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Evaluating the Use of Task Clarification, Self-Monitoring and Performance Feedback

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Evaluating the Use of Task Clarification, Self-Monitoring and Performance Feedback

by

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A thesis submitted in partial fulfillment
of the requirements for the degree of
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Abstract

The effects of self-monitoring, task clarification, and performance feedback on the performance of critical tasks by assembly group supervisors in a manufacturing company were examined. This intervention involved the training of a supervisor to use task clarification, self-monitoring, and performance feedback to improve the work performance of the participating group leaders. A multiple baseline across participants and tasks design was used to examine the effects of the intervention. Measures included: generalization of group leader performance to another work period, procedural fidelity for training the supervisor, intervention integrity of the supervisor's training of the group leaders, treatment acceptability, and social validity. Results showed that the intervention was successful in increasing the overall task completion for both participating group leaders in multiple work intervals and that the intervention was implemented with fidelity and integrity.

Introduction

The application of ABA in performance management involves targeting change in behavior within organizational settings. Behaviors that are often targeted include those that keep workers off-task, that are unproductive for the organization, or that are simply dangerous (Bailey & Burch, 2010). A common issue within work settings is the failure of the employee to meet supervisor expectations in his or her job performance. These performance failures can be due to the lack of performance feedback, the employee's lack of understanding performance expectations, or a combination of these conditions. There are numerous studies that have documented using behavioral interventions to improve employee job performance. Common interventions used organizational and performance management include the provision of performance feedback, task clarification, and the use of self-monitoring by the employee. These studies are briefly reviewed in the following section to describe the nature of how these interventions have been used to enhance worker performance. The proposed study will assess the effects of an intervention package that includes task clarification, self-monitoring and feedback to improve the performance of two group leaders in a medical cart manufacturing company.

Feedback

Daniels and Daniels (2006) define feedback as “information about behavior or performance that allows a person to change his/her behavior.” Alvero, Bucklin and Austin (2001), reviewed the literature to identify studies involving feedback in organizational behavior management from 1985 to 1998. Of the 43 articles reviewed by

Alvero et al., 68 different applications of feedback were utilized. These applications fell under the following 8 intervention package combinations: feedback alone; feedback and antecedents; feedback and behavioral consequences; feedback and goal setting; feedback, antecedents and behavioral consequences; feedback, goal setting, and behavioral consequences; feedback, antecedents, goals, and behavioral consequences. In their examination of these studies, they found that consistent effects were observed in 58% of feedback applications, mixed effects were observed in 41% of applications, no effects were observed in 1% of observations and unknown effects were observed in 4 applications (Alvero et al., 2001).

Of the feedback intervention packages, feedback alone was the procedure used most frequently; however, it produced mixed effects 53% of the time (Alvero et al., 2001). Mixed effects were also shown in interventions that combined feedback and goal setting (Alvero et al., 2001). The use of feedback and goal setting was also responsible for the lowest level of consistent effects (Alvero et al., 2001). With the exception of feedback and goal setting, feedback was most effective when used in combination with any other procedure (Alvero et al., 2001). Those interventions packages that used both antecedent manipulations and feedback produced 100% consistent effects (Alvero et al., 2001).

An early example of an intervention package that involved the use of feedback and positive comments for improvement was conducted by Dick (1978). In this assessment, management was trained on the use of feedback in the form of weekly graphic representations. They were also trained on the use of positive reinforcement and

corrective feedback during individualized meetings to increase the performance level of four Day Relief Operators in a textile machine shop.

After a 16 week baseline, supervisors (crew foreman) instituted a weekly feedback system. This system consisted of weekly meetings in which individual graphs displaying average hours/days/weeks gained or lost for each operator were shared (Dick, 1978). Goals and subgoals were discussed and positive feedback was given for improvements and corrective feedback was given when no improvements were shown. Results of the study show a total increase in performance of 7.5% from baseline rates. The company also gained a total annual savings of \$3453 based on the improvements made during the study (Dick, 1978).

Wittkopp, Rowan and Poling (1990), examined the use of a feedback to improve machine set-up time. Eleven men in a rubber manufacturing plant were participants in this study. Clocks were placed above the machines and steps involved in set-up were determined prior to the implementation of the intervention. Because the plant utilized different machines, different steps were created for each machine and implementation occurred in a multiple baseline design across machines.

At the beginning of the intervention meetings were held to explain procedures and teach expected set-up steps and times (Wittkop et al., 1990). Set- ups were then video taped at an average of one set up per day and mean set up times were compared to baseline levels for each machine. A maintenance phase of the intervention included teaching supervisors to complete audits a least once a week on machine set-up times.

Results showed that set-up times during intervention were consistently below baseline levels even though there was some variability in the magnitude of reductions.

Results of a study by LaFleur and Hyten (1995) demonstrate the consistent effects of an intervention package that utilized antecedent manipulations and feedback as components of the package. This study utilized several antecedent components, graphic feedback and monetary incentives in an ABAB design to show increases in accuracy and timeliness in banquet room setups for hotel staff.

The antecedent manipulations in this package included: (a) training staff; (b) arranging materials in a more convenient fashion for setup; (c) creating checklists for setups; (d) job aids; (e) goal setting; and (f) daily performance feedback (LaFleur & Hyten, 1995). Feedback was provided in a graphic format that was placed near the office on a large poster so that it could be viewed by all banquet staff. The graph consisted of setup completion percentages that were updated daily and served as a way for staff to see if they were meeting the previously specified goal percentages set by hotel management. Monetary incentives in the form of a \$10 bonus were used contingent upon meeting or exceeding the goal percentage (LaFleur & Hyten, 1995).

During the first baseline phase, the mean percentage rate was 68.8%. The first treatment phase resulted in increases in completion percentages that ranged from 89% to 100% (LaFleur & Hyten, 1995). A second naturalistic baseline phase occurred after the research was pulled from the hotel and yielded mean completion rates of 82.3%. This return to baseline was followed by a second intervention phase that resulted in completion rates nearing 100% (LaFleur & Hyten, 1995).

Since the definition and format of feedback varies from study to study (Alvero et al., 20010), it seems fitting that intervention integrity measures would be conducted in studies that use feedback procedures in order to assess if feedback was used in way that the study intended. Across all feedback studies reviewed, this was not the case.

For example, Wittkopp et al. (1990) were able to report that expected weekly audits during a maintenance phase did not occur although improvements from baseline rates were still evident. Authors were unable to explain why this occurred which makes the intervention weak in terms of internal validity. Intervention integrity measures ensure that the intervention packages are being carried out in the way that the researchers intended. Because there were no intervention integrity measures in the Wittkopp et al. (1990) study, it can not be said with certainty that it was the feedback package that was responsible for the results.

Also, with the exception of La Fleur and Hyten (1995), no systematic social validity measures were administered in the studies reviewed that used feedback. Although Dick (1978) reported that employees preferred the use of positive reinforcement used in feedback procedures, there was no mention of social validity measurements being used in the study. Witkopp et al. (1990) also speculate that praise from management may have been valued by employees but no assessment of employee preference was conducted.

Another interesting point is that many of the studies that used feedback also incorporated some kind of task clarification without explicitly labeling it as such. It does however; seem important to clarify expected behaviors before feedback can be given on expected performance.

