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Improving staff performance by enhancing staff training procedures and organizational behavior management procedures

Dennis Martin McClelland

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Improving Staff Performance by Enhancing Staff Training Procedures and Organizational Behavior Management Procedures

by

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A thesis submitted in partial fulfillment of the requirements for the degree of Master of Arts in Applied Behavior Analysis
College of the Graduate School
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Keywords: Tools for positive behavior change, Behavior analysis services program, Coercion, Generalization, Maintenance

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Improving Staff Performance by Enhancing Staff Training Procedures and Organizational Behavior Management Procedures

Martin McClelland

ABSTRACT

The ability of direct care staff members to carry out behavior programs, specific protocols written by a behavior analyst, or recommendations made after completion of a functional behavioral assessment is an essential tool needed for such documents to actually be meaningful to patients. Since direct care staff members spend the most time directly working with patients, it is imperative that they carry out intervention procedures with reliability and fidelity. This study evaluated the effectiveness of staff training procedures as well as organizational behavior management techniques used to ensure that staff members are equipped with the tools they need and are properly motivated to carry out the proposed intervention procedures. Staff members received training on the Tools for Positive Behavior Change curriculum developed by the Behavior Analysis Services Program at the University of South Florida using a myriad of training techniques. Then, organizational behavior management techniques were implemented in order to maintain tool implementation and positive interactions with patients over time. Effectiveness of these procedures was measured using a concurrent multiple baseline across participant research design. Results showed that participants did not increase, or only slightly increased, tool use and positive interactions after being trained. However, tool use and positive interactions showed a more substantial increase for most participants after the implementation of organizational behavior management procedures.
INTRODUCTION

Performance of staff is an important aspect of every human health service organization especially since regulatory bodies (e.g. Joint Commission on Accreditation of Healthcare Organizations, Agency for Health Care Administration, Department of Children and Families, Intermediate Care Facility Standards) require stringent adherence to state laws and statutes. Since staff training is recognized as a significant need in the field of applied behavior analysis and related fields, considerable research has been compiled on teaching skills to direct care staff members and on supervisory techniques used to ensure that paraprofessional staff are using the skills as trained (Fabry & Reid, 1978; Harchik, Sherman, Sheldon, & Strouse, 1992; Page, Iwata, & Reid, 1982; Reid, Parsons, & Green, 1989, chap. 3; Sarokoff & Sturmey, 2004; Schepis, Reid, Ownbey, & Parsons, 2001; Whang, Flethcer, & Fawcett, 1982,). Numerous studies have shown that the mere training of skills to direct care staff is insufficient in maintaining steady performance of those skills (Adams, Tallon, & Rimell, 1980; Edwards & Bergman, 1982; Gardner, 1972; McGimsey, Greene, & Lutzker, 1995; McKeown, Adams, & Forehand, 1975; Sepler & Myers, 1978; Shore, Iwata, Vollmer, Lerman, & Zarcone, 1995). The most common training methods to teach behavioral techniques to staff members are verbal instruction, written instruction, performance modeling, performance practice, and feedback (Reid et al., 1989). Most training models involve the use of multi-faceted programs in which several staff training methods are used within one model (Parsons,
Rollyson, Reid, 2004; Petscher & Bailey, 2006; Sarokoff et al., 2004; Whitman, Scibak, & Reid, 1983, chap. 11).

Staff training is only the first step, and should not be used by itself, in teaching skills and improving staff performance. There are a multitude of reasons why staff training is not sufficient in improving staff performance. First, training programs do not always efficiently teach the skills that trainees are expected to acquire. Despite all of the research on ineffective methods for training staff, there still seems to be a wealth of training models that use only pieces of the multi-faceted approach like verbal or written instruction (Reid et al., 1989). Second, even if the training program does an excellent job of training the essential skills, these skills have been shown to only maintain for brief periods of time (Parsons & Reid, 1995; van den Pol, Reid, & Fuqua, 1983). Many of the past and current research experiments do not typically focus on maintenance of skills over time. As such, supervisors must be prepared to follow up with their staff repeatedly to aid in skill maintenance. Finally, generalization of skills taught in the training setting to the actual work environment is typically poor (Ducharme & Feldman, 1992). Simply because a trainee can perform a skill in the training arena in front of a trainer does not necessarily mean that the skill will generalize to the work environment. In situ training may help supervisors overcome the obstacle of lack of generalization of skills, but there are drawbacks to this approach as well (Horton, 1975). Drawbacks may include the amount of time needed to train staff members in the work environment or that training in the work environment could potentially make staff members feel uncomfortable. In any case, supervisors must be able to commit to providing ongoing feedback, assist in maintenance and generalization of skills, and have an understanding of organizational
behavior management techniques for staff training programs to ultimately be effective (Reid et al., 1989).

