the intervention were not continued. It was not possible to obtain follow-up data because the ST is now working in a different setting with a different team. The ST reported that she did not continue data collection or graphic feedback because this project was completed with a home-based team and obtaining the data was quite challenging.

The ST stated that she had not used the same steps on other performance issues because she does not feel confident in her ability to perform the steps. She would have liked to practice the PM process with a second performance issue. In addition, she would have liked additional practice on developing a measurement system for
staff performance issues and designing interventions. She suggested that future trainings include a take-home component that requires participants to think through how they would address different scenarios. In addition she would have liked a task analysis that she could refer to when thinking through performance issues. She stated that, even though they are quite busy, she really enjoyed the training and would have welcomed additional learning opportunities like homework and reading.

Project 5

Project 5 was completed by one ST who is still with the organization and agreed to participate in the study. After baseline data were collected for her first selected pinpoint it was determined that an intervention was not necessary. Therefore, a second pinpoint was selected. Both projects will be described, the first as project 5a and the second as project 5b.

Pinpoint 5a. The pinpoints for the project were the accuracy of antecedent and consequence delivery during IBI sessions. This included behaviors like setting up the materials quickly and accurately, delivering the correct instructions and prompts, and delivering the appropriate consequence. These pinpoints were important because proper antecedent and consequence use were viewed as imperative for running efficient and effective client treatment sessions. In addition, these behaviors were included in the competency evaluation, which was an evaluation that ITs were required to pass at 90% in order to maintain employment with the organization. Helping employees achieve these components of the competency evaluation meant the organization would have to hire and train fewer new employees. Two ITs who were recently hired were included in this project.
This pinpoint was measured by the ST using the Regional Evaluation Form (Appendix F) while observing 5 to 10 trials in a row for approximately 20 min a few times per week. No interobserver agreement was collected.

**Experimental design.** No experimental design was employed because the ITs reached the competency criterion before the intervention was implemented.

**Results.** Figure 9 depicts the baseline performance for both ITs included in the study for two pinpoints, pre-instruction and pre-teaching. For pre-instruction, average baseline performance for IT A was 86.3% (SD: 15.3; range: 43% to 100%) with an upward trend. Average baseline performance for IT B for pre-instruction was 83.8% (SD: 18.2; range: 50% to 100%) also with an upward trend. Performance for the pre-teaching pinpoint averaged 81.6% (SD: 23.0; range: 12% to 100%) for IT A with an upward trend. Performance for IT B averaged 72.6% (SD: 27.6; range: 12.5% to 95%) and had a similar upward trend. Because of the upward trends and eventual high performance, it was determined that no intervention was necessary.

**Pinpoint 5b.** Because no intervention was needed for the previous pinpoint, the ST decided to choose a new pinpoint. The new pinpoint was increasing the number of incidental teaching opportunities during story time and song time. The ST measured this by sitting in during circle time and noting opportunities for incidental teaching and whether incidental teaching occurred. This pinpoint was chosen because it could increase the opportunities for socialization and generalization in the natural environment. Because this was a classroom setting, it was not possible to target specific staff. Instead, measurement focused on staff working with two different clients.
Experimental design. The ST stated that she hoped to utilize a multiple baseline design across clients. However, no intervention data were available so no information about the experimental design can be provided.

Intervention. The ST planned to review techniques for providing natural learning opportunities for clients and then provide graphic and verbal feedback during weekly team meetings. However, the ST stated the intervention was only partially
implemented. Instead, she showed the ITs the graphic baseline data and reviewed incidental teaching techniques during one team meeting.

Figure 10.

*Data for project 5b, clients A and B*
Results. The percentage of incidental teaching opportunities utilized during
song time for client A averaged 61.3% (SD: 6.6; range: 54% to 74%) and for client B
averaged 38.7% (SD: 6.6; range 26% to 46%). During story time, performance
averaged 16.9 (SD: 25.2; range: 0% to 67%) for client A and 96.4% (SD: 9.4; range
75% to 100%) for client B.

Follow-up. The ST reported that she found the training very engaging and
relevant and would like to continue using the PM process but has not at present. She
stated that the contingencies in the work environment strongly support meeting client
deadlines and expectations but there are few contingencies in the environment to
support staff development and performance management. In addition, the ST
reported she would have benefited from continued conceptual support for staff
management issues. She believes maintenance and generalization would have been
more likely if ongoing training and feedback on follow-up data were included.

Project 6

Project 6 was completed by one ST who is no longer with the organization
and therefore only limited information about the project could be obtained and no
project information verification could be provided. All of the ITs working for the ST
were included in the project.

Pinpoint. The goal of the project was to run all one-on-one programs for all
clients at least once per day. This was important because the goal of one-on-one
programs is to provide intensive instruction to improve skills. Therefore, each time a
program is not run the opportunity to continue gaining skills is lost. This was
graphed as a percentage of the number of programs run out of the number that could
have been run. Data were collected five days per week with a few exceptions for four months.

Experimental design. This project employed an AB design to evaluate the effects of the intervention.

Intervention. The intervention consisted of multiple components. First, a checklist and expectations were placed in each child's treatment binder. Daily graphic feedback was also provided to ITs for each child. Any programs that were regularly not being run were reviewed at weekly team meetings. In addition, the ST checked to make sure all materials needed to run the program were available.

Results. Results indicated that the percentage of programs run increased after the intervention was implemented. Figure 11 shows that during baseline, program-running performance averaged 87.6% (SD: 11.5; range: 71.4% to 100%).
Performance improved to 96.7% (SD: 7.0; range: 78.5% to 100%). At the end of the data collection period, 100% of the programs were run for seven days in a row.

*Follow-up.* Because the ST who ran this project was no longer employed at the organization, no follow-up data were available. However, the ST clearly outlined a maintenance plan in the project presentation and so it is possible that the program maintained until the ST left the organization or longer.

*Project 7*

Project 7 was completed by one ST who is no longer with the organization. Six clients were included in the study, which meant that all ITs who worked with those clients were included.

*Pinpoint.* The pinpoint for this project was the percentage of programs reviewed during team meetings each week for all students. Prior to this project there was not enough time to cover all student programs during team meetings. This meant that service delivery could have been lacking because programs were not being discussed with the team and updated regularly.

*Experimental design.* The clients were divided into two groups of three based on skill level. For one group of three clients, an ABAB experimental design was employed. For the second group, a multiple baseline design across three clients was employed.

*Intervention.* The intervention consisted of using a checklist during team meetings to track the programs reviewed and changes made. This weekly self-monitoring allowed the ST to clearly see whether all of the programs were reviewed and was a helpful quick reference for ITs to see changes that were made.
Results. Figure 12 represents data for the three clients who were part of the ABAB reversal design. During the first baseline, percentage of programs reviewed averaged 8.7% (SD: 8.5; range: 0% to 17%), 36.7% (SD: 20.2; range: 25% to 60%), and 28.7% (SD: 21.4; range: 13% to 53%) for clients 1, 2, and 3, respectively. The percentage increased to 100% (SD: 0; range: 100% to 100%) for all three clients during the first intervention period. During the second baseline phase, performance fell to 21.8% (SD: 5.7; range: 17% to 30%) for client 1, 14.5% (SD: 24.0; range: 0% to 50%) for client 2, and 29.3% (SD: 10.9; range: 20% to 45%) for client 3. After the intervention was re-implemented the percentage of programs being reviewed during team meetings returned to 100% (SD: 0; range: 100% to 100%) and remained at that level for 7 sessions of data collection.

Figure 12.

Data for project 7, clients 1, 2, and 3.
Figure 13.

Data for project 7, clients 4, 5, and 6.

Similar improvements were realized for the second group of clients, displayed in Figure 13. Percentage of programs reviewed averaged 37.3% (SD: 2.2; range: 35% to 40%) during baseline from client 4. The average improved to 100% (SD: 0; range:
100% to 100%) after the intervention was implemented. For client 5, the percentage of programs reviewed during baseline averaged 28% (SD: 15.6; range: 0% to 40%) and improved to 100% (SD: 0; range: 100% to 100%) after the intervention was implemented. Performance averaged 72.7% (SD: 40.9; range: 72.7%) for client 6 during baseline. There was potentially some carryover effect with client 6 because the percentage reviewed seemed to improve at the end of baseline. The average percentage of programs reviewed improved 100% (SD: 0; range: 100% to 100%) after the intervention was implemented.

Follow-up. Because this ST is no longer with the organization no follow-up data or information on maintenance and generalization was available.

Project 8

Project 8 was completed by one ST who is no longer with the organization and therefore only limited information regarding the project was available.

Pinpoint. The goal of the project was to increase parent involvement in the center. Parent involvement included helping create program materials, donating materials, bringing library books to the classroom, and being present at the center. This was measured as the number of instances of parent involvement per client per month. Eleven clients were involved in this project.

Experimental design. The experimental design was an AB design. After three months of baseline the intervention was implemented and four months of data were collected.

Intervention. The intervention was not clearly articulated in the project summary and this participant was not available to provide further details. However, a
plan for maintenance was clearly described and it is likely the intervention included some or all of these components including: sending home a calendar of upcoming events and a list of needed materials, and sending thank you notes after parents donated materials or time, and publicly posting parent participation in the classroom.

Results. Individual data were available for three clients and are presented together in Figure 14. In addition, data that summarized the other 8 clients were available and are also presented in Figure 13. Average parent involvement was once per month for client 1 (SD: 0; range: 1 to 1), .3 times per month for client 2 (SD: .6; range: 0 to 1), 1.3 (SD: .6; range: 1 to 2) for client 3, and once per month (SD: 1.7; range: 0 to 3) for clients 4 to 11. After the intervention was implemented, average involvement each month improved to 2.5 (SD: 1.3; range: 1 to 4) for client 1, 1 (SD: 2; range: 0 to 4) for client 2, 6 (SD: 7.6; range: 0 to 17) for client 3, and 7 (SD: 6.4; range: 2 to 16) for clients 4 through 11.

Figure 14.

Data for project 8, clients 1-11.
Follow-up. No follow-up information was available. However, a clear maintenance plan was outlined in the project summary. The ST planned to continue to inform parents of events and needs by sending home calendars and lists. She also planned to publicly post involvement and to send home thank you notes when parents donated materials or time.

Project 9

One ST completed project 9 and did not elect to participate in the study. Therefore, only limited information could be obtained for this project.

Pinpoint. The target of this project was to increase the percentage of programs implemented per student per day. This was measured each day but it is not clear how these data were collected. Three clients were targeted in this study.

