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Reducing Challenging Behaviors in Intellectually Disabled Individuals: A Comparison of Organizational Culture and Treatment Approach

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Abstract

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by

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MA, Long Island University, 1991

BA, Herbert H. Lehman College, 1988

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

The deinstitutionalization of the intellectually disabled (ID) and their transition to

community living in New York State necessitated training initiatives for staff to manage

challenging behaviors safely and humanely. However, the use of physical interventions

to control self-injury and physical aggression may have become organizationally

habituated, and limited research has compared programs that use physical versus

nonphysical interventions. This mixed-method, comparative case study compared a

restraint-free day habilitation program with one that used physical interventions,

examining the differences in reducing self-injury, aggression, and types of interventions

applied. Qualitative differences in philosophical approach to behavior intervention

strategies and staff training protocols were examined using semi-structured interviews

with employees ($n =11$). Insufficient sample size precluded inferential analyses, but

descriptively the results revealed more incidents of physical assault and self-injury in the

program that used physical interventions. Further, behaviors ceased without intervention

more frequently than they did in the restraint-free program. Qualitative results revealed

shared qualities of person-centered organizational culture across both programs. These

results suggest that an organizational culture that incorporates training and staff support

in the use of restraint-free strategies may influence the type and frequency of challenging

behaviors in this population. This study promotes positive social change by providing

information that the Office of Persons with Developmental Disabilities can use to inform

the development of ID-serving agency policies and staff training protocols to promote

safety, respect, and well-being in ID persons who access community learning services.

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Chapter 1: Introduction to the Study

Intellectually disabled (ID) individuals face significant challenges in life due to cognitive deficits resulting from genetic or chromosomal abnormalities, birth injuries, illness, and other external factors. These deficits can result in diagnoses including intellectual disability (ID), Autism Spectrum Disorder (ASD), and Down's syndrome. At one time, ID individuals in the United States were often remanded to institutionalized living environments where nurturance and less than optimal living conditions resulted in the development of poor coping mechanisms that became habituated over time (Sternlicht & Siegel, 1967; West & Kaniok, 2009). As these institutions have closed and ID individuals have been moved to community settings and group homes, acting out and self-injurious behavior that once presented as problematic have tended to decline (Hamlen, Frijters, Griffiths, Condillac, & Owen, 2011; West & Kaniok, 2009). For some ID individuals, however, challenging behaviors continue to interfere with outcomes that promote social behavior and other independence-related skills, even when placed in supportive environments (Felce, Lowe, & Jones, 2002).

This study compared two nonprofit organizations' intervention practices intended to reduce or eliminate the specific, challenging behaviors exhibited by a subset of the ID population. These agencies provided day habilitation services for ID adults in the northeast region of the United States; at the time of the study, each implemented a unique approach to eliminating aggressive and self-injurious behavior. This study examined how philosophical approach, staff mindset, and practical application of behavior intervention strategies differed between these two human service agencies. It specifically

examined the role that leadership played in communicating the agency's vision and core values through programming, staff training, and behavior management styles, investigating whether environmental modifications and socially engaging learning activities or physical restraints were more effective in developing socially appropriate behavior in the ID population. The implications of the study for positive social change are far-reaching as state regulations and policies demand closer monitoring of the use of restrictive physical interventions (Office of Persons with Developmental Disabilities, 2011). The results of this study help set a course for movement on a statewide level to advance person-centered programming through the development of agency policies and staff training protocols in an effort to promote well-being in ID individuals who access this service.

This chapter defines the problem and purpose of the study, presents the research questions to be examined, the theoretical framework for the investigative process, and definitions of relevant terms. It concludes with a listing of the ideas assumed to be factual; the scope of the study; its delimitations, limitations, and overall significance; and its potential impact on approaches to intervention and strategies that promote a better environment for ID individuals who have behaviorally challenging issues.

Background

Acts of aggression and self-injury in ID adults in the United States are often managed using physical interventions provided by poorly trained human service professionals (Nirbhay et al., 2009). How staff respond to ID individuals who self-injure or become physically aggressive may inadvertently cause an increase in the challenging

behaviors over time (Nirbhay et al., 2009). Prior research has described a two-fold dynamic influencing the mainstream use of physical interventions in response to these types of behavior: a top-down, hierarchical system that is common within both corporate and human service agencies; and a mindset of direct support staff who experience higher stress levels and prefer the use of physical interventions (Disley, Hatton, & Dagnan, 2009).

Several studies have suggested that there is a general lack of education and training for Direct Support Professionals (DSPs) serving ID individuals. DSPs are frequently not trained to intervene before a presenting situation rises to a level where physical restraint is required (Bisconer et al., 2006; Grey & McClean, 2007; Singh et al., 2009; West & Kaniok, 2009). Specifically, traditional training provides DSPs with few choices in managing challenging and aggressive behaviors; this default strategy is more likely to allow the behavior to escalate, leaving a DSP with no other choice but to resort to physical restraint (Bisconer et al., 2006). In contrast, person-centered training encourages DSPs to respond more creatively and spontaneously to accelerating aggression or violence (Hughes, 2009). This training approach has been associated with less-hierarchical organizational cultures that promote out-of-the-box thinking and are supportive of staff initiatives (Chatman & Cha, 2003; Disley, Hatton, & Dagnan, 2009; Jaskyte, 2010; Suess, 2002; Quinn & St. Clair, 1997).

At the time of this study, no extant studies have compared the philosophies and systematic approaches of two human service agencies that intervene to reduce challenging behaviors in the ID population that they serve. This study addressed the

concern of ID service providers about the longstanding use of physical interventions as a means to control maladaptive or challenging behaviors, an approach that did not align with current New York State, OPWDD (Office of Persons with Developmental Disabilities) initiatives that focus on positive behavioral supports and person-centered planning. This study addressed this literature gap by investigating which approach was more effective in reducing challenging behavior; specifically physical aggression and self-injury (Baker & Bissmire, 2000; Bisconer et al., 2006; Grey & Hastings, 2005; Grey & McClean, 2007; Kindy et al., 2005; Singh et al., 2009; Suess, 2000).

Problem Statement

Physical interventions have historically been used to manage challenging behavior in ID persons. There is an emerging understanding, however, that the use of proactive measures to prevent escalation of challenging behavior encourages these individuals to develop better coping mechanisms (Applegate, Matson & Cherry, 1999; Baker & Bissmire, 2000; Bisconer et al., 2006; Grey & Hastings, 2005; Grey & McClean, 2007; Kindy et al., 2005; Singh et al., 2009; Suess, 2000; West & Kaniok, 2009). However, no published research on this topic has specifically compared the organizational culture, types of interventions used, and the frequency of challenging behaviors at institutions serving ID persons.

Purpose of Study

The purpose of this concurrent, embedded, mixed-method design was to compare an ID service program that used nonphysical interventions with one that used physical interventions, examining the differences in the frequency of aggression and self-injurious

behavior in ID service users. This study also examined the differences between the two

programs in staff training and organizational context, in order to better understand how a

program's culture was reflected in the implementation of treatment approaches.

Identifying these differences illuminated agency-specific trainings that reflected their

divergent approaches to behavior modification and revealed whether the agencies' DSPs

believed the trainings prepared them to support program participants. It also determined

whether using physical or nonphysical interventions more effectively reduced

challenging behaviors over the long term.

Research Questions

1. How do agency philosophy/culture, intervention strategy, and DSP training differ

   between agencies that use nonphysical interventions and those that use physical

   interventions?

This research question was investigated using qualitative research methods guided by

Moustakas' (1994) phenomenological approach.

2. What are the differences in intellectually disabled service users' responses in a

   program that emphasizes physical interventions versus in a program that

   emphasizes nonphysical interventions for intellectually disabled individuals who

   exhibit challenging behaviors?

This research question was examined using an ex post facto design, collecting archival

data in order to test the following hypotheses:

H_o1: There are no differences in the types of trigger events between the two

agencies.

H_a1: There are significant differences in the types of trigger events between the two agencies.

H_o2: There are no differences in the frequency of self-injurious behaviors reported between the two agencies.

H_a2: There are significant differences in the frequency of self-injurious behaviors reported between the "Shift Happens" versus the "SCIP-R" agency.

H_o3: There are no differences in the frequency of physically aggressive behaviors reported between the two agencies.

H_a3: There is a significant difference in frequency of physically aggressive behaviors reported between the "Shift Happens" versus the "SCIP-R" agency.

H_o4: There is no difference in the frequency of physical interventions used between the two agencies.

H_a4: There is a significant difference in the frequency of physical interventions used when comparing the "Shift Happens" versus the "SCIP-R" agency.

H_o5: There is no difference in the frequency of nonphysical interventions used between the two agencies.

H_a5: There is a significant difference in frequency of nonphysical interventions used when comparing the "Shift Happens" versus the "SCIP-R" agency.

H_o6: There are no differences in intervention outcomes between the two agencies.

H_a6: There is a significant difference in intervention outcomes when comparing the "Shift Happens" versus the "SCIP-R" agency.

The data collected from archival reports was not of a sufficient sample size (90 reports from Agency A versus 15 from Agency B) to test these hypotheses. These results are analyzed descriptively in Chapter 4, and interpreted with caution in Chapter 5.

Conceptual Framework for the Study

The primary, conceptual framework that grounded this study was rooted in the evolution of how caregivers work with intellectually disabled individuals. The initiation of formal management interventions is sourced in the conceptual frame of B.F. Skinner's operant conditioning model. This model describes behavior as changeable through the association of preferred behaviors with external reinforcers via repetition, response, reward, and consequence (Skinner, 1953). According to this model, operant conditioning is used to elicit a replacement behavior and extinguish specific undesirable behaviors.

Undesirable behaviors are defined in this context as negative actions that became habituated in response to setting events, environmental antecedents/triggers, or as a result of intrinsic factors; in the ID population, these habituated behaviors are less-than-optimal ways to cope with perceived stressors. For example, a woman with sensory-related challenges might arrive at a service location wearing a shirt that is causing her discomfort. Rather than pointing to her shirt and taking staff to the closet to choose a preferred garment, the woman instead engages in actions such as tearing her shirt,

disrobing, and hitting herself on the head. Acting out or engaging in self-injurious behavior may cause undue harm to self or others and "not only endangers the safety and well-being of vulnerable and fragile peers, but also endangers his or her own safety" (Bisconer et al., p. 515, 2006). Extreme acts of self-injury or physical aggression may precipitate calls to the 911 system to facilitate law enforcement involvement and/or transport to the local hospital's emergency room for triage of medical or psychiatric care.

A different treatment approach is suggested by applying Bandura's (2007) learning theory, which conceptualized learning as a process that occurs over time, wherein actions, reactions, and behavioral tendencies are formed naturally and influenced by the context in which the behavior occurs. According to this model, a woman learns to behave one way or another as a natural consequence of the actions modeled by those present on a day-to-day basis. For example, an ID woman who struggles with sensory issues often becomes frustrated, tearing off her shirt and biting her arm when she no longer prefers to wear the one she has on. In response, staff should model the sign for shirt, then show the ID woman a closet with two shirts from which she can choose to change into. Instead of ripping her shirt off and biting her arm, the woman learns to communicate her desire to change into something more comfortable as a natural consequence of signing her preference, learning that she can go to the closet and change into a shirt of her choosing.

The role of organizational culture is directly reflected in the structure of agencies and the actions of the direct support professionals that they employ. How an agency functions, either from a hierarchical, top-down approach or through inclusion of all

members of the system, coincides with its approach to behavioral interventions of service

users (Kaufman, 2011). Factors such as cohesive cultural mindset, hierarchy, and the

context in which an agency functions regarding its members create a collective

perception of the agency's vision to promote the highest level of care for the population it

serves (Jaskyte, 2010). Some examples of this cohesive cultural mindset are

communications from the New York State Office of Persons with Developmental

Disabilities (C. Burke, October 12, 2012) and the Chief Executive Officer of Orange

AHRC (C. Fortune, August 18, 2012) directing administrative and direct support

professionals in these settings to refer to the ID individuals as "Persons We Support."

Nature of the Study

This study utilized a concurrent embedded mixed-method design to examine the

two primary research questions. I chose a concurrent, embedded, mixed-method design

to address organizational and contextual issues of caring for ID individuals, as well as

examine the consequences of treatment approaches that were embedded in the studied

organizations. A qualitatively driven approach to mixing methods provides an

opportunity to gain insight into the lived experiences of persons who act in a variety of

contextual environments in order to generate new knowledge for the community at large

(Mason, 2006).

For the first research question, the phenomena of interest were (1) agency

philosophy, (2) intervention strategy, and (3) DSP training. The phenomenological

approach was used to illuminate how the organizational context of each facility supported

the implementation of interventions for challenging behaviors, as suggested by

Moustakas's (1994) general guideline.

I gathered qualitative data via open-ended interviews with direct support and

administrative staff at the two agencies. I requested and gained permission from

gatekeepers to gain access to the sites to facilitate the interview process. Interviewees

were given an overview of the study's mission, and received informed consent forms that

I distributed and collected prior to data gathering. Interviews were audio recorded,

transcribed, and secured in a locked file cabinet; backup copies of these materials are

stored at a remote location for safekeeping, and are scheduled to be destroyed after a

period of seven years. Member-checking by study participants provided an opportunity

to review transcribed data and offered clarification as needed to glean literal replications

of the phenomena of interest. I also sent a summary of the interview as an email

attachment or hard copy in a sealed envelope via internal mailbox at one of the agencies

that participated in the study and where I am employed as a behavior intervention

specialist. This allowed participants the ability to correct things according to their

perspective.

To answer the second research question, I sent a permission letter (Appendix C)

requesting access to ABC sheets/Occurrence reports to the administrator-in-charge

indicating my requested date(s) for site visits along with alternate dates provided to

accommodate scheduling, if needed. I reviewed archival data on site in a private area

that was removed from the main program area, so as to avoid distraction and any

potential disruption of program activities. All identifiable information was redacted prior

to accessing the reports. To ensure data retention and protection, I stored the reports in a locked file cabinet for a period of seven years. At the end of this time period reports will be destroyed. A second copy is stored in a separate location with the same protocol employed as those of the original. This comparison of archival records provided quantitative data that I used to examine the implementation of physical versus nonphysical interventions and their effectiveness in reducing physically aggressive and self-injurious behavior.

Independent Variable

Two approaches were compared, each with their respective sets of independent variables:

1. **Physical Interventions**. These included: Touch Control, Arm Control, Arm Control with Assistance, One Person Escort, Two Person Escort, Standing Wrap, and Seated Wrap.

2. **Nonphysical Interventions.** These included: Verbal Calming (Talk), Redirect to Another Activity, Staff Change, and Relaxation.

Dependent Variables

This study used two general categories of dependent variables:

1. **Aggression.** These included**:** Hitting, Pinching, Spitting, Scratching, Grabbing or Choking Others, Pulling Hair, Property Destruction.

2. **Self-Injury.** These included**:** Banging Head against Hard Object, Scratching Self, Hitting Self, Pinching Self, and Skin-Picking.

Quantitative analysis of the data extracted from the archived ABC sheets and Occurrence reports were conducted to determine the differences in agency approach and the consequences for reducing both self-injurious and aggressive behavior of ID individuals by comparing frequencies of the target behaviors. I employed the use of contingency tables that examined differences of trigger events and frequency of nonphysical interventions applied. I carried out a nonparametric comparison of the two independent groups of ID individuals' data recording sheets to observe changes in presentation of challenging behavior (ceased, decreased, or continued before de-escalation). Archival review covered a concurrent, six-month period that began January 1, 2014 and ended on June 30, 2014.

Definitions

Antecedent (Trigger Event): "…A→B→C (antecedent leads to behavior leads to consequence)…serves as a cue prompting the person to behave in a given way" (Kreitner & Luthans, 1984, p. 54).

Challenging Behavior: Coping functions of the intellectually disabled that serves any of the five functions associated with it. They are attention, tangible, sensory, physical discomfort, escape/avoidance. This may also include stereotypic behavior including hand flapping, aggression (both verbal and physical), property destruction, and self-injury…and can threaten an individual's residential placement" (Symons et al, 2005) and impact one's ability for social interactions within their community (Anderson et al., 1992; Larson, 1991).

Intellectually Disabled (ID): "…involves impairments of general mental abilities that impact adaptive functioning in…conceptual skills including language, reading, writing, math, reasoning, knowledge, and memory; the social domain (empathy, social judgment, interpersonal communication skills); and practical domain (personal care, job responsibilities, money management, recreation, and organizing school and work tasks)" (American Psychiatric Association, 2013).

Lavish Praise: A verbally reinforcing technique used by direct support staff that is defined as an abundance of positive statements offered to persons served as they demonstrate improved coping skills that are socially appropriate and which replace behavior considered to be challenging or maladaptive in nature (Suess, 2000).

Mindset: "A way of thinking and applying a skill set based upon learned experiences and as a reflection of a person's central norms and view of the world" (Stewart, 2002, p. 3).

Organizational Culture: The role of leadership philosophy and its impact on organizational structure, the delivery of services, and training and identity of staff (Jaskyte, 2010).

Physical Interventions: For the purpose of this study, restraint may be defined as the use of "physical and mechanical restraints to control aggressive and destructive behavior of persons with intellectual disabilities" (Singh et al., p. 1).

Positive Behavioral Supports: A planning, development, and behavioral practice that accentuates positive, proactive approaches to promote behavior change; a perspective

that is distinct from "reactive" intervention protocols (Carr et al., Baker & Bissmire, 2009).

Assumptions

I assumed that using proactive techniques such as active engagement, verbal calming, a gentle touch, modeling of socially appropriate behavior, and encouraging statements were catalysts for positive behavioral change. Therefore, I employed several strategies to minimize personal bias. It was also assumed that the purposeful sampling strategy would result in participants who were able to accurately and effectively discuss aspects of the organizational culture. Further, it was also assumed that the ID populations in the two organizations shared similar characteristics including a diagnosis of intellectual disability. The archival documentation reflected challenging behaviors that are assumed to be typical and were tracked for frequency of behavior, intervention applied, and response to intervention on ABC sheets and Incident/Occurrence reports. Both agencies stored the data in locked file cabinets as required to ensure privacy practices. Finally, it was assumed that staffs from both organizations were ethically responsible and person-centered to support the intellectually disabled, regardless of the context in which services are provided.

