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Performance Deficits in Aging Human Service Settings and a Behavior Analytic Approach to Remediation

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PERFORMANCE DEFICITS IN AGING HUMAN SERVICE SETTINGS AND A
BEHAVIOR ANALYTIC APPROACH TO REMEDIATION

by

Kendra F. Johnson

B. S., Southern Illinois, 2012

A Research Paper
Submitted in Partial Fulfillment of the Requirements for the
Master of Science Degree.

Department of Behavior Analysis and Therapy
In the Graduate School
Southern Illinois University Carbondale
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RESEARCH PAPER APPROVAL

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for the Degree of

Master of Science

In the field of Behavior Analysis and Therapy

Approved by:

Dr. Jonathan Baker

Graduate School
Southern Illinois University Carbondale
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AN ABSTRACT OF THE RESEARCH PAPER OF

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TITLE: PERFORMANCE DEFICITS IN AGING HUMAN SERVICE SETTINGS AND A BEHAVIOR ANALYTIC APPROACH TO REMEDIATION

MAJOR PROFESSOR: Dr. Jonathan Baker

The staff members working in all human service settings have major effects on the populations in which they are working. Staff enjoyment and their preferences also play a role in their work performance. Work performance, specifically in aging settings, is an understudied area of applied behavioral research. Thus, giving focus to identifying performance deficits may assist with increasing job task enjoyment and improving job performance in human service related positions, especially when incentives for job performance is not available due to limited budgets of non-profit organizations. Studies, to date, have focused much attention on preference instead of actual job performance. The mission of this paper is to further research and professional development by identifying areas of performance deficits in human service positions, and provide a behavior analytic approach to remediate these issues and increase job task performance.

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CHAPTER 1

INTRODUCTION

The field of human services is a comprehensive one, with an interdisciplinary approach to meeting populations' specific needs to improve the overall quality of life within those populations. The field seeks to address issues related to accessing and coordinating services within an array of agencies. According to The National Organization of Human Services (n.d.), these agencies are charged with assisting individuals and communities to function as effectively as possible within their environments. The scope of human services is to serve individuals associated with correctional facilities, community mental health centers, and family and child service agencies, via programs concerned with drug abuse, individuals with a variety of disabilities, and aging.

To achieve such a broad scope, human service settings employ many different professionals of varying training and experience working with individuals who have varying levels of care/needs. These services providers are in constant interaction with the populations they serve and are commonly paraprofessionals with minimal to no education and training specific to these populations (Buchanan, Husfeldt, Berg, & Houlihan, 2008; Teri, Huda, Gibbons, Young, & Van Leynseele, 2005). The lack of specific training can result in reduced or nonproductive interactions between staff and clients, ineffective treatments, a reliance on pharmacological interventions, low levels of client improvement, dependency of the client, and low treatment satisfaction (Cohen-Mansfield & Mintzer, 2005; Jahr, 1998). There are a number of aspects of the human service profession that can impact services, including turn over, attendance,

satisfaction, training, and overall job performance. Also, job capabilities, motivation, and other external factors that may assist or limit the performance of job tasks impact staff work performance (Evans, 1986; Hasson & Arnetz, 2008). The following review will include some of these aspects and how they specifically impact aging human services.

CHAPTER 2

HUMAN SERVICE ISSUES IN AGING

Within the field of human services, particularly within aging settings, challenges with staffing is an ever present obstacle. These staffing challenges include, but are not limited to, absenteeism, turnover, low job satisfaction, and problematic job performance (Hasson & Arnetz, 2008; Kinjerski & Skrypnek, 2008; Sikorska-Simmons, 2005). The responsibilities of direct care staff in aging facilities are to provide quality care and assistance to older adults. With these obstacles, aging facilities are constantly struggling to maintain their purpose to provide the best care to their clients.

Organizational Behavior Management (OBM) has targeted absenteeism as a presenting issue for human service settings (O'hara, Johnson, & Beehr, 1985). This specific issue may create the difficulties within the workplace that may contribute to adverse effects on staff and clients. Absenteeism results in lower staffing numbers, which may cause strain within the existing staff members who are responsible to meet the needs of all residents. It may also contribute to low staff morale and low client-staff contacts, possibly hindering meaningful client-staff relations (Kinjerski & Skrypnek, 2008). Staff morale and significant client-staff relations may be contributing factors to a positive and welcoming environments for clients and staff, combatting employment concerns that are not uncommon to this type of organizational setting.

Similarly, another critical issue found in human service settings is staff turnover. Staff turnover can be described as the replacement of old staff members with new staff members. Evidence suggests that high staff turnover rates in long-term care may due to the difficulty of working with residents with dementia (Hoeffler, Rader, McKenzie,

Lavelle, & Stewart, 1997; Sikorska-Simmons, 2005). High turnover rates leave facilities with low staff, creating difficulties with providing quality care to all residents and additional financial expenditures for training and recruiting (Kash, Castle, Naufal, & Hawes, 2006; Sikorska-Simmons, 2005). This strain is a direct result to role overload, in which a staff member believes that their job tasks outweigh their abilities to perform the job with success (Chou & Robert, 2008; Kash et al., 2006; Kinjerski & Skrypnek, 2008). Staff members could experience challenges associated with prioritizing their job tasks, potentially causing tasks to be incomplete or completed to minimum standards. Job strain has an impact on job satisfaction, contributing to number of factors that stimulate human service issues. Previous research has indicated that independent relations between varying staff resources and job satisfaction exists (Chou & Roberts, 2008; Kinjerski & Skrypnek, 2008; Rhoades, Eisenberger, & Armeli, 2001). Examples of staffing resources include institutional support, adequate supplies, and interpersonal relationships with coworkers and supervisors. Typically, it has been found that staff are more satisfied in their jobs when a variety supports, similar to those previously mentioned, are available to them within the workplace. The levels of job satisfaction perceived by staff has an influence on their work performance.