Experimental design. The experimental design was an ABAB design with a maintenance phase. It is not clear when the maintenance data were collected or if the checklist was in place during maintenance.

Intervention. The intervention consisted of placing a checklist in each client’s binder and having ITs place a checkmark on the form when a program was run.

Results. Data for this project is displayed in figure 15. During the first baseline, the percentage of programs run averaged 51.3% (SD: 11.1; range: 40% to 65%) for client 1, 50% (SD: 10; range: 40% to 60%) for client 2, and 67.5% (SD: 9.6; range: 55% to 75%) for client 3. After the intervention was implemented, average performance increased to 81.3% (SD: 18.0; range: 55% to 95%) for client 1, 56.7% (SD: 10.4; range: 45% to 65%) for client 2, and stayed consistent at 70% (SD: 9.6; range: 55% to 75%) for client 3. During the second baseline, performance averaged
61.3% (SD: 4.8; range: 55% to 65%) for client 1, 55.0% (SD: 5; range: 50% to 60%) for client 2, and 68.8% (SD: 4.8; range: 65% to 75%) for client 3. When the intervention was re-instated the average percentage of programs run was 80% (SD: 9.1; range: 70% to 90%) for client 1, 75% (SD: 5; range: 70% to 80%) for client 2, and 73.8% (SD: 4.8; range: 80% to 90%) for client 3. During the maintenance phase, average performance was 90% (SD: 4.1; range: 85% to 95%) for client 1, 86.7% (SD: 2.9; range: 85% to 90%) for client 2, and 92.5% (SD: 2.9; range: 90% to 95%) for client 3.

Figure 15.

Data for project 9, clients 1, 2, and 3.

Follow-up. The ST reported that the checklist would continue to be used. However, no maintenance or generalization information was available, beyond the data presented above.
Table 1.

*Project summary table.*

<table>
<thead>
<tr>
<th>Project</th>
<th>Pinpoint</th>
<th>Intervention</th>
<th>Experimental Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Accuracy of instruction, reinforcement, and error correction</td>
<td>Verbal and written feedback, video scoring</td>
<td>AB</td>
</tr>
<tr>
<td>2</td>
<td>Accuracy and completeness of treatment documents</td>
<td>Expectations clarified, checklist, 15 minutes of free time</td>
<td>AB</td>
</tr>
<tr>
<td>3</td>
<td>Submitting IBI reports on-time</td>
<td>Graphic feedback, $20 restaurant gift certificate</td>
<td>Multiple-baseline/ groups</td>
</tr>
<tr>
<td>4</td>
<td>Data sheet completion and accuracy</td>
<td>Checklist, role playing, graphic feedback</td>
<td>Multiple-baseline/ clients</td>
</tr>
<tr>
<td>5a</td>
<td>Accuracy of antecedent and consequence delivery</td>
<td>None needed</td>
<td>N/A</td>
</tr>
<tr>
<td>5b</td>
<td>Increase frequency of incidental teaching opportunities</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>6</td>
<td>Percentage of programs run</td>
<td>Checklist, expectations clarified, graphic feedback materials checked</td>
<td>AB</td>
</tr>
<tr>
<td>7</td>
<td>Percentage of programs reviewed</td>
<td>Checklist, self-monitoring</td>
<td>ABAB and Multiple baseline/clients</td>
</tr>
<tr>
<td>8</td>
<td>Parent involvement</td>
<td>Not specified</td>
<td>AB</td>
</tr>
<tr>
<td>9</td>
<td>Percentage of programs run each day</td>
<td>Checklist</td>
<td>ABAB</td>
</tr>
</tbody>
</table>
Project Summaries

Table 1 summarizes the pinpoints, interventions, and experimental design for each project. For the projects that clear intervention information was available, four employed some type of feedback as part of the intervention. Five of the seven projects with intervention information available implemented expectation clarification or a checklist and two projects also included a reinforcer (gift certificate and free-time). Three projects evaluated the intervention using a multiple baseline design, two projects employed a reversal design (one project used both a reversal and a multiple baseline design) and the remaining four projects employed an AB design.

Table 2 further summarizes the pinpoints for each project. Results indicated that program quality was most the most common focus for project followed by program compliance and paperwork. The pinpoint impact rating scores made by senior therapists that participated in the study and completed a survey regarding pinpoint impact (N=5) indicate that all of the pinpoints were considered important. A complete table of the ratings for each pinpoint is available in Appendix G.
Table 2.

*Pinpoint summary table.*

<table>
<thead>
<tr>
<th>Project</th>
<th>Pinpoint</th>
<th>Pinpoint Type</th>
<th>Pinpoint Impact Rating Average (5 = Very Important)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Accuracy of instruction, reinforcement, and error correction</td>
<td>Program quality</td>
<td>4.6</td>
</tr>
<tr>
<td>2</td>
<td>Accuracy and completeness of treatment documents</td>
<td>Paperwork</td>
<td>4.8</td>
</tr>
<tr>
<td>3</td>
<td>Submitting IBI reports on-time</td>
<td>Paperwork</td>
<td>4.4</td>
</tr>
<tr>
<td>4</td>
<td>Data sheet completion and accuracy</td>
<td>Paperwork</td>
<td>4.8</td>
</tr>
<tr>
<td>5a</td>
<td>Accuracy of antecedent and consequence delivery</td>
<td>Program quality</td>
<td>5.0</td>
</tr>
<tr>
<td>5b</td>
<td>Increase frequency of incidental teaching opportunities</td>
<td>Program quality</td>
<td>4.4</td>
</tr>
<tr>
<td>6</td>
<td>Percentage of programs run</td>
<td>Program compliance</td>
<td>4.8</td>
</tr>
<tr>
<td>7</td>
<td>Percentage of programs reviewed</td>
<td>Program quality</td>
<td>4.6</td>
</tr>
<tr>
<td>8</td>
<td>Parent involvement</td>
<td>Program quality</td>
<td>4.6</td>
</tr>
<tr>
<td>9</td>
<td>Percentage of programs run each day</td>
<td>Program compliance</td>
<td>4.8</td>
</tr>
</tbody>
</table>

Table 3 displays the effect size for each dependent variable for each project.

Effect size was calculated using the formula $d = (\text{experimental mean} - \text{control mean}) / \text{standard deviation}$. 
pooled standard deviation). Cohen (1969) recommended the following general guidelines to interpret the $d$ statistic: .2-.49 is considered a small effect; .5-.79 is considered a medium-sized effect; and greater than .8 is considered a large effect. Effect sizes ranged from .001 to 54.19. Of the 26 effect sizes calculated, 22 are considered large effects and 1 is considered a medium effect. No effect was present for three dependent variables.

Table 3.

**Effect size summary table.**

<table>
<thead>
<tr>
<th>Project</th>
<th>Pinpoint</th>
<th>Group/Person/ Etc.</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Accuracy of instruction (Figure 1)</td>
<td>IT 1</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Accuracy of reinforcement (Figure 2)</td>
<td>IT 2</td>
<td>1.90</td>
</tr>
<tr>
<td></td>
<td>Accuracy of error correction (Figure 3)</td>
<td>IT 3</td>
<td>1.14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IT 4</td>
<td>2.73</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IT 5</td>
<td>9.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IT 6</td>
<td>14.22</td>
</tr>
<tr>
<td>2</td>
<td>Accuracy and completeness of treatment documents (Figure 4)</td>
<td>Team 1</td>
<td>4.15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Team 2</td>
<td>6.09</td>
</tr>
<tr>
<td>3</td>
<td>Submitting IBI reports on-time (Figure 5)</td>
<td>Group 1</td>
<td>4.26</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Group 2</td>
<td>6.19</td>
</tr>
<tr>
<td>4</td>
<td>Data sheet completion and accuracy (Figure 7)</td>
<td>Client 1</td>
<td>1.12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Client 2</td>
<td>2.17</td>
</tr>
<tr>
<td>5a</td>
<td>Accuracy of antecedent and consequence delivery</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>5b</td>
<td>Increase frequency of incidental teaching opportunities</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>6</td>
<td>Percentage of programs run (Figure 11)</td>
<td>Team</td>
<td>1.00</td>
</tr>
</tbody>
</table>
Table 3—Continued

<table>
<thead>
<tr>
<th>Project</th>
<th>Pinpoint</th>
<th>Group/Person/ Etc.</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Percentage of programs reviewed</td>
<td>Client 1</td>
<td>15.81</td>
</tr>
<tr>
<td></td>
<td>(Figure 12)</td>
<td>Client 2</td>
<td>5.70</td>
</tr>
<tr>
<td></td>
<td>(Figure 13)</td>
<td>Client 3</td>
<td>8.68</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Client 4</td>
<td>54.19</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Client 5</td>
<td>7.74</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Client 6</td>
<td>.003</td>
</tr>
<tr>
<td>8</td>
<td>Parent involvement</td>
<td>Client 1</td>
<td>2.01</td>
</tr>
<tr>
<td></td>
<td>(Figure 14)</td>
<td>Client 2</td>
<td>.56</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Client 3</td>
<td>1.06</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clients 4-11</td>
<td>5.18</td>
</tr>
<tr>
<td>9</td>
<td>Percentage of programs run each day</td>
<td>Client 1</td>
<td>2.62</td>
</tr>
<tr>
<td></td>
<td>(Figure 15)</td>
<td>Client 2</td>
<td>.002</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Client 3</td>
<td>.001</td>
</tr>
</tbody>
</table>

Table 4 summarizes the maintenance and generalization observed for each project. Information was not available for all projects because some of the STs were no longer with the organization at the time this study was conducted. For the projects that follow-up data were available, three out of four projects maintained at least some of the intervention components after the workshops were complete for some time. Follow-up data were collected for one project and indicated that the performance improvement was maintained three years later. Two other projects anecdotally reported that the performance improvement maintained. This may indicate some subject generalization because STs reported some turnover in ITs since the projects were conducted. In addition, there was evidence of stimulus generalization in project 2. The ST reported that two other STs started using her intervention checklist after the project was complete.
Table 4.