Scope and Delimitations

The scope of the study limited access to the use of two agencies to compare physical versus nonphysical intervention strategies. This was a function of the concurrent embedded mixed method design chosen. It was limited to two agencies because of a lack of funding resources and access to assistance in order to carry out this

type of study on a broader scale. This might be addressed by applying for funds to conduct a larger study of this design which would allow for travel and accommodations, as well as research assistantship to carry the study through to its conclusion. The study would have been stronger if one could compare strategies across a broader range of contexts including educational and residential settings.

Analyses included staff interviews and review of archival records (ABC sheets and Incident/Occurrence reports); redacted documents of individuals who have a diagnosis of intellectual disability and a history of physical aggression or self-injurious behavior. A delimitation of this study was my limited access to data extracted due to its inherent design. Carrying out a study of this nature from a different theoretical frame (e.g., Maslow's hierarchy of needs) would have required access to a more extensive data set, including participant history related to family of origin, institutional placements, medical and psychological assessments, diagnoses, documentation of prior interventions and interviews of ID individuals across environments, and for a prolonged period of time.

Another delimitation was my choice not to go to participants or their advocates for primary data gathering. These individuals who exhibit challenging behaviors often have limited verbal skills or are nonverbal. HIPPA (Health Insurance Privacy and Portability Act) and ethical issues regarding access to participants' guardians prevented this group from being included in data collection efforts.

Limitations

Generalizability was limited because the research sites were selected out of convenience. However, the concept of transferability in qualitative research was pursued

(Creswell, 2009; Bradley, Curry, & Devers, 2007). Transferability can be defined as a means by which to strengthen the external validity of qualitative research by "providing sufficient detail of the fieldwork sites…and detailed description of phenomenon in question to allow comparisons to be made" (Shenton, 2004, p. 73) to provide future researchers the ability to reproduce the study in a broader range of environments. Transferability was enhanced through the detailed presentation of each organization and its' staff roles.

Internal validity is limited because data collection was archival rather than primary (Creswell, 2003). I was dependent on prior data collection and recording methods, and assumed that these efforts were reliable and valid as audits of agency records occur annually, to ensure state regulations and HIPPA requirements are adhered to. However, I utilized the advantages of mixed methods research to compare and contrast sets of findings to look for consistencies and discrepancies that shed light on the credibility of the data, and the rigor of the data gathering process (Creswell, 2003; Yin, 2009).

I remained mindful of any potential biases through the use of reflection during and after the interview process and member checking to review portions of audio recordings to insure rigor in maintaining a standard in use of inflection during questioning of interviewees. Additionally, I sought to extract pertinent, descriptive information that may counter any pre-conceived ideas around responses to questions and probes provided during the qualitative portion of the investigation (Johnson, 1997).

Significance

The study was significant in two ways: by filling the behavior intervention literature gap in the area of positive behavioral supports and adding to the field of intellectual disabilities in proven effectiveness through outcome measures and the development of standardized protocols for staff actions to monitor for accountability and supervision purposes. The results of this study impact the field of human services in my local community through justification of grant-writing initiatives for the restructuring of existing space. Monies received would provide a means to develop sensory and other activity-based rooms customized to the needs of service users. Professional application would be far reaching as agency structure, staff identity, and improvement in the lives of those we support will likely promote positive social change in communities; nationally through organizational change and across cultural lines. It is my intent to present the results at the NYSACRA (New York State Association of Community and Residential Agencies) conference to inform state and agency representatives of the role that agency culture plays in affecting change through its policy and practical application measures.

Summary

Chapter 1 provided a rationale for the use of a concurrent embedded mixed method study based upon the theoretical frames of B.F. Skinner and Albert Bandura. Chapter one's introduction and background painted a picture for the reader of the purpose in carrying out a study of this type. Chapter 2 is a review of existing literature to include an historical perspective of how we view behavior based upon the current structure of organizations and the services provided to a fragile population such as those represented

via redacted, archival documents as participants of the study. Chapter 3 provides a step

by step procedure for carrying out both qualitative and quantitative analyses using open-

ended interviews and archival records to gain a better understanding of mindset and

intervention strategies to facilitate behavioral change of PS. Chapter 4 rounds out the

study by incorporating results supporting effectiveness of type of intervention applied

and outcome measures to support its use on a wider scale. Implications for future

research and positive social change are discussed in chapter 5.

Chapter 2: Literature Review

The purpose of this investigation was to explore the organizational context and therapeutic effectiveness of physical and nonphysical methods for managing the behavior of intellectually disabled (ID) adults. The focus of this literature review is to present studies of the use of physical and nonphysical interventions to reduce specific, challenging behaviors exhibited by intellectually disabled individuals.

The literature review is comprised of six sections. Four of the six incorporate the body of information which speaks to the structure of an organization, the overarching culture to which the hierarchy adheres, as well as how this translates into lower level staff training and support, adhocracy, and population supported within the organization. The remaining sections discuss the identification of challenging behavior within a subset of the intellectually disabled, adult population; definitions of the types of behavior exhibited; and environmental triggers with associated staff responses resulting from training in applications such as Strategies for Crisis Intervention and Prevention (West & Kaniok, 2009). The review expands on the definition of physical and nonphysical interventions to assist in providing comparative and contrasting viewpoints to the differing approaches. Some of the literary sources cited are derived from seminal works, including those of Albert Bandura and B.F. Skinner. These sources provide an historical perspective and speak to the inherent differences of the two theoretical frames, including the development of their defined positions on how individuals learn via operant conditioning or through environmental influences and modeling behavior (Bandura, 1977; Catania & Laties, 1999).

Literature Search Strategy

I obtained pertinent literature via the Walden library system. Most of the sources that I examined were peer-reviewed journal articles that I obtained through databases such as CINAHL Plus and MEDLINE combined; I also accessed behavioral studies using psychology databases such as PsycINFO and Sage. Several of the articles found in PsycINFO were also in MEDLINE and as such, this database provided most of the relevant articles for this research study. Keywords and combined search terms used to access pertinent seminal and current peer-reviewed literary sources included *organizational structure*, *staff training*, *restraint*, *mental retardation*, *proactive*, *violence*, *physical*, *punishment*, *self-injury*, *aggression*, *stress-coping skills*, *positive reinforcement*, *praise*, *behavior modification*, *active teaching*, *self-regulation*, *lavish*, *and mindset*.

The Role of Leadership and Organizational Culture in Mental Health Care

Organizations, regardless of function, exist to provide consumers with products or services in the context of a community. The ability to thrive and grow rests on the leadership and culture of a system (Terry, Hussain, & Nelson, 2011). Disgruntled employees with negative mindsets promote negativity to those around them and may influence the behavior of staff and service users (Terry, Hussain, & Nelson, 2011). Stewart (2002) described this cognitive awareness as applying to a person's "world view, cultural values, the role of the family, perceptions of the work role, time orientation, as well as an awareness of the cognitive schemes and thinking strategies used in understanding and interpreting information" (p. 3). The qualities of these mindsets include an individual's skill base in an identified specialty area and understanding how to

apply that knowledge within a particular context, while also maintaining a level of cognitive awareness.

These factors are influenced by the state of the U.S. economy at the time of this study, with many nonprofit organizations struggling to make ends meet with reduced funding sources. If the Chief Executive Officer (CEO) and other high-ranking officials of an organization do little to promote change in response to economic challenges and changes in funding allocation, employees become "stuck" in structures, processes, and outcomes that are unable to respond to economic, political, and social change (Jaskyte, 2010). This produces a "cultural consensus" of mediocrity, both in the upper echelons of organizational government and lower level managers who look the other way rather than enforce guidelines of accountability of its staff (Jaskyte, 2010). An agency's mission and vision is illuminated through the type of system it employs and the response of staff who carry out their roles as employees of the organization.

If upper-level management simply delegates policy and procedures and remains noninclusive and disconnected from the agency's inner-workings, this creates a roadblock towards positive change. Evidence of this process was clearly seen in the horrific revelations of institutionalizations prior to and including the Willowbrook children's facility (West & Kaniok, 2009). A 1972 expose' that used hidden TV cameras brought to life the consequences of a cultural consensus that developed from lack of funds, societal neglect, and an internal conspiracy to hide wrong doings. The effects on patient care were obvious and profound. The overwhelming evidence of abuse, neglect,

and squalor became the catalyst for the development of initiatives to protect and advocate

for the ID; a move that would become the genesis for deinstitutionalization.

The current era of de-institutionalization in the care for intellectually disabled

individuals in the United States was motivated by champions of change such as social

services workers, public service attorneys, patients, and their families, and by pressure on

state and local governments to spend less on institutional care (Suess, 2007; West &

Kaniok, 2009). The resulting move towards community-based living and inclusion that

focused on improving quality of life for the ID population.

Regardless of organizational structure, the function and mindset of an

organization's employees is directly related to the core beliefs and actions of the

leadership. Leadership impacts staff attitudes, work ethics, and behaviors that improve

organizational effectiveness or promote negativity and dissent (Chatman & Cha, 2003).

Healthcare reform initiatives also impact how services are rendered to consumers, which

may be a driving force in changing organizational culture based upon what is put into it

and subsequent results of these efforts (Kaufman, 2011). Payments received under an

umbrella of state-based funding that focuses in part on providing managed care for the

intellectually disabled requires closer scrutiny around allocation of monies while

maintaining a high level of care (Kaufman, 2011). The cultural mindset of an

organization's leaders defines what an organization uses as its guiding force through

shared thinking and from this its central tenets are built.

For example, Jaskyte (2010) examined the cultural characteristics of organizations

to identify specific markers that elicit positive change. Using 79 not-for-profit agencies

in the southeastern U.S. ($N = 910$ participants), Jaskyte examined the differences between relational and cultural organizational characteristics (consensus, structure, and content) for transformational leadership, formalization, centralization, occupational differentiation, and organizational size. Using several self-report measures of organizational culture and leadership, the results revealed a strong, positive correlation between shared cultural ideas and charismatic leadership in organizations where the input from employees was valued. Jaskyte also found that in organizations with centralized, hierarchical structures, active engagement was lower and transformation was minimal. Similarly, the culture and philosophy of service providers of the intellectually disabled may influence level of engagement and ability to transform in response to the evolving needs of those they serve.

Hierarchical Versus Clan System

A large body of research has examined of how the structure of organizations influences culture, process, and effectiveness (Jaskyte, 2010; Schneider & Reichers, 1983). For the purpose of this review, the most relevant was the comparison of hierarchical and clan systems (Richard, McMillan-Capehart, Bhuian, & Taylor, 2009). In these two systems CEOs, CFOs (Chief Financial Officers), and upper and lower level management inherently share characteristics which serve as an integral function of the organization to maintain its very existence. This is defined by the organization's precedence in transactional versus relational values.

A broader, yet more fully defined explanation of the contrasting system viewpoints is based upon "relational psychological contracts" (Richard, McMillan-

Capehart, Bhuian, & Taylor, 2009, p. 819). In a hierarchical system, leaders delegate with expectations that employees will follow their directives. Salaries are established as a result of a cost-versus-benefit examination of the organization, where capital efficiency is top priority and interchange between staff and upper management is minimal at best. Rules and regulations are established and scope of responsibilities as operationally defined by job title, leave little for the employee to act independently or expand the definition of responsibilities associated with the title.

Clan systems, by contrast, view employees as an integral component that is connected to the process of transformational change and remunerates employees on a reward system. A Clan system's core value demonstrates the importance of relationships within and among all levels within the system. In a Clan system, staff are encouraged to think out of the box, expand on scope of responsibilities, and moved to spearhead incentives and improvements, agency wide (Richard et al., 2009).

Adhocracy

Adhocracy is a term that represents the function of an organization; one that is both intentional and directional in its focus. This type of organization is characterized by a philosophy and style that is exemplified by leaders who respond quickly to environmental changes based upon the "collective" ideas of its employees (Mintzberg, 1985). Employees are equipped to react skillfully and quickly through practical experience within the work environment, combining textbook knowledge and out-of-the-box thinking to everyday interactions (Hays, 2004). Quinn and St. Clair (1997) defined an adhocratic organization as one that is "responsive" and identified by "emergent"

management practices. While adhocracy is action-oriented, it must be carefully managed to "balance" its unique characteristic of transparency so that its employees are kept abreast of, and included in, decision-making policies which affect the life of the organization. This can be observed by how happy or stress-filled its employees are (Quinn & St. Clair, 1997).

Quinn and St. Clair (1997) posited that there are competing forces at work within four "quadrants" of an organizational structure that must be identified and worked through to move toward adhocracy. These are presented as two dimensions: flexibility-control; and internal-external. They suggested that organizations must maintain a balance of flexibility and control by accessing community resources (open systems quadrant) yet maintain a level of internal control by established rules of the organizational system (internal processes quadrant). The aforementioned are balanced by effectively employing strategies to achieve agency-wide goals. They refer to this as the responsive organization framework (Quinn & St. Clair, 1997).

Organizational Structures in Mental Health Care

As the historical wheels of change impacted the care of ID individuals from institutionalized to community-based living environments, so has the role of organizational structures to enhance the relationship between service providers and service users who access mental, behavioral, and general health services, nationwide. As concerns mount over rising health care costs the movement towards a managed health care system prompted the formation of the Affordable Health Care Act (ACA) in 2010. Bennett (2012) describes this act as the development of structured and measurable

guidelines to promote affordable health care delivery for its Medicare participants and accountability of participating providers and patients. Under the umbrella of the ACO (Accountable Care Organization) hospital administrators develop policies and procedures for participating doctors and other providers to improve health care and reduce costs on both sides, including patients who are enrolled in Medicare's Shared Savings Program (SSP). ACOs will be required to meet minimum expectations on 33 "quality measures" across four areas that include "patient/caregiver experience, care coordination/patient safety, preventive care, and at-risk population" (pp. 246, 249).

   Moving in the same direction as the structure of health care are agencies that provide behavioral and mental health services within the community. They are leading the charge to raise the bar of accountability and reduce costs by joining with a number of other not-for-profit service providers to reduce cost yet provide better quality services for the ID population. Their goal is to set a standard of leadership in person centered planning and services for the ID through national accreditation. An example of this is CQL (Council on Quality and Leadership), an accrediting body that has instituted a set of personal outcome measures for agencies to meet standards of success within 21 domains of leadership qualities, with the goal of developing and instituting the highest level of person-centered residential and day treatment planning for the population it supports. Personal Outcome Measures (POM) is organized into three factors: a) My Self: Who I am as a result of my unique heredity life experiences and decisions, b) My World: Where I work, live, socialize, belong or connect, and c) My Dreams: How I want my life (self and world) to be (Personal Outcome Measures, n.d.). Although this is currently a voluntary

agency-based movement, state regulations are setting more stringent guidelines for accountability by tracking for reimbursement of services provided. Agencies must now modify its structure in reporting of incidents where there is suspected abuse or neglect through systems set in place to reduce such occurrences that may lead to injury or even death. New York State's OPWDD (Office of People with Developmental Disabilities) beginning in July, 2012, requires agencies to report allegations of abuse and/or neglect through the IRMA (Incident Report and Management Application) system. State required reporting systems such as IRMA will continue to demand organizations change their structure to meet the needs of their communities and the people they support.

Professional Identity and Organizational Culture

Professional identity is closely associated to the culture of an organization, and when an organization transitions to a new form the professional identities of the employees must shift as well. As Kaufman (2011) explained:

> In a culture of entitlement there is the belief that one deserves certain rewards, rights, and privileges based on tradition or past achievements. In contrast, in a culture of accountability, rewards, rights, and privileges are only earned based on the needs of one's current behaviors and action and the measureable results they produce. The transition from a culture of entitlement to a culture of accountability is a perilous journey because rights and privileges are no longer automatic, and the "entitled party" usually feels angry, or mistreated. (p. 299)

Disley, Hatton, and Dagnan (2009) conducted a review of six research studies that examined the professional identities of staff in residential settings for the intellectually

disabled. This included nurses, direct service workers, and administrative staff. The

authors used equity theory to examine the relationship between group-based outcomes

(Miner, 2003; Adams, 1965). All six studies revealed a strong correlation between

compensation and fairness. If pay was perceived as commensurate with work input and a

sense of fairness in treatment then staff felt a sense of equity. Perceived inequity resulted

in higher stress levels and a motivation to correct the perceived inequity.

Three of the six studies reviewed by Disley et al., (2009) focused on nurses who

worked in a variety of settings serving the ID. Those who perceived themselves as being

"under-benefited" experienced burnout. Similar results were revealed when measuring

these variables within the professional and direct service professional samples. Results

revealed a moderate percentage of staff (61%) feeling under-benefited with a significant

percentage of the sample (80%) expressing feelings of less than optimal organizational fit

within the agency. However, there was no difference in burnout regardless of whether

the service worker perceived a relationship advantage or disadvantage over a service

user. Direct support staff who worked with intellectually disabled persons with

challenging behaviors felt "burned out" to a greater degree (Disley et al., 2009).

Training and Organizational Culture

Training and support of direct service staff have implications for the treatment of

service recipients and correlates of organizational effectiveness. In addition to improving

the quality of care, training and organizational support provide feedback mechanisms to

leadership, who can then manage the treatment community more effectively.

For example, in the U.K., staff development in agencies that work with ID adults includes focus on defining aggression, how to prevent it, and how this applies to decreasing the frequency and type of physical restraints applied. Deveau and McDonnell (2009) conducted a review of studies comparing approaches used in the U.K and United States to reduce the use of physical interventions (PI) in various service settings (e.g., medium secure institutional settings, and other agencies servicing the learning disabled, and intellectually disabled with challenging behavior). Their review suggested a growing concern over insufficient staff training policies, monitoring, and tracking of use of PI. Two of the studies reviewed indicated both staff and service users shared negative perceptions regarding the use of physical interventions. Furthermore, service users believed staff experienced joy when applying such interventions (Hawkins et al., 2005). Three strategies were recommended to reduce or eliminate restraint. These include (1) providing hard data to inform management in the application of PIs, (2) implementing specific tracking mechanisms for oversight, review and modification of restraint reduction strategies, and (3) leadership and organizational change (p. 174).