Behavioral Self-Monitoring

Behavioral self monitoring (BSM) approaches have been used widely in behavior analytic literature to address many different behaviors (e.g., Haring & Breen, 1992; Lalli, J.S., Pinter-Lalli, Mace, & Murphy, 1991; Maag, Reid & DiGangi, 1993; VanWormer, 2004; Woods, Miltenberger, & Lumley, 1996). Behavioral self-monitoring involves an individual or group of individuals observing, evaluating and recording their own behavior (Olson & Winchester, 2008). Self-monitoring in the workplace targets main job responsibilities in order to accomplish organizational goals (Olson & Winchester, 2008). When the improvement of productivity is the goal, behavioral self-monitoring requires that employees seek out and compile data on their own performance (Olson & Winchester, 2008).

In the applied behavior analysis research literature, self-monitoring interventions for work related behaviors have mostly involved populations with disabilities (Ackerman & Shapiro, 1984; Burgio, Whitman & Reid, 1983; McCuller, Salzberg & Lignugaris/Kraft, 1987; Petscher & Bailey, 2006; Richman, Riordan, Reiss, Pyles, Bailey, 1988;). Interest in the use of BSM in the workplace began for the purposes of improving productivity, safety, and health related behaviors. Applications of self-monitoring in organizational behavior management with typically developing populations has been used to change worker performance (Rose & Ludwig, 2009), address safety behaviors (Gravina, Austin, Schoedtder & Loewy, 2008; Olson & Austin, 2001), reduce tardiness (Lamal & Benfield, 1978), increase productivity (Calpin, Edelstein, & Redmon, 1988) and reduce loss of materials (Krigsman & O'Brien, 1988).

In an intervention to address the safe driving behaviors in University bus drivers, Olson and Austin (2001) used an intervention package that included self-monitoring as a primary component along with prompts and graphic feedback. Data were collected on collision reports and safety behaviors related to the loading and unloading of passengers and safety behaviors related to the bus being in motion and at a stop. Intervention components were introduced in a multiple baseline fashion and included a meeting to introduce procedures, self-monitoring, graphic feedback, supervisor prompts and observations and independent variable integrity. Although overall effects were small to moderate, the intervention components were successful in increasing the safe behaviors of bus drivers (Olson & Austin, 2001).

Gravina, Austin et al. (2008) used self-monitoring to increase the safe posturing of college students performing typing and assembly tasks in an analog work setting. Six safe posture definitions were used as the dependent measure. A multiple-baseline across tasks design was utilized in which participants were asked to record their postures as being “safe” or “at risk” when a tone was sounded on a CD player. The use of self-monitoring as a solitary intervention produced mixed results, increasing performance on 5 of the 7 postures by 35% or more from baseline levels and 6 more postures showed 10% or better improvements in performance from baseline levels. The authors suggest that increasing compliance with interventions, using more intensive self monitoring trainings, and adding other components to self-monitoring procedures may make for increased intervention results (Gravina et al., 2008).

Rose and Ludwig (2009) used self-monitoring in combination with task clarification and performance feedback in to increase cleaning behaviors in lifeguard staff

at a public pool. This study used an ABA design to increase cleaning behaviors in lobby and pool areas. Task clarification involved using a script that detailed specific information for completing cleaning tasks in a satisfactory manner. Self-monitoring involved a checklist in which participants rated each completed task as being done at a satisfactory level (rated a 1) or as not satisfactory (rated as 0). Feedback was used in a publicly posted graphic format that displayed self-reported ratings updated each night.

Results suggest that this intervention package was successful in increasing cleaning behaviors from 45% to 77% during intervention, reducing once more to 45% during a follow up phase (Rose & Ludwig, 2009). Limitations of the study and design led the authors to make suggestions for future study in this area including more intensive training during task clarification and utilizing a multiple-baseline design (Rose & Ludwig, 2009).

Although Rose and Ludwig (2009) state that an advantage of self-monitoring is that it requires minimal effort, it does involve extra work on the part of the worker to take data on their own performance. Because of this, it is important to assess for social validity of interventions involving self-monitoring. Only Olson and Austin (2001) used a systematic measurement system to assess the usefulness of the intervention from the perspective of the workers who participated in the study. Social validity data is important to gather when asking workers to do more than what they typically do because they may only continue to self-monitor if they find the intervention useful.

Another important point to address when using self-monitoring is that, unless there are observations occurring concurrent to self-monitoring of performance, we are unable to assess for accuracy of self-monitoring. Olson and Austin (2001) had observers

ride the bus to collect the same data on performance that the drivers were expected to take on their own performance. Of the self-monitoring studies reviewed, only Olson and Austin (2001) assessed for accuracy of self-monitoring.

Concurrent observation however, has its own limitations in that reactivity may occur when workers know that they are being watched and assessed based on their performance. To control for reactivity, Olson and Austin (2001) used observers that were unknown to the bus drivers as being a part of the study.

In a study by Mowery, Miltenberger and Weil (2010), self-monitoring was used with staff members in a group home to increase positive interactions with residents. Observations were conducted using confederate observers when the staff member supervisor was present and when the supervisor was not present to assess for reactivity. The results of the study showed that reactivity did occur and positive interactions did not increase while using self-monitoring when the supervisor was not present. Mowery et al. (2010) was also one of the few self-monitoring interventions that included social validity measures.

Task Clarification

An intervention in a business setting can often be as simple as letting employees know what their roles are and giving feedback on how well they are accomplishing this role (Amigo, Smith & Ludwig, 2008). This kind of intervention is successful in settings where there are other behaviors that are more reinforcing and are therefore competing with on-task behaviors of employees (Amigo et al., 2008). The technique of clarifying tasks of employees and prompting expected performance is called task clarification (Amigo et al., 2008). In work settings, task clarification has been used to affect the

behaviors of employees in the following areas: cleaning behaviors (Amigo et al., 2008; Anderson, Crowell, Hantula & Siroky, 1988; Doll, Livesey, McHaffie & Ludwig, 2007; Rose & Ludwig, 2009); customer service (Slowiak, Madden & Mathews, 2006; Squires et al., 2007; Tittelbach, Deangelis, Sturmei & Alvero, 2007; Wilson, Boni & Hogg, 1997); maintenance tasks (Gravina, VanWagner & Austin, 2008; Pampino, Heering, Wilder, Barton & Burson, 2004; Pampino, MacDonald, Mullin & Wilder, 2004); and offering promotional items (Rodriguez et al., 2006).

In a recent study by Amigo et al. (2008) task clarification was used in combination with goal setting and feedback to decrease table bussing times at a pizza restaurant. Four lunchtime servers and one manager participated in this study. Intervention included task clarification and goal setting in the form of a memo outlining expectations and manager verbal and graphic feedback. Feedback and materials were faded after four weeks of intervention (Amigo et al., 2008).

Results of the intervention showed decreases in mean bus times from more than 5 minutes during baseline to a daily average of 2.5 minutes (Amigo et al., 2008). When feedback was removed, bussing times decreased to near-baseline levels. Results indicate that task clarification on its own led to an increase in bussing behaviors consistent with those stated in the memo (Amigo et al., 2008). Task clarification may have given the employees the information they needed to know on expected behaviors but these behaviors are not expected to continue without the use of reinforcement (Amigo et al., 2008).