_Maintenance and generalization summary table._

<table>
<thead>
<tr>
<th>Project</th>
<th>Pinpoint</th>
<th>Intervention Maintained</th>
<th>Behavior Maintained</th>
<th>Generalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Accuracy of instruction, reinforcement, and error correction</td>
<td>Components</td>
<td>Yes (anecdotal)</td>
<td>No</td>
</tr>
<tr>
<td>2</td>
<td>Accuracy and completeness of treatment documents</td>
<td>No</td>
<td>Yes (anecdotal)</td>
<td>Yes (checklist)</td>
</tr>
<tr>
<td>3</td>
<td>Submitting IBI reports on-time</td>
<td>For some time</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>4</td>
<td>Data sheet completion and accuracy</td>
<td>Checklist for a short time</td>
<td>N/A</td>
<td>No</td>
</tr>
<tr>
<td>5a</td>
<td>Accuracy of antecedent and consequence delivery</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>5b</td>
<td>Increase frequency of incidental teaching opportunities</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>6</td>
<td>Percentage of programs run</td>
<td>Un-Known</td>
<td>Un-Known</td>
<td>Un-Known</td>
</tr>
<tr>
<td>7</td>
<td>Percentage of programs reviewed</td>
<td>Un-Known</td>
<td>Un-Known</td>
<td>Un-Known</td>
</tr>
<tr>
<td>8</td>
<td>Parent involvement</td>
<td>Un-Known</td>
<td>Un-Known</td>
<td>Un-Known</td>
</tr>
<tr>
<td>9</td>
<td>Percentage of programs run each day</td>
<td>Un-Known</td>
<td>Un-Known</td>
<td>Un-Known</td>
</tr>
</tbody>
</table>

Table 5 summarizes the comments made by the 6 STs that agreed to participate in the study spanning across the first 5 projects. This information was gathered by phone interview and through the last page of questions on the Pinpoint Impact Survey. All of the STs reported that they enjoyed the training. The STs
reported finding the training interactive, engaging, personalized, and relevant.

However, most felt that the process seemed too time consuming and that ongoing training and further practice was needed. In addition, STs reported that they needed more organizational support in order to continue the performance management process.

Table 5.

**Summary of ST comments about the training.**

<table>
<thead>
<tr>
<th>Project 1 (2 ST comments)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Interactive and personalized</td>
<td></td>
</tr>
<tr>
<td>Too time consuming</td>
<td></td>
</tr>
<tr>
<td>No issues so serious that they warranted such a systematic and intensive approach</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Interactive and engaging</td>
<td></td>
</tr>
<tr>
<td>Tailored to needs and relevant to job</td>
<td></td>
</tr>
<tr>
<td>Consultant was very accessible by email</td>
<td></td>
</tr>
<tr>
<td>Needed time during work hours to complete</td>
<td></td>
</tr>
<tr>
<td>Would like ongoing training and data sharing</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Project and process were extremely valuable</td>
<td></td>
</tr>
<tr>
<td>Seemed to be a long process</td>
<td></td>
</tr>
<tr>
<td>Time consuming</td>
<td></td>
</tr>
<tr>
<td>Data sharing</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project 4</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Enjoyed training</td>
<td></td>
</tr>
<tr>
<td>Wanted more training and practice with different pinpoints</td>
<td></td>
</tr>
<tr>
<td>Task analysis</td>
<td></td>
</tr>
<tr>
<td>More homework and reading</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project 5</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Engaging and relevant</td>
<td></td>
</tr>
<tr>
<td>Ongoing training and conceptual support</td>
<td></td>
</tr>
<tr>
<td>Create organizational contingencies that support project development and continuation</td>
<td></td>
</tr>
</tbody>
</table>
Discussion

Results of this study indicate that the workshop was effective at teaching STs to develop and implement their own performance improvement project. Nine different projects were completed, three in groups and six individually. Six of the STs representing five projects still worked for the organization after the completion of the project and agreed to participate in the study, therefore, more detailed information was available for those projects. The study indicated that the projects were, for the most part, very effective at improving important pinpoints.

The workshop model included all of the components of institutionalization described by Sigurdsson and Austin (2006): 1) Intervention development, 2) Intervention implementation, 3) Data collection, and 4) Consequence delivery. Senior Therapists developed their interventions with some assistance from the consultant. After the intervention was developed they implemented the intervention without assistance. Senior Therapists collected all of the data and delivered consequences on their own. The training equipped the STs with the skills to conduct the Performance Management process, rather than implementing it for them. Therefore, the workshop model appears to be very successful at institutionalization on a project-by-project basis. It is unclear how effective the training was at institutionalizing PM as a general management strategy in the organization.

Pinpoints

The STs selected a wide variety of pinpoints including those that affected paperwork, program quality, and program compliance. Only two project pinpoints overlapped, which means that eight different pinpoints were selected. The STs’
ratings of the pinpoints suggested that they chose important pinpoints that had the potential of positively impacting client care, staff-parent and staff-staff relationships, and the organization’s finances.

Although the selected pinpoints varied, many seemed to focus on improving IBI sessions by increasing their frequency, improving the quality of service delivery during the sessions, and improving the quality of session records. This indicates that providing high quality services to clients was a top priority for STs, and this makes sense, since providing services to clients is the core process of the organization.

Project Effectiveness

All of the projects except one implemented the intervention with more than one team, IT, or client, which allowed for the effects to be replicated. With only one exception, all of the STs collected baseline and intervention data, enabling a comparison of performance across the two conditions. In addition, four of the projects demonstrated experimental control using either a multiple baseline design or a reversal design.

Overall, 22 out of 26 of the dependent variables in the PM projects yielded what would be considered large effect sizes indicating that the STs developed and implemented highly effective interventions. One of the dependent variables that yielded an effect size that was considered negligible, client 6 in project 7, was likely due to carryover effects. This client was the last “leg” of the multiple baseline and the ITs had already begun to improve their performance of the dependent variable for other clients. Performance at the beginning of client 6’s baseline was low but it
improved when the intervention was implemented for the other clients and therefore appeared to produce no effect.

Many factors may help explain the overall substantial effectiveness of the projects. First, as mentioned earlier, the workshop model was highly successful at institutionalizing the intervention on a project-by-project basis (that is, the training seemed to produce an environment that encouraged participants to design, conduct, and evaluate their own improvement projects). According to Sigurdsson and Austin (2006), there is a correlation between the number of institutionalization components included and effect size. The workshop model included all of those components and resulted in large effect sizes. Therefore, these results appear to lend support to the findings of Sigurdsson and Austin.

Next, the STs were trained behavior analysts and although they had rarely, if ever, been directly trained to apply behavior analysis techniques to employees they still had more intimate knowledge of the principles and procedures than the average manager. It is possible that the workshops would not have resulted in such large project effects if it had been implemented with managers with no prior behavior analysis learning history. In addition, the STs who participated in the study reported that they had several new ITs working with them at the time the projects were conducted and thus there may have been a greater potential for improvement. It is possible that such large effects would not have been possible with more experienced employees because they may have performed at higher levels (i.e., ceiling effects).

Senior Therapists also chose pinpoints that had a lot of face value – meaning that it was easy for the ITs and STs to understand the importance of the projects. If
different pinpoints would have been selected, perhaps ones with less direct effect on client care, such substantial effects may not have been achieved. This suggests that the training was highly effective at helping participants select valuable pinpoints.

Lastly, the director of the program was extremely supportive of the projects. Manager support can influence employee behavior (Cooper, 2006) and may have served as a motivating operation to conduct high quality projects.

Challenges

Despite all of the support STs were provided, they also reported several challenges to completing and maintaining their projects. Because providing excellent services was a high priority, many reported they found it challenging to find time to maintain the PM projects. At the time the workshops were conducted, many of the STs were new to their position and had several new ITs working for them. In addition, many of the ITs had little or no previous behavior analysis experience. This meant that a lot of time needed to be devoted to training ITs. For individuals who oversaw home-based programs, there was the additional challenge of finding ways to measure or observe employees that rarely worked at the office. Despite these challenges, the STs were quite successful in conducting their projects.

Because this study took place three years following the workshop, it is possible the verbal reports regarding maintenance and generalization were not accurate. Future research should attempt to measure maintenance and feedback immediately following the workshop to obtain the most accurate information.
Maintenance

Although the projects were generally successful, there was minimal evidence that the projects were maintained. Information regarding maintenance for all of the projects could not be obtained because some of the STs had left the organization or changed positions at the time of this study. Therefore, few conclusions can be drawn about maintenance. The limited information that is available suggests that the components that were easy to implement (e.g., checklists in the binder) were most likely to be maintained. Intervention components that required observation and measurement (e.g., feedback) were not maintained. This suggests that it may be best to utilize easy-to-implement intervention components, if possible. In addition, STs reported that the PM process was time consuming. Therefore, approaches that use fewer steps (i.e., positive feedback for any target behavior, based on limited and informal observation) should be considered, when programming for maintenance.

Only one ST provided follow-up data, which indicated that the performance maintained despite the fact that the intervention was not maintained. Other STs reported that anecdotally, the performance issue they addressed appeared to remain resolved three years after the projects were conducted even though the complete intervention was not continued. It is possible that, because many of the ITs were new, the learning associated with the projects produced lasting changes in behavior.

The STs who participated in the study reported that they did not maintain the interventions because they were time consuming. One ST reported that she was spending multiple hours per week measuring and could not afford to continue. In the future it may be beneficial to either chose a measurement system that requires less
time or to persuade top management to allow employees enough time to conduct PM projects. In addition, it may be helpful to encourage workshop participants to document time or money saved, in order to help “reinforce” project-conducting behaviors.

The lack of evidence of maintenance may suggest that additional components, beyond those described by Sigurdsson and Austin (2006), are required in order to ensure institutionalization of PM techniques in the organization. Perhaps management support, incorporation into the organization’s existing systems, and including natural reinforcers could further assure intervention maintenance. In safety studies that demonstrated long-term maintenance, some or all of these components were also included. For example, in Cooper (2006) manager support appeared to be an important component of the safety process. Fox et. al., (1987) also incorporated an incentive program into the organization and community system, which in turn produced natural reinforcers. Further discussion and evaluation of institutionalization should include some or all of these components.

Generalization

There was limited evidence of dissemination across participants in this study. Some of the STs reported that they provided components of their interventions to other STs who used these components for an undetermined amount of time. However, there was no evidence of stimulus generalization. None of the STs reported using the PM steps learned in the training for another performance issue. When asked what prevented STs from using these steps, they reported that the process seemed time consuming and lengthy. Many collected baseline data for three
months because the workshops were spread out and the interventions were not discussed until that point. They stated that they want to address performance issues immediately rather than after extensive baseline data collection. Also, some STs reported that they felt they needed more training to be able to generalize the PM process to other performance issues.

As mentioned in the introduction, Baer (1982) suggests that training should include: training loosely, employing indistinguishable contingencies, programming in common stimuli, and generalization. The workshop included some "loose training" because participants practiced pinpointing during the workshop. However, they mostly focused on their own project. It could be possible to provide more training with multiple examples. At the conclusion of the workshop, participants were required to present their projects to stakeholders in and outside of the organization. However, beyond this there were no explicit consequences in place for completing, continuing, or generalizing the project, which means that no programmed indistinguishable consequences existed in the organization. There may have been natural consequences associated with completing the projects, but the fact that very little generalization occurred suggests that these consequences may not have been strong enough by themselves.