In sum, Deveau and McDonnell's review of these studies support the view that the type of behavioral interventions incorporated within the agency is directly related to the type of leadership rather than employee skill development practices. Organizational culture can be linked to the choice of behavioral protocols and procedures. Further, the literature suggests that there is an impact of leadership and organizational structure on the delivery of services and the training and identity of staff. However, this has not been explored in organizations that provide care to intellectually disabled individuals.

Functional Behavior in the Intellectually Disabled Population

There exists a subset of the ID population who exhibit poor self-regulation skills and struggle with maladaptive behaviors. A more general term, "challenging" will be used in this study as it employs a better identification of behavior associated with coping mechanisms of an individual, rather than the negative implications of the former reference of "maladaptive" regarding behavior associated with the intellectually disabled.

A subset of the ID population struggle with challenging behaviors that serve a particular, coping function. In other words, persons in this population do not have a repertoire of behaviors and/or language that communicates needs and preferences in the same way as nondisabled persons. Thus, these behaviors are "functional," even though they are aggressive or challenging. These functional challenges span the range of ID from mild to severe/profound cognitive impairment. The most prevalent challenging behaviors exhibited are aggression and self-injury (Applegate, Matson, & Cherry, 1999).

Both aggression and self-injurious behavior among the ID population serve particular functions. There are many assessment tools that are available for caring staff to use to assess and work with these individuals. For example, the QABF (Question About Behavioral Function) measures five functions of challenging behavior: (a) Attention, (b) Tangible, (c) Self-stimulation, (d) Physical discomfort, and (e) Escape/Avoidance (Matson & Mayville, 2001). Questionnaire format assists clinicians in obtaining markers that drive a particular behavior and the motivation underlying its action. The clinician can also note if the behaviors related to these functions are internally or externally driven (Applegate, Matson, & Cherry, 1999). Once identified, the

assessment tool can assist service providers in developing treatment plans to facilitate alternative skills of those with challenging behaviors to better communicate desires. For example, Embregts, Didden, Huitink, and Schreuder (2009) examined the function and frequency of aggressive behavior in 87 individuals ranging in age from 13 – 76 years, living in four residential settings who function within the mild to "moderate" range of ID. The results of this study indicated that both social and task–related events evoked aggressive behaviors. Interestingly, events like daily routines and negative interactions evoked aggressive behavior most frequently, while medication, illness, and other physical states evoked aggressive behavior the least often.

Theoretical Foundations

The intellectually disabled are often at risk for displaying challenging behaviors. It is important to understand the context of those behaviors in order to better prevent and safely manage them. Two theoretical models have been incorporated into treatment protocols that rely on contextual interpretation.

Operant Conditioning

The most widely held approach to understanding human behavior was spearheaded by B.F. Skinner. In his book, "Science and Human Behavior" (1953), Skinner introduced professionals and laypeople to Thorndike's discussion of learning curves as a by-product of behavior. According to Skinner, "…we make a given consequence contingent upon certain physical properties of behavior…and the behavior is then observed to increase in frequency" (p. 64).

Because a specific response to reinforcing agents cannot be guaranteed in every instance, while similar responses may occur, the term "operant" emerged as a more inclusive definition of conditioned (learned) behavior over time. It is the individual's response to experiences and level of ability to reflect on these experiences which contributes to the development of subsequent patterns of internalizing or externalizing behavioral responses (Le Cornu, 2009). Similarly, when patterns of behavior have been ingrained over time, the use of extinction is applied to extinguish behavior caused by the "emotional response" associated with it. Skinner (1953) asserted that "behavior during extinction is the result of the conditioning which has preceded it, and in this sense the extinction curve gives an additional measure of the effect of reinforcement" (p. 70). There is interplay between the organism and the world where actions are "emitted" rather than "elicited."

Punishment may be received as a result of "self" actions or by someone else. Skinner (1953) sees this as "a powerful technique of social control" (p. 185), and should prompt appropriate behavior, decrease punishment or negative response to one's actions and become rewarding (reinforcing) in such a way that the appropriate behavior becomes part of one's usual, social repertoire of "self" actions over time. Internal or external stimuli may be precipitating factors to behavior and if it (the response) is positively reinforcing the behavior will continue. A person's behavior, whether good or bad, may be reinforced if the response is rewarding to one's self.

Olive (2007) discussed the role of behavior intervention plans, its use in applying both positive reinforcement (e.g., candy for turning homework in on time) and negative

reinforcement (e.g., enter pass code to turn off screeching house alarm) strategies to promote desired behavior. Midgley (2012) explained Skinner's role in the development of Applied Behavioral Analysis (ABA). He theorized that behavior change is accomplished through the manipulation of a person's environment and incorporates the use of reinforcers and consequences (positive or negative), to produce a replacement behavior. When applied to the ID population, ABA reduces or extinguishes maladaptive (challenging) behavior such as self-injury and aggression and promotes adaptive (socially appropriate) behavior (e.g., use of icons by pointing to a desired activity). The individual receives a reward as a consequence of the desired, replacement behavior.

Social Learning Theory

Bandura found the operant conditioning model discordant with his observation of how much is learned through observing others.

> I could not imagine a culture in which its language; mores; familial customs and practices; occupational competencies; and educational, religious, and political practices were gradually shaped in each new member by rewarding and punishing consequences of their trial-and-error performances. (Bandura, 2007, p. 55)

Bandura (2007) proposed a social learning model whereby behavior is formed (actions and reactions) through observations made and subsequent modeling of the primary care giver's actions and reactions during a person's formative years. This occurs as a part of a person's perceptions through experiences at home and social environments (e.g., school and recreational interactions with adults and peers).

In the case of the ID population, Bandura's theory suggests that consistent modeling by caregivers creates opportunities for observational learning. Consequences of behavior occur naturally and are not exclusively reinforced in an operant manner. Bandura (1971) saw social learning (modeling) as something that requires consistent attention, and the ability to interpret these experiences in such a way that they become internalized and rewarding. He further emphasized the importance of pro-social, positive behavior on the part of the therapist so that in time, the individual begins to internalize self-affirming characteristics which then translate actions that model the therapist (Bandura, 1961; Brauer & Tittle, 2012). From a social learning perspective, challenging behavior of ID individuals could be seen as a by-product of internal or external triggers in anticipation of an aggressive response by caregivers. In other words, these individuals are appropriating the very behaviors that caregivers which to extinguish.

Deinstitutionalization of Disabled Individuals and Impact on Adaptive Behavior

Development of adaptive behavior within the ID population has been the focus of attention since the period of deinstitutionalization. Prior to this movement, "imbecile" children, adolescents, and adults who deviated from the norm of society were remanded, sometimes through falsification of documentation, to institutions much like that which existed at the Willowbrook State School (Sternlicht & Siegel, 1967). In this seminal study, the authors assessed 92 ID subjects, applying testing instruments including the WISC or WAIS, Stanford Binet, the Goodenough Drawing Test, Seguin Form Board Test, and Bender-Gestalt once yearly over a period of four years measuring the long term effects of institutionalization on I.Q. A regression analysis employing *t* tests revealed a

10-point decrease in intellectual functioning in all of the child subjects, regardless of

level of cognitive functioning with relative stability in adolescence and adult participants.

The study supported the view that there is a relationship between institutionalization,

level of cognitive functioning, nurturance (feeling loved), and social connectedness and

its impact on the ID.

The conditions found within institutionalized settings sparked the notion to

include individuals with challenging behaviors as part of society with a move toward

"normalization" of their environments. Hamlen, Frijters, Griffiths, Condillac, & Owen

(2011) conducted a meta-analysis of 33 studies based on an initial sample of 351 articles

to determine whether transition initiatives to move ID people out of institutions and into

community-based living environments such as IRAs and CRs (Individualized Residential

Alternative; Community Residence) would assist in decreasing the frequency of

challenging behavior. These included 2,083 participants, a median age of 37.9, and more

males than females (56.8%) from the United States, Canada, Australia, and the United

Kingdom. While the authors were challenged to find studies similar enough (i.e.,

standardized measures, matched groups, longitudinal designs) they found a strong,

consistent pattern of results.

Their results supported the view that deinstitutionalization of intellectually

disabled people into community based settings is a mitigating factor, with the majority of

studies showing an increase in level of adaptive behavior and few results indicating an

increase in maladaptive behavior (Lerman, Apgar, & Jordan, 2005; Spreat & Conroy,

2001; Conroy et al., 2003; Fine, Tangeman, & Woodard, 1990; Jourdan-Ionescu, Ionescu,

Rivest, & Corbeil, 1990; Young, Ashman, Sigafoos, & Grevell, 2001; Cullen et al., 1995;

Pare', Parent, Pilon, & Cote', 1996). Furthermore, ID people who moved into a group

home setting showed the greatest increase in adaptive behavior skill development.

(Hamlen et al., 2011, p. 66).

In sum, a significant amount of literature exists to support the idea that

environment has a strong influence on adaptive behavior in ID individuals that exhibit

challenging behavior. Since the behavior and actions of staff are part of this

environment, the ways in which direct service and other staff intervene when behavioral

challenges arise is explored.

Intervention Approach and Its Effect on Reducing Challenging Behavior

Staff are trained to apply physical interventions in the form of restraint to prevent

self-injury or acting out behavior (Butterworth & Harbison, 2011). New York State

regulations set forth the protocol for staff development and certification in the use of

restraint. There has been a tendency for DSPs to resort to the use of physical

interventions with limited guidance, monitoring, and ongoing training by staff developers

in proactive measures to prevent escalation of behavior in the first place. While the focus

of training is geared toward preparing staff to respond in a manner that assists in de-

escalation of challenging behavior, it oftentimes becomes a first course action on the part

of staff that applies it to merely control a presenting situation (West & Kaniok, 2009;

Starogiannis & Hill, 2008; Stone, 2004).

Physical Interventions

Stubbs, Leadbetter, Paterson, Yarston, Knight, and Davis (2009) conducted a review of the literature within the healthcare system involving the risks related to use of physical interventions. Response to intervention from staff and service recipient was extrapolated from research in the United Kingdom. Numerous studies looked at variables of staff performance following training in the use of physical interventions (PI), the fragility of certain populations and its use and potential to cause undue harm, and the potential to create "corrupted" cultural environments. Patients in general felt that staff found pleasure in administering, what they referred to as "punishment," resulting in increased levels of anxiety and trauma as a consequence of abuse on the part of staff applying these interventions (Sequeira & Halstead, 2004). However, research is lacking in the area of measuring level of effectiveness over the long term as well as, an increased need to include proactive measures as part of agency training protocols (Moran, Cocoman, & Scott, 2009).

Baker and Bissmire (2000) discussed the use of control and restraint in the UK. Its genesis came from the prison system and involved the use of "pain-compliant" techniques that were later used on the ID in hospital settings but were eventually outlawed (p. 39). The authors assessed level of confidence when applying physical interventions before and after formal two-day SCIP training and rating of level of organizational support in its use. A Likert ratings scale was administered pre and post training. Staff recorded events on standardized tracking forms, however the organization provided no staff training in the use of physical interventions, nor were formal procedural

guidelines established. Records were reviewed pre-training at five months and again post-training, at three months. Results revealed no change in level of confidence in eight of the respondents, more confidence in five of the respondents, and only six stating an increase in comfort level in their ability to prevent behavioral issues.

Studies of Less Restrictive Interventions

With the development of less restrictive interventions, the question arises for the need to monitor how frequently they are applied, as well as how to safely implement physical interventions (Baker & Bissmire, 2000, p. 100). Bisconer, Green, Mallon-Czajka, and Johnson (2006) used a single case study to investigate whether implementation of a behavior plan would positively impact level of aggression of an in-patient, psychiatric patient applied by nursing staff. The relatively high frequency of nursing staff injuries and out-of-work status following the use of physical interventions within this environment prompted the investigation.

A behavior plan was developed for a 40-year old man struggling with severe aggression and self-injurious behavior. Diagnoses included schizo-affective disorder bipolar type, mild mental retardation, and seizure disorder. The framework of the behavior plan was formed based upon the use of psychosocial skill development participation along with other patients on unit and responding proactively to environmental triggers following the development of a functional behavior assessment. Reinforcers to positive behavior and exclusion of challenging behavior were incorporated into the plan. Behavioral actions were tracked using a checklist (Bisconer, Green, & Mallon–Czajka, 2006, p. 518).

Periodic review of records at 3 month intervals over the course of the 39-months revealed an overall reduction in need to apply physical restraints and use of PRN medications, although the subject's tendency toward physical aggression remained as an identified target throughout both pre and post treatment protocols. Periodic staff training to maintain skill base was viewed as an integral component of effectiveness in using a behavior plan to reduce overall frequency of aggression (Bisconer, Green, & Mallon-Czajka, 2006).

There are a number of studies that support reducing restrictive physical interventions when working with ID individuals who struggle with challenging behaviors via functional behavior assessments and a multi-level staff support structure in place to target aggressive and self-injurious behavior (Grey & McClean, 2007; Grey & Hastings, 2005; Singh et al., 2009). There is a consensus among professionals that while psychotropic medication may effectively be employed to ameliorate psychiatric symptoms, acting out behaviors such as the ones described continue to manifest with antecedents not always clearly identified. Grey and McClean (2007) examined the effectiveness of Person-Focused (P-F) staff training as a component to the development (assessment) and intervention and interval assessment of plan application. The authors compared level of effectiveness of a control group (*n*=30) measured against an intervention group (*n*=30). Clinical, nursing, and direct support staff collaborated in the development of the behavior support plan.

There was no significant difference at baseline for either the control or intervention group. The Checklist for Challenging Behavior (CCB), a moderate

reliability measure, was used to rank severity of target behaviors with physical aggression ranking highest for both groups at pre and post P-F training. There was a significant reduction to 22% of baseline for the target group the first quarter and a further reduction to 11% (Grey & McClean, 2007).

Singh, Lancioni, Winton, Singh, Adkins and Singh (2009) tested the use of Mindfulness training to determine if staff could reduce the use of physical interventions as part of a behavior support strategy in response to concerns related to staff injuries and service users' negative reaction to physical interventions applied. Participants included 23 staff and 20 ID individuals, with five residents in each of the four group homes. A three week baseline was established prior to Mindfulness training. Staffs were instructed to apply basic behavior management protocols throughout this period.

Mindfulness training took place over a 12 week period. During the training and practice phase of Mindfulness training, there was a reduction in incidents and injuries of study participants, with the practice phase virtually nonexistent. This study demonstrated that the practice of Mindfulness enables staff to disengage themselves from premature actions and to pre-empt or control the behavior of the individuals, based on patient history (Singh et al., 2009). Collaborative efforts on the part of clinical and direct support staff along with ongoing training and support defines the movement toward the use of support plans with the goal of reducing the need for physical restraints and interventions while increasing the level of adaptive behavior of service users.

In sum, the intervention studies point to a general acceptance in the use of physical interventions and overarching consensus among the literature asserting the need

to reduce its use. There is agreement within the research base to increase staff training and level of effectiveness at reducing challenging behavior both in in-patient, intermediate care facilities, and community settings.

DSP Training

Physical Interventions (SCIP-R) and Behavior Management

Training of DSPs in the use of physical interventions to "manage" or "control" challenging behavior within the ID population is common practice in the United States, U.K., and Australia. Both in the United States and England, documentation is required in agencies providing services in in-patient mental health and community based settings for the ID population. Tracking mechanisms via an occurrence or incident report require staff who employed the use of a physical intervention to include information such as: location of incident, events leading up to the use of physical intervention, type of intervention used, client/patient response to the intervention, and duration of restraint (Reeves, 2011; West & Kaniok, 2009). Some agencies advocate for, and implement the use of videoing direct support staff for the purpose of review in supervision and quality improvement, staff development, and review of clinical practices as agencies advocate for a reduction in the use of physical interventions altogether, and as part of a movement in employing more proactive measures to increase adaptive behavior in the ID population (Finlay, Antaki, & Walton, 2008). Training can positively impact staff mindset and focus on proactive and active, rather than poorly applied reactive strategies to effectively reduce problem behaviors and staff and service user injuries (Baker & Bissmire, 2000).

The use of physical interventions as part of an individual's behavior support plan (BSP) must first be determined and approved for use as set forth in agency guidelines. Orange AHRC (2012) requires a referral for assessment by any member of the service recipient's team. The referral may include any one or more of the following: ABC charts, frequency charts, Nursing notes, Occurrence reports, and observations. Staff psychologists may recommend baseline data be collected. Following this the senior psychologist will develop a preliminary plan and train staff accordingly. If a PRN medication is warranted, the specific parameters will be included by the prescribing physician and attached to the BSP. Prior consent must be obtained either by the individual's legal guardian or the agency's informed consent committee and human rights committee (personal communication, A. L. Hershman, 2012).

Agency staffs that work the front lines are trained in the application of SCIP-R (Strategies for Crisis Intervention and Prevention–Revised) by state certified SCIP trainers with re-certification required annually. Physical interventions are applied as a "last resort" when proactive, active, and reactive interventions of a nonphysical nature have been exhausted.

Gradient control is defined as applying a physical intervention in such a manner from least restrictive to most restrictive technique (West & Kaniok, 2009). AHRC Behavior Management Handbook (2009) includes guidelines for crisis escalation and de-escalation, assessing behavior, measuring the behavior, selecting reinforcers, techniques to increase or decrease targeted behaviors, as well as a formatted behavior management plan (Hershman et al., 2009). The Motivation Assessment Scale (1992) is an integral

component in the development of the final document. New employees are oriented to behavior management protocols within 30 days of hire.