A number of factors, including a combination of turnover, limited educational and professional training, may be responsible for low levels of staff performance in these settings. (Kash et al., 2006; Rhoades et al., 2001; Sikorska-Simmons, 2005). This performance issue can be addressed by directly implementing procedures that target these concerns like providing additional trainings, altering the level of supervisory roles that make necessary contingencies and feedback available. Focus on these areas of

concern are crucial because they not only affect the staff's performance abilities, but may be associated with unwanted client related outcomes (Hasson & Arnetz, 2008; Jahr, 1998; Kash et al., 2006; Parsons, 1998). Some negative outcomes of low staff performance may include increasing client dependency, reduced or nonproductive interactions between clients and staff, and ineffective/less effective treatments. Clients do not receive the highest quality of care when job performance of staff is low. High quality training does not always occur in human service settings. Training staff, especially when high turnover rates are present, can be time-consuming. High demands of management positions take a toll on the priority of quality staff training, and it may be neglected. Necessary client treatments may, as a result, be less effective or may not even occur. According to Reid and Parsons (2002), if staff are not implementing behavior plans correctly, there is essentially no treatment being provided. Unfortunately, it is not uncommon for management to place unrealistic expectations of skilled performance upon staff, in regards to completing job tasks successfully. Staff competence in applications of behavioral techniques and other relative work skills is vital to maintaining the client's right to effective treatment and an improved quality of life (Hasson & Arnetz, 2008; Jahr, 1999). When staff are not effectively trained, the clients, staff, and organization all suffer.

With sufficient training, work performance may still be of concern. Some factors that may contribute to lacking performance include the absence of or low contact with incentives, procedural acceptability, low work enjoyment, job support, and the opportunity to perform. The opportunity for gaining incentives are typically few and far between. Money is a very strong conditioned reinforcer, potentially being the most

preferred incentive for staff. However, financial constraints within the human service field make the possibility of providing monetary incentives to unlikely. The demand of human service positions may prompt staff to also request extra time off as an incentive. Again, this incentive may be difficult for organizations to provide to staff, based on previously mentioned staffing challenges with absenteeism and turnover.

Satisfaction with work-related procedures may impact the likelihood of staff utilizing and effectively implementing them. Acceptability corresponds to the extent to which staff view a management practice (Kemp et al., 1996). According to Davis and Russell (1990), procedural acceptability involves whether the recipient believes the intervention to be “fair, appropriate, nonintrusive, practical, consistent with standard practices, and unlikely to result in negative side effects” (p. 260). Procedural acceptability has been measured through the use of anecdote, rating scales, and providing staff with choices (Parsons, 1998; Baker & LeBlanc, 2011). These measures may be problematic as they do not provide management with the most accurate depiction of what interventions staff will actually adopt when they are required to implement a procedure (Baker & LeBlanc, 2011). Procedural acceptability may be high, but resulting behaviors do not consistently coincide with what was identified as acceptable by the staff. Also, these measures are based upon the assumption that staff are rating or choosing the procedures and tasks that are most preferred (Baker & LeBlanc, 2011). Furthermore, the measurement procedures commonly utilized may only allow staff to respond to the options presented, which exclude other options they may choose in the moment. This factor alone impedes upon the intent of these measures. Assessments regarding the acceptability and effectiveness of multifaceted procedures

are instrumental to mediate the challenges associated with job performance. Thus, a component analysis to assess on a smaller scale would be beneficial to address any presenting acceptability issues (Jahr, 1998; O'hara et al., 1985; Parsons, 1998). This approach may assist with concentrating on the actual presenting problems, and to foster the identification of productive behavioral interventions. According to Parsons, Herold and Leatherwood (1985), staff attribution to their own success may influence an individual's decision for absences or to quit their job altogether. Failure to conduct interventions that are deemed as "acceptable" by staff may potentially be traumatic to the overall job performance of staff within the organization.

CHAPTER 3

COMMON TECHNIQUES TO CHANGE PERFORMANCE

A typical method of addressing staff performance issues is to conduct staff meetings. Staff meetings are typically conducted in a verbal format, with supervisors leading an informational meeting about rules, regulations, and performance issues. Staff meetings allow the opportunity for supervisors to verbally, and possibly in written form, address issues related to the workplace. Staff meetings can be useful when disseminating information to staff and clarifying information. As previously mentioned, role strain may result in low staff performance. This strain creates a challenge for staff to prioritize all of their duties. For implementing behavioral interventions, the administration could provide assistance to decide how staff should prioritize their job tasks when there are refusals to do behavioral programs that conflict with other priorities. This establishes the behavior analyst as a reinforcer, which may encourage staff to discuss difficulties with providing the intervention, increasing the likelihood that staff will change their behaviors.