Gravina, Van Wagner et al. (2008) used task clarification in an intervention package. In this study, task clarification was used along with feedback and environmental

manipulations to increase equipment preparation behaviors of 6 employees in a physical therapy clinic. Two areas of the clinic were targeted and the dependent variable was the percentage of checklist items completed for each of these areas (Gravina, VanWagner et al., 2008). Each area had seven different behaviors targeted on the checklist and employees were trained on how to complete the checklists.

An ABC multiple baseline across behaviors was used to examine the use of task clarification, graphic feedback, and environmental manipulations for checklist implementation in one area of the clinic first and then for the other area (Gravina, VanWagner et al., 2008). The C phase of the study was conducted a week after the intervention package was implemented for the second area and involved changing graphic feedback to verbal feedback to increase maintenance. A follow-up phase was implemented three months following the completion of the final phase of intervention and a social validity measure was given to three of the participants and the supervisor at the conclusion of the study.

Results of the study showed increases in the completion of preparation tasks across both areas (Gravina et al., 2008). The maintenance phase did show maintenance of results, although at a lower rate than the intervention package utilizing graphic feedback. Social validity ratings for the intervention were moderately favorable, scoring 5.14 and 4.86 on a 7-point scale (Gravina et al., 2008).

In the studies reviewed, task clarification is used in combination with some kind of feedback given by management. A limitation of the studies is that no treatment integrity data was taken on manager implementation of procedures. Feedback is

important for the success of interventions that use task clarification because workers need to know how well they are meeting the expectations given to them via task clarification.

Amigo et al. (2008) expect that the long-term success of task clarification has to do with the implementation of feedback procedures. They state that a limitation of their study is that feedback was not standardized or verified. They also expressed a need for future research to create guidelines for the use of feedback and to assess its use through implementation of validity checks.

Purpose of the Study

This study evaluated the use of task clarification, self-monitoring and feedback by a medical cart manufacturing company to address issues related to the task performance of factory employees. In this study, task clarification, self-monitoring, and feedback were combined into a multi-component intervention package. The study extends the current literature by including treatment integrity to verify that the treatment package, including the use of feedback, was delivered as designed. In addition, the study extends the current literature by including social validity measures to offer data on the acceptability of the treatment package and validity of outcomes that were achieved. The inclusion of these measures replicated procedures of only a few studies in the self-monitoring literature that assessed for social validity.

The design of the study also replicates and extends the current literature by offering measures that assess for often unmeasured reactivity in the presence an observer who is known to be taking data on worker performance.

Method

Participants and Setting

This study involved the evaluation of an approach to address group leader performance by a medical cart manufacturer located in Central Florida. The owner of the company identified that there were issues related to productivity in the assembly area of the company and enlisted the support of a behavior consultant to make recommendations for an intervention approach. The behavior consultant conducted interviews with the supervisor in that area and observed the assembly teams at work. The interviews and observations led to the conclusion that the productivity issues appeared to be related to performance issues of group leaders who were not engaging in some tasks and the lack of clarity by their supervisor when assigning tasks.

Through the guidance of the behavior consultant, the company addressed task performance issues through an intervention using task clarification, self-monitoring, and performance feedback. The initial evaluation of the implementation of this approach occurred with two group leaders as described below.

James (pseudonym) was a group leader who works specifically with a group of electronic assemblers who worked exclusively on medication dispensing carts. James had been with the company for 5 years. James supervised a group of about 3 employees who assembled and wired carts that dispense medication. James functioned as a group leader with limited supervision responsibilities and worked alongside other members of his team in the assembly of carts. James was expected to do the following tasks: review daily production needs and identify necessary equipment; attend group leader meeting where

compositions of teams and equipment specifications are finalized; and complete the daily safety and production report (“traveler”).

Greg (pseudonym) was a group leader in the assembly work area of the manufacturing company. He supervised about 3 to 5 employees who were engaged in a variety of assembly tasks in a large one room work area. He had been with the company for 7 months at the inception of the study. The tasks Greg was expected to complete as group leader included: organizing the work tasks for his team; collaborating with other group leaders to ensure sufficient numbers of workers within each group for assigned tasks; supervising the activity of his team to ensure that expected rates of assembly are met; helping workers maintain assembly rates by retrieving needed tools, materials or equipment for the workers; ensuring that workers were working on assigned tasks and completing the daily safety and production report (“traveler”).

Greg and James’ supervisor was in charge of the assembly area and was a liaison between upper management, other areas of the company and the employees in the assembly area. He managed employee scheduling, and the scheduling of when certain medical carts are to be made and how many should be made.

Employees at this manufacturing company worked from 6:00am until 2:30pm. They were allotted two breaks splitting the work day into two distinct work intervals. Work Interval 1 occurred from 6:00 a.m. until 9:00 a.m. followed by a break. Work Interval 2 followed the break and occurred from 9:30 a.m. until 12:00 p.m. followed by a break. The final work interval of the work day was Work Interval 3 with expectations that were identical to the expectations of work interval two and occurred from 12:30 until 2:30 p.m. During these work intervals, Greg and James both typically worked on

assembly tasks with their teams although these tasks were not the preferred behaviors of their supervisor.

Target Behaviors

The identification of target behaviors occurred through a process of interviews and observation. Initial meetings with the owner of the company identified the assembly area as an area that he wished to see improvement. This meeting was followed by additional meetings with the supervisor of the assembly area who identified Greg and James as having difficulty fulfilling certain expectations of the supervisor. During interviews with the supervisor, the supervisor was asked to identify the specific task expectations for those employees. Following the interviews with the supervisor, observations of employees were conducted to examine employees' performance and to identify if there were related antecedents or consequences to behaviors that were observed or absent. Target behaviors that were identified through this process are described below. James had very limited responsibilities that were not being implemented. His targeted tasks were to:

- 1) *Attend Morning Meeting.* James should attend the group leader meeting that occurs 15 minutes prior to the arrival of other employees;
- 2) *Checking Documents.* James should go and retrieve weekly documents of necessary equipment and look at them once every morning; and
- 3) *Completing Travelers.* Once during each work interval, James should a) retrieve a traveler document; b) initial and date necessary boxes; and c) return traveler to designated area.

Tasks for Greg were more complex as he was responsible for setting up and supervising a larger group of assembly teams. His targeted tasks were divided into two task clusters:

1) Preshift Organization. Upon arriving to work, Greg should: a) begin work at 5:45; b) read supervisor feedback on previous day's performance; c) check monthly document showing what will be worked on each day; and d) attend morning group leader meeting.; and

2) Floating and Completing Travelers. At least 15 minutes into the work interval and each hour thereafter, Greg should walk around the work room and to each employee he should a) greet the employee; b) ask the employee for a status update on what he or she is working on; c) ask employee if there are needed materials (e.g., "Is there any equipment I can get for you?" or "Are there any materials that you need?"); d) retrieve equipment if necessary; and e) continue floating. Once every hour, Greg should also a) retrieve a traveler document; b) initial and date necessary boxes; and c) return traveler to designated area.

Data Collection

The dependent measure of the study was the percentage of target behaviors implemented within task clusters. The task cluster for James included attending the morning meeting, checking documents, and completing travelers. Two task clusters were targeted for Greg. The first was tasks related to pre-shift organization responsibilities and the second related to floating to check in with supervisees and completing travelers.