DSP Training in Nonphysical Interventions (Shift Happens)

"Shift Happens" is a positive approach to behavior management developed by the Arc of Delaware County's (Delarc) CEO, George Suess (2000). Its main premise is to assist service workers in changing the way they perceive challenging behavior in the ID population and develop strategies to understand the reasons why a person may be unsuccessfully communicating wants and needs. In contrast to the gradient approach asserted within OPWDD SCIP-R guidelines, "Shift Happens" asserts the need for staff to be mindful of the 24 hour clock and the importance of providing a positive, stimulating, and person-centered environment where active engagement is front and center. Some foundational teachings are "people are good most of the time. They are not 'bad all the time'" (p. 6). Developing and maintaining "caring relationships" and new skills are developed in small, measureable steps with "lavish praise and reinforcement" included as an integral component so that power struggles are avoided because staff learn that it is important to "…try reducing your expectations. Instead of increasing them by saying, 'Do it and do it now,' suggest 'How about trying again in a few minutes'" (Suess, 2000, p. 19).

"Shift Happens" emphasizes a team approach and incorporates regular supervision of direct support staff as they are viewed as the professional guides in the ongoing assessment to improve self-regulation skills of persons supported. Part of the ongoing process is to modify staff to service user ratios when the need arises.

Supervisors are viewed as trainers, coaches, and supporters rather than simply as foremen or bosses. By improving ratios, the clinical and professional ability of direct service staff and supervisors will improve, and are likely to require fewer outside professional and clinical services (Suess, 2000).

A second component to the "Shift Happens" approach to positive behavior supports and one that is part of all new employee's orientation to Delarc is the "Vantage Point" experience. As early as the first day of orientation, new staff experience, first hand, a day in the life of a person supported. Beginning with a bus ride, the staff person spends the entire day in a wheelchair, part of the time blindfolded, and is in the classroom with a facilitator and up to six ID persons, some who live with challenging behaviors. As participants and observers, new staff have the opportunity to develop key skills including empathy and role modeling to set the tone for the employment relationship (Suess & Keikkinen, 2002).

"Shift Happens" avoids the use of physical interventions with the expectation that staff will (1) regularly assess situations; (2) adjust how they react to what a person supported is trying to communicate; (3) respond in a nonjudgmental manner by ignoring inappropriate behavior as it happens; while (4) verbally engaging positive behavior within the immediate environment. Small successes in improved behavior are rewarded with lavish praise and reinforced at high levels. As appropriate behavior increases, lavish praise becomes secondary and the individual learns that person-centered, engaging activities can translate into improved social relationships overall (Suess, 2000).

Summary of Methods Used in the Studies

Contextual characteristics of organizations, both contextually and relationally, were measured using a one way ANOVA and ANTHROPAC. Likert rating instruments assisted in differentiating between hierarchical and clan systems and clarified nominal variables included in behavioral assessment scales. Chronbach's Alpha measured internal consistency of the QABF scales.

Defining agency status quo and empowering organizational change was explored in two opinion-based articles. Literature review studies explored relational and group-based outcomes using multiple linear regression analysis, and meta-analysis (Cohen's *d*) to ascertain effect sizes based upon predictor variables of ID service users that transitioned from institutional to community settings (e.g., group homes) and subsequent adaptive behavior change (increase or decrease) at three, six, and nine months follow-up.

Summary and Conclusions

This literature review focused on the current thinking on the role of leadership and organizational culture and how this impacts the staff in terms of identity, training, and effectiveness. The role of deinstitutionalization and subsequent challenges related to community based, supported living environments directly impacted the direction and focus of interventions applied in response to challenging behavior within this subset of the ID population. The types and effectiveness literature was reviewed, clearly demonstrating a lack of rigorous examination comparing the culture and implementation of different interventions and effectiveness. The next chapter presents the methodology for addressing this problem.

Chapter 3: Research Method

Introduction

The exposure of conditions at the Willowbrook State School in 1972, triggered a process of deinstitutionalization of care for intellectually disabled (ID) individuals in the United States. This led to initiatives being introduced to assist in the transition of ID individuals to community-based settings with the goal of promoting a life for those we support to be as independent and normal as possible (Hamelin, Frijters, Griffiths, Condillac, & Owen, 2011). The purpose of this mixed-method, comparative case study was to compare a program that used proactive, nonphysical interventions with one that used physical interventions. The study specifically examined the differences in the frequency and type of challenging behaviors in persons each agency supports. It also examined the differences between the two programs in terms of staff training and organizational context, in order to better understand how a program's culture was reflected in the implementation of treatment approaches.

This chapter is comprised of six sections. The Setting section describes the environment and rationale for using two agencies that served ID individuals within day habilitation programs. The Research Design section presents the central research question and identifies the rationale for using a mixed-method, comparative case study approach employing an embedded unit of analysis. The Participants section describes the selection criteria (staff and archival persons served data). The Instrumentation and Procedures section presents the information-gathering tools (open-ended interviews and

archival data) and provides a step-by-step data collection protocol so that the study can be replicated.

Setting

The setting for this study consisted of two nonprofit service agencies serving ID individuals and located in the northeast United States. At the time of this study, both of these agencies provided day habilitation programs that served the intellectually disabled, adult population. Both agencies supported service users with the intent of promoting a better quality of life, but with fundamental differences in their philosophical approaches to behavioral intervention; this difference provided the rationale for comparing the two agencies. Of the two agencies identified, one explicitly prohibited the use of physical interventions by staff when an ID person exhibited a self-injurious or aggressive behavior.

Agency A (AHRC)

Orange AHRC is located in New York State's lower Hudson Valley region, in Orange County. At the time of this study, the agency served all age groups in the ID population. Services included early intervention, two preschool environments, one school that provided education serving the elementary through aging out (age 21) population, evaluation services, clinical services, Medicaid service coordination, guardianship, day habilitation, residential (19 group homes), and supported living environments (4 apartments). A licensed clinical psychologist who served as a consultant, credentialed school psychologists, and master's level clinicians referred to as Behavior Intervention Specialists (BIS) provided services. Additional service clinicians included

licensed physical and occupational therapists, certified occupational therapy assistants (COTAS), speech pathologists, licensed, clinical social workers, licensed teachers, and teacher aides. At the time of the study, approximately 800 persons were supported by the agency. This study specifically examined one location at Orange AHRC, the John McManus Center day habilitation site in Middletown, New York, hereafter referred to as Agency A. At the time of the study, Agency A served 80 individuals, all of whom had a primary diagnosis of intellectual disability (ID), with cognitive abilities ranging from severe/profound to mild.

The John McManus Center is a one-level, independent structure located within the Middletown city limits. There was an on-site Director and Assistant Director, BIS (Behavior Intervention Specialist), service coordination, nursing, and part-time physical therapy and speech services. The site was divided into four day habilitation areas. Day Habilitation 1 was aided by two active behavior support plans. Day habilitation areas one and two were divided into "classrooms," with approximately 20 persons served in each. There were two DSPs who provided services in each classroom. While Day Habilitation 1 included seven or eight program participants in each classroom, Day Habilitation 2 primarily supported persons who struggled with challenging behaviors. Staff: participant ratio in each of Day Habilitation 2's classrooms was 2:5 or 2:6. Day Habilitation 3 provided cared for predominantly medically fragile and/or nonambulatory persons. Day Habilitation 4 served approximately 23 program participants with only one active behavior support plan in place. Programming was developed around the person's valued outcomes; the centerpiece from which activities, meal preparation, and needs of the

individual were focused. Program participants who struggled with challenging behaviors were provided a behavior support plan. If warranted, the plan included the use of physical interventions to manage self-injurious or physically aggressive behaviors.

Agency B (Delarc)

The Arc of Delaware County, also referred to as Delarc, is located in New York's Delaware County in the Catskill region. This study specifically examined one Delarc location, the Community Living Skills Day Habilitation site. This independent structure is located within the town limits of Walton, New York. At the time of the study, this site served 71 adult ID, individuals; its service users live with diagnoses ranging from severe/profound to mild ID. The Director and Assistant Director both have offices at this location, but direct support staff and lower level managers provide day-to-day operation of the site. The agency did not have psychology clinicians at the time of the study, but employed a licensed, clinical psychologist as a consultant for document review and staff guidance related to positive behavior supports. Occupational therapy services did not fall within the scope of this agency.

The Community Living Skills site had 11 classrooms, with a staff: participant ratio of 1:5 or 1:6. There was also a gym and a large sensory room. Program participants had daily schedules and usually rotated to different areas or classrooms, daily, depending upon the day of the week. Staff members at every level in this agency were referred to as "Life Coaches," with levels ranging 1–12, depending upon several factors including years of service and skill set. Individualized day habilitation planning was developed around the person's desired outcomes. Individuals who struggled with challenging behavior

were provided a behavior support plan. All behavior support plans did not include the use of physical interventions to remediate self-injurious or physically aggressive behaviors. The key members of both agencies who acted as participants of this study were the CEOs, directors, assistant directors, lower-level management, and direct support professionals (staff who worked directly with PS) at the respective sites.

Research Design and Rationale

The central phenomena for investigation were the organizational culture and the care of persons that these organizations supported. Two research questions were explored:

1. What is the meaning of agency philosophy, intervention strategy, and training for administrators and DSP staff working in programs serving intellectually disabled adults?

2. What are the differences in self-injurious behaviors, physical aggression, and staff responses between a program that employs the use of physical interventions and a program that employs the use of nonphysical interventions for intellectually disabled individuals who exhibit challenging behaviors?

A concurrent embedded mixed method design was used to answer the research questions, as suggested by Creswell (2009). This was best suited for the study as it allowed the researcher to "embed" a secondary method (in this case the quantitative design) that focused on a different question inside. The secondary method (in this case, the quantitative design) focused on gaining a broader perspective on the primary research question, as suggested by Creswell (2009). A mixed methods approach was attractive for

several reasons. A researcher can collect the two types of data simultaneously, during a single data collection phase. The study provided the advantages of both quantitative and qualitative data, and the researcher was able to gain perspectives from the different types of data from different levels with the study.

Qualitative Design. Because the difference between the two agencies is more than the application of intervention strategies, and included the core organizational beliefs and behaviors that guided these protocols, the concurrent collection of qualitative data using the phenomenological tradition provided greater insight as to how the two agencies differed in their treatment approach and achieved results. A phenomenological inquiry was conducted using open-ended interviews of CEOs, Day Habilitation Assistant Directors, Direct Support Supervisors, and DSPs from two independent, not-for-profit service agencies. The intent was to provide rich, thick descriptions from which co-occurring themes regarding organizational culture and care of PS can be developed.

Nine interview questions presented to the participants were geared toward exploring the experience and meaning of each of the central phenomena (organizational culture and care of persons supported) in order to understand how the two agencies differed in philosophy and approach to behavioral (physical versus nonphysical) interventions for reducing physical aggression and self-injurious behavior. Follow-up "probe" questions were incorporated to assist in extrapolating themes across the two environments. Use of iterative questions and follow-up interviews were incorporated into the qualitative data collection for clarification and to determine whether some of the

descriptive data should be removed due to inconsistencies in an informant's response to an area of inquiry. These are detailed in the Instrumentation section.

Quantitative Design. An ex post facto design using archival data was employed for the quantitative component (Silva, 2010). This allowed the researcher to compare two or more groups on one or more dependent variables without manipulation of the independent variable. The independent variable is the type of approach used to ameliorate challenging behavior; SCIP-R versus "Shift Happens." There were two independent variables and dependent variables:

1. The trigger event (e.g., intrinsic anxiety, external trigger, verbal threat). This is a categorical variable, and a contingency table analysis was used to examine differences.

2. Self-injurious behaviors (e.g., head banging, biting self, hitting self, skin picking). This is a continuous variable, and a contingency table analysis was used to examine differences.

3. Physical aggression (property destruction, hitting, kicking, biting, spitting, or scratching other people). This is a continuous variable, and a contingency table analysis was used to examine differences.

4. Frequency of physical intervention applied (Touch Control, Arm Control, One-Person Escort up to the most restrictive, Three-Person Supine Control). This is a continuous variable, and a contingency table analysis was used to examine differences.

5. Frequency of nonphysical intervention applied (Verbal Calming, Redirect to Another Activity, Relaxation, and Staff Change). This is a categorical variable, and a contingency table analysis was used to examine differences.

6. Changes in the presentation of the challenging behavior (e.g., behavior ceased, decreased or increased). This is an ordinal variable, and a nonparametric comparison of two independent groups was conducted.

Role of the Researcher

My role as a researcher for the proposed study was that of an observer-participant. Of the two agencies selected to participate in the study, I was employed at one of them in the capacity of BIS (Behavior Intervention Specialist). The role requires training of direct support staff, review of records, plan development and revision, and tracking of behavior and interventions applied. I was removed from direct intervention, having no direct supervisory authority in any capacity within the agency's structure, and did not participate in direct care of program participants.

In my role as researcher investigating cultural mindset, intervention protocols, and effectiveness of approach, management of biases were carried out through the use of researcher journaling, peer review, and use of audio recording for accurate transcription. I used triangulation of sources (different agency position interviews and documents). I was removed from direct contact with program participant population to prevent conflict of interest throughout the data collection process.

I provided potential participants with information about the purpose of the study, including a recruitment letter (see Appendix A) for those who may have had a preliminary interest in the proposed study.

The recruitment letter contained a brief description of the study, their role as an interviewee, and a clear statement informing the participants that they have an option to leave the study at any time without judgment. There was no offer of incentives, monetary or otherwise, to participate in the study.

Methodology

Participant Selection Logic

Qualitative. A criterion sampling strategy was used. The rationale for this approach was to select participants who would provide information-rich stories that explored the core tenets of each agency's philosophy, culture, and mindset. The criteria for selection was as follows: being at least 18 years old; being employed at either Agency A or B; and having at least three years' experience in the field of intellectual disabilities with two of the three years employed at the identified agencies included in the study. Additional criteria include the job description at the Agency site.

A total of 11 participants were recruited and included five to six employees from each of the respective agencies. AHRC and Delarc participants included the Chief Executive Officer, Assistant Director of Day Habilitation Services, Direct Support Professional Supervisors (DSPSs), and Direct Support Professionals (DSPs). Yin (2009) explained that unlike quantitative analysis sampling logic which determines the minimum number of cases to establish an effect, qualitative studies measure establish sampling

saturation through the process of selecting information rich cases that thoroughly address (or "saturate") the concepts that best address the research question (Guest, Bunce, & Johnson, 2006). The use of triangulation in the participant selection process allowed for the phenomena, in this case cultural mindset, to be examined from a variety of positions held within the agencies of interest (Shenton, 2004).

The general procedure for recruitment was to place an invitational letter and RSVP in the respective agency's internal mailbox for each potential participant who did not have access to agency email. Agency email addresses of all remaining potential participants were accessed via the respective site's Gatekeeper. An invitational letter and RSVP was included as an email attachment. Each agency has one CEO, one Director of Day Habilitation Services, and one Assistant Director of Day Habilitation Services so one invitation per participant was delivered. These are presented in Appendix B.

Each organization has about 30 people employed at each site, respectively. The first five to six staff who responded to the invitation from each respective site were followed up with further information for participating. It was expected that theoretical saturation of the phenomena of organizational culture would be achieved using this sample size, since the participants represented key informants of the organizational structure and day-to-day care of the program participants. Guest, Bunce and Johnson (2006) have demonstrated that six to twelve well-selected participants are sufficient for saturation to occur.

Each invitation included RSVP information to contact me if they had a preliminary interest in participating (Appendix B).

Quantitative. Archival data was used for the quantitative part of the study. The CEOs from each site were contacted by me with a letter requesting access to ABC sheets and Occurrence Reports documenting the incidence of challenging behaviors and the consequences and staff actions. A letter of cooperation was obtained from each agency along with instructions for the retrieval of this information. Identifiers other than that of age, gender, and diagnosis (if included in either of the documents) were redacted from ABC/Occurrence Report documents to ensure anonymity.

Instrumentation

Qualitative. I developed a semi-structured interview guide based on a phenomenological approach developed by Moustakas (Creswell, 2007; Moustakas, 1994). This allowed me to ask questions or change questions based on participant responses to previous questions. Iterative questions were employed when contradictions in responses warranted further exploration to determine whether a portion of an informant's data should be eliminated (Shenton, 2004). Interviews were recorded on audiotape.

The intent of the interview questions was to identify "textural" descriptions ("What happened?") and "structural" descriptions ("What was experienced?") in order to discover the essence or meaning of the phenomena as experienced by the participants. In this case, the phenomena of interest were agency philosophy, cultural mindset of administrators and staff, and how these factors determined what type of interventions were used to address challenging behaviors of ID individuals.

The following questions were used to guide the interviewees to express their experiences:

1. Describe what you believe to be your agency's culture. What is its philosophy and approach to treating ID individuals who exhibit challenging behaviors?

   i. Probe: Provide an example that demonstrates your agency's philosophy in day-to-day practice.

2. What is your organization's culture? Please describe some of the things your agency does that supports *your* professional success in accomplishing the agency's vision and purpose?

   i. Probe: Please provide an example of how your agency provides the support you need to effectively do your job.

3. Now we'll focus on your hiring experience. Can you recall the hiring process?

   i. Probe: What do you remember most about the orientation process?

   ii. Probe: What did the initial training sessions focus on?

4. What were some of the skills and tools you learned to assist in working with ID individuals who have challenging behaviors?

   i. Probe: What did you learn about your agency that distinguishes it from others you may be familiar with?

5. Please describe for me your position within the agency structure and provide a definition of your role and responsibilities.

   i. Probe: How often do you interact with ID individuals who exhibit challenging behaviors?

6.   What is your understanding of what is meant by "challenging behavior?"

   i. Probe: What are your thoughts about what causes an ID individual to act

       out in challenging ways to express themselves?

7.   How has your work with individuals who evidence challenging behaviors

        changed since you've been here?

   i. Probe: What has changed?

   ii. Probe: What has remained consistent?

8.   Tell me a bit about the frequency and type of behavioral intervention trainings

        you've received during your tenure at ___.

   i. Probe: What was your experience of the most recent training?

   ii. Probe: Was the training consistent with the organization's culture of how

       to work with your program participants?