Although staff training is critical to the implementation of skills taught in the training arena, it is only part of the essential steps in producing proficient staff performance. Once it is clear that staff members have received the satisfactory amount of training as authorized by the individual agency and the training supervisor has deemed that the staff member can correctly implement the skills taught in the training arena as evident by a monitoring system, organizational behavior management (OBM) systems should be put in place so supervisors can routinely focus on monitoring and improving staff performance (Burgio, Whitman, & Reid, 1983; Ivancic, Reid, Iwata, Faw, & Page, 1981; Kissel, Whitman, & Reid, 1983; Parsons et al., 1987; Parsons et al., 2004; Reid et al., 1989). Most frequently, organizational behavior management procedures are grouped into antecedent and consequence strategies (Whitman et al., 1983). Self-management procedures can be used as well (Burgio et al., 1990; Burgio et al., 1983; Kissel et al., 1983; Richman et al., 1988). Like staff training procedures, organizational behavior management techniques can be combined into multi-faceted programs involving antecedent, consequence, and self-management procedures such as goal setting (Faw, Reid, Schepis, Fitzgerald, & Welty, 1981; Johnson, Welch, Miller, & Altus, 1991; Page et al., 1982; Parsons et al., 1987; Reid & Shoemaker, 1984; Shore et al., 1995).

The current study evaluated whether well-researched staff training procedures are sufficient in maintaining staff performance over time or whether organizational behavior management techniques are necessary to increase or maintain staff performance. Therefore, this study will determine whether organizational behavior management
techniques are needed to properly motivate staff to carry out procedures learned in the training environment.
METHOD

Participants and Settings

The present study was implemented at Manatee Palms Youth Services in Bradenton, Florida. This facility is a locked, Level IV, residential treatment center for children and adolescents who all have at least one Axis I diagnosis (DSM-IV), are typically victims of physical and/or sexual abuse, and may have diagnosed behavioral disorders as well (e.g. Impulse-Control Disorder, Oppositional Defiant Disorder, Intermittent Explosive Disorder). The facility is comprised of three different residential units with a large, circular nurses’ station in the center. An adolescent unit for males with sexual behavior problems (Siesta), a female adolescent unit (Terra Ceia), and another adolescent male unit (Apollo) make up the structure of the facility.

A total of five staff members, who work directly with the patients on a routine basis, were recruited from the facility to participate in the study. The first staff member who agreed to participate, Nicole, was a core mental health technician on the Siesta unit. Nicole was a twenty-three-year-old Caucasian female with four months of experience in residential care. The next two staff members who agreed to participate, Ronnie and Tonya, were core mental health technicians on the Apollo unit. Ronnie was a twenty-year-old African-American male with six months of experience in residential care. Tonya was a twenty-eight-year-old African-American female with five months of experience in residential care and years of experience as a foster parent. The last two participants who agreed to take part in the study, Caitlyn and Courtney, were core mental
health technicians on the Terra Ceia unit. Caitlyn was a twenty-three-year-old Caucasian female with eight months of experience in residential care. Courtney was a twenty-seven-year-old African-American female with three months of experience in residential care. Two other staff members from the Siesta unit originally agreed to participate but never attended any of the trainings offered and eventually withdrew from the study.

The Institutional Review Board (IRB) at the University of South Florida approved the proposal to collect data on staff members (IRB #106486G). Informed consent was obtained from each participant prior to beginning the study using the form stamped by the graduate school. Training occurred in a room designated by the facility as a training environment. Data collection occurred on the individual units, in the classrooms of the facility, in the cafeteria, and while the patients occupied the outdoor regions of the facility grounds. More details on staff training and data collection will be discussed in the sections to follow.

Materials

The Tools for Positive Behavior Change curriculum developed by the University of South Florida’s Behavior Analysis Services Program was instructed in a stepwise fashion to the participants who volunteered as part of a special training series (Van Camp, Borrero, & Vollmer, 2003). The purpose of these tools for staff consisted of increasing socially appropriate behavior and decreasing inappropriate social behavior of the patients at the facility. Each staff member was provided with a written manual of the Tools for Positive Behavior Change for training purposes and use as a reference for future use. Training was provided by two certified trainers on four Tools for Positive Behavior Change using verbal instruction, written instruction, performance modeling,
performance practice, and performance feedback. Each tool was task analyzed into several steps and was trained according to the task analyses. Data collection sheets developed by the Behavior Analysis Services Program were used to collect data on interaction styles and tools used by the staff members.