Data for both group leaders were collected on-site 3-5 days a week during Work Interval I for a period of 1 hour or until all targeted behaviors were observed. An observer watched both group leaders perform their work activities and used a checklist

(Appendix A-D) to record the occurrence of their implementation of target behaviors.

Generalization observation probes were conducted for *Completing Travelers* for James as well as for Greg's completion of *Floating and Completing Travelers* during work intervals 2 and 3.

The behavior consultant collected data on-site 3-4 times per week. One data collector was trained by the behavior consultant using scripted scenarios and videos. As a result of training, the data collector and behavior consultant were at 96% agreement overall agreement prior to conducting live observations. Interobserver agreement (IOA) data were collected for 29.6% of all observations conducted by the behavior consultant. Agreement was calculated by determining agreement for each task over agreements plus disagreements multiplied by 100 to reach a percentage. Total agreement for all observation sessions was 92.3%. with scores ranging from 16% to 100% for James and 77% to 100% for Greg. IOA was also conducted for 25% of all generalization sessions. One generalization probe was taken with IOA and agreement for this session was 100%.

Data were also collected for procedural fidelity of training procedures to ensure that the supervisor was trained by the behavior consultant on all procedures and intervention integrity was collected in a similar fashion to determine if the supervisor trained the group leaders in the new procedures. These data were collected through audio-recordings and scored by two observers using checklists (Appendices E-I). Overall agreement for procedural fidelity audio recordings was 91.5% and for intervention integrity was 100%.

Design and Procedures

A multiple baseline across participants design for Greg and James was used to evaluate the influence of the intervention across each worker. A multiple baseline across tasks was also used to evaluate the influence of the intervention on the implementation of task clusters by Greg. For James, all three target behaviors were examined by implementing the intervention for all tasks following stability in performance during baseline. For Greg, the effects of the intervention were examined by implementing the intervention in a staggered fashion for each task cluster with each phase lasting until there was stability in Greg's performance of meeting 80% correct or more on the task cluster before a phase change.

Baseline. During baseline, observations took place during the 15 minutes prior to Work Interval 1 and lasted through the first hour of that interval. No instructions were provided to Greg, James or their supervisor. The observer watched Greg and James as they conduct their work tasks in a typical manner using the observation sheet of task cluster target behaviors in Appendices A and B. The supervisor was instructed to continue to supervise in his typical manner.

Intervention: James. The intervention involved task clarification, self-monitoring and feedback to promote the implementation of target behaviors by James. The intervention for *Checking Documents*, *Attending Morning Meeting* and *Completing Travelers* was implemented following stable baseline data.

The behavior consultant met with the supervisor to train him on procedures for training James on using self-monitoring forms (all self-monitoring forms may be found in Appendix J and K) and completing expected tasks. The behavior consultant read the

items on the self-monitoring form to the supervisor and explained what behaviors would be expected in order for James to get credit for a task. The behavior consultant also reviewed how the self-monitoring form should be completed.

The supervisor was also trained on delivering written feedback to James on his self-monitoring form. The behavior consultant first defined positive written feedback provided examples of positive feedback in relationship to correct implementation of tasks and then gave the supervisor an opportunity to practice on a sample form. The training of the supervisor also included a verbal explanation of the materials needed so that James is able to complete the necessary tasks. Procedural fidelity for this training indicated that 86% of planned training procedures were completed based on the procedural fidelity checklist for this training (Appendix E). Steps omitted included: “Give the supervisor opportunity to practice written feedback” and “Go over any questions the supervisor may have”.

The supervisor was given the self-monitoring forms for the *Checking Documents*, *Attending Morning Meeting* and *Completing Travelers* and instructed to use the forms in his training with James. During the training the supervisor read through the self-monitoring form with James and explained what he would need to do in order to give himself credit for completing the items on the form. James was told where to turn in his forms at the end of the day and that he will be receiving feedback by the following morning on the previous day’s tasks. This training was audio recorded for intervention integrity and given a 100% complete score based on the intervention integrity checklist for this training (Appendix I).

Based on data showing variable responding for *Checking Documents* after a period of three weeks, a booster training session was completed with the supervisor and with James. The booster training with the supervisor was conducted by the behavior consultant. The issue with the task was explained to the supervisor, a new self-monitoring form was introduced, corrective feedback was introduced and a new expectation was set for *Checking Documents*. The new self-monitoring form added a within-stimulus prompt in the form of changing the color of key words to red to make them easier and quicker to see. Procedural fidelity for training the supervisor on how to conduct the booster training with James was 100% (Appendix F).

The supervisor conducted the booster training session with James by a) introducing the new self-monitoring form to James, b) reminding him that checking off boxes on the form should only be done if the task on the form has been completed, c) asking him if there was anything that could be done to make checking his documents easier and d) explaining where the new self-monitoring form should be kept and where he could access it in the morning to see his feedback. This training was audio recorded and given a treatment integrity score of 100% complete based on the treatment integrity checklist for this training (Appendix I).

Intervention: Greg. An unplanned delivery of instruction occurred prior to implementation of task clarification, self-monitoring and feedback. Following implementation of procedures for *Attending Morning Meeting* for James, instructions were given to Greg regarding expectations for his attendance in morning meetings as well. During this phase, Greg was told that his presence was required at every morning group leader meeting.

The intervention involved task clarification, self-monitoring and performance feedback to promote the implementation of target behaviors by Greg within two task clusters: *Pre-shift Organization* and *Floating and Completing Travelers*.

The behavior consultant met with the supervisor to train him on how to train Greg in the same manner as for James for using self-monitoring forms, completing expected tasks, delivering feedback and organizing environmental variables. The supervisor was then given the self-monitoring forms for the *Preshift Organization* section only. This training was audio recorded and given a procedural fidelity score of 76% complete based on the procedural fidelity checklist for this training (Appendix G). Items missed were “Remind of exemplars list that can be used”, Go over any questions that the supervisor may have about feedback” and “Read each step to supervisor” referring the intervention integrity form.

The supervisor then trained Greg in a similar manner as James for *Preshift Organization*. The supervisor read through the self-monitoring form with Greg and explaining what he would need to do to in order to give himself credit for completing each item. He was also told where to turn in his forms at the end of the day and that he would be receiving feedback by the following morning on the previous day’s tasks. This training session was audio recorded and given an intervention integrity score of 100%. This score was based on the intervention integrity checklist for this training (Appendix I).

Intervention for *Floating and Completing Travelers* was implemented after Greg met the criterion of meeting 80% correct or more performance over three consecutive sessions on *Preshift Organization* tasks. The behavior consultant trained the supervisor in the same manner for *Floating and Completing Travelers* as described for *Preshift*

Organization and was then provided with self-monitoring forms that included *Floating and Completing Travelers* as well as *Preshift Organization* tasks. Greg was trained by his supervisor in the same manner described for *Preshift Organization* and then given the self-monitoring forms that included all tasks. Greg was also given a clipboard so that he could have access to his form around the work area throughout the day. The training of the supervisor was audio recorded and given a procedural fidelity score of 90% based on the procedural fidelity checklist for this training (Appendix H). The supervisor's training of Greg was also audio recorded and given a treatment integrity score of 100% based on the intervention integrity checklist for this training (Appendix I).