9.   Is there anything else you'd like to share with me that would help me

        understand your organization's culture?

Quantitative. I created a data collection recording tool that is presented in

Appendix A. Each case was identified in the column of the data recording tool and

included the gender (male/female), agency (A or B), and target behavior (physical

aggression and self-injurious behavior [SIB]) of each participant, as well as the physical

intervention(s)/nonphysical intervention(s) applied by staff. Each descending row of the

data recording tool is listed as participant #1, participant #2, and so on, according to date

of event. Each data recording sheet extracted information beginning on January 1, 2014

and ended on June 30, 2014. Columns provided sufficient space for descriptive data such

as type of behavior exhibited (e.g., banging head on a hard surface or pinching a peer) and type of intervention applied (e.g., redirection to another activity or use of a seated wrap to stop behavior from continuing). Totals for each data category calculated frequencies of target behaviors (self-injury/physical aggression), intervention(s) applied, and response to intervention(s) of PS (behavior ceased, continued before de-escalating and ceasing, de-escalated before ceasing) to facilitate the analysis process.

Procedures for Recruitment, Participation and Data Collection

Recruitment and Participation

Qualitative. This study was carried out in full compliance with the guidelines laid out by the American Psychological Association (APA) and Walden University. The IRB of Walden University granted approval to collect data. The IRB approval number for this study was 09-25-14-0072920 with an expiration date of September 25, 2015. As described above, an invitation was provided to all potential participants through agency email or internal mail. For those who responded with a positive RSVP, I either contacted the Gatekeeper via telephone or email to set up the interview date, times, and location or contacted the interested, potential participant directly to schedule date, time, and location in order to facilitate informed consent should if the staff person agreed to participate in the interview (Appendix B).

The interviews took place in a private room at the site of each Agency. Prior to beginning the interview, I reviewed the Informed Consent process, and let the participant know that they may opt out of the interview at any time without prejudice. Debriefing took place immediately following the interview and included a request for a phone call or

email to facilitate follow up interview and follow up member checking to improve rigor and credibility of the interview data. No interviewees terminated their participation in the study.

Quantitative. Archival documents were accessed; therefore, no informed consent process was necessary. Permission was obtained from both participating organizations.

Data Collection Procedures

Qualitative. I took into account each participant's position within the respective agencies and where they felt most comfortable during the interview process. Interviews of participants took place either in the Conference room or a preferred location they selected. Interviews were recorded via audio tape averaging thirty to forty-five minutes in length. Follow up interviews were not needed as I did not require further clarification regarding interview questions and follow-up probes. Member checks were used to glean greater insight into an informant's responses as patterns across informants emerged (Shenton, 2004). There were a total of 11 interviews recorded in all. I created audio recordings that were safeguarded in privacy envelopes which were closed, taped, stapled, and stored in a locked file cabinet and removed for transcription purposes only. Audio recordings were destroyed following completion of study analysis. Transcribed interviews were safeguarded in the same manner as audio recordings and stored in a locked file cabinet for a period of seven years at which time the transcriptions will be destroyed as well.

Quantitative. A permission letter (see Appendix C) requesting access to ABC sheets/Occurrence reports was sent to the administrator-in-charge indicating the date(s) site visit should be granted with alternate dates provided to accommodate scheduling, if needed. Review of archival data took place on site in a private area, removed from the main program area so as to avoid distraction and any potential disruption of program activities. All identifiable information was redacted. Data was stored in a locked file cabinet for a period of seven years, and then destroyed. A second copy was stored in a separate location with the same protocol employed as those of the original.

Data Analysis Plan

Qualitative. A phenomenological analysis of 11 semi-structured interviews was used to explore the meaning of each agency's unique philosophy, intervention strategy, and DSP trainings. Moustakas (1994) provided a seven step, modified Van Kaam method that enabled the researcher to list responses of participants related to the research questions, assign preliminary groupings according to responses provided (thematic categories), and reduce and eliminate nonessential responses. Following this, invariant constituents were formed; a term used to define key responses relevant to the research topic. I then had the ability to extract themes, create textural descriptions through examples of specific participant responses, and formulate composite descriptions of shared meaning of the 11 participants. Since this study included a comparison of two different agencies, final composite descriptions represented their similarities (shared meaning) and differences as part of the analysis of each agency's unique perceptions and experiences in day to day practice.

Quantitative. Quantitative data analysis of archival records using Occurrence reports/ABC sheets over a six month period (January, 2014 through June, 2014) was recorded on an Excel spreadsheet with date of Occurrence, person, agency, trigger event, intervention applied, and response to intervention (cease, increase or decrease of target behavior). Analyses of data included frequency distributions and visual displays comparing the two programs. The small number of cases ($n=15$) were disproportionate to the number of Occurrences ($N=105$); therefore, it was not feasible to conduct inferential comparisons of the two programs. A contingency table analysis was used to measure effectiveness of interventions applied to ameliorate challenging behaviors. Use of SPSS version 21.0 was used to compute the analyses. The variables of interest were straightforward; therefore no covariate/confounding variables were incorporated into the analysis plan.

The hypotheses tested were as follows:

Ho1: There are no differences in the types of trigger events between the two agencies.
Ha1: There are differences in the types of trigger events between the two agencies.

Ho2: There are no differences in the frequency of self-injurious behaviors reported between the two agencies.
Ha2: There are differences in the frequency of self-injurious behaviors reported between the "Shift Happens" and the "SCIP-R" agency.

Ho3: There are no differences in the frequency of physically aggressive behaviors reported between the two agencies.
Ha3: There are differences in the frequency of physically aggressive behaviors reported in the "Shift Happens" versus the "SCIP-R" agency.

Ho4: There is no difference in the frequency of physical interventions applied between the two agencies.
Ha4: There are differences in the frequency of physical interventions applied in the "Shift Happens" versus the "SCIP-R" agency.

Ho5: There is no difference in the frequency of nonphysical interventions used between the two agencies.
Ha5: There are differences in the frequency of nonphysical interventions used in the "Shift Happens" versus the "SCIP-R" agency.

Ho6: There are no differences in intervention outcomes between the two agencies.
Ha6: There are differences in intervention outcomes between the "Shift Happens" agency and the "SCIP-R" agency.

Integration of quantitative and qualitative analysis was accomplished through the extrapolation of themes inherent to each agency's philosophical perspective and mindset as demonstrated via direct support staff's application of their unique approach to intervention across the two environments. Archived data outcome measures demonstrated level of effectiveness that was reflective of the type of intervention applied within the respective agencies.

Threats to Validity

The quantitative part of the study can be examined in terms of threats to internal, external, and construct validity. Regarding internal validity, this part of the study was an ex post facto design used archival data. Therefore the documents reflected the actions of the participants (ID persons supported and staff applying behavioral intervention techniques) and were considered to be accurate with no alteration of document data. Archival data did not reflect the actions of participants through the manipulation of independent variables on dependent variables, but rather the review of historical documents that have not been modified over the pre-determined period of time. It was an

accurate reflection of behavior and interventions during this time frame which ensured

credibility of the data through records review (Yin, 2009; Shenton, 2004).

Regarding external validity, I chose the two sites purposefully, with

convenience/access in mind. Thus the ability to generalize findings to the target

population of facilities within the surrounding region was limited; however transferability

to other contexts is viable as the methods used in this study can be applied to areas with

similar participant characteristics and data-tracking tools (Shenton, 2004; Creswell,

2007).

Construct validity was strong, as the charting of behaviors and interventions

applied were tracked on standardized forms developed by the agencies that identify

"operational measures that match the concepts" (Yin, 2009, p. 42). This has been a

proven method of measuring response to interventions both in institutional and

deinstitutionalized settings (Bisconer, Green, & Mallon–Czajka, 2006; Reeves, 2011;

West & Kaniok, 2009).

Issues of Trustworthiness

Qualitative. Issues of trustworthiness were addressed using triangulation across

occupational levels, maintaining consistency of interview questions, and use of member

checking. In this way internal validity was strengthened by using informants to review

transcribed descriptions or "themes" and correct any inaccuracies included in the

interpretive findings found within the report (Creswell, 2007). Peer review and

researcher reflection notes enhanced credibility and confirmability in findings as

colleagues in the field provided "feedback" as an adjunct to my ongoing review of the

investigative process. Inaccuracies were noted and adjusted so that the study "may be devoted to the effectiveness of the techniques that have been employed" (Shenton, 2004, p. 68).

Mixed methods analysis. Strategies to address issues of trustworthiness included the use of triangulation of qualitative and quantitative data so as to compare and contrast the rich, thick descriptions of employee experiences with individual and aggregate documentation of self-injurious or aggressive behaviors and the consequences. This strengthened credibility and dependability as data triangulation was "supported by more than a single source of evidence" (Yin, 2009).

Transferability of a mixed methods analysis strengthens the external validity and research findings of a study of this kind as it has the ability to be reproduced within a variety of contexts, broadening the applicability of the research design (Shenton, 2004). This is so because although day habilitation sites were used as the context (environment) for the current study, it can be applied to other venues including school and residential settings and may be adapted to glean perspective and approach to behavioral interventions for use in home-based behavior support plans where a need exists in primary caretaking environments (when the ID person lives with their family of origin). In this way similarly shared experiences across a wider landscape can add to the phenomena of inquiry from the framework of family perspective on approach to intervention and its application across contexts (e.g., at home and at the day habilitation program).

Ethical Procedures

Ethical considerations were addressed by writing a letter of permission (see Appendix C) to the lead administrator on site to gain access to participants, proposing a time frame to completion of data collection (interviews and archival data), and outlining measures to minimize intrusiveness to site activities. All personal information of participants and archival data sets with identifying information was redacted to ensure anonymity and privacy throughout the data collection, analysis, and interpretation process. Participants were identified in the study as "Participant A01," for example. Participants were recruited solely on a voluntary basis, the nature and purpose of the study was explained prior to the interview, and participants had the ability to voluntarily withdraw at any time. Potential issues that may affect time to collect data such as replacing a participant who withdraws prematurely were included as part of the permission letter with protocols established for replacement participants in the event of early withdrawal due to illness or other unexpected factors that would prompt replacement initiatives. Both I and the participant signed the agreement to participate and informed consent letter and a copy was given to each interview participant.

I maintained a journal log during the process of interviewing and analyzing the transcribed interviews for the purpose of synthesizing visual cues and information received to compare and contrast employee mindset and agency philosophy by extracting themes across the two environments. Interviews were audio taped, transcribed, and secured in a locked file, with back-up copies stored at a remote location for a period of seven years for safekeeping, then destroyed. Myself and one employee from the

respective sites had access to facilitate periodic review (audit trail) of documents described in the recruitment and permission letters (see Appendix B and C).

Potential issues that may have arisen as a result of my role as employee of one of the two agencies involved in the proposed study did not present conflict as there was no direct involvement in provision of services to PS. Position included review of records, development and revision of support plans, various committee memberships, and in providing periodic, annual trainings mandated by state guidelines. Further, I provided no direct intervention or supervision of employees within the agency's hierarchy. No monetary or other incentives were included in the recruitment or at completion of the interview portion of the study.

Summary

Chapter 3 provided a description of the process for conducting the mixed method study. Ethical considerations including letters of permission and informed consent were included in the section to provide for the protection of human participants. Handling of and maintaining data for safekeeping and confidentiality, employing triangulation of themes and coding of data, along with journaling, audit trails, member checking, and peer review assisted in obtaining trustworthiness of qualitative data and validity through replication of quantitative analysis, as well as managing personal bias.

Chapter 4 reports the findings of the qualitative and quantitative analysis to answer the research questions. All findings are reported and include information that may support or disconfirm the research propositions and the interpretation of such findings are described, clearly and objectively, by me.

Chapter 4: Results

The purpose of this mixed-method, comparative case study was to compare a program that used nonphysical interventions with one that used physical interventions, and examine the differences in the frequency and type of challenging behaviors of service users in response to each agency's unique philosophy and intervention strategies. This study also examined differences in philosophical approach to behavior intervention strategies and staff training protocols through interviews of its CEOs, assistant directors, lower-level program managers, and direct support staff to better understand how a program's culture was reflected in the implementation of treatment approaches. A phenomenological approach was used to examine how the meaning of agency philosophy, culture, intervention strategy, and DSP training differed between agencies. It answered the question using qualitative research methods through the lens of agency staff mindset via open-ended interviews of participants. The following research questions were explored:

1. How does meaning of, a) agency philosophy/culture, b) intervention strategy, and c) DSP training differ between agencies that use nonphysical interventions and those that use physical interventions?

This question was addressed using qualitative research methods guided by Moustakas' (1994) phenomenological approach.

2. What are the differences in "ID service user's response" between a program that employs the use of physical interventions and a program that employs the use of

nonphysical interventions for intellectually disabled individuals who exhibit

challenging behaviors?

This research question was examined using an ex post facto design, collecting archival

data in order to examine agency differences.

Chapter Four is comprised of seven sections, many of which are divided into two

sections to clearly distinguish the qualitative and quantitative procedures and findings.

The actual data collection setting is reported, following by a description of the

demographics of the participants. The data collection procedures are revisited to identify

adjustments to what was proposed. This is followed by a presentation of the results, as

well as the procedures used to enhance the trustworthiness of the data gathering and

analysis process. A summary and transition section concludes this chapter.

Setting

Qualitative

None of the interviewees from either Agency A (AHRC) or Agency B (Delarc)

reported any unusual, personal circumstances or organizational conditions at the time of

the study. Staff who expressed a preliminary interest in participating were pre-screened

to ensure they were employed by their agency for at least two years prior to participating

in the interview process. The participants from both agencies included seasoned staff

who were employed for more than five years.

Quantitative

Archived data accessed from ABC Sheets and Occurrence Reports developed by

the agencies were the standard, daily tracking mechanisms completed by staff that

documented self-injurious or aggressive acts, intervention applied by staff, and response to intervention of program participant.

Demographics

Qualitative

The participants included a total of three men and eight women. Agency A staff were comprised of two men and three women. There were six staff persons who participated from Agency B: one man and five women. Participants from both agencies were full-time day habilitation employees.

Agency positions included upper, middle, and lower level administrators, and direct support professional staff. Lower-level direct support professional supervisors and direct support professionals reported to have daily interaction with program participants as those who held these titles either provided direct oversight and responsibility of program planning, team meetings, documentation, and staff supervision, or provided direct service to program participants within the classroom setting.

Quantitative

Agency A and B's data were extracted from archived, redacted Occurrence reports and ABC Sheets of program participants who live with a diagnosis of intellectual disability and who exhibited challenging behaviors, consistent with the population of interest across both sites and with all identifiers removed to ensure anonymity.

Data Collection

Qualitative

Agency A recruitment began in July, 2014 and ended on October 15, 2014. Response rates to the invitation letter averaged one person per week. Interested staff contacted me directly and once it was determined that the individual met baseline qualifications a date, time, and location was scheduled to complete the interview. Staff who agreed to participate were provided an informed consent agreement that included a statement of confidentiality. Both myself and the participant signed and dated the form prior to beginning the interview and the participant was given a copy for their records. Interviews commenced on October 14, 2014 and ended on November 13, 2014. There were no deviations from the plan described in Chapter 3.

Agency B's gatekeeper assisted me by conducting a preliminary determination of qualified staff according to years of service at the agency and years of experience in the field of intellectual disabilities. Once completed, a date and schedule of times throughout the course of one day for interested staff to meet with me to facilitate the interview was agreed upon. I fielded questions at the day habilitation site from those who expressed preliminary interest and provided clarification, as needed. Staff who agreed to participate were provided an informed consent agreement and statement of confidentiality. Both myself and the participant signed and dated the form prior to beginning the interview and the participant was given a copy for their records. All of the interviews were carried out and completed on November 13, 2014 in a conference room located within the agency's day habilitation site. There were no deviations from the plan described in Chapter 3.

Each of the 11 interviews averaged between 30 and 45 minutes in length and were completed in one session. Data were recorded on a digital audio recorder. I informed all participants prior to beginning the data collection, audio recordings were being utilized to facilitate accurate transcription and would be destroyed upon completion of study analysis.

I created margin notes during the interview process, noting body language, facial expressions, and hesitations or limited responses to questions or follow-up probes. Confidentiality was secured by using letters and numbers to identify participant by agency and order of interview (e.g., A01 defined as Agency A, participant number one) from a total of 11 interviews, overall.

All research participants were debriefed immediately following the interview. There were no discrepancies in data collection from the plan presented in chapter 3, nor were there any unusual circumstances encountered in data collection.

Quantitative

For the time period of the data collection, there were on average, 80 program participants in Agency A and 71 in Agency B. During that time 15 participants (eight from Agency A and seven from Agency B) exhibited challenging behaviors that were documented on Occurrence Reports and ABC Sheets. These documents provided descriptive information of setting event, self-injurious and/or aggressive behaviors, type of intervention(s) applied by staff, and outcome (response to intervention).

The acquisition of data was slightly different than what was originally proposed in Chapter 3. I received from Agency A, a total of 90 redacted, hard copy Occurrence

reports in an inter-office, manila envelope that was hand delivered by the gatekeeper at the agency site on an agreed upon date. I traveled to Agency B on two separate, mutually agreed upon dates to access redacted, hard copy ABC Sheets provided by the gatekeeper at the day habilitation site. However, preliminary review of these documents revealed item omissions on several of the documents that included male/female and date of report. I contacted the gatekeeper and requested the needed information of specified items. Incomplete documents were scanned as PDF documents and sent as an attachment by me via email to the gatekeeper for reference. I received full data documents from the gatekeeper via scanned copies that were sent back to me via email attachment for review to ensure accuracy of data analysis.

Three males and five females from Agency A and six males and one female from Agency B exhibited self-injurious or aggressive acts that resulted in the 105 challenging behaviors recorded within the six month time frame of January 1, 2014 through June 30, 2014.