However, staff meetings can be unproductive as well, especially in aging human service settings, when the availability for performance demonstration and feedback regarding job performance is unavailable. Meetings occur during a preset time frame and are conducted at the same time that the agency is in business (24 hours per day in aging human service settings), which creates difficulty, in itself, to address all staff members while providing sufficient care to clients around the clock. Another issue related to this common technique to change performance is that these meetings may not allow staff to actually demonstrate job skills and receive feedback. This eliminates

the opportunity to practice job tasks, individual feedback is unlikely, and effective behavioral change cannot occur.

Another common technique for changing performance is to assess motivation in order to increase staff's desire to complete job tasks. Dieleman, Viet Cuong, Le Vu Anh, and Martineau (2003) suggested that in order to improve motivation and thereby increase staff performance, attention should be given to motivating factors, for example by increasing the individual's sense of achievement and to demonstrate recognition of that achievement. Internal motivating factors are used to explain why a staff member may desire to or fail to complete job tasks. Earlier research, however, report that when attempting to change performance in organizational settings, it is unnecessary to examine the needs and motivations of the staff; the focus should be on alterations within the environmental contingencies (O'hara et al., 1985). With a behavioral approach to motivation, in terms of establishing operations in this setting, this factor can be evaluated in an empirical way (Olson, Laraway, & Austin, 2001). According to Olson et al. (2001), establishing operations are environmental events or stimulus conditions that affect the momentary effectiveness of reinforcer and punishers, which evoke related behaviors. In aging human service settings, an increase or decrease in behaviors that have been previously correlated with a consequence illustrates the establishing operations functioning. Poling (2001) asserts that rules in the environment can also be considered establishing operations. So, another common technique that is used in these settings are developing specific rules for staff in regards to their job tasks. Considering establishing operations in aging human service settings promotes the development of a variety of interventions which foster advantageous environments,

expose barriers to ideal performance, and develop a well-informed understanding of behaviors.

Also, when difficulties are met in changing staff performance, agencies typically criticize or condemn those staff behaviors. According to Carnegie (1981), criticizing or condemning staff is an ineffective technique to change staff performance. The author states that by approaching staffing issues in this critical way, staff are more inclined to be defensive or provide justification for their behaviors. First, a plan of action to change these behaviors must be evaluated, most effectively with the assistance of a professional in the field of changing staff behaviors.

In essence, many of these approaches have behavioral components; however, the addition of other non-behavioral factors, such as those based in introspection, detracts from the development of effective behavioral interventions. Although organizations may observe changes in staff behavior after using these approaches, it is unlikely whether the behaviors will maintain over time.

CHAPTER 4

EXAMPLES OF INDIVIDUALIZED BEHAVIORAL TECHNIQUES

Various behavioral techniques are used in aging settings, either alone or in combination (Burgio, Whitman, & Reid, 1983; McCabe, Davidson, & George, 2007; Teri et al., 2005). Promoting positive changes in a work environment involves interventions for the antecedent to the behavior or to provide consequences to behaviors that are exhibited. Antecedent interventions may assist in increase the opportunity and likelihood for effective staff performance to occur. Consequences are provided after behaviors have occurred. In organizational settings, a productive way to provide consequences is by providing positive consequences, like reinforcement and feedback. Namely, instructional procedures, staff training, self-management, providing incentives, and providing verbal, written, and visual feedback can be used on an individual level when staff performance issues are present.

Instructional procedures may be used with staff as an antecedent intervention. These procedures usually include lectures, discussions, and written and/or verbal information. This procedure may also be applied as an additional component to other procedures, like staff training, for example. Achievement of results deemed sufficient by individual organizations are best met when instruction occurs within the realm of behavioral skills training in the setting that the behaviors are expected to take place with reduced or no competing contingencies (Gross, Miltenberger, Knudson, Bosch, & Breitwieser, 2007; Jahr, 1998; Reid & Parsons, 2002). Instructional components can be utilized while role-playing, modeling, and providing immediate verbal feedback. When instruction is provided outside of the setting in which they occur, the target behaviors

are less likely to occur and maintain at optimal levels (Jahr, 1998; Kessler & Green, 1999; Reid & Parsons, 2002). Feedback, especially when provided on an individual level, may be more effective than in group settings, allowing the individual to become aware of their own strengths and weaknesses. Individual feedback also eliminates the possibility of staff members questioning where the deficits are in their performance. An applied example of a combinatorial approach is a combination training approach to train staff about working with older adults with dementia conducted by Teri et al. (2005).

Moreover, competing contingencies make prioritizing job tasks increasingly difficult, making the possibility of job performance issues to reappear or become more difficult to extinguish. These factors are important to achieve the best possible outcomes of this behavioral technique. Instructions on how staff should be prioritizing tasks with a provided rationale enhances the acceptance of these expectations (Reid & Parsons, 2002). Individual procedures are vital to performance-based staff training. This type of training outlines and demonstrates the expectations of staff performance (Gross et al., 2007; Reid & Parsons, 2002). Feedback can be more readily provided when clear instructions are available to staff.