Feedback was also assessed for intervention integrity. Out of 21 days in which a self-monitoring form was turned in for feedback by James, feedback was given on 18 occasions with overall completion of feedback for James being 85%. Out of 22 days in which a self-monitoring form was turned in by Greg, feedback was given on 20 occasions with overall completion of feedback for Greg being 90%.

Social Validity Measures. Three social validity measures (Appendix L-N) were used. The supervisor was asked to complete a rating scale of questions related to the group leader's performance prior to and after intervention (Appendix L). The items on this form allowed for the supervisor's assessment of each group leader's organizational and leadership skills. A rating scale was also provided to each of the participating group leaders prior to and after the intervention. The questions of that form (Appendix M) provided an indication of the self-reported performance of each of the group leaders. A third social validity measure examined aspects of treatment acceptability (Appendix N). This form is based on the Treatment Acceptability Form developed by Reimers and

Wacker (1988). It was administered to the supervisor and group leaders after the experiment was completed to validate the social acceptance of the intervention approach.

Results

Results of the study displayed in Figure 1 show percentage of task completion by group leaders during baseline and intervention phases over the course of 27 sessions. Data are displayed in a concurrent multiple baseline across participants and tasks design and include observations by the primary observer, and generalization probes.

James

During the baseline period, James did not complete any of the steps of his targeted task. In the first session following the training provided by his supervisor and with the use of self-monitoring, task clarification and feedback, James increased his performance to completing 50% of targeted steps. His performance was 100% task completion on the third day following treatment implementation.

During task clarification, self-monitoring and feedback implementation, James began to frequently miss the *Checking Documents* item. Out of 16 session probes, this item was missed on 9 occasions. His overall average of task completion across intervention sessions was 82%. Due to this variability in responding, the supervisor was trained to provide a booster training to James to increase his fluency with task completion. The booster session added a within-stimulus prompt to the self-monitoring form, provided corrective feedback, and set a new expectation for *Checking Documents*. Following the booster training, James scored 100% on task completion for 4 out of 5 sessions. During this phase, percentage of task completion averaged 94%.

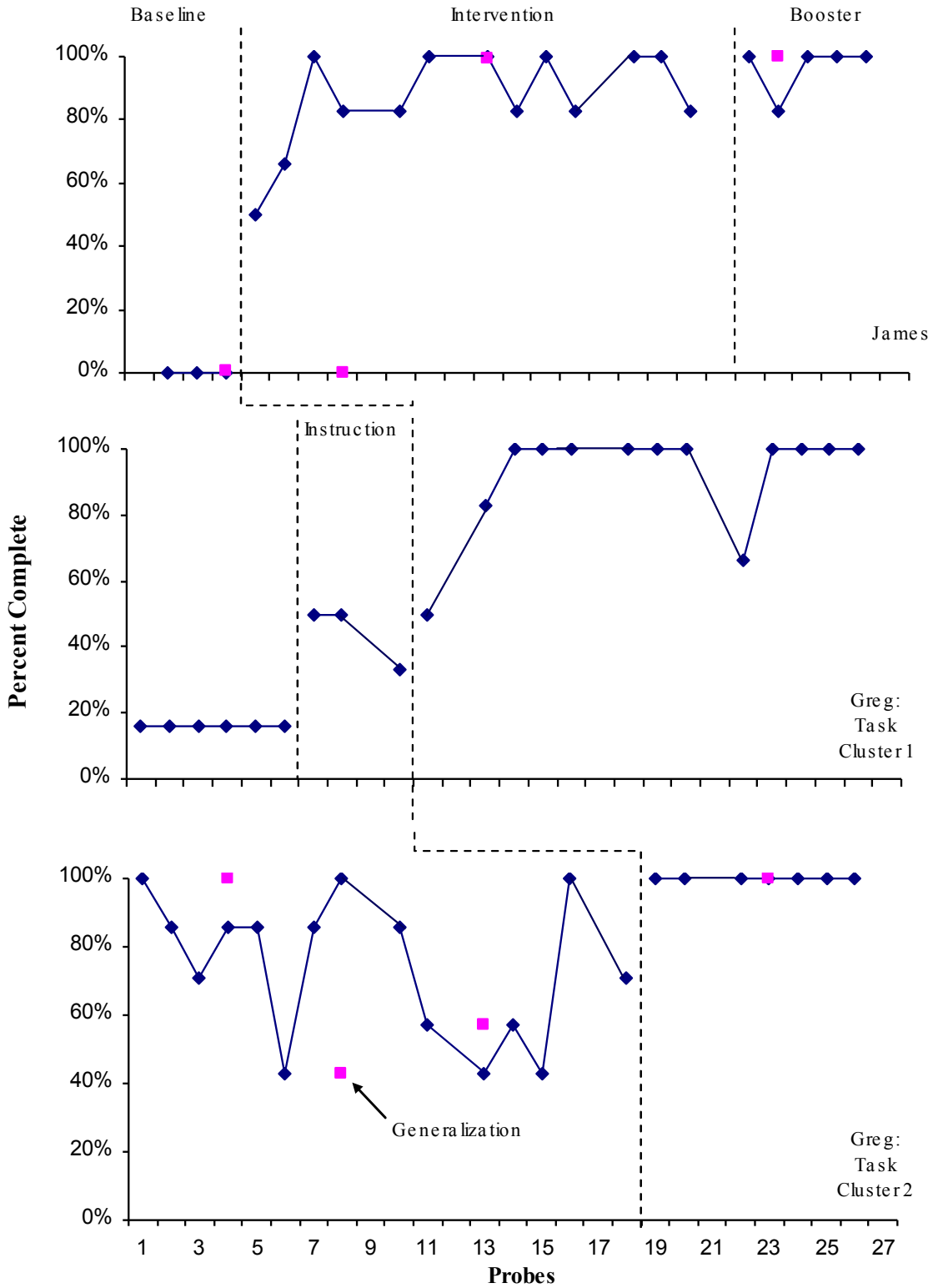


Figure 1. Percent of tasks completed, including generalization data.

One generalization probe was conducted during baseline with 0% completion of *Completing Travelers*. Two generalization probes were conducted during the task clarification, self-monitoring and feedback phase with the first probe at 0% completion and the second at 100% completion of *Completing Travelers*. One generalization probe was conducted following the booster trainings with James completing 100% of *Completing Travelers* tasks.

Greg

Greg's completion of *PreShift Organization* steps (Task 1) was below 20% throughout the first 6 sessions. Once morning meetings became structured for James, Greg also began attending and data increased in this baseline phase to 50% during sessions 7 and 8 and back down to 33% just prior to implementation of the treatment package. Overall, task completion averaged 25% in this baseline phase.

Following the implementation of task clarification, self-monitoring and feedback for Greg's *PreShift Organization* tasks there is an increasing trend in the first three data points with completion of tasks increasing from 50% for the first probe to 83% on the second probe and then 100% on the third probe. Data for completion of tasks for this task cluster remained at 100% throughout this intervention phase for regular session probes with the exception of one day. On this day, expectations for assigning tasks were not completed. Overall, task completion averaged 91% for this intervention phase.