Table 1

Demographic Characteristics of Participants

Category	Agency A	Agency B	Total
Males	5	6	11
Females	3	1	4
Challenging Behaviors	90	15	105

There were a total of 15 program participants who exhibited 105 challenging behaviors that were recorded on ABC and Occurrence Reports over the six-month period. Of those, eight program participants from Agency A accounted for 90 of the 105 reports and seven program participants from Agency B accounted for 15 reports. The large discrepancy in number of reports generated from Agency A compared to number of reports generated from Agency B influenced the type of analyses conducted and will be discussed in Chapter 5.

Data were recorded on an Excel spreadsheet (see Appendix A). Columns one and two referenced the date of report and participant gender. The other variables included:

1. Trigger Event (Sensory/Tangible; Escape/Avoidance; Attention Seeking; Person; No Clear Trigger).

2. Type of Aggressive Behaviors (Pinching Others; Spitting at Others; Biting Others; Hitting Others; Kicking Others; Scratching Others; Pushing Others; Pulling Others Hair; Property Destruction) were coded as "1" (occurred) or "0" (did not occur).

3. Type of Self-Injury (Biting Self; Scratching Self; Hitting Self; Banging Head against a Hard Surface; Skin Picking) were coded as "1" (occurred) or "0" (did not occur).

4. Type of Intervention (Verbal Calming; Redirect to Another Activity; Staff Change; Relax in Quiet Area; Deflect Physical Assault; Touch; Arm Control by One Person; Arm Control with Assistance; One Person Escort; Two Person Escort; Standing Wrap; Seated Wrap) were coded as "1" (occurred) or "0" (did not occur).

5. Outcome (Behavior Ceased with No Intervention; Behavior Ceased following Application of Nonphysical Intervention; Behavior Ceased following Application of Physical Intervention; Behavior Continued following Application of Physical Intervention before De-escalating/Ceasing; Behavior De-escalated before Ceasing) were coded as "1" (occurred) or "0" (did not occur).

Other than the minor discrepancies in data collection and the substantive difference between the two agencies in number of reported incidents (as described above), no unusual circumstances were encountered in data collection.

Data Analysis

Qualitative

A phenomenological approach using van Kaam's modified method (Moustakas, 1994) was chosen because it allowed me to illuminate key responses from the 11 semi-structured interviews using systematic steps to identify thematic categories, highlight individual participant's relevant statements (invariant constituents), and create group categories that represented the key responses of shared meanings. Shared meanings allowed for comparison of the two agency's unique philosophical approach to ameliorating challenging behaviors of ID individuals who exhibited challenging behaviors.

First, I transcribed and converted audio taped interviews into electronic MSWord™ documents. Transcribed interviews of participants identified only by letter (Agency A or Agency B) and number (1 through 11) were uploaded into NVivo 10 qualitative analysis software to facilitate the analysis process. I read each interview several times and created a summary that was sent to each participant for member checking (Creswell, 2007).

I followed Moustakas' (1994) description of the seven step modified Van Kaam method of analysis. While reviewing each participant transcript, I first listed and grouped words and phrases of participants that illuminate personal experience (*Horizonalization)*. Steps two through four required me to look at each expression to determine whether it "…is a necessary and sufficient constituent for understanding it" (p. 121); this is referred to as *invariant constituents.* Through the process of reduction and elimination, exact

statements or descriptives were "labeled" as invariant constituents, and then clustered into thematic categories. NVivo 10 qualitative software assisted in coding of invariant constituents. I created nodes that included individual textural descriptions identified by agency which allowed for quick reference of participant responses and frequency of shared or validated responses (phrases that meet the definition of an invariant constituent, even though it may not be an exact wording).

Steps five through seven of the modified Van Kaam analysis process involved the formation of individual textural descriptions of each participant's experience by providing verbatim examples extracted from transcribed interviews using *imaginative variation* to clarify experiences of participants related to the study questions. Lastly, I created composite textural-structural descriptions that were representative of agency A and agency B, followed by the group as a whole (all 11 participants). The analysis of themes represent the conclusions via composite descriptions that answered the research questions. An audit trail was used to enhance confirmability and ensure interpretation of data gathered to manage researcher bias (Shenton, 2004).

Quantitative

The Excel Spreadsheet was imported into SPSS (Version 21) for coding and analysis of variables. The original plan was to compare, using inferential statistics, the frequencies and mean of key indicators to identify differences between the programs. However, the small number of cases (eight and seven, for Agency A and B, respectively); and the considerably uneven frequencies of Occurrence Reports (90 and 15, for Agency A and B, respectively) did not meet the assumptions for inferential analysis (Gravetter &

Wallnau, 2007). Therefore, the quantitative analyses were reported using descriptive statistics. The limitations of this choice will be discussed in Chapter 5.

It was also not anticipated that the participants (i.e., the source of the reports) would vary substantially with respect to the number of reports. As shown in Table 2, four participants from Agency A were responsible for 91% of the events (82 out of 90); and in table 3, four participants from Agency B were responsible for about 80% of the events (12 out of 15).

Table 2

Frequency of Reports Generated by Agency A Participants

Participant #	Frequency	Percent	Valid Percent	Cumulative Percent
Program Participant 1	26	28.9	28.9	28.9
Program Participant 2	27	30.0	30.0	58.9
Program Participant 3	15	16.7	16.7	75.6
Program Participant 4	14	15.6	15.6	91.1
Program Participant 5	4	4.4	4.4	95.6
Program Participant 6	1	1.1	1.1	96.7
Program Participant 7	2	2.2	2.2	98.9
Program Participant 8	1	1.1	1.1	100.0
Total	90	100.0	100.0	

Table 3

Frequency of Reports Generated by Agency B Participants

Participant #	Frequency	Percent	Valid Percent	Cumulative Percent
Program Participant 9	1	6.7	6.7	6.7
Program Participant 10	1	6.7	6.7	13.3
Program Participant 11	1	6.7	6.7	20.0
Program Participant 12	3	20.0	20.0	40.0
Program Participant 13	3	20.0	20.0	60.0
Program Participant 14	3	20.0	20.0	80.0
Program Participant 15	3	20.0	20.0	100.0
Total	15	100.0	100.0	

Qualitative Results

Invariant constituents extracted from transcribed interviews using the NVivo 10 qualitative analysis software were clustered into thematic categories (see Table 4). Examples representing thematic categories included data from individual textural descriptions that were protected using letters and numbers to ensure anonymity of study participants.

Table 4

Thematic Categories and Invariant Constituent Distribution for Interviews

Thematic Categories	# of Invariant Constituents
Unique Agency Qualities	14
Agency Philosophy in Day to Day Practice	11
Staff Definition of Challenging Behavior	5
Behavior Intervention Strategies (18)	
Developing a Relationship	3
Patience	2
Observation	2
Assessment Tools	4
Staff Input and Action Planning	2
Immediate Reinforcers for Desired Behavior	1
SCIP (Strategies for Crisis Intervention and Prevention)	2
Giving People Control and Offering a Lot More Choice	1
Building Around a Person's Routines	1
Supporting Professional Success	14

Unique Agency Qualities

The first thematic category illuminated participants' comparison of their agency

to others they may be familiar with. Nine employees representing both agencies A and B

described attributes of person-centeredness, either explicitly or implicitly and included

qualities of promoting community membership and using a positive approach.

Participants from Agency B reported that their agency does not use any form of restraints

as part of their intervention approach. Table 5 provides explicit and compatible invariant

constituent responses and frequencies among the 11 participants.

Table 5

Unique Agency Qualities

Invariant Constituent	# of Participants to Note This
Person-centered	2
Promotes Community Membership	1
Employs a Positive Approach to Behavior Intervention	5
No Restraints	4
A Family as Opposed to a Job	1
Poor Communication Practices	1

As seen in Table 5, nearly half of the participants described their agency as one

that takes a positive approach to behavior intervention practices compared to others they

may be familiar with. When asked what they viewed as unique to their agency;

something that sets them apart from others that provide the same type of services,

representative employees from both agencies were clear to note the strength that

positivity promotes for those they provide supports to. Participant A02 described the

agency as "really trying to make everything person centered; trying to go there."

Participant A03 went on to say, "We want to try to encourage them um, to help them be

more successful. You know, I think we play more of an active role in helping them to be

successful."

Participant A05 described the agency as one of family and said:

Back in when I went through orientation, the one thing that I do remember that there was a really a um, a real family kind of feeling to the agency that that (*sic)*, even though the material was the same material kind of like, that I had previously uh, presented over and over and over again from different agencies; um, it really felt like the people who were presenting the information were really taking it to heart. They believed what they were talking about and I felt like I was joining a family as opposed to a job.

Participant A01 talked about the agency's movement away from segregated services (i.e., With support from a staff person, the individual makes and attends a medical appointment with a doctor of his or her preference, versus groups of individuals scheduled on the same day and seen by one doctor at a residential site).

Well, we've really taken the initiative to, to really almost get rid of our sheltered employment and to, to start taking the lead of not having as many segregated services. I think we've been a leader in providing day habilitation without walls and, and promoting community membership.

Although almost all of the participants from agency A identified unique characteristics from a positive perspective, there was one dissenting voice who expressed concern around agency communication practices. Participant A04 stated:

So as at the higher ups and the uh, uh, and the executives and, and, are running a business. And they're not really relating to what's going on, on the ground floor as far as us. So I think more needs to be communicated; more needs to be interacted with their employees so that they can get a better grip.

Agency B participants' echoed similar responses to that of Agency A when asked about what distinguishes their agency from others. Participant B06 stated: "We're just constant being proactive; positive with everybody. Um, there is just no sitting around." And, "Just having that caring relationship and stuff like that." Participant B07 added, "To couple consistency and being positive."

Participants' B09, B10, and B11 identified using nonphysical interventions as a distinguishing characteristic of their agency. Participant B10 said, "Um, the one thing that I have learned that I didn't know until I started working here is that we're; we were for the longest time the only one with no restraints." "…we assure all the individuals what a great job they do every day." Participant B11 added, "And to know we don't utilize that here (SCIP) and it's more about talking it through. Because it's positive, you know you don't focus on the negative, you focus on the positive." Participant B09 described the agency's "no restraint" policy as follows:

> And it, I think it requires a lot more patience and it takes a lot of time to help people come to where they you know, want to be. You know, a healthier place to where they don't feel like they have to use negative behaviors to get their wants and needs met. But quite frankly, I wouldn't have it any other way. I wouldn't. I can't imagine. I can't imagine when they call it "wrapping" people, or taking people down, you know? And, some staff have come to us from other agencies where they do that. And they're just so happy to not have to do that.

Agency Philosophy in Day-to-Day Practice

The second thematic category emerged in response to asking participants how they carry out their agency's philosophy on a daily basis. Key invariant constituents of four participants pointed to the importance of caring relationships and several others validated their agency philosophy through practices that included choice making, positive reinforcement, avoiding the use of restraints, and by providing a structured classroom environment comprised of individuals with and without behavioral challenges. Table 6 provides the responses and associated frequencies of Agency A and Agency B staff.

Table 6

Agency Philosophy in Day-to-Day Practice

Invariant Constituent	# of Participants to Note This
Person Centered Activity	1
Positive Reinforcement	1
Caring Relationships	3
Empowering People through Choices	1
Avoiding Use of Restraints	1
Exploring Challenging Behavior	2
The Classroom Environment	1

Three participants expressed the importance of building a caring relationship with program participants and its positive effect on reducing the likelihood of challenging behavior from occurring. Participant A03 stated that "Um, we always try to get an idea

of how their morning has been going so far when they come into program." Participant

B06 went on to say, "…I mean you sharing that caring relationship that reduces a lot of

behavior." Becoming familiar with vulnerabilities, irritants, and preferences facilitated

building a caring relationship with persons they supported. Participant B09 explained:

So you know, some philosophies might be it's time to go; we're going. But

that's not how we do things here. So the first thing we do, um, and we have a

new staff learning you know, even uh now is we teach them to build a caring

relationship. Get to know. Get to be able to understand her personality. What

motivates her? You know? What makes her tick? If this particular individual

loves to have fun; so if you make it fun she'll get up and go, you know? Um, and

you know if she wants to take her lunch pail, let her take her lunch pail! It

doesn't matter. What does it matter you know, if it's not lunch time. She doesn't

want to eat it, she just wants to know where it is. It brings her a sense of security

and she feels good about that. We all have our things, right?"

Discovering why challenging behaviors occurred was noted by two participants

from Agency A. Participant A02 explained what employees strived to do every day and

stated, "I think with, dealing with challenging behaviors, we kind of try to learn what the

behavior is for because there's always a reason for it." Participant A01 concurred and

elaborated further:

…when we look at the situations is to find out what are the factors of a person's

life that could be contributing to somebody who's having a challenging behavior

and uh, again, that it's not an innate function within a person that you know, they

just have behaviors. Oh well, what are we going to do about that as opposed to write a behavior plan that focuses on this behavior uh, without understanding what's going on within the person, and what are the things they are dealing with in the environment?

Participants also noted daily practices of empowering people through choice making, integrated classrooms, avoiding the use of restraints, and person centered activities. Participant A03 said, "Uh, we always try to get them (program participants) engaged in something they prefer; something they like." Participant B07 spoke about encouraging good choice making and reinforced this practice through preferred activities to promote success. "So we work at like every day to have a good day, make good choices so she can have that car ride on Friday." Participant B11 said, "Um, I think every activity that the individual is engaged in is very person centered. We don't just put any activity in front of somebody…setting those expectations to see, and helping them to learn and grow."

Ensuring a mix of personalities, abilities, and challenges within the classroom environment was viewed as an important component of day to day programming as well. Participant A04 asserted, "I would say that's exactly you know, one of the things they're striving for. To like I said, to have it integrated so that people, you know, can all be different but yet be together and not have that be a situation where they're gonna confine people to one certain room or confine it to one certain area."

An example of Agency A's philosophy was provided via an experience that demonstrated the direction in which the agency is moving toward. Participant A05 described one event where challenging behavior was exhibited and restraints avoided.

Yes, um, within the last year um, I was working um, I was pulled into a situation where an individual was being or, attempting to be extremely aggressive. Um, running after the staff in an attempt to hit or kick and stuff like that. It took myself and two other staff but we, we kind of agreed that um, we weren't gonna do the physical intervention dance with the person. And the three of us spent a couple of oh gosh, maybe about an hour, an hour and a half or two hours in the room with the individual. Um the room was cleared out and we just spent time trying to verbally calm him and, and getting out of the way when he went after us. Or, um, just providing um, what we would call "defensive" moves holding him away from us when he was trying to hit and, but not using any real physical interventions with him. Um, and honestly I think from what I could remember, that was probably one of the few times; no, one of the over the last year, that could have been. We could have spent probably hours with him in physical techniques, which would have been tiring for him and us and caused us a lots and lots of agita (i.e, indigestion in Italian) on both parties. Um, but I think that really set a standard for the way that we'd like to work with him and we've tried to work with him. And I think that he's learning that we're not going to do that to control his behavior; that he needs to, to find ways to cope and we'll help him with that as well. So, providing the training and then substitute skills for those behaviors to,

to, to get the same result that he's looking for without having to behave a certain way.

Reinforcing persons using a positive approach was something Participant B06 said took place on a daily basis. "Well, of course positive reinforcement. Just of course, if they answer you like 'no, I don't want to'. Okay, well then you can let me know. Your answer to my question is just as important. Um so, positive reinforcement you know. A lot of verbal praises, you know?"

Staff Definition of Challenging Behavior

The third thematic category asked participants to describe their understanding of what is meant by challenging behavior. Of the 16 invariant constituents, nine of the 11 participants (four from Agency A and five from Agency B) defined communication difficulties as a predominant challenging behavior. Table 7 presents the variety of responses and associated frequencies of Agency A and Agency B staff.

Table 7

Staff Definition of Challenging Behavior

Invariant Constituent	# of Participants to Note This
Communication Difficulties	9
Psychiatric Symptomatology	1
We All have Challenging Behavior	1
Relationship	1
Danger to Self/Others	1

Table 7 identified communication difficulties as a primary marker for behaviors considered to be challenging. This was echoed by both Agency A and Agency B respondents. Participant A01 stated: "…it's some kind of communication from a person to us that we need to change what we're doing. To me the challenge is, is, uh, is for us to figure out what is going on." Participant B10 pointed to the importance of getting to know the person and said, "So for me a challenging behavior is, when I don't have the relationship with someone and they need something. And, I can't give that to them cause I just don't understand."

Participant A02 agreed that communication deficits are a challenge but added that in some cases psychiatric difficulties may be a contributor as well and said, "…because they can't verbally tell you what they want, or show you so, or in, in certain cases some people are just certain, like obsessive with certain things…like psychotic moments when they actually flip..." Participant A04 spoke to communication difficulties some ID

persons experienced in this way: "And it's hard to get them beyond their problems because of maybe not having the tools; maybe not having the means." According to Participant A05, "The truly challenging people are the people that are really having trouble communicating what they need." This employee added: "So it really is the; the, you know, when a person becomes dangerous to themselves or others. That's challenging to me."

When asked to define "challenging" behavior, Participant B06 responded, "We all have those challenging behaviors. It depends on the behavior too, what's challenging. Some people could just shut right down and I thought. Some people could be throwing chairs." Participant B08 pointed to persistence, identifying the challenge, understanding the behavior support strategy, and communicating this to team members. "A challenging behavior is something you really have to work at to help decrease. You know, and it all comes back to the communication and knowing what their plan is." Participant B09 responded, "I think I would just go with "undesirable" because you know what the challenge is? Figuring out how to help people get past it. The challenge is, why are they doing this?"

Behavior Intervention Strategies

The fourth thematic category emerged in response to asking employees to describe skills and tools they learned to ameliorate challenging behaviors. These included use of data collection tools and employee supports to promote successful behavior change. Table 8 presents the invariant constituents and associated frequencies of Agency A and Agency B staff to assist in answering the research questions.