Alongside feedback, another intervention for changing staff performance could be provided through self-management. Past research has found that as long as supervisory roles are not diminished with the use of this intervention, improvements in a number of job tasks are observed with staff training on setting goals, monitoring their own behaviors, and administering self-praise (Burgio et al., 1983; Richman, Riordan, Reiss, Pyles, & Bailey, 1988). A combination approach to staff self-management includes providing incentives. Examples of Incentives, like lottery-based drawings, that

are low-cost and do not put additional strain on the organizations may be a probable way to intervene when incentives are not available in aging human service settings. Furthermore, when incentives are provided, if they are not of value to the staff members or offered frequently, organizations are less likely to observe changes in staff performance (Pampino, Heering, Wilder, Barton, & Burson, 2003).

Individual techniques appoint the staff members as the target for intervention. This approach allows for researchers to analyze each staff member's speed of behavior change and determine whether the intervention can continue to be implemented or altered to better fit the staff's needs. Also, by providing individualized techniques, reinforcement and feedback can be delivered on a variable schedule. Multiple versions of incentive programs currently exist and could be adapted to fit many organizations. McCabe et al. (2007) posit that the role of systematic factors should be further investigated when evaluating and preparing to modify staff performance. Levels of job support, motivation, and staff skill sets are all areas that could benefit from further inspection. Combinations of all of these examples may be used to fit the needs to each agency.

CHAPTER 5

EXAMPLES OF SYSTEMS APPROACHES TO CHANGING PERFORMANCE

Prior to the development of programs to alter the behavior of staff, it is vital to ensure that the system in which behaviors will occur is supportive of these changes. A well-functioning system is a prerequisite to changing performance. When the organization is not willing to facilitate and support the avenues necessary for changing performance, the efforts of behavioral intervention may be futile. Once organizational factors are no longer a concern, other behavioral techniques that allow the individual staff members to be the center of the intervention may be utilized. Research has indicated that assessments of the organization and staff performance are essential to the process of creating effective behavior change protocols in these settings (Austin, Carr, & Agnew, 1999; Green, Reid, Passante, & Canipe, 2008; Komaki, Collins, & Penn, 1982). These assessments can be used as tools for identifying where interventions should focus. One assessment that may be useful in this task is the Performance Diagnostic Checklist (PDC; Austin, 2000; Pampino et al., 2003).

The PDC is utilized as a functional assessment tool in work settings to identify areas within the organizational setting that may warrant an intervention. This assessment also assists in identifying at which level of staffing these concerns should be addressed, highlighting the relationship between the job tasks and work performance. Researchers in the field of organizational behavior management should identify the variables maintaining undesirable work behaviors and identify what is impeding staff to perform more desirable behaviors (Austin et al., 1999). The PDC guides intervention selection by specifying areas in need of improvement through

assessments of antecedents, equipment and processes, knowledge and skills, and consequences related to job tasks (Rodriguez et al., 2006). For example, if antecedents are an area where improvement is identified, an intervention that may be utilized is one that targets how the organization can arrange an environment that promotes the preferred staff behaviors. One way that this can be done is to provide additional stimuli in the environment where the job task is performed that identifies specific job task expectations or provide trainings. When multiple areas are identified as areas containing major deficits, one single approach may not be effective. The results of a study by Komaki et al. (1982) confirm that although antecedent strategies assist in improving work performance, work motivation is highly effected by consequences as well. The authors suggest that extensive supervisor involvement and a combinatorial approach may be necessary for an effective change to occur. Thus, effective changes within the workplace must first be addressed systematically.

One of the four characteristics of organizational behavior management is to make the organization more efficient by increasing work performance and job satisfaction (Frederiksen, 1982b). Assessments are one way to lead interventions at a systematic level. Staff behaviors are likely to change when there are changes made within their work environment. Dieleman et al. (2003) affirmed that staff can be motivated to perform despite the many factors of human service work positions that may cause the staff to feel dismayed. In regards to work performance, one vital component that may be infrequently highlighted is the role of supervisors. As previously stated, there is a lack of supervisory support in completing job tasks within aging human service settings. There are varying levels of support that may be needed in order to

effectively mediate concerns within organizational environments. One option for changing behaviors at a systematic level is to develop interventions at the supervisory level. Blumberg and Pringle (1982) insisted that supervisors must consider the effect of their own behaviors on staff's willingness, capacity, and opportunity to perform. The authors posit that the resultant effect of work performance is based upon the supervisory role in the interactions between these variables.

The positions of higher management allow for alterations of the work environment to occur and encourage increased work performance. Research in areas of work satisfaction and enjoyment may contain social significance to combatting the issues in aging human services. Green et al. (2008) and Reed, Reed, Campisano, Lacourse, & Azulay (2012) attempted to use the Task Enjoyment Motivation Protocol (TEMP) and the Modified Task Enjoyment Motivation Protocol (M-TEMP), respectively, in order to increase preferences for the non-preferred work tasks for staff. The authors did this by first creating a participative management process in order to assess aspects of the job that were less-preferred, and then altered the targeted job task to make it more preferred. The intervention was successful in increasing the preferences of non-preferred job tasks and increasing the quality of their work life. Although this process focused on supervisors, staff (Green et al., 2008), and their work tasks, in hopes of increasing their job preferences, satisfaction, and overall agency effectiveness, there were undeniable faults. For example, the TEMP did not provide a clear methodology for intervening on staff behaviors and relied heavily on verbal report of private events, which cannot be objectively measured. To improve upon the issue of measurement, job performance may be an area to target. Measuring actual job performance was a

limitation in both studies conducted. Therefore, the following section describes how extending the framework of Green et al. (2008) and Reed et al. (2012) in order to provide a further look into this aspect of aging human services, specific job task interventions could be individualized to any settings and include supervisors and direct care staff.