**Target Behaviors and Data Collection**

Baseline data was collected for all of the participants by trained observers and data collectors. Additionally, Pre-Tests were administered to each participant prior to receiving classroom training. Staff members received training on four Tools for Positive Behavior Change developed by the University of South Florida’s Behavior Analysis Services Program in a stepwise fashion. The staff member from the Siesta unit was trained first, then two staff members from the Apollo unit were trained, and finally two staff members from the Terra Ceia unit received the training. After completing the training, each participant then completed a Post-Test to assess their knowledge of the tools. The pre- and post-tests consisted of role plays in which the primary trainer played the role of the patient, and the participants played the role of a staff member and were instructed to respond in a normal manner. Scenarios used were developed to exemplify situations that the participants may have encountered in the work environment. The same scripted role plays were used in both the pre- and post-test assessments. Assessments were scored by trainers according to the task analyses listed in Appendix A.

Each one of the tools was operationally defined via task analysis so that the staff members were aware of which behaviors were being tracked and observers knew which participant behaviors were to be tracked. Appendix A provides a description of each individual task analysis. The data collectors monitored interactions and scored them as
positive, negative, neutral, and/or coercive interactions. In addition, periods of time without interactions were recorded. Each of these behaviors was operationally defined as well and can be found in Appendix C. Prior to taking any data, the data collectors entered the work environment for at least 15 minutes and interacted with the staff and patients each time upon entering one of the units. This procedure was implemented to minimize measurement reactivity. Furthermore, data was collected at nearly the same times of day across the different phases of the study to minimize potential confounding variables due to time of observation in the study.

Each session was 10 minutes in length. The data sheets were broken down into ten 1-minute intervals. Data collectors scored each minute for the type of interaction observed and for specific tool use as well. See the attached data collection sheet with definitions of each type of interaction, junk behavior, coercives, etc. (Appendix C). When more than one data collector was present (primary and secondary), the data collectors were instructed to separate from each other by at least 5 to 10 feet to ensure independent scoring of participant interactions and protect the internal validity of the study. The data collectors then provided head nods to each other that the participant was clearly visible as well as the interacting patient(s). A primary and a secondary observer were designated prior to data collection in such cases as well. The primary data collector used simple head nods to signify the beginning and end of each ten minute session to the secondary data collector in order to synchronize the recording. Stopwatches were used to be sure the 1-minute intervals were consistent throughout data collection sessions.
Inter-Observer Agreement

Forty-six percent of all interactions were scored by two trained, independent observers to assess for inter-observer agreement across participants in all phases of the study. A percentage was calculated for each ten minute session by dividing the total number of agreements by the total number of agreements plus disagreements divided by 100%. Inter-observer agreement for the baseline phase of the study was 94%, the staff training phase was 96%, and the OBM phase was 94%. For Nicole, inter-observer agreement averaged 95% for all recorded sessions. The inter-observer agreement for Ronnie for all recorded sessions averaged 96%. For Tonya, inter-observer agreement averaged 94% for all recorded sessions. Inter-observer agreement for Caitlyn for all recorded sessions averaged 95%. Lastly, inter-observer agreement for Courtney averaged 90% for all recorded sessions. The overall inter-observer agreement for the entire study was 95%.

Procedure

Baseline. The staff members at Manatee Palms Patient Services had not received the training on the Tools for Positive Behavior Change prior to the start of the study. Therefore, baseline data was collected on staff-child interactions and tool use prior to participants receiving the training. Upon being hired as a mental health technician at Manatee Palms Patient Services, staff members were instructed on several intervention procedures to manage the behavior of the patients. The orientation training consisted of training on Dialectical Behavior Therapy (DBT), Non-Abusive Psychological and Physical Interventions (NAPPI), and the behavior management system employed at the facility. DBT focuses on helping the patients change thinking patterns and teaching skills
to manage stressful situations. NAPPI focuses on simple behavior management techniques and physical intervention procedures should the patients display violent behavior that poses imminent danger to themselves or others. Manatee Palms Patient Services employs a point system, level system, and negative consequence system to reinforce and punish the behavior of the patients. Each patient is assigned 4 target behaviors that are measured and recorded by staff members on one hour intervals throughout each day. The points assist the patients in moving through the level system along with appropriate behavior/absence of inappropriate behavior. As the patients move through the level system, more activities and privileges are granted. Staff members are also instructed to use negative consequences to remove or delay privileges when the patients engage in problematic behaviors.

Independent Variables

Staff Training. Participants then completed training on the Tools for Positive Behavior curriculum in the manner previously mentioned (Siesta staff, Apollo staff, Terra Ceia staff). The curriculum was provided in a training setting using a multi-faceted approach (verbal instruction, written instruction, performance modeling, performance practice, and performance feedback) with two trainers in nearly all of the sessions. Each participant received training on four Tools. The total amount of hours spent in the training was eight for each participant.