Programming common stimuli was included in the workshop. Senior Therapists developed a measurement system and intervention for an actual performance problem. Lastly, mediating generalization did occur. Senior Therapists were taught the steps for conducting a PM project and they were taught to use the performance diagnostic checklist to diagnose performance issues and develop an
intervention. These were rules that the STs could use to conduct future PM projects. A few STs stated that they would have found a task analysis of the PM process useful so it is possible this could have been extended further.

Overall it appears that some of Baer's recommendations for generalization are accomplished by the workshop model. However, there is room for improvement. It could be beneficial for the organization to implement a system that encourages maintenance and generalization of projects. It could also be helpful to provide more opportunities for practice during and outside of the training. Lastly, providing clear job aids that assist with generalizing and applying the skills during the workshop could help improve generalization.

STUDY TWO

Method

Participants and Setting

For this study, all STs and Clinical Supervisors (CSs) who consented to participate were surveyed, regardless of whether or not they were exposed to the OBM training. Seventeen STs and eight CSs completed the survey. Six of the STs participated in the workshop and two of the CSs participated, although the CSs did not complete performance management projects. Fifteen of the STs held a Bachelor's degree, one held an Associate's degree and one held a Master's degree at the time of the survey. None held a BCBA or BACB credentials. Average length of employment in their current position was 2.5 years (range: 1 to 5 years). All of the STs except three reported having at least some previous training in behavior analysis techniques prior to their current position.
Seven of the eight CSs held a Master's degree and one held a Doctoral degree. Seven of the eight CSs held a BCBA. At the time of the survey, the CSs reported working in their current position for an average of 1.8 years (range: 1 to 4 years) and all of the CSs reported having previous training in behavior analysis. Participants were recruited to participate in the survey in the same manner and at the same time as study 1.

**Survey Procedure**

A survey was created to assess whether a difference in management techniques (e.g., frequency of feedback delivery, goal-setting) existed between those exposed to the training and those not exposed. The survey was created in Survey Monkey and was administered online. Each participant's email address sent to all individuals that agreed to participate in the study. The survey can be found in Appendix H. One reminder email was sent and the survey was completed by everyone who consented to participate except for one person.

**Experimental Design**

Participants for the first survey were divided into two groups: those who took the workshop and those who did not. Survey results were compared using a two-way t-test. Each survey response was assigned a number. For example, for the question, "How often do you deliver VERBAL FEEDBACK to each staff member you manage or supervise on average (choose one)? (Verbal feedback includes any spoken or written information about an employee's performance.)" the answer "never" was assigned a value of "0" and the answer "once per day" was assigned a value of "6" and the intermediate answers were assigned the intermediate corresponding values. A
two-tailed t-test was chosen as opposed to a one-way test because there was not a clear direction of expected difference. In addition, a t-test was chosen because of the small and unequal sample sizes.

Results

Results from the survey are broken into two separate tables, questions that allowed for statistical evaluation and those that did not. The statistical analyses conducted in table 6 indicate that answers provided by individuals that took the workshop were not statistically significantly different for four of the six survey questions. The survey responses indicated that individuals who took the workshop were more likely to report that they measured more frequently and this result was statistically significant ($t = 2.64; p = .013$). The survey responses also indicated that individuals who did not take the workshop were more likely to use tangible reinforcers for staff than those who took the workshop and this was also statistically significant ($t = 2.69; p = .013$).

Table 6.

Survey results for items that were statistically evaluated.

<table>
<thead>
<tr>
<th>Item 1: How often do you measure staff performance (choose one)?</th>
<th>Workshop (n=8)</th>
<th>No Workshop (n=17)</th>
<th>T score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Several times per day</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>2.64*</td>
</tr>
<tr>
<td>Once per day</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td></td>
</tr>
<tr>
<td>A few times per week</td>
<td>4 (50.0%)</td>
<td>0 (0.0%)</td>
<td></td>
</tr>
<tr>
<td>Once per week</td>
<td>1 (12.5%)</td>
<td>6 (35.3%)</td>
<td></td>
</tr>
<tr>
<td>1-2 times per month</td>
<td>3 (37.5%)</td>
<td>10 (58.8%)</td>
<td></td>
</tr>
<tr>
<td>A few times per year</td>
<td>0 (0.0%)</td>
<td>1 (5.9%)</td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td></td>
</tr>
</tbody>
</table>
Table 6—Continued

**Item 2:** How often do you deliver VERBAL FEEDBACK to each staff member you manage or supervise on average (choose one)? (Verbal feedback includes any spoken or written information about an employee’s performance.)

<table>
<thead>
<tr>
<th>Answer</th>
<th>Workshop (n=8)</th>
<th>No Workshop (n=17)</th>
<th>T score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Several times per day</td>
<td>1 (12.5%)</td>
<td>2 (11.8%)</td>
<td>.33</td>
</tr>
<tr>
<td>Once per day</td>
<td>2 (11.8%)</td>
<td>2 (11.8%)</td>
<td></td>
</tr>
<tr>
<td>A few times per week</td>
<td>2 (11.8%)</td>
<td>7 (41.2%)</td>
<td></td>
</tr>
<tr>
<td>Once per week</td>
<td>2 (11.8%)</td>
<td>3 (17.6%)</td>
<td></td>
</tr>
<tr>
<td>1-2 times per month</td>
<td>1 (12.5%)</td>
<td>3 (17.6%)</td>
<td></td>
</tr>
<tr>
<td>A few times per year</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td></td>
</tr>
</tbody>
</table>

**Item 3:** How often do you deliver GRAPHIC FEEDBACK to each staff member on average (choose one)? (Graphic feedback includes any kind of visual depiction of employee performance not including written feedback.)

<table>
<thead>
<tr>
<th>Answer</th>
<th>Workshop (n=8)</th>
<th>No Workshop (n=17)</th>
<th>T score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Several times per day</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>1.09</td>
</tr>
<tr>
<td>Once per day</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td></td>
</tr>
<tr>
<td>A few times per week</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td></td>
</tr>
<tr>
<td>Once per week</td>
<td>0 (0.0%)</td>
<td>1 (5.9%)</td>
<td></td>
</tr>
<tr>
<td>1-2 times per month</td>
<td>1 (12.5%)</td>
<td>3 (17.6%)</td>
<td></td>
</tr>
<tr>
<td>A few times per year</td>
<td>2 (25.0%)</td>
<td>5 (29.4%)</td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>5 (62.5%)</td>
<td>8 (47.1%)</td>
<td></td>
</tr>
</tbody>
</table>

**Item 4:** How often do you deliver TANGIBLE REINFORCERS to staff (choose one)? (Tangible reinforcers include items you give to employees like money, tickets, gift certificates, candy, etc.)

<table>
<thead>
<tr>
<th>Answer</th>
<th>Workshop (n=8)</th>
<th>No Workshop (n=17)</th>
<th>T score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Several times per day</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>2.69*</td>
</tr>
<tr>
<td>Once per day</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>p=.013</td>
</tr>
<tr>
<td>A few times per week</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td></td>
</tr>
<tr>
<td>Once per week</td>
<td>0 (0.0%)</td>
<td>2 (11.8%)</td>
<td></td>
</tr>
<tr>
<td>1-2 times per month</td>
<td>0 (0.0%)</td>
<td>7 (41.2%)</td>
<td></td>
</tr>
<tr>
<td>A few times per year</td>
<td>5 (62.5%)</td>
<td>6 (35.3%)</td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>3 (37.5%)</td>
<td>2 (11.8%)</td>
<td></td>
</tr>
</tbody>
</table>
Table 6—Continued

Item 5: How often do you deliver SOCIAL REINFORCERS (e.g. praise) to each staff member (choose one)?

<table>
<thead>
<tr>
<th>Answer</th>
<th>Workshop (n=8)</th>
<th>No Workshop (n=17)</th>
<th>T score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Several times per day</td>
<td>1 (12.5%)</td>
<td>2 (11.8%)</td>
<td>.12</td>
</tr>
<tr>
<td>Once per day</td>
<td>1 (12.5%)</td>
<td>3 (17.6%)</td>
<td></td>
</tr>
<tr>
<td>A few times per week</td>
<td>4 (50.0%)</td>
<td>9 (52.9%)</td>
<td></td>
</tr>
<tr>
<td>Once per week</td>
<td>2 (25.0%)</td>
<td>2 (11.8%)</td>
<td></td>
</tr>
<tr>
<td>1-2 times per month</td>
<td>0 (0.0%)</td>
<td>1 (5.9%)</td>
<td></td>
</tr>
<tr>
<td>A few times per year</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td></td>
</tr>
</tbody>
</table>

Item 6: How often do you set goals with/for each staff member on average (choose one)?

<table>
<thead>
<tr>
<th>Answer</th>
<th>Workshop (n=8)</th>
<th>No Workshop (n=17)</th>
<th>T score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Several times per day</td>
<td>2 (25.0%)</td>
<td>6 (35.3%)</td>
<td>.06</td>
</tr>
<tr>
<td>Once per day</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td></td>
</tr>
<tr>
<td>A few times per week</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td></td>
</tr>
<tr>
<td>Once per week</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td></td>
</tr>
<tr>
<td>1-2 times per month</td>
<td>6 (75.0%)</td>
<td>7 (41.2%)</td>
<td></td>
</tr>
<tr>
<td>A few times per year</td>
<td>0 (0.0%)</td>
<td>2 (11.8%)</td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>0 (0.0%)</td>
<td>2 (11.8%)</td>
<td></td>
</tr>
</tbody>
</table>

Table 7 depicts results for items that were not statistically evaluated.

Some of the information was obtained qualitatively and was converted into categories for the table. Through visual inspection there appears to be no substantial difference between those that took the workshop and those that did not.
Table 7.

Survey results for other items.

Item 1: Please list all types of staff performances you measure, how often (as above), and the way you measure (i.e., self-report from staff, parent reports, your direct observation, video taping, etc.) each. (Gathered qualitatively.)