Table 8

Behavior Intervention Strategies

Invariant Constituent	# of Participants to Note This
Developing a Relationship	3
Patience	2
Observation	2
Assessment Tools	4
Staff Input and Action Planning	2
Immediate Reinforcers for Desired Behavior	1
SCIP	2
Giving People Control and Offering a Lot More choice	1
Building Around a Person's Routines	1

Table 8 presents key responses to the variety of skills and tools participants

employed to affect positive behavior change in the people they supported. Three

participants stressed the importance of getting to know the person and how building a

good relationship helped employees understand persons who exhibited challenging

behaviors. Participant A04 noted the importance of learning about things that were

meaningful to a person. "It could be so many different things and until you can get to the

root of what it is, that the individuals are, enjoy, or like, or dislike so to say. Then you

know when to go forward and develop a better relationship you know, with them because

of these things." Participant A02 shared similar thoughts and said, "I learned a lot of skills from certain staff and managers that were here but for me being on the floor, actually getting to know each individual personally, is what really helped me." Participant B10 added, "But really, other than aside from the reading or being able to be taught it's, it's more of just getting to know somebody."

Managing emotions was a skill important to Participant B06. This employee said, "It's just, you're working with them and patience is a big, big thing. And trying not to get upset yourself you know, if they're upset." Participant A04 described it a bit differently and said, "Some of the skills would be to remain calm; to be able to observe more and not just jump into things." Observation and the importance of targeting one challenging behavior at a time was noted by Participant B11 who said:

> We really have to look and sometimes take a step back; watch folks and see what those antecedents might be to follow up to what that behavior might be. Starting with that one and then going on to other ones. It's hard for you to be able to stay focused on what behavior to actually work with and with that individual if you're jumping all over the place.

Employees noted a variety of assessment tools incorporated into their behavior intervention protocols. Strategies for Crisis Intervention and Prevention was one tool used to intervene by employing verbal, nonverbal, and physical techniques. Participant A03 said, "Um, SCIP was one of them. Um, being taught the different techniques." This employee added, "We were taught you know, how to do ABC charts and to recognize uh, you know, what might cause someone to become upset and have a behavior…"

Participant A05 felt the same way. "I could say I learned the most about dealing with people from the SCIP class."

Participant B08 also mentioned nonphysical intervention strategies that assisted in helping to prevent escalation of behavior. This employee said, "Um, we are gonna you know, if they're in a classroom and they're getting increasingly upset, we'll offer them to go for a walk. Um, make a joke; change the subject." "ABCs and MAS (Motivational Assessment Scale) chartings to help us understand things" and "…the Shift Happens model." Participant B09 explained further, "But very, very important is our APR process. You know; assessment, prevention, and replacement. And this is where we use our ABC chart."

Immediate reinforcement for desired behavior was a behavior support tool Participant B09 described as:

> The positive approach, you know. We are huge on reinforcement. Just as soon as that person does what is desired, you want to reinforce them in some way. We do a lot of verbal reinforcement. So you might say, "Good job." That's very general. But what's more powerful is the specific reinforcement.

"It was nice to go through you know, like, their behavior plans and see what we can do" said Participant A02. Participant B07 echoed similar sentiment and said, "Being able to put my input from working with that person with a certain behavior."

Participant A01 pointed to different strategies incorporated into a person's behavior support plan. This employee stated,

So I think some basic uh, premises that I believe are you know, giving people

control, as much control as they can handle in their life, and teach them how to

have control, to, to take a look at the choices that they have and make sure that

you're really offering a lot more choice uh, to help them, you know, kind of fill

up their file cabinet full of options they have. We make people with disabilities to

fit our convenience and that if we focus on allowing them to have their routines

and we build around their routines instead of having to conform to ours. Well, if

we screwed around with all of our routines, we'd not be so happy!

Supporting Professional Success

The fifth thematic category focused on the types and frequencies of employee

supports that promoted their professional success in working with ID individuals who

exhibited behavioral challenges. Table 9 illustrates invariant constituents of respondents

and their associated frequencies.

Table 9

Supporting Professional Success

Invariant Constituent	# of Participants to Note This
Different Types and Lots of Trainings	3
Weekly Supervisories	1
Tools for Teaching	1
The Door is Always Open	2
CQL Trainings	3
DSP-R Credentialing	1
Shift Happens	1
Bless Your Little Heart	1
Staff Shortage	1

Table 9 reports employee responses to being asked how their agency provided the supports they needed to successfully do their job. Both Agency A and Agency B employees identified several types of staff supports; some formal and others, informal.

Participant A01 spoke to the culture shift in response to the CQL (Council on Quality and Leadership) training and accreditation initiative. This employee said, "Well, the agency's culture has really uh, moved forward in a positive way because of our CQL accreditation. And I think the idea of what does it mean to be person centered has finally started to be understood within the organization." Participant A05 added, "I did go to a CQL, what's called a POM (Personal Outcome Measures) training which was really great

because um, it helped me change the way I look at what I do every day. It helped me to reframe the way I ask the questions to the individuals that we support." Participant A04 expressed some basic knowledge of the CQL initiative but identified with a different type of professional support received. This employee said:

But, they are providing training for us to, to become a DSP-R, which is a new rank as far as direct support professionals are concerned. That they're trying to uh, make it a more professionalized um, title and, and situation for any DSP.

Participant A05 agreed that "…the philosophy of Shift Happens… is about being person centered. It's about um, looking at the idea that even though a person has a behavior, it's not all the time." And "…the other things we put in place to really help with our vision is the CQL…"

Participant A02 felt this way: "I think there's a lot of encouragement and meeting with the staff, and trying to come up with different ways to help with the challenging behaviors" but added, "I do not think it's okay that staff is left short back there."

Three participants mentioned receiving supports through varied training opportunities. Participant B07 said, "A lot of house trainings." Participant B08 expanded on this and said, "Trainings and lots of trainings. Lots of meetings. Lots of communication." Participant B09 felt supported by "having weekly supervisory meetings." Participant B10 described how the agency supports professional success in this way: "They provide um, all sorts of trainings. Um, I have the opportunity to do trainings throughout the year, whether in house or not. The door is always open. They make sure we have the tools that we need for teaching."

Participant B10 described a particular employee recognition to supports professional success:

"Bless your" is a, it's a bless your little heart. It's a person dressed up as a heart who comes and presents you with a certificate of what you're being blessed for. And it's um, it's an award that; it's an award. It's a recognition of seeing another way like, maybe one or two aspects of using all of our unifying principles. Um, so they come and, of course it's a big deal. So, you know; you might get an email from your supervisor, or any other supervisor that says, "Hey, I saw you doing this and that was absolutely fantastic! We really appreciate that."

Individual Textural-Structural Descriptions

Structural Description for Participant A01

Participant A01 is an administrator who viewed the agency's culture as "a mixed bag." This employee believed that, although perception of the intellectually disabled has improved over time, there are still some within the agency who adhere to the old mindset that the problem lies within the person. Participant A01 stated:

You know, we have people who have worked here for 30 years who were taught one thing, we have people who have been here for 10 or 15 years, and we have new people. And, I think the belief system about people with disabilities has changed over that course of time. And, not all people that have been here for a long time have caught up with the new thinking even though we've provided training. It's hard for people who have mental models about people with disabilities to change their mind.

Participant A01 said that "even using the word somebody's having a 'behavior' I find strange." This employee also noted that a person supported by the agency is reflective of the agency and that the approach to intervention is changing as well. Participant A01 described how the agency is moving away from a deficit-based approach to intervention towards a strengths-based behavior intervention model in this way:

Uh, you'll find this false assumption that, you know, that I think that people make in the field that especially the more "old school" that people have to earn attention. Well, they're good they'll earn attention. I think that people innately deserve attention just because they're a human being; that if you give people attention they'll do better. I think that um, that, you know, giving people uh, the ability to have privacy um, to have a little bit more choice and control in their life. I think that people just really have a lack of control over all and that we control everything. And sometimes some of the people we call "behaviors" is, is an attempt to gain control but maybe it's not communicated clearly. But I see, I think a lot of it as an attempt to gain control. So I think some basic uh, premises that I believe are you know, giving people control, as much control as they can handle in their life, and teach them how to have control, to to take a look at the choices that they have and make sure that you're really offering a lot more choice uh, to help them, you know, kind of fill up their file cabinet of options they have. You know, people with disabilities tend to not have that level of information about choices. And I they need to give them more choices. And also to plan for people based on their capacity.

Participant A01 felt supported by the agency knowing that CQL initiatives have helped the agency to "become more and more person centered."

Although Participant A01 did not have any specific orientation, this employee reached out to other organizations for guidance and "…jumped in and started help teach orientation here, you know." Working toward ending sheltered employment, reducing the number of segregated services, being "a leader in providing day habilitation without walls and, and promoting community membership" distinguishes this agency from others for this participant.

Structural Description for Participant A02

Participant A02 is an administrator who expressed the agency's philosophy and approach to treating ID individuals who exhibit challenging behaviors this way: "Okay, I think um, that this agency believes that um, no matter what the behaviors are or who we deal with, um, everyone has an opportunity to succeed in everything." This employee reported that behavioral challenges are largely due to communication difficulties and may sometimes be triggered by coexisting, psychiatric symptoms. This employee interacted with those who have challenging behaviors daily and stressed the importance of building a relationship with staff and program participants. Creating a mix of abilities, challenges, and needs within a classroom, combined with supports provided from clinical and other staff "on the floor" helped, but stated, "Getting to know each individual personally, is what really helped me."

Participant A02 received orientation as a new employee and said:

Uh, I have to be honest, I don't really remember that much. Our mission statement. Um, to kind of explain what that is and, I remember that part. I remember them talking about abuse, and, I don' really remember much. I know they do like a walk in your shoes now but they didn't do that when I started, so.

Participant A02 reported that the agency's distinguishing quality of moving more and more toward person centeredness is "a strong point that our agency is doing" and that formal and informal trainings are consistent with the organization's culture to work with their program participants.

Structural Description for Participant A03

Participant A03 is an employee who worked with ID program participants on a daily basis. The participant described the agency's philosophy as one that avoided using physical interventions if at all possible, engaged persons with choices of activities they preferred, and was greatly impacted by the orientation process, particularly after viewing the Willowbrook expose'. This employee recalled several trainings that included CPR, First Aid, Choking Prevention, and Preventing Abuse.

Participant A03 recalled SCIP as the only training received to learn "…how to address you know, their issues" but learned to incorporate ABC charts to discover why someone might experience behavioral challenges. The employee described the importance of conversation with program participants and taking "…an active role in helping them to be successful." The employee summed up the agency's philosophical approach to behavior intervention in this way:

Um, that's a tough one. I think our mindset is to assist them uh, in any way

possible, uh, with like SCIP being the last choice. I mean uh, we try to talk to our

folks and, reason with our folks, and um, we try to refrain from any kind of

physical interaction. Um, I think our agency's uh, way of dealing with them is

by, you know, positive approaches. Um, you know, we're clearly here to help

them. Um, try to assist them and, um, you know we try to figure out what their

issues might be.

Structural Description of Participant A04

Participant A04 is an employee who worked with program participants on a daily

basis, some who exhibited behaviors considered to be challenging. As stated by others,

the philosophy described by this participant affirmed the agency's movement toward

community inclusion, person centeredness, and making strides in strategies to reduce

challenging behaviors of those they support. This employee echoed the importance of

diversity of persons supported within the classroom environment as part of the agency's

philosophy and day to day practice in this way:

Um, like I said, they're very diverse in that way. So, it is kind of you know.

Some people might be able to talk, other people might use sounds, and other

people might use physical movement. So to try to combine the three; the

diversity of it makes everyone be on the same page is, something I know we try to

do in our classroom.

Participant A04 also described ways the agency supported the successes of its

employees through CQL training and DSP-R credentialing to "professionalize" direct

support staff. Others included SCIP, Alzheimer's disease, "Autistic training," Shift

Happens training, medically-related procedures, and conferences. These tools were

viewed as tools for skill building. On the one hand this participant viewed it positively

and said, "So you're actually working with the individuals to be able to achieve what

we're personally gonna be able to achieve" but had not attended a formal behavior

intervention training for more than a year.

Participant A04 listed behavior intervention tools and skills such as listening,

providing nonjudgmental observation, and communication as essential "on all kinds of

levels." This employee empathized with the agency changes but felt communication

across agency levels was lacking.

Structural Description of Participant A05

Participant A05 is an administrative staff who, without hesitation, recited the

agency's mission statement. This employee spoke of the importance of community

inclusion, a philosophy of empowering persons the agency supports and applying

physical interventions only as a last resort using a gradient approach.

> I think right now we're at a place where we would like to empower the people as
>
> much as they can handle so that they can actually be in control of their own
>
> behavior. With that said, I think the culture is in line with not using physical
>
> interventions as much as possible for the people with behavioral challenges...

Participant A05 defined challenging behavior as a matter of staff "perception" and

"very difficult to deal with" and felt that communication barriers were the overarching

reason for behavioral challenges of the ID persons the agency supports.

Orientation to the agency was viewed as redundant because it was something this employee experienced at other agencies. This participant was impressed by the passion expressed by the facilitators of the two-week orientation and left with the impression as that of a family work environment.

Participant A05 expressed being supported professionally through trainings in addition to SCIP that included a two day Shift Happens experience and CQL POM training (Personal Outcome Measures) that prompted a new perspective and approach to the development of person centered valued outcomes based upon the goals and dreams of persons supported. This participant described the agency's culture as "changing" and said:

> I think we, we still have as an agency we still have many, many, many people that are not there; that believe that we need to protect these people that we need to shelter them from the community; that we need to um, kind of like be the body guard for the parents. And um, and that they're meek and helpless and they don't have the abilities that are needed to go into the community. The culture that's coming in is that um, these people that we support are human beings. They need to be treated just the way that we needed you know like, would like to be treated. Um, that they have dreams and aspirations for life and that our job really is to help them, as much as possible, reach their dreams. And really help them to get a full quality of life.

Structural Description of Participant B06

Participant B06 is an employee who interacted with program participants on a daily basis to bridge the gap between those in the community and the people the agency supports. This employee described the agency's philosophy as "caring without restraint" and added, "Uh, but you know, but as far as caring we treat them like a friend or a family member."

In practice, according to Participant B06, the agency used positive reinforcement and the caring relationship to reduce the frequency of challenging behavior and said, "We all have those challenging behaviors. It depends on the behavior too, what's challenging. You know, if we're not happy about something. You know, you know, anything could be challenging." This participant identified factors such as anxiety, need for attention, not feeling well, or a person "they're just not crazy about that they don't want to be around" as potential antecedents and said that patience is a skill developed to assist in working with ID individuals who have challenging behaviors.

Participant B06 identified several things the agency does to support professional success. Weekly supervisories "to discuss what needs to be worked on" and lobby meetings were noted by this participant as two things the agency does to help employees effectively do their job. Participant B06 described the purpose of lobby meetings:

Lobby meetings, yea. You know like basically uh, we discuss what's been going on throughout the day. Or if there's going to be any changes. You know, that way nobody's uh caught up in look what, hey, what's going on? You definitely,

you know, they're like 10 minute lobby meetings just to let you know what's

going on throughout the day.

Participant B06 described the orientation process as a 10 day training that

included working in the classroom. "A lot of training in the room too. So, you're doing

it independently, trying to do it independently throughout the day." This participant

described one of the first trainings called "Vantage Point" in this way:

Like uh, you know one of the first trainings is you know, Vantage Point. We all

have to go through it. And it's just to get an idea of what they've gone through in

a day. Just to being themselves is a challenge in life. And it gives you an eye

opener. It's like, wow! This is quite interesting. But you know, instead of feeling

sorry for them, it's you're like, wow, I admire you!

Structural Description of Participant B07

Participant B07 is an employee who interacted with behaviorally challenged

program participants daily and had a level of skill to "jump into any classroom and teach

that class without any questions." This staff described the agency's philosophy and

approach as "positive" and one that helps people who exhibit challenging behavior

"through the reinforcing and the consistency of the reinforcing." This participant

described using "tangible or verbal reinforcement" on a day to day basis to make "good

choices" through talk and practice.

Participant B07 defined challenging behavior as "something that you never really

pinpoint" and, "not being able to vocalize what they want" as underlying factors that

causes an ID individual to act out in challenging ways to express themselves. "It's just, you keep working at finding different positive things" to encourage positive behavior.

Although Participant B07 joined the agency as a residential staff, orientation to day habilitation was comprised of experiencing Vantage Point, followed by a 10 day training. Initial training sessions focused on "really learning those reinforcements." This employee described the transition training in this way:

> And switching from residential there's a lot more. In residential they kind of get off on the positive reinforcing. And when I got here it was reinforce, reinforce. It was a good change. In here it's "great job following that!" Like, the reinforcements are awesome here in the way they have you, train you to work on that every day to work with them.

Participant B07 said that "sitting in on some behavior planning and being able to put my input in from working with that person with a certain behavior" was a skill developed to assist in working with ID individuals who exhibited challenging behaviors and identified "to couple consistency and being positive" as a distinguishing agency quality.

Structural Description of Participant B08

Participant B08 is an administrator who described Agency B's philosophical approach to behavior intervention as a process of getting to know the person first, not the disability. This employee reported interacting with program participants who exhibit challenging behaviors on a daily basis but asserted that defining what the word "behavior" can be difficult. This employee described for the researcher in day to day

language, the escalation/de-escalation process in terms of a scale, with a range of one to

ten and said:

> Um, depending on what your definition of "behavior" is. If it is something as
> simple as mouthing everything because that could be considered a behavior. Um,
> if your definition of a behavior is somebody screaming, yelling, kicking, or biting.
> For me, it's few and far between right now. But I have worked with an individual
> that's done that for the majority of the day. Um, so it really just varies. I've been
> here for a very long time. I work with almost everybody in the building. So
> when somebody begins to exhibit signs I can quickly be proactive and (the
> program participant) not get all the way to level 10 and hopefully stay down
> around three.

Participant B08 experienced Vantage Point the first day on the job spending the

entire day as a program participant. Being in the classroom, using a wheelchair, limiting

one's physical ability by not using one arm, and learning signs and schedule, was

described by this employee who said, "And it opens your eyes to a lot of things. It makes

you realize a lot of things." This employee described the two week training as "a boot

camp." Communication, meetings, and "lots of trainings" follow the "one on one

training with somebody right next to you in the classroom, helping you through

everything, showing you where everything's at. Weekly supervisory meetings, person

centered planning meetings, and behavior meetings include "a team of people that

actually work directly here." This employee identified skills of being observant, open-

minded, patient, and calm as effective tools to assist those who exhibit challenging

behaviors as well as "knowing that I can go to my supervisor and freely talk to them."