Prior to the first class, a pre-test was administered by the data collectors using an array of role plays to assess the participants’ skills before the training began. The rest of the first class concentrated on proactive versus reactive interactions as a staff member and the twelve coercives listed in Appendix B. A coercive is a negative interaction in
which a child may react by sighing, cowering, crying, or walking away. Stay Close was the tool emphasized in the second class. This tool is a form of non-contingent attention used to develop a relationship with the patient and establish the staff member as a conditioned reinforcer. Use Reinforcement and Pivot were the subject of the third class. Use Reinforcement is a tool used by the staff to increase the probability of an appropriate behavior of a patient occurring again in the future. Pivot is a tool in which extinction is utilized by the staff when a patient displays inappropriate but harmless behavior and then the staff would provide reinforcement when the same patient begins to display desirable types of responses. The final class consisted of focusing on the tool Redirect-Reinforce, and lastly a post-test was administered using the same role plays as in the pre-test. Redirect-Reinforce is a tool in which a patient is prevented from engaging in a potentially dangerous behavior and directed to engage in a more appropriate behavior. Once the appropriate behavior is displayed, the staff provides praise as a potential reinforcer. See Appendix A for a list of the steps for each tool. After these trainings were complete, an additional two hours of modeling was provided to each participant by the trainer(s) in the work environment. The trainer(s) entered the work environment of the trainee and modeled each of the four tools as well as positive interactions with the patients. Data was then collected on their interactions and tool use with the patients after the staff members had completed the necessary training sessions as outlined above.

*Organizational Behavior Management.* Finally, organizational behavior management (OBM) techniques were implemented to increase or maintain tool use and positive interactions between staff members and patients. Similar to the Korabek, Reid, Ivancic (1981) study, direct care staff were exposed to a multi-faceted OBM treatment
package which consisted of antecedent, self-management, and consequence strategies. This study employed an OBM treatment package which included performance modeling by the behavior analyst, privately displayed data along with goal setting with the behavior analyst, laminated cards containing the list of steps for each tool, tokens earned for tool use and increases in positive interactions to be redeemed after garnering a total of fifteen for a gas gift card, public recognition in the work environment for tool use and positive interactions, and private praise offered for increases in tool use and positive interactions.

After staff members completed the training, the behavior analyst then modeled each of the tools along with positive interactions with the patients on the units while staff members were present. Staff members met with the behavior analyst to collaboratively set targeted percentage increases at the beginning and throughout this phase of the study. Laminated cards with a list of the steps for each tool were provided to the participants to be used on the units as a reference. Once direct care staff began to meet their previously identified percentage increase goals for tool use and interaction styles, they began to contact reinforcers to assist them in maintaining their behavior over time by receiving tokens from the data collectors immediately following each ten minute session. Participants received a token for each tool used at the end of each session in the OBM phase of the study. In addition, data collectors reviewed the percentage of positive interactions of each participant prior to collecting data. If the participant showed an increase in positive interactions from the last two sessions, the data collectors provided a token at the end of that session. Public recognition was given by the data collectors as the participants received tokens and praise in front of other staff members. Lastly, when
the staff members met with the behavior analyst to review data, praise was delivered for increases in tool use and positive interactions.

*Experimental Design*

A concurrent multiple baseline across participant design was used to assess whether staff training alone was sufficient enough to affect change in staff member behavior or if organizational behavior management techniques were necessary as well. To further strengthen the multiple baseline design, a participant (Nicole) from the Siesta unit was exposed to the independent variables initially. Then, the participants (Ronnie and Tonya) from the Apollo unit began to contact the independent variables. Lastly, the participants (Caitlyn and Courtney) from the Terra Ceia unit started to contact the independent variables in the stepwise fashion described earlier. This design added to treatment integrity over time since the participants were not privy to the independent variables being implemented for the other participants in other phases of the study.
RESULTS

Pre- and Post-Test Assessments

Scores were calculated by dividing the number of steps for each tool completed successfully by the total number of applicable steps multiplied by 100%. See Figure 1 for the percentage correct for each participant for each tool. Participants maintained or increased the number of steps for each tool completed for nearly all of the assessments. The average percentage correct during the Stay Close role plays was 66% for pre-tests and 84% for post-tests. Pre-tests averaged 78% and post-tests averaged 88% for percentage correct for Use Reinforcement. The average percentage correct during the Pivot role plays was 32% for pre-tests and 56% for post-tests. Pre-tests averaged 50% and post-tests averaged 91% for percentage correct for Redirect-Reinforce.

Observational Data on Participant Interactions

Nicole, from the Siesta unit, had positive interactions below 20% with a decreasing trend at the end of baseline. This low level of positive interactions continued throughout the staff-training phase of the study. In fact, positive interactions never reached above 10% of the intervals within a single data collection session. However, once the OBM phase began, positive interactions slowly began to increase and then skyrocketed to 80% during session 15. The level of positive interactions maintained over the last 5 sessions at a steady level of 80% of the data collection sessions. Nicole did not use any of the tools in baseline or in the staff-training phase but did begin to use them in the OBM phase. Use Reinforcement reached a level of 10% on three occasions and Stay
Pre- and Post-Test Assessments

Figure 1. Comparison of the pre-test and post-test scores for each of the participants.
Close reached a level of 20% during session 17 in the OBM phase.