CHAPTER 6

PROPOSED METHODOLOGY

As previously identified, the limitations of current research in the area of staff performance within aging human service settings creates a need for additional research to be conducted. Based upon the information collected, below I propose an example of a behavior analytic methodology for conducting further investigations for identifying deficits and increasing staff performance in these settings follows. In the example below, I focus on one aspect of staff performance that may be an excellent start, documentation. Accurate documentation is necessary for most agencies to maintain licenses, but also would be the first place that a behavior analyst providing services to older adults would look to get data on behavior. Not only does this dependent variable provide an excellent opportunity for designing an intervention, but also when conducted in a real setting, a demonstrated change in this area could be an ideal way for a behavior analyst to leverage for more behavior analytic interventions to help staff (i.e., early success may result in the agency seeking more support).

Participants and Setting

An appropriate setting to conduct research regarding performance issues within an aging human service setting would be an Assisted Living Facility (ALF) for older adults. The participants would be several direct support staff working within the facility. These participants should be selected for the investigation because their job task included writing staffing notes regarding residents living within the targeted facility. The shift that would receive the intervention would be based on initial observations of staff performance. Ideally, the shift that shows the most performance deficits in this area of

writing staffing notes, based on the specified requirements for writing each staffing note (see Appendix A), should receive the intervention, if all shifts within the facility are not targeted.

Materials

During assessment, the Performance Diagnostic Checklist (PDC; Austin, 2000; Pampino et al., 2003) should be utilized as a functional assessment tool to identify areas within the organizational setting that may warrant an intervention. The PDC guides intervention selection by specifying areas in need of improvement through assessments of antecedents, equipment and processes, knowledge and skills, and consequences related to job tasks.

Other materials that may be used for this investigation would be staffing note checklists (Appendices A and B) and a computer that is capable of running Microsoft Excel for data collection and graphing.

Dependent Measures and Data Collection

A researcher should develop an objective checklist detailing all of the requirements for writing a staffing note, which would allow for accurate, and objective, measurement of these behaviors after they occurred. A potential dependent variable could be the percentage of checklist requirements completed for each shift's staffing notes (further referred to as 'accuracy') for five residents in the facility. For consistency, data should be excluded from days in which the staff writing the staffing notes were not the normal staff working that shift. Including these data in the analysis would represent a threat to internal validity, because the performance of employees who may be more skilled in writing staffing notes could be misinterpreted across the phases of the

experiment. The staffing notes for these five residents would be targeted due to the lowest staffing note accuracy across all shifts during baseline observations. Trained data collectors should use the checklist to record whether tasks required for writing a staffing note were completed or not by looking at the finished permanent products produced by the staff. Each staff participant should be assigned a number for data collection and confidentiality purposes. Data collection should occur in a private room inside the facility, with none of the staff members present.

Reliability and Procedural Integrity

Interobserver agreement (IOA) would be assessed by a second observer independently reviewing data. IOA data should be calculated by dividing the number of agreements by the total number of agreements plus disagreements, and multiplying by 100 to obtain a percentage. IOA data could be collected during at least 30% of sessions. An agreement for IOA would be scored when both observers recorded that the component was present. A disagreement would be scored when observer one recorded that the component was present and observer two recorded that it was not present.

Experimental Design and Procedure

Based upon prior research, the recommended experimental design would be a concurrent multiple baseline across behavior components 1, 2, and 3. These behavior components would be targeted based upon baseline observations of the staffing notes. The behavior components would be necessary requirements of a staffing note that staff may neglect to report on. Examples of components would be if medication pass was completed, specific activities of daily living,

Pre-Intervention assessment. The researcher should conduct the PDC assessment with the facility's administrator and staff members from all shifts. The assessment results would assist to indicate that an intervention may benefit in one or more of the following areas: competing job tasks that may interrupt staffing note completion, the absence of appropriate and available antecedent stimuli, staff members being unaware of the details required for writing staffing notes, and issues regarding the consequences delivered related to writing staffing notes.

Baseline. During baseline, data regarding the staff's completion of staffing note requirements should be collected before the intervention is used. The staff should not receive any instructions regarding the job task at this time. Data should be collected for each of the three components until stable responding is observed. Once stable during baseline, intervention assessments should begin. I recommend intervening on the baselines that display downward trends and/or demonstrate the lowest percentages of checklist requirements completed for each shift's staffing notes.