<table>
<thead>
<tr>
<th>Percentage who reported using:</th>
<th>Workshop (n=8)</th>
<th>No Workshop (n=17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct observation</td>
<td>5 (62.5%)</td>
<td>10 (58.8%)</td>
</tr>
<tr>
<td>Parent reports</td>
<td>2 (25.0%)</td>
<td>1 (5.9%)</td>
</tr>
<tr>
<td>Self-monitoring</td>
<td>3 (37.5%)</td>
<td>3 (17.6%)</td>
</tr>
<tr>
<td>Videotapes</td>
<td>4 (50.0%)</td>
<td>8 (47.1%)</td>
</tr>
</tbody>
</table>

Item 2: Please estimate your ratio of positive feedback to negative.

<table>
<thead>
<tr>
<th>Answer</th>
<th>Workshop (n=8)</th>
<th>No Workshop (n=17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 to 1</td>
<td>2 (25.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>4 to 1</td>
<td>1 (12.5%)</td>
<td>4 (23.5%)</td>
</tr>
<tr>
<td>3 to 1</td>
<td>1 (12.5%)</td>
<td>2 (11.8%)</td>
</tr>
<tr>
<td>5 to 2</td>
<td>0 (0.0%)</td>
<td>1 (5.9%)</td>
</tr>
<tr>
<td>7 to 3</td>
<td>0 (0.0%)</td>
<td>1 (5.9%)</td>
</tr>
<tr>
<td>2 to 1</td>
<td>2 (25%)</td>
<td>2 (17.6%)</td>
</tr>
<tr>
<td>3 to 2</td>
<td>0 (0.0%)</td>
<td>1 (5.9%)</td>
</tr>
<tr>
<td>1 to 1</td>
<td>1 (12.5%)</td>
<td>2 (11.8%)</td>
</tr>
<tr>
<td>3 to 7</td>
<td>0 (0.0%)</td>
<td>2 (11.8%)</td>
</tr>
<tr>
<td>2 to 3</td>
<td>1 (12.5%)</td>
<td>0 (0.0%)</td>
</tr>
</tbody>
</table>

Item 3: How do you MOST OFTEN deliver your GRAPHIC FEEDBACK (choose one)?

<table>
<thead>
<tr>
<th>Answer</th>
<th>Workshop (n=8)</th>
<th>No Workshop (n=17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email</td>
<td>0 (0.0%)</td>
<td>1 (5.9%)</td>
</tr>
<tr>
<td>In person</td>
<td>3 (37.5%)</td>
<td>7 (41.2%)</td>
</tr>
<tr>
<td>Memo</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>N/A</td>
<td>5 (62.5%)</td>
<td>9 (52.9%)</td>
</tr>
</tbody>
</table>
Table 7—Continued

Item 4: Who do you usually give TANGIBLE REINFORCERS to (choose one)?

<table>
<thead>
<tr>
<th>Answer</th>
<th>Workshop (n=8)</th>
<th>No Workshop (n=17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groups of employees</td>
<td>5 (62.5%)</td>
<td>9 (52.9%)</td>
</tr>
<tr>
<td>Individual employees</td>
<td>2 (25.0%)</td>
<td>4 (23.5%)</td>
</tr>
<tr>
<td>NA</td>
<td>1 (12.5%)</td>
<td>4 (23.5%)</td>
</tr>
</tbody>
</table>

Item 5: List the types of tangible items you deliver. (Gathered qualitatively.)

<table>
<thead>
<tr>
<th>Answer</th>
<th>Workshop (n=8)</th>
<th>No Workshop (n=17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coffee</td>
<td>2 (25.0%)</td>
<td>3 (17.6%)</td>
</tr>
<tr>
<td>Dessert/sweets</td>
<td>4 (50.0%)</td>
<td>9 (52.9%)</td>
</tr>
<tr>
<td>Gift certificate</td>
<td>1 (12.5%)</td>
<td>3 (17.6%)</td>
</tr>
<tr>
<td>Leave early</td>
<td>0 (0.0%)</td>
<td>2 (11.8%)</td>
</tr>
<tr>
<td>Meal</td>
<td>4 (50.0%)</td>
<td>5 (29.4%)</td>
</tr>
<tr>
<td>Small tangibles</td>
<td>1 (12.5%)</td>
<td>3 (17.6%)</td>
</tr>
<tr>
<td>(i.e., pencil, timer)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Item 6: Who do you usually give SOCIAL REINFORCERS to (choose one)?

<table>
<thead>
<tr>
<th>Answer</th>
<th>Workshop (n=8)</th>
<th>No Workshop (n=17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual employees</td>
<td>7 (87.5%)</td>
<td>16 (94.1%)</td>
</tr>
<tr>
<td>Groups of employees</td>
<td>1 (12.5%)</td>
<td>1 (5.9%)</td>
</tr>
<tr>
<td>NA</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
</tr>
</tbody>
</table>

Item 7: How do you usually set goals?

<table>
<thead>
<tr>
<th>Answer</th>
<th>Workshop (n=8)</th>
<th>No Workshop (n=17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOR employee</td>
<td>2 (25.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>WITH employee</td>
<td>6 (75.0%)</td>
<td>16 (94.1%)</td>
</tr>
<tr>
<td>NA</td>
<td>0 (0.0%)</td>
<td>1 (5.9%)</td>
</tr>
</tbody>
</table>
Discussion

The results from study 2 indicate that little difference exists in the self-reported management behaviors for STs who were exposed to the workshop and those who were not. Those exposed to the workshop reported measuring more and those not exposed to the workshop reported providing more tangible reinforcers. It should be noted that individuals who took the workshop have been employed at the organization on average for 3.5 years and those who did not take the workshop have only been employed for 1.5 years. This difference in employment length could account for some of the differences in the survey data.

Measurement and Goals

Employees reported measuring performance between a few times per week and 1-2 times per month. They most often used direct observation and videotapes to measure performance, which allows for more precise measurement of performance than self-reports or parent evaluations. Goals were reportedly set either several times per day or 1-2 times per month or less and were generally set with employees rather than for employees. Limited evidence suggests that employee participation in goal-setting may result in a spread of effect (Ludwig & Geller, 1997) and therefore, may be preferred.

Verbal and Graphic Feedback

Employees reported that they delivered verbal feedback from several times per day to 1-2 times per month. The estimated ratios of positive to negative feedback ranged from 5:1 to 2:3. More positive feedback than negative was estimated by 17 employees, an equal ratio was estimated by 3 employees, and more negative than
positive feedback was estimated by 3 employees. Daniels and Daniels (2004) recommend that managers maintain a ratio of 4:1 for positive to negative. Only 7 employees reported maintaining that ratio or greater indicating some potential room for improvement in manager verbal feedback delivery ratio.

The frequency of graphic feedback delivery ranged from once per week to never. The largest number of employees reported never delivering graphic feedback for both groups. Employees that did deliver graphic feedback reported doing so in person. A feedback review by Alvero, Bucklin, and Austin (2001) suggests that graphic feedback may be the most effective form of feedback delivery. This may be because graphic feedback allows the performer to compare his/her performance to past performance. The lack of reported graphic feedback delivery suggests an additional opportunity for improvement. It may be helpful to assess employee skills related to graphic feedback and to provide employees support for implementing this effective intervention technique.

Tangible and Social Reinforcers

Reported frequency of tangible reinforcer delivery ranged from once per week to never with most employees reporting they deliver tangible reinforcers 1-2 times per month or a few times per year. Tangible reinforcers were most often delivered to the group rather than individuals. Food and beverages were the most common types of tangible reinforcers described. Social reinforcers were reportedly given between several times per day and 1-2 times per month. The majority of respondents reported delivering social reinforcers individually rather than in groups.
Practical Significance

Overall, the results of this study suggest that the workshop model may not produce lasting changes in overall management strategies. Because this may be a goal of organizations hiring OBM consultants, these results indicate additional components may need to be incorporated into the workshop model in order to influence overall management strategies. However, this information was collected through self-report by a survey administered one time. In the future it may be beneficial to collect regular self-report data and other direct data to corroborate the data.

GENERAL DISCUSSION

The workshop model has some promising features. Through this method of training, employees were able to make a meaningful impact with their projects that could positively affect client care, relationships within and outside of the organization, and the organization’s finances. However, it appears there may be some room for improvement in order to create changes that are lasting and more widespread. Although the consultant workshop model resulted in projects that successfully improved performance, it did not appear to lead to sustainable changes in the organization. The STs did not report incorporating the PM process into their management procedures. Several potential reasons for this were identified and therefore recommendations for improving the process can be made. Further evaluation of techniques to improve maintenance and generalization are warranted.

This research has substantial practical value. Over the years OBM has developed and refined many useful techniques but in recent times there has been much
discussion regarding finding ways to better deliver and infuse OBM into organizations and the world (e.g., Harshbarger, 2008; McSween & Matthews, 2004). Future research should continue to examine this and other methods for delivery and develop techniques for evaluating the overall impact and effectiveness of these delivery methods. In addition, intervention components that may impact the likelihood of maintenance and generalization should be experimentally evaluated.

Limitations

There are several potential limitations of this research. First, the project was conducted three years after the consultation took place. Therefore, it was difficult to obtain explicit details about the workshop content and projects and no information could be obtained by direct observation. In addition, only 6 of the 13 STs that participated in the workshop also participated in the study. Some were no longer with the organization and others chose not to participate. Therefore, interviews could not be completed for seven of the STs involved in the workshop which means that the information gathered may not be complete.

In addition, only 4 of the 9 projects utilized a design that allowed for experimental control and one of those four only had one data point of overlap in the multiple baseline design. Although effect sizes indicate that the projects were for the most part highly effective, possible confounds cannot be eliminated for the other four projects that only employed AB designs.

RECOMMENDATIONS

Based on the information gathered from studies 1 and 2, several recommendations for possible improvement of the consultant workshop model will be
suggested. This model effectively helped employees identify important performance concerns and make substantial improvements in performance. However, for organizations that desire to change employees' management behaviors and/or to encourage employees to develop new projects, a more comprehensive approach may be required.

First, more emphasis during and after the training should be placed on maintaining the projects and generalizing the PM skills. This can be accomplished in a few ways. First, practice opportunities for each step of the PM process could be added into the training. Using scenarios, workshop participants can practice identifying pinpoints, developing measurement systems and data collection forms, diagnosing performance issues, and developing viable interventions. A one-page task analysis can be provided for easy reference. Workshop participants should also be taught to develop very manageable measurement systems and interventions that require the least amount of time, effort, and resources. Consultants may even consider only teaching measurement and feedback and eliminating some or all of the diagnosis and intervention components of the training in order to simplify the process. More advanced components could be taught once mastery and use of these basic skills has been demonstrated. Lastly, workshops should be placed close enough together to eliminate lengthy baselines, which may be discouraging to participants, but long enough to allow for adequate data collection.