Ronnie, from the Apollo unit, had a level of 0% positive interactions in baseline until the last two sessions. Although Ronnie’s level of positive interactions increased at the end of baseline and continued at the beginning of the staff-training phase, the level then plummeted at the end of the staff-training phase. More specifically, Ronnie had levels of positive interactions as high as 90% and then dropped back down to 10% prior to the OBM phase. The level of positive interactions was immediately impacted by the OBM phase as the level rose to 70% on three different occasions and never decreased below 40%. Ronnie did not use any of the tools in baseline or in the staff-training phase but did begin to use them in the OBM phase as well. Stay Close reached levels as high as 60%, Use Reinforcement was utilized a total of nine times, and Pivot was also observed in the OBM phase of the study.

Tonya, from the Apollo unit, had levels of 30% positive interactions or below until the final two data points of baseline. Much like Ronnie, Tonya had an increasing trend going into the staff-training phase which continued into session 8 where positive interactions reached a peak of 100% for that session. Just one session later though, the level of positive interactions fell all the way to 0% and remained lower than 20% for the rest of the sessions prior to the OBM phase. Tonya began the OBM phase with low levels of positive interactions but then an increase was observed during three of the last five sessions. Positive interactions increased to 50% during those sessions. Tonya used the Use Reinforcement tool twice in baseline but decreased the level going into the staff-training phase. No tools were used in the staff-training phase, but the Use Reinforcement tool reappeared in the OBM phase. This tool reached a peak of 30% in this phase.
Caitlyn, from the Terra Ceia unit, began with a level of 100% positive interactions during the first data collection session. This level decreased quickly and remained below 40% for the rest of the sessions in baseline. Once the staff-training phase began, the level of positive interactions increased dramatically and maintained with levels of 70% or higher for the rest of the phase. Caitlyn began the OBM phase with high levels of positive interactions of 80% or higher. This level even increased to 100% for two sessions. Nearly halfway through the OBM phase, the levels of positive interactions began to drop but then increased again slightly at the end of the phase. In addition, positive interactions never dropped below 30% in the OBM phase. Caitlyn was the only participant to demonstrate high levels of tool use in baseline before dropping to a 0% level before receiving training. During the staff-training phase, Use Reinforcement was utilized as high as 100% in session 12. This level decreased prior to the implementation of the OBM phase. The Stay Close and Use Reinforcement tools increased again during the first five sessions in the OBM phase to 60% and 30%, respectively. Then, tool use fell to 0% at the end of the phase.

Courtney, from the Terra Ceia unit, began with high levels of positive interactions similar to Caitlyn. However, after starting with a high of 60%, positive interactions fell to 10% and remained there until the staff-training phase. During the beginning of the staff-training session, the level of positive interactions rose to 70% before producing a decreasing trend entering the OBM phase of the study. Positive interactions spiked again at the beginning of this phase and reached a peak of 70% before dropping to low levels midstream. During sessions 19 through 24, positive interactions remained at 10% or lower before increasing again to 50% at the end of the phase. Tool use for Courtney was
low in baseline. However, tool use increased during the staff-training phase and
maintained for most of the OBM phase. Despite decreasing in the middle of the OBM
phase, tool use reached a level of 30% in the staff-training and OBM phases.

Overall, negative and coercive interactions were low for all participants across all
phases. Positive interactions were low in the baseline and staff-training phases for four
out of five participants. Neutral and no interactions were highest in these phases.
However, positive interactions increased or maintained for all five participants in the
OBM phase of the study. Neutral and no interactions decreased proportionately to low
levels for four out of five participants. By the same token, tool use was low in the
baseline and staff-training phases for three of five participants as well. In the same
manner as above, tool use increased or maintained for all five participants during the
OBM phase.
Interaction Styles with Patients

Figure 2. Percentage of positive and negative interaction used by the participants.
**Interaction Styles with Patients**

Figure 3. Percentage of no interaction used by participants.
Tool Use on Patient Behavior

Figure 4. The Tools for Positive Behavior Change used by the participants.
DISCUSSION

This study examined the effects of staff training alone and staff training in combination with organizational behavior management procedures. Staff training was performed to instruct the Tools for Positive Behavior Change in hopes of increasing participant performance. After staff training alone showed little to no effect on performance for four out of five participants according to the data, organizational behavior management procedures were implemented with all participants.