Intervention assessment. The intervention used should be based upon the result of the PDC. The deficits identified with the PDC should guide the development of the intervention to ensure that the intervention chosen is both necessary and effective. For the purposes of this paper, the following intervention would be proposed for identified deficits in regards to appropriate antecedents for writing staffing notes. The proposed independent variable could consist of two antecedent modifications. In order to fulfill their work duties, human service workers are often required to complete many different tasks each day (Green et al., 2008). In order to minimize the competing tasks during staffing note writing, the participants could be instructed to only write staffing

notes in the staff lounge area during the last thirty minutes of their shift. Also, to increase the staff's awareness of staffing note requirements, a verbal intervention in which specific instructions are developed and placed in the immediate work environment could be utilized in regards to the three different targeted components. Staffing note instructions ought to specify details for completing staffing notes, drawing attention to the specific component being targeted by providing additional information of its importance/requirement for each staffing note.

The experimenter would implement the intervention phase for the first component, while the other two components continue in baseline. After performance becomes stable in the first component, the second component should be targeted and the intervention is applied. Finally, after the second component becomes stable, the intervention should be applied to the third component. Therefore, a verbal intervention will be used.

To ensure treatment integrity, researchers could require that the staff document that they completed all components of their staffing notes and initial on a checklist located near the staffing note instructions. If this is done, the researcher should provide a locked box so that the staff's information is kept confidential. Researcher could also conduct random supplemental checks during the staffing note writing times to verify that all materials are available and being utilized. These measures would be used to control for inconsistencies of verbal report, commonly found in related research (Kemp et al., 1996).

Social Validity

After the study is complete, the experimenter should ask administrators to provide an expert rating to redacted staffing notes. Social validity should be assessed within both broad and narrow goals, and at varying levels, in order to ensure the most socially important effects have been attained (Fawcett, 1991; Schwartz & Baer, 1991). The social validity of the intervention could be assessed by allowing an expert rater to view a sample of the permanent products from each phase of the study and verify accuracy of the staffing notes (i.e., all staff identifying information would be removed and no indication of which staffing notes were from baseline observations and which staffing notes were from intervention observations should be provided). This would be used in order to assess whether the staffing note writing had improved after the intervention. A secondary measurement of social validity could be utilized by asking administrators to complete a short questionnaire about the intervention and their views on its effectiveness. A third measurement of social validity could be measured by the continued implementation of the intervention during maintenance probes. This measurement would allow for a relationship between verbal report and actual treatment adoption to be established (Baker & Leblanc, 2011).

Hypothetical Results

Throughout the proposed investigation, the researcher should potentially observe increases in the percentage of completed requirements for each component from baseline to intervention phases. Figure 1 shows overall results of this proposed methodology. The results displayed are ideal results, illustrating the increases that can be seen when using a concurrent multiple baseline design across three behavior components. The hypothetical graph shows that the percentage of checklist

requirements completed remain low until the intervention is used. The graph also shows that the percentages maintain at low levels for the components that continue in baseline while other components have the intervention applied. This ideal pattern for a concurrent multiple baseline design could be observed until all components have received the intervention.