In addition the organization should be encouraged to create a plan for maintenance and generalization. For example, time could be built into monthly meetings for data sharing and project discussions. Time could also be specifically
allotted during each week for managers to develop and implement PM-based solutions. Incentives for project maintenance and generalization could be added to the existing incentive system or one could be created. Higher-level managers in the organization could graph the number of ongoing projects and the percentage of managers reporting project data and improvements. Lastly, employees should be encouraged to measure and graph other residual results (e.g., time and money saved, increased rate of client progress, etc.) that may encourage them to continue the study.

If the organization also desires changes in general management practices, training workshops and the organizational systems should be modified to support this. To accomplish changes in the employees’ overall management approach, delivering frequent performance feedback to managers by the consultant or higher-level managers in the organization could be added. In addition, readings and assignments discussing different management strategies could be included. Lastly, leaders should support the process by making it explicit that performance management is important, providing time and resources to manage performance, and reinforcing it when performance management does occur.

In addition, the behavior of the leader should be reinforced in some way. If the leader’s behavior of institutionalizing the intervention is not reinforced it is unlikely the behavior will be maintained (Cooper, 2006). There are a few potential solutions to this issue. Managers can be taught to reinforce the behavior of the leader. Another option would be to have the consultant continue with the organization in a “coaching” capacity to reinforce leader behavior. Leaders could also be taught to self-manage their supportive behaviors. Lastly, natural reinforcers for the leaders
and/or managers could be identified and included to help maintain the behavior (Welsh et. al., 1994). For example, incentives for leader support could be included in the compensation system and evidence of improved organizational success could be communicate to the leader regularly.

Lastly, aspects of the highly successful behavior-based safety approach should be considered (Pounds, 2008). For example, the behavior-based safety approach is participative – all levels of employees are responsible for data collection, data dissemination, feedback, and praise (e.g., Fox et al., 1987). There is a focus on problem-solving and removing barriers to improved performance. Therefore, employees may feel less like they are being targeted for improvement and more like they are contributing to the solution. PM managers could be trained in a similar way that safety observers are trained across the organization, with the eventual goal of all employees being familiar with the process. This may provide more “natural” reinforcers for employees (e.g., seeing their suggestion for equipment improvements implemented) than the current workshop model, result in PM being incorporated into the organization’s systems, and thus, could potentially improve maintenance and generalization of OBM practices in organizations. If these features were included with the existing workshop framework, it is likely even more organizational success could be realized through performance management.
Appendix A

Recruitment Script
Read aloud by the program director.

You have been invited to participate in a research study being conducted through Western Michigan University. In order to participate, you must be a senior therapist or a staff member on a senior therapists team. If you participated in Dr. John Austin's workshop in 2005, you will be asked to provide information about the project you conducted. All individuals that participate in the study, whether you participated in the workshop in 2005 or not, will be asked to fill out a survey online through survey monkey. They survey will take approximately a half hour to complete. All identifying information from the survey will be held confidentially by the researchers and will not be disclosed to the organization. The survey information will only be presented to the organization and in presentations and publications in group format.

Now I am going to pass around the consent form. You should take two copies and keep one for yourself. If you are interested in participating in the study please sign the consent form. I will pass around this envelope so that you can place one of the consent forms back in the envelope. If you choose not to sign the consent form there will be no negative consequences for you. Everyone should place one consent form back into the envelope, signed or not signed, so that individuals that have chosen to participate or not to participate cannot be identified. Then, I will seal the envelope in from of you so that you know I cannot look at who signed the consent forms. This envelope will be sent directly to the researchers.
Appendix B

Consent Form
You have been invited to participate in a research project entitled "An Evaluation of an OBM Program in a Human Service Setting." This research is intended to study the impact of the consultant workshop model. This project is Nicole Gravina's dissertation project.

If you attended the OBM workshop provided by Dr. John Austin in 2005, you will be asked to provide information regarding any projects you have conducted through an emailed survey and a one-time over-the-phone or in-person follow-up interview. If you did or did not attend the training, you will also be asked to provide information regarding your supervisory practices through a survey monkey online survey.

As in all research, there may be unforeseen risks to the participant. If an accidental injury occurs, appropriate emergency measures will be taken; however, no compensation or treatment will be made available to me except as otherwise specified in this consent form. One potential risk of participation in this project is that you may be concerned about providing information about your project and/or management practices. The information gathered by the survey monkey survey will only be presented in group format and the organization has signed a form indicating that they will not discipline employees based on the study information gathered.

One benefit of this project that may or may not impact you directly, is that the information gathered will be used to make suggestions for improving the consultant-workshop model.

All of the information collected from you is confidential. That means that your name will not appear on any papers on which this information is recorded. The forms will all be coded, and Nicole Gravina will keep a separate master list with the names of participants and the corresponding code numbers. Once the data are collected and analyzed, the master list will be destroyed. All other forms will be retained for at least three years in a locked file in the principal investigator's office.

You may refuse to participate or quit at any time during the study without prejudice or penalty. If you have any questions or concerns about this study, you may contact either John Austin at 269-387-4495 or Nicole Gravina at 269-352-5012. You may also contact the chair of Human Subjects Institutional Review Board at 269-387-8293 or the vice president for research at 269-387-8298 with any concerns that you have.

This consent document has been approved for use for one year by the Human Subjects Institutional Review Board as indicated by the stamped date and signature of the board chair in the upper right corner. Do not participate in this study if the stamped date is more than one year old.

Your signature below indicates that you have read and/or had explained to you the purpose and requirements of the study and that you agree to participate.

Signature ___________________________________________ Date __________________
Appendix C

Employer Consent
Letter of Approval for Presentation and/or Publication of Data

"AN EVALUATION OF AN OBM PROGRAM IN A HUMAN SERVICE SETTING"

Principal Investigator: John Austin, PhD
Student Investigator: Nicole Gravina

Kinark Child and Family Services has given permission for Dr. John Austin, and Nicole Gravina to collect, analyze and present and/or publish the data collected for the project entitled, "An Evaluation of an OBM Program in a Human Service Setting."

Kinark was involved in the project from the start and is therefore familiar with its details. Kinark has discussed, in detail, the possibility of presenting and/or publishing the work with Dr. Austin and Ms. Gravina and company officials believe that the proposed presentation and/or publication will not adversely impact the performance or well-being of the employees who participated in this project. In addition, Kinark agrees to not discipline employees based on the information gathered from the study. Kinark may terminate this approval at any time before presentation and/or publication and for any reason without penalty.

Sincerely,

Anne R. Cummings, Ph.D., BCBA
Clinical Director, Central East Autism Program
Kinark Child and Family Services

Date
Appendix D

Pinpoint Impact Survey
Pinpoint Impact Survey

Page 1. Pinpoint 1 - Accuracy of Instruction, Reinforcement and Error Correction

Pinpoint 1 aimed to increase the accuracy of instruction delivery, reinforcement delivery, and error correction during treatment sessions.

1. Would achieving this pinpoint be likely to improve client care?
   Definitely
   Most likely
   No/neutral
   It would have a negative impact on client care

   Comments (optional)

2. Would achieving this pinpoint be likely to save/make the organization money?
   Definitely
   Most likely
   No/neutral
   It will cost more than it will save

   Comments (optional)
3. Would achieving this pinpoint be likely to improve parent-staff relationships?

Definitely
Most likely
No

It would have a negative impact of parent-staff relationships

Comments (optional)

4. Would achieving this pinpoint be likely to improve staff-staff relationships?

Definitely
Most likely
No/Neutral

It would have a negative impact on staff-staff relationships

Comments (optional)

5. How would you rate the overall importance/impact of this pinpoint?

Very important
Somewhat important
Neutral
Not very important
Very unimportant
Page 2. Accuracy and Completeness of Treatment Documents

Pinpoint 2 aimed to increase the accuracy and completeness of treatment documents included having: an updated table of contents, program information complete, graphs filled out accurately, data sheets completed accurately and filed appropriately, and programs updated.

1. Would achieving this pinpoint be likely to improve client care?

Definitely
Most likely
No/neutral
It would have a negative impact on client care

Comments (optional)

2. Would achieving this pinpoint be likely to save/make the organization money?

Definitely
Most likely
No/neutral
It will cost more than it will save

Comments (optional)
3. Would achieving this pinpoint be likely to improve parent-staff relationships?

Definitely
Most likely
No
It would have a negative impact of parent-staff relationships

Comments (optional)

4. Would achieving this pinpoint be likely to improve staff-staff relationships?

Definitely
Most likely
No/Neutral
It would have a negative impact on staff-staff relationships

Comments (optional)

5. How would you rate the overall importance/impact of this pinpoint?

Very important
Somewhat important
Neutral

Not very important

Very unimportant

Comments (optional)

Page 3. Pinpoint 3 - Submitting IBI Reports On-Time

Pinpoint 3 aimed at increasing submitting the Intensive Behavioral Intervention (IBI) time reports by the weekly deadline for each client.

1. Would achieving this pinpoint be likely to improve client care?

Definitely

Most likely

No/neutral

It would have a negative impact on client care

Comments (optional)

2. Would achieving this pinpoint be likely to save/make the organization money?

Definitely

Most likely

No/neutral
It will cost more than it will save

Comments (optional)

3. Would achieving this pinpoint be likely to improve parent-staff relationships?
Definitely
Most likely
No
It would have a negative impact of parent-staff relationships

Comments (optional)

4. Would achieving this pinpoint be likely to improve staff-staff relationships?
Definitely
Most likely
No/Neutral
It would have a negative impact on staff-staff relationships

Comments (optional)
5. How would you rate the overall importance/impact of this pinpoint?

Very important

Somewhat important

Neutral

Not very important

Very unimportant

Comments (optional)

Page 4. Pinpoint 4 - Data sheet completeness and accuracy

Pinpoint 4 aimed at increasing data sheet accuracy and completeness. Five different aspects/pinpoints of the data collection sheets were measured including recording the response, prompt, condition, schedule of reinforcement, and mastery criteria.

1. Would achieving this pinpoint be likely to improve client care?

Definitely

Most likely

No/neutral

It would have a negative impact on client care

Comments (optional)

2. Would achieving this pinpoint be likely to save/make the organization money?
3. Would achieving this pinpoint be likely to improve parent-staff relationships?

Definitely
Most likely
No
It would have a negative impact of parent-staff relationships

Comments (optional)

4. Would achieving this pinpoint be likely to improve staff-staff relationships?

Definitely
Most likely
No/Neutral
It would have a negative impact on staff-staff relationships

Comments (optional)
5. How would you rate the overall importance/impact of this pinpoint?