During baseline, Greg's completion of the steps involved in floating and completing travelers (Task 2) was variable with some days having 100% completion and others down to 43% completion of steps. The average of completing task steps was 75% during baseline. Following implementation of task clarification, self-monitoring and

feedback, Greg’s performance immediately increased to 100% completion and maintained at 100% during all sessions in the remainder of the study.

Three generalization probes were taken during the baseline phase for Task 2 (*Floating and Completing Travelers*) that Greg was expected to complete during all work intervals. During the baseline phase, generalization was variable with the first probe at 100% the second at 43% and the final baseline generalization probe at 57%. Following the implementation of task clarification, self-monitoring and feedback, one generalization probe was conducted and performance was at 100% completion of *Floating and Completing Travelers*.

Social Validity

A self assessment was given to both group leaders so that they could rate their personal work performance (using a scale of 1 to 5, with 1 representing “Unsatisfactory” and 5 representing “Excellent”). This assessment was administered before and after data collection was completed for the study. Ratings from the employees’ self assessments are provided in Table 1.

Table 1

Self Assessment of Work Performance

Item	James		Greg	
	Pre	Post	Pre	Post
Organization of work tasks for your team	4	4	2.5	4
Leadership performance	5	4	3	4
Contribution to teams productivity	5	4	4	4
Ability to motivate team members	5	4	4	4
Overall performance as a team leader	5	4	2.5	4
Mean Rating	4.8	4	3.2	4

Note. 5= Excellent, 4= Satisfactory, 3= Somewhat Satisfactory, 2= Needs Improvement, 1= Unsatisfactory.

Prior to baseline data collection, James’ overall mean rating of his work performance was 4.8 out of 5. After the completion of intervention procedures and performance measures, his overall mean rating of his work performance was 4 out of 5. Greg provided an average rating for his work performance as 3.2 across items. Self-rated improvement was greatest for “Organization of work tasks for your team” and “Overall performance as a group leader” with both indicators increasing from 2.5 prior to baseline data collection to 4 following the completion of the intervention.

The supervisor also completed an assessment of the work performance of both group leaders before the study began and after the study was completed. The measure was identical to the self-assessment and group leaders were rated on a scale of 1 to 5. These ratings are provided in Table 2.

Table 2

Supervisor Assessment of Group Leader Work Performance

Item	James		Greg	
	Pre	Post	Pre	Post
Organization of work tasks for his team	3	3	1	2
Leadership performance	2	2	1	2
Contribution to teams productivity	3	3	2	3
Ability to motivate team members	3	3	2	3
Overall performance as a team leader	3	2	1	2
Mean Rating	2.8	2.6	1.4	2.4

Note. 5= Excellent, 4= Satisfactory, 3= Somewhat Satisfactory, 2= Needs Improvement, 1= Unsatisfactory.

Prior to any measures being taken on performance, the supervisor’s overall mean rating of James’ work performance was 2.8 out of 5. After the completion of intervention procedures and performance measures, his overall mean rating of James’ work performance was 2.6.

Prior to any measures being taken on performance, the supervisor’s overall mean rating of Greg’s work performance was 1.4 out of 5. After the completion of intervention procedures and performance measures, his overall mean rating of Greg’s work performance was a 2.4.

Two weeks after the completion of intervention procedures and performance measures, group leaders and their supervisor were asked to complete a questionnaire on the acceptability of aspects of the intervention.

Table 3

<i>Intervention Acceptability</i>				
Elements	Respondent			
	James	Greg	Supervisor	Means
Understanding of procedures?	7	7	7	7
Acceptability of strategies?	6	6	6	6
Disruptive to implement?	6	5	2	4.3
Effectiveness of strategies?	6	6	4	5.3
Cost?	6	1	1	2.6
Willingness to use in the future?	6	5	5	5.3
Did you like the procedure?	7	6	5	6

Note. Scoring is based on a likert scale of 1 to 7, where 7= very clear, very acceptable, etc. and 1= not at all clear, not at all acceptable, etc.

Understanding of procedures was rated the highest by the supervisor and participating group leaders. Mean ratings across participants were also high for acceptability of strategies and whether or not participants liked the procedures.

Discussion

The results demonstrate a functional relationship between the use of task clarification, self-monitoring, and performance feedback by group leaders and their completion of targeted tasks. These results provide support to the value of using task clarification, self-monitoring, and performance feedback to address worker performance issues within a manufacturing plant.

Increases in task completion for James were sizable, going from zero percentages during baseline to 50% immediately following implementation of treatment procedures and increasing to rates above 80% for the remainder of the study. Large and consistent increases were also seen in completion of tasks for both task clusters for Greg. For *PreShift Organization*, increases were gradual and then maintained at 100% for the majority of sessions following implementation of treatment procedures. For *Floating and Completing Travelers*, responding was initially variable in baseline and following implementation of treatment procedures, immediately rose to 100% completion of tasks and remained at 100% for the remainder of the study.

An unplanned delivery of additional instructions occurred prior to the implementation of study procedures. This was most likely due to generalization of the supervisor's training for expectations regarding group leader attendance at the morning group leader meeting. Although task completion was seen to increase in the phase, it was not until task clarification, self-monitoring, and feedback for all Task Cluster 1 behaviors was implemented, that results increased to levels reaching 100% on task completion.

Generalization probes were conducted for each group leader to determine if they were able to generalize targeted tasks to another work period (where observation did not typically occur). The generalization probes for both James and Greg follow the pattern of performance of the targeted work period. During baseline, task performance for James was at 0% and during intervention when improvement occurred within the targeted work period, similar improvement occurred in the generalization work period. Task performance for Greg also improved in other work intervals after the implementation of the treatment package.

With the exception of ratings provided by Greg, who reported improvements in his own performance as well as liking the procedures and finding them effective, social validity ratings yielded interesting results in light of the improvements seen in completion of targeted tasks. James initial ratings of his own performance were high and post data were similarly positive but with a more conservative score. These results are not consistent with the improvement in performance seen in data yielded from direct observations of performance. While the supervisor did report seeing improved performance in Greg, he reported seeing relatively no change in James' performance, which also is not consistent with large improvements seen in James' performance. The supervisor's intervention acceptability results also showed similar outcomes in terms of ratings of effectiveness as he gave the study a score of 4 or "neutral" on this indicator.

One possible reason for these social validity outcomes for the supervisor was a restriction given from the reporting University's Institutional Review Board regarding the sharing of performance data with the supervisor. Given this restriction, the supervisor's neutrality about the effectiveness is of interest it is possible that he was not completely

aware of the group leader's improved performance. In future studies, the provision of graphical performance data to all involved might be of importance so that opinions regarding performance will have a greater chance of being based on actual outcome data and less on objective opinions that might have been formed due to a long history of workers not completing tasks in the past.

There is one important note about the social validity of treatment procedures as it relates to the outcomes of the study. The supervisor's overall mean rating of James' performance prior to implementation of treatment procedures was only 2.8 out of 5, falling below average. However, James' self-assessment of his own performance prior to the implementation of treatment procedures was 4.8 out of 5. This may indicate that James did not feel that he needed the assistance of treatment procedures and may provide a rationale for his reluctance to follow certain procedures (i.e., checking weekly documents each morning) as he felt that what he was already doing was sufficient. Future research may want to look further into the relationship between high self-assessments prior to implementation of treatment procedures and low or variable outcome data.