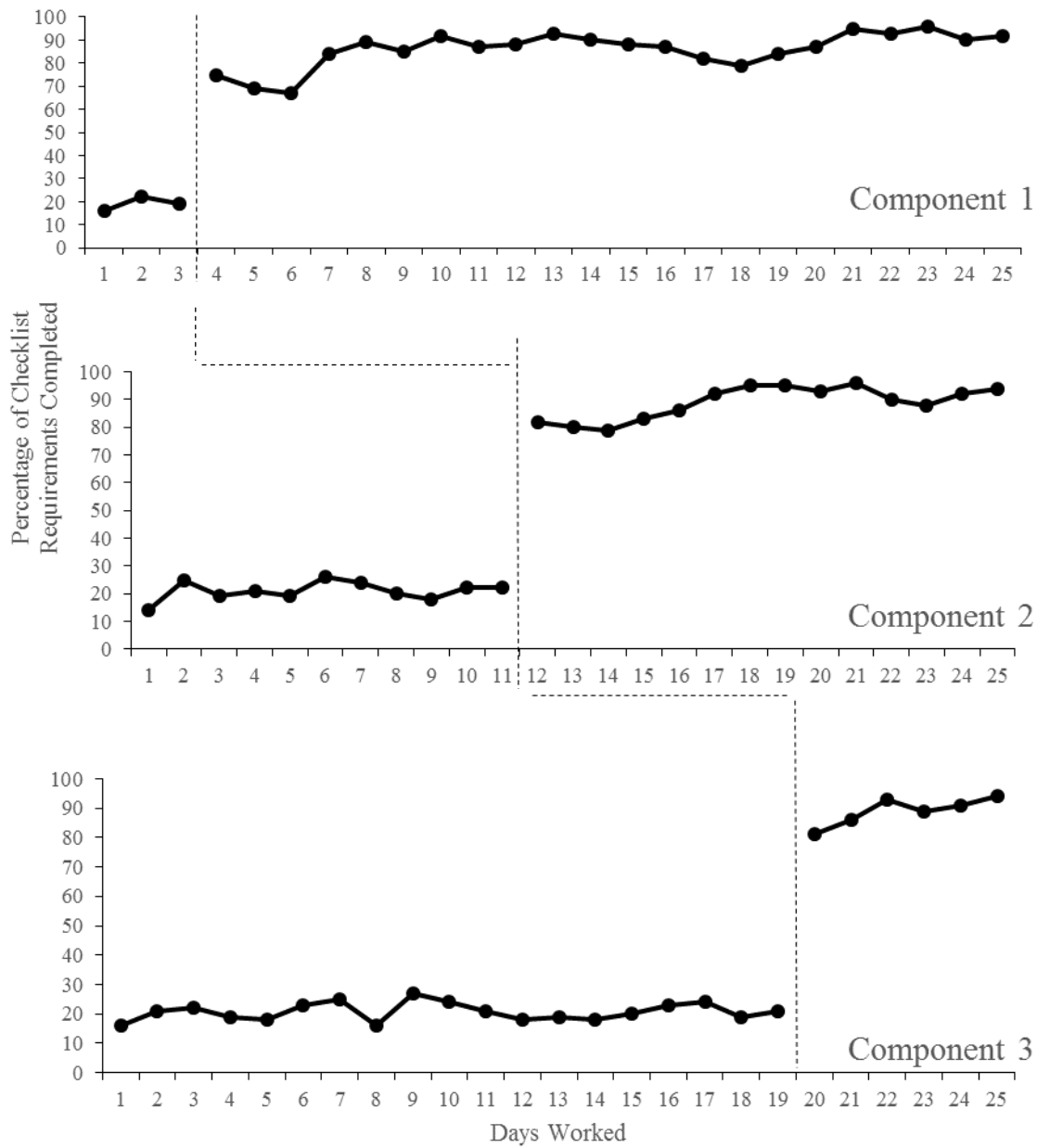


Figure 1. Figure 1 displays a hypothetical graph of potential results when utilizing the proposed methodology.

CHAPTER 7

CONSIDERATIONS FOR ADOPTION

Before adoption of the proposed methodology for identifying deficits and increasing staff performance in aging human service settings, several conditions are essential to recognize. The development of research design, data collection systems, graphing, data entry, and confidentiality are all areas to be considered.

Past research has used non-concurrent multiple baseline designs (Green et al., 2008) when intervening in an organizational setting. Reed et al. (2012) considered the use of a concurrent multiple baseline design, in that it the use of a non-concurrent multiple baseline designs may be considered a relatively less rigorous application of single-case experimental design. Non-concurrent multiple baseline designs may be considered less rigorous due to relatively little control for historical threats to internal validity. The proposed methodology outlines the method to control for these threats. When approaching this topic, considerations should be given to threats to validity in order to provide the most effective intervention.

Furthermore, another consideration for designing the intervention includes creating a data collection system. Specifically, staffing note instructions must be relevant to the targeted organization and follow any necessary ethical guidelines. In an aging human service setting, considerations must be given to expectations and minimum standards set by the state Department on Aging (DoA), alongside specific agency expectations. The standards on writing staffing notes according to the DoA, and the expectations of the organization may correspond with one another, but may not be identical. Obstacles for creating a data collection system for staffing notes may become

present in these differences. All expectations for writing staffing notes should follow standards set by the DoA and fulfill the requests of the organization. A question of whether the final data collection system provides both required and sufficient information on what may be needed or helpful to someone reading the staffing notes will be yet another consideration of the researcher. These data collection systems should also be approved by administration prior to being used.

Once the data collection system is approved, graphing considerations should be discussed. When calculating performance in aging setting, especially where each client requires differing levels of care, data input and graphing may become challenging. For example, if activities of daily living is a requirement for each staffing note, the researcher must consider if that is relevant to the specific client. One client in the proposed aging setting may not require assistance with activities of daily living, but requires assistance with housekeeping and meal preparation. Other clients, in that same setting, may require assistance with activities of daily living. In this case, when using Microsoft Excel, a formula for conditional requirements must be considered. Otherwise, the scores may not be accurate reflections of staff performance and appear to be missing when it is not applicable for that staffing note.

Next, ethical guidelines for conducting research, especially working with staff in human service settings, confidentiality is a pressing concern. In order to conduct this type of research, approval of the study must be obtained through a human subjects committee, as well as the site being targeted. In organizational settings, gaining approval from the staff members to assess and evaluate their job performance can be a daunting task. The proposed methodology may be welcomed or met with concerns.

Administration may be open to, or even request, the application of the proposed methodology. Additionally, a human subjects committee may requested a detailed plan about measures to protect participant confidentiality, which can, again, be very difficult.

The main goal of the proposed methodology is to improve and preserve the quality of documentation in aging human service settings. Accurate documentation is a necessary factor of providing services in all human service sectors. Inaccurate documentation may lead to negative outcomes and put organizations at risk for law suits, uninformed care, and confusion among staff. These negative outcomes can be avoided if appropriate assessments and behavioral interventions are implemented. Fear of putting job security at jeopardy is a concern that may cause some resistance to providing permission to conduct or consent to participate in this type of research study. As a researcher, one must consider how to track individual performance with

One way to ensure that confidentiality is protected is by first eliminating staff identifiers. No identifiable information should be provided to the organization's administration, staff, or clients regarding participation in the research. Dependent on the organization's method of documenting, this could prove to be challenging. Ideally, staff members are given an identifier that eliminates their identity from any documentation that is related to the research. A master list of all staff may be created two naïve researchers. For example the first naïve researcher may be able to assign staff random numbers, and then another naïve researcher could follow up with assigning staff some other type of identifier (i.e., a letter or name). Still, there may be difficulty with ensuring that this master list of identifiers is not accessible by administration, staff, clients, or primary researchers. Another method toward protecting privacy is to redact staffing

notes and have a naive researcher score the staffing notes. It is to be noted that the brief list of methods to protecting confidentiality is not exhaustive, by any means. The key consideration in this area is to be aware that confidentiality is a factor that must be handled with great care.