Very important
Somewhat important
Neutral
Not very important
Very unimportant

Comments (optional)

Page 5. Pinpoint 5 - Antecedent and consequence delivery

Pinpoint 5 aimed at improving antecedent and consequence delivery. This included behaviors like setting up the materials quickly and accurately, delivering the correct instructions and prompts, and delivering the appropriate consequence.

1. Would achieving this pinpoint be likely to improve client care?

Definitely
Most likely
No/neutral

It would have a negative impact on client care

Comments (optional)
2. Would achieving this pinpoint be likely to save/make the organization money?

Definitely
Most likely
No/neutral
It will cost more than it will save

Comments (optional)

3. Would achieving this pinpoint be likely to improve parent-staff relationships?

Definitely
Most likely
No
It would have a negative impact of parent-staff relationships

Comments (optional)

4. Would achieving this pinpoint be likely to improve staff-staff relationships?

Definitely
Most likely
No/Neutral
It would have a negative impact on staff-staff relationships

Comments (optional)

5. How would you rate the overall importance/impact of this pinpoint?

Very important
Somewhat important
Neutral
Not very important
Very unimportant

Comments (optional)

Page 6. Pinpoint 5b - incidental teaching opportunities

Pinpoint 5b aimed at increasing the number of incidental teaching opportunities during story time and song time

1. Would achieving this pinpoint be likely to improve client care?

Definitely
Most likely
No/neutral

It would have a negative impact on client care
2. Would achieving this pinpoint be likely to save/make the organization money?

Definitely
Most likely
No/neutral
It will cost more than it will save

Comments (optional)

3. Would achieving this pinpoint be likely to improve parent-staff relationships?

Definitely
Most likely
No
It would have a negative impact of parent-staff relationships

Comments (optional)

4. Would achieving this pinpoint be likely to improve staff-staff relationships?
Definitely
Most likely
No/Neutral

It would have a negative impact on staff-staff relationships

Comments (optional)

5. How would you rate the overall importance/impact of this pinpoint?

Very important
Somewhat important
Neutral
Not very important
Very unimportant

Comments (optional)

Page 7. Pinpoint 6 - Percentage of programs run

Pinpoint 6 aimed at increasing the percentage of planned programs that were run.

1. Would achieving this pinpoint be likely to improve client care?

Definitely
Most likely
No/neutral

It would have a negative impact on client care

Comments (optional)

2. Would achieving this pinpoint be likely to save/make the organization money?

Definitely

Most likely

No/neutral

It will cost more than it will save

Comments (optional)

3. Would achieving this pinpoint be likely to improve parent-staff relationships?

Definitely

Most likely

No

It would have a negative impact of parent-staff relationships

Comments (optional)
4. Would achieving this pinpoint be likely to improve staff-staff relationships?

Definitely
Most likely
No/Neutral

It would have a negative impact on staff-staff relationships

Comments (optional)

5. How would you rate the overall importance/impact of this pinpoint?

Very important
Somewhat important
Neutral
Not very important
Very unimportant

Comments (optional)

8. Pinpoint 7 - Percentage of programs reviewed

Pinpoint 8 aimed at increasing the percentage of programs reviewed at the weekly team meetings.

1. Would achieving this pinpoint be likely to improve client care?
2. Would achieving this pinpoint be likely to save/make the organization money?

Definitely
Most likely
No/neutral

It will cost more than it will save

Comments (optional)

3. Would achieving this pinpoint be likely to improve parent-staff relationships?

Definitely
Most likely
No

It would have a negative impact of parent-staff relationships

Comments (optional)
4. Would achieving this pinpoint be likely to improve staff-staff relationships?

Definitely

Most likely

No/Neutral

It would have a negative impact on staff-staff relationships

Comments (optional)

5. How would you rate the overall importance/impact of this pinpoint?

Very important

Somewhat important

Neutral

Not very important

Very unimportant

Comments (optional)

Page 9. Pinpoint 8 - Parent involvement

Pinpoint 8 aimed to increase parent involvement in the center. Parent involvement
included helping create program materials, donating materials, bringing library books to the classroom, and volunteering at the center.

1. Would achieving this pinpoint be likely to improve client care?

   Definitely
   Most likely
   No/neutral

   It would have a negative impact on client care

   Comments (optional)

   

2. Would achieving this pinpoint be likely to save/make the organization money?

   Definitely
   Most likely
   No/neutral

   It will cost more than it will save

   Comments (optional)

   

3. Would achieving this pinpoint be likely to improve parent-staff relationships?

   Definitely
   Most likely
   No
It would have a negative impact of parent-staff relationships

Comments (optional)

4. Would achieving this pinpoint be likely to improve staff-staff relationships?
   Definitely
   Most likely
   No/Neutral

It would have a negative impact on staff-staff relationships

Comments (optional)

5. How would you rate the overall importance/impact of this pinpoint?
   Very important
   Somewhat important
   Neutral
   Not very important
   Very unimportant

Comments (optional)
Page 10. Overall Summary

1. What did you like about the PM training?

2. What would you improve about the PM training?

3. We would like to increase the maintenance and generalization of the skills learned in the training. How do you think we could encourage folks to continue their projects after the training is complete? How do you think we could encourage folks to do new projects when other performance issues arise?
Appendix E

HSIRB Approval Letter
Date: January 9, 2008

To: John Austin, Principal Investigator
Nicole Gravina, Student Investigator

From: Amy Naugle, Ph.D., Chair

Re: HSIRB Project Number: 07-12-17

This letter will serve as confirmation that your research project entitled "An Evaluation of an OBM Program in a Human Service Setting" has been approved under the expedited category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note that you may only conduct this research exactly in the form it was approved. You must seek specific board approval for any changes in this project. You must also seek reapproval if the project extends beyond the termination date noted below. In addition if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: January 9, 2009
Appendix F

Regional Evaluation Form
## Provincial IBI Competencies Evaluation Form (Draft March 12 2004)

**Staff:** ___________________________  **Observer:** ___________________________  **Date:** ___________________________

**Part 1:** Observe a series of instructions delivered during IBI session. Either pause videotape between instruction samples, or use a 15 second recording interval, to complete checklist before observing the next instruction. Observe and record 15-20 discrete instructional sequences.

- **✓** skill was observed and correct;
- **X** skill was observed and incorrect;
- **N** skill was not observed

### A: Antecedent (Pre-Instruction)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Programming materials were ready or available</td>
<td>✓</td>
<td>X</td>
<td>N</td>
<td>X</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>2. Spatial relationship of instruction/child appropriate to task</td>
<td>X</td>
<td>X</td>
<td>N</td>
<td>X</td>
<td>N</td>
<td>✓</td>
</tr>
<tr>
<td>3. Child was oriented to task and/or instructor</td>
<td>X</td>
<td>X</td>
<td>N</td>
<td>X</td>
<td>N</td>
<td>✓</td>
</tr>
<tr>
<td>4. An EO was established prior to handing (if applicable)</td>
<td>X</td>
<td>X</td>
<td>N</td>
<td>X</td>
<td>N</td>
<td>✓</td>
</tr>
<tr>
<td>5. The target stimulus (S+) presented as per program</td>
<td>X</td>
<td>X</td>
<td>N</td>
<td>X</td>
<td>N</td>
<td>✓</td>
</tr>
<tr>
<td>6. The comparison stimuli (S-) presented as per program</td>
<td>X</td>
<td>X</td>
<td>N</td>
<td>X</td>
<td>N</td>
<td>✓</td>
</tr>
<tr>
<td>7. The program materials were positioned properly</td>
<td>X</td>
<td>X</td>
<td>N</td>
<td>X</td>
<td>N</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Total # ✓'s =**

### B: Antecedent (Instruction)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The instruction was clear and concise</td>
<td>✓</td>
<td>X</td>
<td>N</td>
<td>X</td>
<td>N</td>
<td>✓</td>
</tr>
<tr>
<td>2. Appropriate tone/cadence</td>
<td>✓</td>
<td>X</td>
<td>N</td>
<td>X</td>
<td>N</td>
<td>✓</td>
</tr>
<tr>
<td>3. Instruction/Task delivered as per program</td>
<td>✓</td>
<td>X</td>
<td>N</td>
<td>X</td>
<td>N</td>
<td>✓</td>
</tr>
<tr>
<td>4. Instruction not repeated (before child's response)</td>
<td>X</td>
<td>X</td>
<td>N</td>
<td>X</td>
<td>N</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Total # ✓'s =**

### C: Antecedent (Prompts)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The appropriate prompt was given for success (0 sec)</td>
<td>X</td>
<td>X</td>
<td>N</td>
<td>X</td>
<td>N</td>
<td>✓</td>
</tr>
<tr>
<td>2. No unintentional prompts were given (e.g., eye gaze)</td>
<td>X</td>
<td>X</td>
<td>N</td>
<td>X</td>
<td>N</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Total # ✓'s =**

### D: Behaviour (Record the child's response)

<table>
<thead>
<tr>
<th></th>
<th>+</th>
<th>-</th>
<th>+</th>
<th>-</th>
<th>+</th>
<th>-</th>
<th>+</th>
<th>-</th>
</tr>
</thead>
</table>

**Total # ✓'s =**

### E: Consequence (Reinforcer delivery)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reinforcer delivery was immediate (0-2 SECS)</td>
<td>X</td>
<td>X</td>
<td>N</td>
<td>X</td>
<td>N</td>
<td>✓</td>
</tr>
<tr>
<td>2. Appropriate tone/cadence</td>
<td>X</td>
<td>X</td>
<td>N</td>
<td>X</td>
<td>N</td>
<td>✓</td>
</tr>
<tr>
<td>3. Other reinforcers delivered paired with praise</td>
<td>X</td>
<td>X</td>
<td>N</td>
<td>X</td>
<td>N</td>
<td>✓</td>
</tr>
<tr>
<td>4. Reinforcement schedule was followed as per program</td>
<td>X</td>
<td>X</td>
<td>N</td>
<td>X</td>
<td>N</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Total # ✓'s =**

### F: Consequence (Error correction)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The correction procedure was followed as written</td>
<td>X</td>
<td>X</td>
<td>N</td>
<td>X</td>
<td>N</td>
<td>✓</td>
</tr>
<tr>
<td>2. Differential reinforcement used for prompted correct</td>
<td>X</td>
<td>X</td>
<td>N</td>
<td>X</td>
<td>N</td>
<td>✓</td>
</tr>
<tr>
<td>3. Reinforcer delivery was immediate (0-2 SECS)</td>
<td>X</td>
<td>X</td>
<td>N</td>
<td>X</td>
<td>N</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Total # ✓'s =**

### G: Intrafield Competencies

<table>
<thead>
<tr>
<th></th>
<th>1</th>
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<th>3</th>
<th>4</th>
<th>5</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Data recorded as per program</td>
<td>X</td>
<td>X</td>
<td>N</td>
<td>X</td>
<td>N</td>
<td>✓</td>
</tr>
<tr>
<td>2. The interval interval was less than 5 sec</td>
<td>X</td>
<td>X</td>
<td>N</td>
<td>X</td>
<td>N</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Total # ✓'s =**
Part 2: Rate how well the overall flow of the observed session and behaviour management was applied.