Future research might also want to evaluate the long term follow-up of trained group leaders to assess for the maintenance of trained skills and the continued use of treatment procedures. Since certain procedures (self-monitoring) are meant to serve as prompts in the teaching of new skills, one might not expect to see all procedures in place at follow-up, however other procedures such as the use of feedback may still serve a significant purpose in the maintenance of trained skills.

Future research might also want to include the fading of certain prompts once a criterion of task completion has been met on consistent bases. Self-monitoring, for

example, might be faded once workers are able to show that they are completing tasks at 100% for a significant period of time.

Another area for future research might include an assessment of generalization of the use of training of procedures by managerial staff (i.e., managers, supervisors, etc.) when other staff meet difficulty in the area of completing expected tasks.

This study supports previous research that has demonstrated the effectiveness of task clarification, self-monitoring and performance feedback within a business setting to improve the performance of employees. In this study, a supervisor was able to learn and implement the intervention procedure with his employees with accuracy. Once task clarification, self-monitoring and feedback were implemented with the group leaders, performance was shown to improve providing evidence of the effectiveness of these procedures when implemented properly.

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Appendices

Appendix A: Data Collector Observation Sheet: James

Name: _____ / Reliability? Yes / No

Date:

Please check if James was observed doing the following:

1. Checking Documents.

	Yes	No
Arrive by 5:50am		
Look at weekly documents of necessary equipment at least once prior to 6:00am		

2. Attend Morning Meeting.

	Yes	No
Attend morning group leader meeting		

3. Completing Travelers. (Once per hour)

	Yes	No
Retrieve traveler		
Initial and date necessary boxes		
Return traveler to designated area		

Percent Complete: ___ / 6 = _____ %

Appendix B: Data Collector Observation Sheet: Greg

Name: _____ / Reliability? Yes / No

Date:

Please check if Greg was observed doing the following:

1: PreShift Organization

	Yes	No
Arrive between by 5:50am		
Read feedback from previous day's self-monitoring form (Credit for this item should be given if Greg picks up the previous day's form from the tray)		
Check monthly document showing what will be worked on each day (The supervisor should update this and keep this in the file drawer; Greg gets credit if he gets it out of the drawer and opens the folder)		
Attend morning group leader meeting		
Assign tasks for the day: a) Post employee's name on the white board (@least 3)		
b) Write job/jobs they will be working on that that day next to their name		
Percent Complete: ___ / 6= ___ %		

2: Floating (once per hour)

	Yes	No
Floating begins at least 15 minutes into work interval		
Greg approaches at least 3 different employees once per hour:		
Employee 1		
Employee 2		
Employee 3		

3: Completing Travelers (once per hour)

	Yes	No
Retrieve traveler		
Initial and date necessary boxes		
Return traveler to designated area		
Percent Complete: ___ / 7= ___ %		

Appendix C: Data Collector Observation Sheet: James (Generalization)

Name: _____ / Reliability? Yes / No

Date:

Please check if James was observed doing the following:

4. Completing Travelers. Once each work interval

	Yes	No
Retrieve traveler		
Initial and date necessary boxes		
Return traveler to designated area		

Percent Complete: ____ / 3 = _____ %

Appendix D: Data Collector Observation Sheet: Greg (Generalization)

Name: _____ / Reliability? Yes / No

Date:

Please check if Greg was observed doing the following:

1: Floating (once per hour)

	Yes	No
Floating begins at least 15 minutes into work interval		
Greg approaches at least 3 different employees once per hour:		
Employee 1		
Employee 2		
Employee 3		

2: Completing Travelers

	Yes	No
Retrieve traveler		
Initial and date necessary boxes		
Return traveler to designated area		
Percent Complete: ____ / 7 = ____ %		

Appendix E: Procedural Fidelity: James

Name: _____ / Reliability? Yes / No

Date:

Please listen to the recording and mark “Yes” if you hear the following items mentioned, No if you do not or N/A if the item is not applicable.

A) Introduction

	Yes	No	N/A
Introduce how task clarification, self-monitoring and feedback will be a part of the study (any description of all three procedures will be sufficient)			
Introduce PreShift Organization (e.g., “... right now we are going to work with James on things he needs to get done in the morning” etc.)			

B) Self-monitoring and Task Clarification

	Yes	No	N/A
Read each task to supervisor (this can include extra clarification of expected behaviors)			
Explain how the self-monitoring form should be filled out			
Go over any questions that supervisor may have			

C) Feedback Training

	Yes	No	N/A
Explain what positive written feedback is			
Give handout of exemplars of positive written feedback to the supervisor			
Go over any questions that the supervisor may have about feedback			
Give supervisor opportunity to practice written feedback (for example, asks him to write a feedback statement etc.)			
Tell supervisor when and where written feedback should be given			

D) Environmental Manipulations

	Yes	No	N/A
Inform supervisor of environmental variables that he will be responsible for (mention of features: tray and calendar)			
Go over any questions that supervisor may have			

E) Training of James

	Yes	No	N/A
Give supervisor a copy of Intervention Integrity form			
Read each step to supervisor			
Explain to the supervisor that he should cover each of the topics read to him from the Intervention Integrity form			
Offer an opportunity to role play			
Go over any questions that supervisor may have			

Appendix F: Procedural Fidelity: James (*Booster Session*)

Name: _____ / Reliability? Yes / No

Date:

Please listen to the recording and mark “Yes” if you hear the following items mentioned, No if you do not or N/A if the item is not applicable.

A) Introduction

	Yes	No	N/A
Introduce the reasons for the booster session			
Introduce what will change (e.g., “...we are going to make some minor changes to the self monitoring forms” etc.)			

B) Self-monitoring and Task Clarification

	Yes	No	N/A
Show the new form to the supervisor			
Review each task with the supervisor			
Go over any questions that supervisor may have			

C) Feedback Training

	Yes	No	N/A
Go over any questions that supervisor may have about feedback			
Remind supervisor when and where written feedback should be given			

D) Environmental Manipulations

	Yes	No	N/A
Inform supervisor of environmental variables that he will be responsible for (mention of features: tray and calendar)			

E) Training of James

	Yes	No	N/A
Give supervisor a copy of Intervention Integrity form			
Read each step to the supervisor			
Tell the supervisor to remind the group leader that checking off boxes should only be done if the task has been completed to the specifications listed on the self-monitoring sheet			
Tell supervisor to ask about modifications (This can include getting the group leaders opinion on how to make completing the task/tasks easier)			
Remind the supervisor that he should cover each of the topics from the Intervention Integrity form			
Go over any questions that the supervisor may have			

Appendix G: Procedural Fidelity: Greg (*PreShift Organization*)

Name: _____ / Reliability? Yes / No

Date:

Please listen to the recording and mark “Yes” if you hear the following items mentioned, No if you do not or N/A if the item is not applicable.

A) Introduction

	Yes	No	N/A
Introduce Floating (e.g., now we are going to add an additional set of tasks for Greg that includes... etc.)			