Baseline levels of positive interactions and tool use were low for all participants. Caitlyn and Courtney initially demonstrated high levels of positive interactions, but these levels dropped back to levels of 0% prior to the staff-training phase. Measurement reactivity may have caused an impact on the data for these two participants in session 1. Staff members were often observed in baseline to engage more in talking to each other or in paperwork duties. Sessions with neutral or no interactions were much higher in baseline as a result. The training on the Tools for Positive Behavior Change curriculum appeared to improve the participants’ knowledge on each tool as demonstrated by the pre- and post-test scores. However, the training did not translate into higher levels of positive interactions for four out of five participants. Furthermore, the training did not produce higher levels of tool use for three out of five participants. Organizational behavior management techniques then increased levels of positive interactions and tool use for four out of five participants. Several participants showed variability in terms of the data, especially Courtney who had increases at the beginning of each intervention but
then showed decreases at the end of each phase. Neutral and no interactions decreased dramatically in the OBM phase for four out of five participants as well. Anecdotal reports from the participants revealed that modeling on the unit by the behavior analyst, goal setting and review of data, public recognition, private praise, and reinforcement through tokens were all well received. The laminated cards were also observed in the work environment by the data collectors on numerous occasions. The token system seemed to have the greatest impact as all five participants stated that a gas card would be a welcomed reinforcer. Figures 2, 3, and 4 lend support through data that the treatment package was effective in changing the performance of the participants.

There were several limitations to the current study. One limitation was the lack of data collected on patient behavior. The ultimate goal of training participants was to observe an improvement in patient behavior. However, data on restrictive procedures was collected at the facility. This data suggested that child behavior may have been affected by the independent variables implemented in the study. The rate of physical restraints per 1000 patient days was collected by the facility to meet corporate and federal regulations. The rates for the last seven months were as follows: November 2007- 80, December 2007- 59, January 2008- 68, February 2008- 32, March 2008- 23, April 2008- 33, and May 2008- 34. Although the data only has the ability to show a correlation, since the study began in late February the rate decreased sharply and has maintained at a lower rate. The rate of seclusions per 1000 patient days began at a low rate at the beginning of the year and maintained that level. The rates for the last five month were as follows: January 2008- 0, February 2008- 0, March 2008- 0, April 2008- 0, and May 2008- 3. Finally, the rate of emergency treatment orders of psychiatric medications began the year
at a high rate and then dropped in correlation with the study. The rates for the last five months were as follows: January 2008- 36, February 2008- 16, March 2008- 9, April 2008- 16, and May 2008- 12.

The data for all participants across all of the phases was variable at times especially upon visual inspection of the interaction styles in Figure 2, which was another limitation of the study. Courtney seemed to have the most variable data of all of the participants. However, the other participants had sharp increases followed by sharp decreases in all phases of the study. Perhaps, in future research, the phases of the study should be lengthened to be able to attain greater internal validity in the data. Also, data sessions appeared to be influenced by the activity that the patients were engaged in at the time of data collection. For example, Ronnie and Tonya each had sharp increases in positive interactions prior to the staff-training phase. These sessions were conducted while the patients were on the unit playing board/card games with each other and the staff. In such cases, the likelihood that the level of positive interactions between the participants and the patients might have been higher. The current study attempted to control for activities by collecting data at the same time of day. However, activities did vary on occasion. Future research should concentrate more closely on the activity during data collection and whether or not a high level of positive interaction/tool use is noted during specific activities and if specific activities require higher interaction levels.

Another concern was the number of participants in the study. With only five participants in the study, it is unknown whether the results would generalize to different types of caregivers or settings. Two of the original participants who volunteered to take part in the study dropped out prior to the staff-training phase. Attrition is a natural part of
any study but, in this case, decreased the number of participants from seven to five. Instead of having a group of participants from each unit, the study consisted of an individual participant along with two groups with two participants each. Nicole did not have the luxury of participating in the phases of the study with other participants as did the other participants. However, the data of the other participants may have been affected by watching their counterparts. On several occasions, it was noted that participants witnessed other participants obtaining tokens for positive interactions/tool use. Positive interactions/tool use appeared to increase immediately following a participant witnessing another participant earning tokens.

Component analysis for the treatment package was not assessed in this study which was a possible limitation. Since there were a total of six procedures utilized in the OBM phase, it is unknown which of the procedures was most effective or if all six were needed. Perhaps one component would have been sufficient in increasing or maintaining participant performance. Future research could examine the effects of each component used in the OBM phase to determine which component or components are necessary to increase or maintain staff performance.