<table>
<thead>
<tr>
<th>Target Competencies</th>
<th>Good (2)</th>
<th>Emerging (1)</th>
<th>Need to Improve (0)</th>
<th>Not observed</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Organization (pre-teaching)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Reviewed program notes and data</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2. Materials prepared &amp; ready (at least 3 tasks)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>3. Variety of potential reinforcers present</td>
<td></td>
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<tr>
<td>4. Data collection materials ready / available</td>
<td></td>
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<tr>
<td>5. Level of distraction as per child and/or program</td>
<td></td>
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<tr>
<td>B. Instructional or demand presentation</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1. Task choices offered</td>
<td></td>
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<tr>
<td>2. Fade in # of demands</td>
<td></td>
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<tr>
<td>3. Fade in response effort (low at first)</td>
<td></td>
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<tr>
<td>4. Mix and vary tasks (random, intermixed, arrays)</td>
<td></td>
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<tr>
<td>5. Intersperse easy and hard tasks</td>
<td></td>
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<tr>
<td>6. Instruction delivery rate &gt; 5 / min</td>
<td></td>
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<tr>
<td>C. Prompting</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1. Errorless prompting strategies</td>
<td></td>
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</tr>
<tr>
<td>2. Prompt fading was attempted</td>
<td></td>
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<tr>
<td>D. Reinforcer delivery</td>
<td></td>
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</tr>
<tr>
<td>1. Stimulus preference testing (EO / MO)</td>
<td></td>
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</tr>
<tr>
<td>2. Reinforcers were varied (across modes)</td>
<td></td>
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<tr>
<td>3. Prase statements varied (wording)</td>
<td></td>
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<tr>
<td>4. Uses differential reinforcement</td>
<td></td>
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<tr>
<td>5. Maintains control of reinforcers</td>
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<tr>
<td>6. Reinforcer delivery as per child and/or program</td>
<td></td>
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<tr>
<td>E. Session engagement</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1. Child engaged throughout observation</td>
<td></td>
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<tr>
<td>2. Instructor appeared positive throughout</td>
<td></td>
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<tr>
<td>F. Behaviour Management strategies</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1. Ignored minor beh excesses and continue</td>
<td></td>
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<tr>
<td>2. Redirection to another response</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>3. Environ. manipulation (demands, location)</td>
<td></td>
<td></td>
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<tr>
<td>4. Differential reinforcement other behaviours</td>
<td></td>
<td></td>
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<tr>
<td>5. Child did not escape task by beh excesses</td>
<td></td>
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</tr>
<tr>
<td>6. Behaviour plan followed as written</td>
<td></td>
<td></td>
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<tr>
<td>7. Behaviour data recorded in a timely manner</td>
<td></td>
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<tr>
<td>G. Data Management (child performances)</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1. Recorded accurately as per program (IQR)</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2. Recorded in a timely manner (asap)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>3. Data is graphed accurately</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>4. Session notes accurate (may include data based decisions re mastery/revision criteria)</td>
<td></td>
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</tbody>
</table>
Provincial IBI Competencies Evaluation Form (Draft Mar 12, 2004)

Photocopy to back of Part 2

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Areas to Improve</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

Other notes / observations:
Appendix G

Pinpoint Impact Data
Complete pinpoint impact rating table.

<table>
<thead>
<tr>
<th>Project</th>
<th>Improve Client Care</th>
<th>Save/Make Org Money Relationships</th>
<th>Improve Staff/Parent Relationships</th>
<th>Improve Staff/Staff Rating</th>
<th>Overall Importance (5 = Very Important)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pinpoint 1: Accuracy of instruction, reinforcement, and error correction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Definitely:</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>4.6</td>
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<tr>
<td>Most Likely:</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>No/Neutral:</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Negative Impact:</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
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<tr>
<td>Pinpoint 2: Accuracy and completeness of treatment documents</td>
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</tr>
<tr>
<td>Definitely:</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>4.8</td>
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<tr>
<td>Most Likely:</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>No/Neutral:</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Negative Impact:</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
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<tr>
<td>Pinpoint 3: Submitting IBI reports on-time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Definitely:</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>4.4</td>
</tr>
<tr>
<td>Most Likely:</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>No/Neutral:</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Negative Impact:</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Pinpoint 4: Data sheet completion and accuracy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Definitely:</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>4.8</td>
</tr>
<tr>
<td>Most Likely:</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>No/Neutral:</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Negative Impact:</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Pinpoint 5a: Accuracy of antecedent and consequence delivery</td>
<td>Definitely: 5 1 2 5 5.0</td>
<td>Most Likely: 0 1 0 0</td>
<td>No/Neutral: 0 2 3 0</td>
<td>Negative Impact: 0 0 0 0</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------------</td>
<td>-------------------</td>
<td>-------------------</td>
<td>-------------------</td>
<td>-------------------</td>
<td></td>
</tr>
<tr>
<td>Pinpoint 5b: Increase frequency of incidental teaching opportunities</td>
<td>Definitely: 5 1 1 2 4.4</td>
<td>Most Likely: 0 0 1 3</td>
<td>No/Neutral: 0 4 3 0</td>
<td>Negative Impact: 0 0 0 0</td>
<td></td>
</tr>
<tr>
<td>Pinpoint 6: Percentage of programs run</td>
<td>Definitely: 5 1 1 3 4.8</td>
<td>Most Likely: 0 4 2 2</td>
<td>No/Neutral: 0 0 2 0</td>
<td>Negative Impact: 0 0 0 0</td>
<td></td>
</tr>
<tr>
<td>Pinpoint 7: Percentage of programs reviewed</td>
<td>Definitely: 4 1 1 3 4.6</td>
<td>Most Likely: 1 3 2 2</td>
<td>No/Neutral: 0 1 2 0</td>
<td>Negative Impact: 0 0 0 0</td>
<td></td>
</tr>
<tr>
<td>Pinpoint 8: Parent involvement</td>
<td>Definitely: 4 4 3 2 4.6</td>
<td>Most Likely: 1 1 2 1</td>
<td>No/Neutral: 0 0 0 2</td>
<td>Negative Impact: 0 0 0 0</td>
<td></td>
</tr>
<tr>
<td>Pinpoint 9: Percentage of programs run each day (See pinpoint 6)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Survey for Supervisors

Page 1. Introduction

1. Please type your name in the box below.

   

2. What is your job title?

   

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

   1 or less
   2
   3
   4
   5
   6+

4. What is your highest level of education attained?

   Some College
   Associates Degree
   Bachelor's Degree
   Master's Degree
   Doctorate Degree

5. Do you have a BCBA?

   Yes
   No
6. Prior to working in your current position, did you have previous experience working as a behavior analyst? If yes, please explain below including the number of years of experience in your description.

7. Did you take John Austin's OBM Workshop in 2005?
   Yes
   No

8. If you did take John Austin's OBM workshop, did you complete a performance management project?
   Yes
   No

Page 2. Measurement

1. How often do you measure each staff member's performance (choose one)?
   Several times per day
   Once per day
   A few times per week
   Once per week
   1-2 times per month
   A few times per year
2. Please list all types of staff performances you measure, how often (as above), and the way you measure (i.e., self-report from staff, parent reports, your direct observation, video taping, etc.) each.

Page 3. Verbal Feedback

1. How often do you deliver VERBAL FEEDBACK to each staff member you manage or supervise on average (choose one)? (Verbal feedback includes any spoken or written information about an employee's performance.)

   Several times per day
   Once per day
   A few times per week
   Once per week
   1-2 times per month
   A few times per year
   Never

2. List the behaviors or results you most often deliver VERBAL FEEDBACK for?
3. How do you most often deliver your VERBAL FEEDBACK (choose one)?

In person
Over the phone
In email
Written

4. Please estimate your ratio of positive VERBAL FEEDBACK to negative verbal feedback in numbers:

Page 4. Graphic Feedback

1. How often do you deliver GRAPHIC FEEDBACK to each staff member on average (choose one)? (Graphic feedback includes any kind of visual depiction of employee performance not including written feedback.)

Several times per day
Once per day
A few times per week
Once per week
1-2 times per month
A few times per year
Never

2. List the behaviors or results you most often deliver GRAPHIC FEEDBACK for?
3. How do you MOST OFTEN deliver your GRAPHIC FEEDBACK (choose one)?

In person

In email

Other (please explain below)

Page 5. Tangible Reinforcers

1. How often do you deliver TANGIBLE REINFORCERS to staff (choose one)? (Tangible reinforcers include items you give to employees like money, tickets, gift certificates, candy, etc.)

Several times per day

Once per day

A few times per week

Once per week

1-2 times per month

A few times per year

Never

2. List the types of TANGIBLE REINFORCERS you provide, if any, and describe what each is given for:
3. Who do you usually give TANGIBLE REINFORCERS to (choose one)?

Individual Employees

Groups of Employees

Not Applicable

Page 6. Social Reinforcers

1. How often do you deliver SOCIAL REINFORCERS (e.g. praise) to each staff member (choose one)?

Several times per day

Once per day

A few times per week

Once per week

1-2 times per month

A few times per year

Never

2. List the types of SOCIAL REINFORCERS you provide, if any, and describe what each is given for:

3. Who do you usually give SOCIAL REINFORCERS to (choose one)?

Individual Employees

Groups of Employees

Not Applicable
Page 7. Goal Setting

1. How often do you set goals with/for each staff member on average (choose one)?

Several times per day
Once per day
A few times per week
Once per week
1-2 times per month
A few times per year
Never

2. List the behaviors or results you most often set goals for?

3. How do you usually set goals?

WITH Employees
FOR Employees (assigned goals)
Not Applicable

Page 8. Conclusion

1. If you are having a performance problem with staff, what do you do?
2. Please feel free to add any final comments or thoughts in the box below.
BIBLIOGRAPHY


performance of managers, supervisors, front-line staff and clients in a human service setting. *Journal of Organizational Behavior Management, 16*(2), 3-34.