B) Self-monitoring and Task Clarification

	Yes	No	N/A
Read each task in PreShift Organization to the supervisor (this can include extra clarification of expected behaviors)			
Remind how the self-monitoring form should be filled out			
Go over any questions that the supervisor may have			

C) Feedback Training

	Yes	No	N/A
Review what positive written feedback is			
Remind of exemplars list that can be used			
Go over any questions that the supervisor may have about feedback			
Review when and where written feedback should be given			

D) Environmental Manipulations

	Yes	No	N/A
Remind the supervisor of environmental variables that he will be responsible for (mention of features: tray and calendar)			

E) Training of Greg

	Yes	No	N/A
Give the supervisor a copy of Intervention Integrity form			
Read each step to the supervisor			
Explain to the supervisor that he should cover each of the topics read to him from the Intervention Integrity form			
Offer an opportunity to role play			
Go over any questions that the supervisor may have			

Appendix H: Procedural Fidelity: Greg (*Floating and Completing Travelers*)

Name: _____ / Reliability? Yes / No

Date:

Please listen to the recording and mark “Yes” if you hear the following items mentioned, No if you do not or N/A if the item is not applicable.

A) Introduction

	Yes	No	N/A
Introduce how task clarification, self-monitoring and feedback will be a part of the study (any description of all three procedures will be sufficient)			

B) Self-monitoring and Task Clarification

	Yes	No	N/A
Read each task in Floating and Completing Travelers to the supervisor (this can include extra clarification of expected behaviors)			
Remind how the self-monitoring form should be filled out			
Go over any questions that the supervisor may have			

C) Feedback Training

	Yes	No	N/A
Review when and where written feedback should be given			

D) Environmental Manipulations

	Yes	No	N/A
Remind the supervisor of environmental variables that he will be responsible for (mention of features: documents update)			
Go over any questions that the supervisor may have			

Training of Greg

	Yes	No	N/A
Give the supervisor a copy of Intervention Integrity form if he no longer has the copy given to him from Greg's training			
Explain to the supervisor that he should cover each of the topics read to him from the Intervention Integrity form			
Offer an opportunity to role play			
Go over any questions that the supervisor may have			

Appendix I: Intervention Integrity Checklists

Self-monitoring and Task Clarification Supervisor Training of Group Leaders

Please check Yes, No or N/A

<i>James' Training:</i>	Yes	No
Introduce Task to James (this can include any extra explanations of expected behaviors)		
Explain how the self-monitoring form should be filled out		
Explain where self-monitoring form should be kept and accessed the following morning		

<i>James' Booster Training:</i>	Yes	No
Introduce new sheet to James (this can include any extra explanations of expected behaviors)		
Remind the group leader that checking off boxes should only be done if the task has been completed to the specifications listed on the self-monitoring sheet		
Ask the group leader if there is anything that can be done to make checking the weekly document easier		
Explain where self-monitoring form should be kept and accessed the following morning		

<i>Greg's Training 1(PreShift Organization):</i>	Yes	No
Introduce Task Cluster for Greg (if this is a new task cluster, make a statement about the addition of this task cluster to the previous)		
Read each task to Group Leader (this can include any extra explanations of expected behaviors)		
Explain how the self-monitoring form should be filled out		
Explain where self-monitoring form should be kept and accessed the following morning		

	Yes	No
Introduce Task Cluster for Greg (if this is a new task cluster, make a statement about the addition of this task cluster to the previous)		
Read each task to Group Leader (this can include any extra explanations of expected behaviors)		
Explain how the self-monitoring form should be filled out		
Explain where self-monitoring form should be kept and accessed the following morning		

Appendix J: Self-monitoring Form: James

Date: _____

1. Attend Morning Meeting.

Arrive by 5:45am

Attend morning group leader meeting

2. Checking Documents.

Look at weekly documents
at least once prior to 6:00am

3. Completing Travelers. Once per hour

a) Retrieve a traveler document

b) Initial and date necessary boxes

c) Return traveler to designated area

Supervisor Feedback:

Appendix K: Self-monitoring Forms: Greg

Date: _____

1: PreShift Organization

Arrive at 5:45am

Read feedback from previous day's self-monitoring form

Check monthly document showing what will be worked on each day

Attend morning group leader meeting

Notes: _____

Assign tasks for the day:

a) Post each employee's name on the white board

b) Write job/jobs they will be working on that that day next to their name

Employees Present:
Kari
Claudia
Fran
Ashley
Angela
Viviana
Catherine

Supervisor Feedback:

Date: _____

1: PreShift Organization

- Arrive at 5:45am
- Read feedback from previous day’s self-monitoring form
- Check monthly document showing what will be worked on each day
- Attend morning group leader meeting
- Notes:

Assign tasks for the day:

- a) Post each employee’s name on the white board
- b) Write job/jobs they will be working on that that day next to their name

2: Floating (@ least 15 minutes into each work interval)

- a) Greet Employee (ex. “Hello Amy”, “Good morning”, “How are you, Steve?”)
- b) Ask employee for a status update on what they are working on or if it can be seen that the employee is on task, praise the employee for being on task (ex. “What are you working on?” or “Thanks for completing those ___ for me.”)
- c) Ask employee if there are needed materials (“Is there any equipment I can get for you?” or “Are they any materials that you need?”).
- d) If employee answers yes, retrieve materials and then continue floating.
- e) If no, continue floating.
- f) Put a check mark in the box next to each employee’s name after completing a, b, c and d of this section for *each* employee that is present

Employees Present:	Floating (1):	(2)	(3)	(4)	(5)	(6)	(7)

Notes: _____

3. Completing Travelers (Once each hour)

- a) Retrieve a traveler document
- b) Initial and date necessary boxes
- c) Return traveler to designated area

(on backside of form)

Supervisor Feedback:

Appendix L: Social Validity: Supervisor Assessment of Group Leader Performance

Name of Group Leader:	Unsatisfactory	Needs Improvement	Somewhat Satisfactory	Satisfactory	Excellent
Please rate leader's current work performance:					
Organization of work tasks for his team	1	2	3	4	5
Leadership performance	1	2	3	4	5
Contribution to team's productivity	1	2	3	4	5
Ability to motivate team members	1	2	3	4	5
Overall performance as a team leader	1	2	3	4	5

Appendix M: Social Validity: Self Assessment of Work Performance

Name of Group Leader:	Unsatisfactory	Needs Improvement	Somewhat Satisfactory	Satisfactory	Excellent
Please rate your current work performance:					
Organization of work tasks for your team	1	2	3	4	5
Leadership performance	1	2	3	4	5
Contribution to team's productivity	1	2	3	4	5
Ability to motivate team members	1	2	3	4	5
Overall performance as a team leader	1	2	3	4	5

Appendix N: Social Validity: Intervention Acceptability

1. How clear was your understanding of the suggested procedures?

1	2	3	4	5	6	7
Not at all Clear			Neutral			Very clear

2. How acceptable did you find the strategies that were recommended?

1	2	3	4	5	6	7
Not at all Acceptable						Very Acceptable

3. How disruptive was it to implement the suggested strategies?

1	2	3	4	5	6	7
Not at all Disruptive						Very Disruptive

4. How effective did you find the suggested strategies?

1	2	3	4	5	6	7
Not at all Effective						Very Effective

5. How costly was it to implement the suggested strategies?

1	2	3	4	5	6	7
Not at all Costly						Very Costly

6. How likely is it that you would use similar procedures to address similar situations in the future?

1	2	3	4	5	6	7
Not willing						Very Willing

7. How much did you like the suggested procedures?

1	2	3	4	5	6	7
Do not like at all						Liked them very much