To conclude, results showed that staff training may have had a slight impact on staff performance in terms of positive interactions and tool use. The data revealed that the change in participant performance was only temporary for four out of five participants. Organizational behavior management procedures were then implemented in the form of a treatment package with six components. Results then indicated that the participants who previously did not maintain their performance were able to increase positive interactions and tool use again in the OBM phase. Therefore, this study may add to the research base
that staff training in addition to OBM techniques may increase performance and maintenance of positive staff behaviors and assist in generalizing skills learned in the training environment to other environments.
REFERENCES


APPENDICES
Appendix A: List of Steps for Each Tool

Tool 1: Stay Close

1) Get close to the child within 15 seconds of the stay close behavior (move toward child and be within arms reach, etc.)
2) Touch appropriately (pat, high five, daps, etc.)
3) Match facial expressions (appropriately reflect the emotion of the situation).
4) Use appropriate tone of voice (voice matches situation, a neutral monotone is not good).
5) Relax your body language within 15 seconds of the stay close behavior (relaxed, arms open, attentive, looking at child, etc.)
6) Ask open-ended questions (What? How? Could you?).
7) Listen while the child is speaking. Talk less than the child. (Do not problem-solve unless the child asks for help. Do not interrupt or abruptly change the topic.)
8) Use empathy statements (act like a mirror and reflect the child’s feelings, express understanding, caring, etc.).
9) Avoid reacting to junk behavior (minor, non-harmful behavior).
10) Stay cool throughout the process (no coercives).

Tool 2: Use Reinforcement

1) Tell the child what behavior you liked (if this is appropriate).
2) Provide a positive consequence for the behavior that matches the value of the behavior. (Circle those provided):
   - Social Interaction
   - Verbal Praise
   - Appropriate Touch (pat, high five, daps, etc.)
   - Tangible Item
   - Privilege
   - Break from Task
3) Provide the positive consequence within 3 seconds of recognizing the appropriate behavior (if possible).
4) Use sincere and appropriate facial expression, tone of voice, and body language.
5) Avoid reacting to junk.
6) Avoid coercion and punishment.
Tool 3: Pivot

1) Say nothing about the junk behavior. (For example, don’t say “Stop that now!” or “Quit doing that!”).
2) Do nothing to react to the junk behavior. (For example, don’t roll your eyes, stomp out of the room, cross your arms, stare, etc.).
3) Actively attend to another child, person, or activity. (For example, read a book or praise another child for behaving appropriately).
4) Once the child who displayed the junk behavior behaves appropriately, provide reinforcement for the appropriate behavior (social attention, touch, item, privilege, break from task) within 10 seconds of recognizing the appropriate behavior of this child.
5) Stay cool. No coercives.

Tool 4: Redirect-Use Reinforcement

1) Get within arms reach of the child (before saying anything).
2) Make sure the child stops the inappropriate behavior. (Use gentle physical guidance if necessary).
3) Calmly say something like, “Hey (child’s name), I want you to (state the positive alternative behavior).
4) If the child does not begin to perform the suggested activity within 3 seconds, model, or gently guide them to do the activity.
5) Use reinforcement when the child does the appropriate behavior (praise, touch).
6) Reinforce the behavior within 3 seconds after the appropriate behavior begins. (Stopping serious behavior may be the appropriate behavior.)
7) Say nothing and do nothing about junk behavior throughout the process.
8) Stay cool and use no coercives.
Appendix B: Description of Coercives

1. **Questioning**: Asking repeated questions when the staff does not really expect an honest answer and likely won’t accept the answer.
   
   *Example:* A staff member observes a patient drawing on a wall with a marker. The staff member responds by saying, “Why are you doing that? Don’t you know not to draw on walls? What are you trying to do? Who do you think you are?”

2. **Arguing**: Attempting to force a patient to agree with staff and responding to any objection by the patient.
   
   *Example:* A patient asks a staff member if he/she can begin a load of laundry. However, it is not the day or time for that patient to do their laundry. The staff member politely asks the patient to wait for their day and time. Then, the patient responds by whining and asking several questions related to why he/she cannot begin their laundry. The staff member engages in the argument going back and forth with the patient with the negative interaction.

3. **Sarcasm/Teasing**: Making fun.
   
   *Example:* A patient is seen picking on another patient who is much smaller in stature. A staff member responds by saying, “Wow Timmy, you’re really a tough guy picking on the little kids.”

4. **Force (physical or verbal)**: Causing pain or creating fear.
   
   *Example:* The group is supposed to be going outside according to the schedule of activities. One of the patients speaks up and states that he/she will not be going out with the group. The staff members react by saying that he/she will not be going out even if they have to drag him/her. The patient continues to refuse so the staff come over and grab the patient to escort him/her out of the building.

5. **Taking things from others**: Removing a desired/preferred activity or item in an attempt to change a patient’s behavior in the future.
   
   *Example:* A patient is disruptive in the classroom by repeatedly getting out of their seat and walking around the room. The patient is also shouting profanity aloud which is distracting the other patients who are trying to focus. The staff member decides to assign a negative consequence which removes access to previously earned privileges.

6. **One ups-man-ship**: Minimizing a patient’s statements by telling him/her stories about how good or bad your life experiences have been.
   