CHAPTER 8

SUMMARY

The purpose of the present paper is to further research and professional development by providing a behavior analytic approach to increase job performance and remediate issues found in aging human service settings.

The populations served by staff in human service settings are effected by staff performance. Deficits aging human services include that lack of specific training, low job satisfaction, absenteeism and turnover, motivation, little training and low education, little to no access to incentives, and ineffective techniques being used to change staff behaviors. All of these factors may negatively impact clients in these aging settings, including ineffective treatments, client dependency, and reduced or no interactions between staff and clients, among others.

Common techniques to changing behaviors are utilized in organizational settings. Although some techniques may have limited effectiveness or behavioral components, staff interventions in aging settings should be conducted by a behavior analyst with competent organizational behavior management skills. Some individual and systems approaches to behavioral techniques used to change staff behaviors have been provided. It is anticipated that with the assistance of the presented information, staff work performance will see a benefit, and in turn, provide a quality level of care to all adults in aging settings.

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APPENDICES

**Appendix A:
Daily Staffing Report**

Apartment # _____ Gender: M / F Date: _____ Staff
Initials _____

Shift: Morning Evening Overnight

ADL Checklist

Behavior of Resident (circle all that apply)

Shower	Y	N	Happy	Talkative	Frustrated	Sleeping
Changed Clothes	Y	N	Sad	Tired	Content	Social
Brushed Hair	Y	N	Other: _____			
Shaved		Y	N			
Use Deodorant	Y	N				

Did the resident require any assistance with any of the above ADL's? If so, which ADL's required assistance? _____

Do these activities usually require assistance? Y N

Comments _____

Were there any med changes that occurred? Y N
If so what changed? _____

Were ALL medications taken by resident? Y N

Were any PRN's taken by resident? Y N

If so, which PRN was taken? _____ **How many?** _____

Did the resident participate in any activities during this shift? (Circle all that apply)

Meal Time Watched TV Read a Book Socialized with other Residents Word Puzzles

Took a Walk Jigsaw Puzzle Attended Church Set Up the Dining Room Played

Piano Walked a Pet Smoked Outside Played Cards Other: _____

Did the resident leave the building? Y N

Comments: _____

Did the resident have visitors? Y N

Comments: _____

Did housekeeping come today? Y N

Comments: _____

Did the resident have any complaints about anything? Y N

If so, what was it? _____

Additional Comments:

Appendix B: Administrative Staffing Note Rating Checklist

You are being asked to complete this form in order to rate staffing notes from various phases of this research study. No identifying information will be on the staffing notes that you are rating and the experimenter will not provide any information regarding this confidential information. One form will be used for each staffing note that is being rated.

Date of Staffing Note: _____

Was a staffing note completed? (circle one) Yes / No
If no, please move on to the next staffing note.

Please circle **YES** or **NO** to determine if each component is present in the presented staffing note:

Staffing note completed?	Yes / No
Full Date (day/month/year)?	Yes / No
Shift for staffing note?	Yes / No
AM/PM included for Time? (if needed)	Yes / No
Were Full Sentences used?	Yes / No
Remind/Observe (R/O)?	Yes / No
Shower?	Yes / No
Change Clothes?	Yes / No
Hair?	Yes / No
Shaved?	Yes / No
Deodorant?	Yes / No
Other ADL Assistance?	Yes / No
Affect/Behavior?	Yes / No
Health Related information?	Yes / No
Med Changes?	Yes / No
Details about Med Changes, if needed?	Yes / No
PRNs/Additional assistance	Yes / No
Activities?	Yes / No
Meal?	Yes / No
Location of resident?	Yes / No
Visitors?	Yes / No
Housekeeping/Laundry?	Yes / No
Complaints?	Yes / No
Refusals?	Yes / No
Staff Spoke to POA/On-Call?	Yes / No

For Researcher Use Only:

Number: _____ Phase: _____ Accuracy: _____

(# components present / total # components required)

Appendix C:

The Adapted Treatment Evaluation Inventory-Short Form (TEI-SF)

Scale:	1	2	3	4	5
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

Questions:

1. I find this treatment to be an acceptable way of dealing with writing staffing notes
2. I would be willing to use this procedure if I had to change staff's staffing notes
3. I believe that it would be acceptable to use this treatment without staff's consent
4. I like the procedures used in this treatment
5. I believe this treatment is likely to be effective
- *6. I believe the staff will experience discomfort during the treatment
7. I believe this treatment is likely to result in permanent improvement
8. I believe it would be acceptable to use this treatment with staff who need
improvements in writing staffing notes
9. Overall, I have a positive reaction to this treatment

*Note: scale is reversed when scoring this item

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