   *Example:* A patient begins to complain to a staff member about how tough his/her home life has been. The staff member cuts them off and says, “You think you’ve
got it rough. I grew up without a father, living on the streets, not knowing where
my next meal was coming from, living in cold weather, etc.”

7. **Threats**: A warning by that you will do something mean.
   *Example*: A staff member witnesses a patient taking his/her hygiene box into their
   room. The staff member says, “You better get that hygiene box out of your room
   or you will be getting a consequence.”

8. **Criticism**: Putting down other people.
   *Example*: A patient draws a picture for a staff member and hands it to him/her.
   The staff member reacts by saying, “That is the ugliest duck I’ve ever seen.”

9. **Silent Treatment**: Obviously ignoring another person in order to punish them.
    Ignoring past the point of the troubling behavior’s occurrence and the patient is
    now behaving more appropriately.
   *Example*: A patient gets upset and spits on a staff member’s shirt. Although the
   incident happened three days ago and the patient has written a letter of apology,
   the staff member will still not speak to the patient.

10. **Telling on them to others**: Talking to others regarding the behavior of a patient in
    front of the patient or where the patient can hear.
    *Example*: A patient hears the staff talking in a meeting. A staff member says,
    “Did you see the way Timmy peed on himself? The whole front of his pants was
    wet. The other patients were laughing. It was really funny.”

11. **Despair/Pleading/Helplessness**: Saying or doing things to make a patient change
    because they feel sorry for you or guilty for what they have done to you.
    *Example*: A staff member pulls a patient aside to talk to him/her about their
    cursing behavior. The patient promises to stop cursing and use better language.
    However, the very next day, the staff member hears the patient cursing again and
    again. The staff says, “How many times do we have to talk about this. I come to
    work everyday to help you, and you continue to do these bad behaviors. Why
    should I even bother talking to you about this anymore? You know I have better
    things to do. I try to give my time and effort, and you still won’t do better.”

12. **Logic**: Explaining with more than one or two brief statements why a behavior is
    good or bad for a patient. The explanation is especially likely to function as
    coercion if it is a frequent conversation between you and the patient.
    *Example*: A patient comes back from a home pass with his/her family and tests
    positive for marijuana on a drug screen. A staff confronts the patient by saying,
    “Don’t you know how bad weed is for you? We just went over this in group the
    other day. You know that it can have the same harmful effects as smoking
    cigarettes, right? You can still get cancer, emphysema, and you’re teeth will get
    brown. That’s really not cool. I can’t believe you.”
Appendix C: Front Side of Data Collection Sheet

Staff Member/Patient Data Collection Sheet

Staff Member Name: _____________________               Date: ______________
Primary Observer: ____________________    Reliability Observer: _________________
Circle:  Primary / Reli

Number of Children Present: _____  Start Time: ________  End Time: ______

Activity (circle):  Self-Care (specify)_______// Meal // Leisure // TV // Computer-Time // Outside-Play // Outing //Other (specify) __________

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Comments (i.e., types of coercives used, environmental, other types of data to consider collecting, etc.):
IOA = # of disagreements _____ / total # of disagreements + agreements ______
IOA = ________

**Observation Checklist Definitions**

**Positive Interaction:** Any appropriate use of a tool with a patient (excluding cool down/time out), doing something for a patient when the patient’s presence is required (e.g. helping load the washing machine), agreeing to do something for a patient when the patient requests it, interactions with a patient that includes a calm/pleasant tone of voice, offers to help, touching appropriately, being attentive, smiling, listening, expressions of concern, eye contact with appropriate facial expression, playing a game with a patient. *Must be checked when Tools (e.g. Stay Close, Use Reinforcement, Pivot, Redirect-Reinforce) are used.*

**Negative Interaction:** Use of any of the 12 coercives, any interaction that makes a patient seem scared, fearful, or guilty (child sighs, cringes, cries, etc.); any interaction which may cause harm to a patient. *Must be checked if Coercive is checked.*

**No Interaction:** If the staff has not given attention to junk behavior (10 sec) or has not had a positive, neutral, or negative interaction for 1 minute. *If “Pivot” tool is used, then “No Interaction” to junk must be checked.*

**Neutral Interaction:** Any vocal interaction that is stated in a neutral tone of voice that may be used to prompt behavior but cannot be classified as positive or negative.

**Coercive:** Use of any of the 12 coercives.

**Tools:** (Score on checklist)
-50% or more counts as an approximation of tool use.

**Child Behavior Definitions**

(A) **Appropriate:** Any behavior that would not be considered as Junk or Harmful behavior; otherwise neutral.

(J) **Junk:** Any age-typical behavior that may be annoying, but not harmful, to self, others, property, or animals.

(H) **Harmful:** Any behavior that is dangerous and may cause minor or severe injury to self, others, animals, or property.