Referring to mistakes made when working with individuals who have challenging

behavior, Participant B08 summed it up in this way:

> How can we strategize to help them through so that we can be you know, three
>
> steps ahead? Um, mistakes aren't horrible here. We learn from them, grow from
>
> them. And it really just all about the communication, communication,
>
> communication. The meetings; talk about it. Getting it all out there. Um,
>
> making sure that everybody's on board and everybody knows what's going on so
>
> that we can be on the same page.

Structural Description of Participant B09

Participant B09 is an administrator who described the agency as "a very

proactive, positive philosophy." This employee said what distinguished their agency

from others was "One of the things that definitely sets us apart is that we do not use

restraint. Getting to know the person is the foundation for building a caring relationship.

In this way staff are able to discover preferences and create a learning environment that

reinforces autonomy while avoiding conflict." This employee described the process in

this way:

> Um, we believe in trying to create a positive learning environment for people
>
> where their needs are being met and they're being engaged in things of their own
>
> interests, obviously. The more interested, they want to be engaged. But,
>
> presenting them you know, activities and things to do um, that keep them

engaged. And, getting to know people. The very, the basis of everything we do is the caring relationship. Without that people aren't going to risk, you know, try something new. An, the possibility of failure, you know. So, start with the caring relationship. Um, and then we try to create an environment that's positive, engaging, and fulfilling. You know, it fulfills the needs of the individuals so they don't feel like they have to resort to undesirable behaviors to get their wants, needs met, known, or understood. And to the very best of our ability, and in a very small nutshell, that's what we try to do.

Participant B09 felt supported through the interactive dialogue that occurred during weekly supervisory meetings where, "In a nutshell the expectation is that I will bring the agenda, rather than them just serving me."

Similar to other employees who responded from Agency B, Participant B09 echoed the responses of others who described the weekly, Wednesday afternoon meeting. Issues and concerns are brought to the floor by staff and everyone has the opportunity to offer "suggestions for improvement." "So people are invited to share and we learn from each other. Everybody has something to contribute. You know um, and that is the, a great tool for growth."

Participant B09 described challenging behavior as "undesirable and not safe." This employee interacted with persons who experience challenging behaviors on a daily basis. ABC charts and the MAS (Motivational Assessment Scale) are tools used as part of the behavior change process and "autonomy" and "control" underlies motivation to act out in sometimes undesirable ways. This employee described skills learned including

"patience" and "understanding" and added: "I think the caring. I mean I've learned a lot. You know, I've learned a lot about approaches and how to's and why's. You know, what to do next. And all those tools I've shared with you I've learned."

Orientation consisted of Vantage Point, an experience this participant described as "valuable." Trainings included "Shift Happens" and the APR process, but many times were "impromptu" or took place during staff meetings.

Participant B09 considered their agency as uniquely different from others. "One of the things that definitely sets us apart is that we do not use restraint. Behavior modification techniques help to discover underlying reasons to find out why."

Structural Description of Participant B10

Participant B10 is an administrator who described Agency B's philosophy and approach as "to just treat our individuals with the dignity and respect that any one of us would want. And be given the opportunity to grow and develop in areas of their needs." This employee gave an example of how the agency puts it into practice on a daily basis. Through discovery of a program participant's desire to drive a car, yet understanding that physical limitations would not avail him the opportunity, a variety of options were offered that revealed his desire to go fast. This led to activities of his choice that included horseback riding and skiing.

Participant B10 reported that applying teaching tools and use of consistency in approach helped to get through days described as "stressful," yet after nearly 20 years with the agency, looked forward to returning to work every day. This employee said:

Again, it's clearly something. You need to have a lot of strength, but at the same

time, maybe not. I guess you just need to, to be able to have the desire to watch

people grow and learn. Is really what, you know. If you have that in you, then

you thrive. Being innovative is a huge thing for us. It is one of our unifying

principles.

Professional success was supported through frequent trainings and weekly

supervisories. This employee said that although considered shy, the agency provided a

gentle nudge to learn and grow:

They're just encouraging me to grow which helps me to step out of my box.

Because if I stay comfortable, I'm not going to be the great employee. So they

help me want to shine. They encourage me to shine. Um, they listen to any

concerns that I have.

Like other employees from Agency B, Participant B10 found the Vantage Point

experience to be the most memorable of the initial training sessions. During the first 10

days of training, a seasoned employee models teaching and praise techniques that are

person-specific. Participant B10 explained:

At the beginning it's just skill building and praise. Learning how to give that

praise. So the focal point is just being able to say, one person per minute. In a

specific way of: I love the way you're talking to "x" with such a nice voice. Um,

relationship building, and you know, just understanding the goals. Cause if you

don't understand the goal, then you're probably not teaching them. You're not

understanding the method of teaching. Um, just helping them build that relationship. Encouraging them, you know?

This employee believed the training was consistent with the organization's culture of how to work with their program participants.

Participant B10 reported to interact with individuals who exhibit challenging behaviors on a daily basis, defined the challenge as "me not understanding what the person is expressing" and attributed challenging behaviors as exhibited when a person's needs are not being met. Over time this employee said seeing things from a different perspective and gaining patience is what has changed over time. "Teaching; the praise. Um, caring relationships. I think um, just our overall philosophy of people with disabilities will live personally fulfilling lives. I think that's been the same."

Structural Description of Participant B11

Participant B11 is a direct support staff who defined the agency's culture as one that provided positive reinforcement for the individuals they support as well as for each other. "Not just positive reinforcement that you're using with the individuals that we support, but as well as staff to staff. For us being that role model. Using that within each other, not just the individuals we support." Day to day practices included "basic community living skills" that are considered to be "very person centered…so they can eventually have those goals and dreams."

Participant B11 expressed that employees were supported in similar ways as those they supported. This participant said:

I think it's not just letting, having the individuals grow in their goals and dreams, but as well as the staff. Um, we're all set up to where if you want to go some where's in this agency, you're more than willing and able. Um, through promotions, um, through you know; learning and working at other sites within the agency.

This employee felt supported through the agency's clarity in communication as well as being provided the tools to accomplish success and said:

Well, it goes with communicating effectively. Being very clear of what their expectations are of me. Um, giving me the materials that I need. Um, giving me the will, knowing that I want to learn and grow. Giving me those opportunities. Um, I think they just really like to push ya, push ya; to say, "Here's more. You want to try it or not?" And, ten times out of ten I've, yeah sure, I'll go.

This participant described Vantage Point as part of the introduction to the agency's culture and philosophy. "Um, and to be in a group of folks in a classroom and having that positive reinforcement given to you cause you really don't hear those pieces outside of here." The employee continued:

And yeah, I mean and then when you're reinforcing as a staff member to the folks then to staff team members, you hear individuals reinforce staff members and each other. So it's like contagious; something very contagious that goes on throughout this building which is amazing. Very powerful.

Participant B11 described initial training sessions over the 10 day period that included observation and note taking, relationship building, and the "trainer" modeling

classroom teaching techniques. "And then well, you're doing some more jumping in learning the teaching aspects."

Participant B11 reported to have daily interaction with individuals who exhibited challenging behaviors. This employee felt that for a behavior to be considered challenging, it would have to rise to a higher level than what would be considered usual for the particular person but that included factors such "safety of the individuals plus ourselves." When asked about what causes an ID individual to act out in challenging ways to express themselves, this employee said:

People don't listen. Because a lot of the people just don't get down to their level just to talk to them and listen. I think there's too much of, "You need to do this." Instead of, "what do you want?' Treating them just like any other human being cause nobody wants to be told what to do. They want to know they have choices, they have rights. But, and the right you know, right tone, the right form of communication.

Participant B11 reported becoming "more open minded" when asked how their work has changed since they began working at the agency. "You really are more observant to see different sides of those pieces before and the antecedents and such." What did not change is the use of the "positive, proactive approach."

Participant B11 described the trainings as "a learning process along the way" and referred to learning how to complete ABC charts and MARS as part of the "foundation dignity training." This employee spoke of the 10 day training which included use of videoing staff to examine "group management," reinforcers, and tools used. Review of

ABC charting was a most recent training. This employee believed these tools were in line with the agency's culture of how to work with their program participants. "It's all about being proactive, having that proactive approach. Um, like I said, it's communicating coping skills. Being person centered, having that relationship."

Structural Composite Descriptions

This section presents the synthesis of information derived from the thematic categories of invariant constituents and individual structural descriptions of participants from Agencies A and B in order to generate a structural composite description of the groups as a whole. For the purpose of this study, the "meanings and essences of the experience, representing the group as a whole" required two separate structural composites to clarify responses between the two agencies for theme's one and five (Moustakas, 1994, p. 4). Group composites defined and compared their unique approach to reducing challenging behavior of ID individuals as demonstrated though day to day practice (physical versus nonphysical) interventions and outcomes. The lived experience of the participants was captured in the concluding themes in order to respond to the study's research questions.

Theme 1: Agencies A and B Described Shared Qualities of Positive, Proactive, and Person-Centeredness Even Though One Agency Employed the Use of Physical Interventions and the Other Did Not Use Restraints to Reduce Challenging Behaviors of ID Program Participants in Their Care

Agency A. Agency A employees described their philosophy and approach to behavior intervention as positive, proactive, and person centered. Qualities included

supporting individuals to achieve independence and getting to know program participants as important factors that assisted staff to provide supports to build a structure for successfully achieving their dreams, whether or not a person experienced behavioral challenges. The philosophy was centered on the agency's vision to create an environment where those they support become valued, respected members of their community.

Agency B. Agency B employees reported similar qualities as those of Agency A. They believed in treating each person they support in the same way as those in the larger community. Employees overwhelmingly described the "caring relationship" as a fundamental agency philosophy for creating success in the lives of those they supported. Equally as important was the policy of "no restraint," agency wide.

Theme 2: Both Agencies Practiced What They Considered to be Positive, Engaging Activities That Were Person-Centered and Built Around a Person's Choices

Agency A. Community integration, classrooms comprised of individual with varying cognitive and physical limitations, including some with behavioral challenges, were supported through choice-based activities that were implemented on a daily basis. Getting to know a person's preferences and changing the environment in response to behaviorally challenging events were noted as practiced to build on existing skills of those they supported.

Agency B. Agency B employees echoed similar practices to support their program participants as those of Agency A. Building a repertoire of choice-based activities around a person's preferences and structuring the environment so that a person

could join in another group applied flexibility in their approach to programming. Community-based activities and supporting routines of individuals with behavioral challenges were key components to providing day to day supports.

Theme 3: Participants From Both Agencies Defined Challenging Behavior as Something That is Hard to Identify and Can Lead to Self-injury or Aggressive Behaviors That can Present as Dangerous to the Person or Those in the Immediate Environment

Invariant constituents and individual textural-structural composites from both Agency A and B employees reported strongly affirmed beliefs around what challenging behavior is. Communication difficulties or, not being able to express wants and needs underlined this theme.

Theme 4: Both Agencies Used ABC Charting and Other Tools to Try to Understand What a Person They Supported Was Trying to Communicate

Employees from Agency A and Agency B reported applying similar techniques and tools to identify, plan, and implement behavior change strategies. Documentation of challenging behaviors through the use of ABC charting and Motivational Assessment Scale tools were standard practice to understand what triggers or other irritants might have contributed to challenges identified as a function of the behavior. Staff meetings to discuss and address issues on a contemporaneous basis was viewed as ongoing and necessary to remain flexible in their approach to ameliorate challenges. The behavior support plan was used by both agencies for employee reference of prescribed directives to implement proactive, active, and reactive strategies.

Although documentation reflected the same types of self-injurious and aggressive actions within event reports, Agency A applied the use of physical interventions as a last resort. Agency B did not use physical interventions in all cases reported.

Theme 5: Participants From Each Agency Reported Different Strategies to Promote Professional Success of its Employees

Agency A. Employees from Agency A reported being supported by their agency through experiences that included Shift Happens training and participating in Vantage Point, SCIP training, DSP credentialing for opportunities of advancement and proficiency in the profession, and POM (Personal Outcomes Measures) training. The latter assisted in the development of person centered planning and agency wide initiatives to achieve the agency's mission.

Employees reported they felt unsupported when there were staffing shortages and as a result of insufficient communication practices disseminated from upper administration to lower level, agency employees.

Agency B. Employees from this Agency B felt supported in a variety of ways as well. In-house trainings in behavior support development, weekly supervisories, the ability to attend off-site trainings for professional development throughout the year, and once weekly, full-staff "lobby" meetings were some of the supports reported received by participants from Agency B. Employees also felt supported by the open door policy that was described as staff having the ability to approach higher-ups with concerns and receive immediate support when a situation presents from any supervisor on site.

Quantitative Results

An ex post facto design using archival data from Occurrence Reports and ABC Sheets was used to answer the following research question: What are the differences in self-injurious behavior, physical aggression, and staff response between a program that employs the use of physical interventions and a program that employs the use of nonphysical interventions for ID individuals who exhibit challenging behaviors? Contingency table analyses and a nonparametric comparison of the two independent groups was conducted to answer this research question.

As shown in Table 10, "Hitting Others" was the most common challenging behavior exhibited as reported by agency A, (58.9%) and B, (73.3%), respectively. Agency A reported acts of "Pinching Others" and "Pushing Others"; each of which occurred at a rate of 4.4% as compared to none of these two types of behaviors reported by Agency B.

Table 10

Frequency of Aggressive Behaviors by Agency (*N*=105)

Behavior	Agency A Freq. (%)	Agency B Freq. (%)	Total
Total	90	15	105
Physical Aggression			
Pinching Others	4 (4.4)	0	4 (3.8%)
Spitting at Others	26 (28.9)	1 (6.7)	27 (25.7%)
Biting Others	10 (11.1)	0	10 (9.5%)
Kicking Others	11 (12.2)	2 (13.3)	13 (12.4%)
Hitting Others	53 (58.9)	11 (73.3)	64 (61.0%)
Scratching Others	10 (11.1)	0	10 (9.5%)
Pushing Others	4 (4.4)	0	4 (3.8%)
Pulling Others Hair	10 (11.1)	3 (20.0)	13 (12.4%)
Property Destruction	2 (24.4)	3 (20.0)	25 (23.8%
Self-Injurious Behaviors			
Biting Self	10 (11.1)	0	10 (9.5%)
Scratching Self	4 (4.4)	0	4 (3.8%)
Hitting Self	17 (18.9)	1 (6.7)	18 (17.1%)
Banging Head	4 (4.4)	1 (6.7)	5 (4.8%)
Skin Picking	5 (5.6)	0	5 (4.8%)

Overall there were 170 physically aggressive behaviors and 42 self-injurious behaviors across the 105 events. Tables 11 and 12 present a comparison of these types of behaviors by agency. As shown in Table 11, there was only a 1% difference of physically aggressive behaviors when comparing Agency A (94.4%) to Agency B (93.4%), overall. One to two physically aggressive behaviors were documented in 72.2%

of Agency B's reports; as compared to 86.7% of Agency A's reports. Three to four

physically aggressive behaviors were documented in 22.2% percent of Agency A's

reports, as compared to 6.7% of Agency B's reports.

Table 11

The Frequency of One or More Physically Aggressive Behaviors by Agency (*N*=105)

Physical Aggression		Agency		Total
		Agency A	Agency B	
No Physical Aggression	Count	5	1	6
	Percent	5.6%	6.7%	5.7%
1 Physically Aggressive Behavior	Count	47	9	56
	Percent	52.2%	60.0%	53.3%
2 Physically Aggressive Behaviors	Count	18	4	22
	Percent	20.0%	26.7%	21.0%
3 Physically Aggressive Behaviors	Count	13	1	14
	Percent	14.4%	6.7%	13.3%
4 Physically Aggressive Behaviors	Count	7	0	7
	Percent	7.8%	0.0%	6.7%
Total	Count	90	15	105
	Percent	100.0%	100.0%	100.0%

As seen in Table 12, Agency A's reports of one recorded self-injurious behavior

comprised 26.7 % of cases when compared to 13.3% recorded by Agency B.

Table 12

Frequency of Self-Injurious Behaviors by Agency (*N*=105)

Self-Injurious Behaviors		Agency		Total
		Agency A	Agency B	
No Self-Injurious Behaviors	Count	59	13	72
	Percent	65.6%	86.7%	68.6%
1 Self-Injurious Behavior	Count	24	2	26
	Percent	26.7%	13.3%	24.8%
2 Self-Injurious Behaviors	Count	5	0	5
	Percent	5.6%	0.0%	4.8%
3 Self-Injurious Behaviors	Count	2	0	2
	Percent	2.2%	0.0%	1.9%
Total	Count	90	15	105
	Percent	100.0%	100.0%	100.0%

Overall, there were 148 nonphysical interventions and 173 physical interventions across the 105 events.

Table 13 presents a comparison of type of interventions by agency. Agency A employed the use of one to two nonphysical interventions 72.1% of the time when compared to 53.3% of the time by Agency B. Agency B combined the use of three nonphysical techniques 33.3% percent of the time as opposed to 4.4% of the time by Agency A. Physical interventions were used by staff at Agency A, only. One physical intervention was most commonly applied at 46.5% of the time.

Table 13

Individual Physical & Nonphysical Interventions by Agency (*N*=105)

Physical/Nonphysical	Interventions	Agency A Freq. (%)		Agency B Freq. (%)	Total
Nonphysical Interventions					
	No Intervention	Count	30	1	31
		Percent 33.3%		6.7%	29.5%
	1 Intervention	Count	41	3	44
		Percent 46.5%		20.0%	41.9%
	2 Interventions	Count	14	5	19
		Percent 25.6%		33.3%	18.1%
	3 Interventions	Count	4	5	9
		Percent 4.4%		33.3%	8.6%
	4 Interventions	Count	1	1	2
		Percent 1.1%		6.7%	1.9%
Physical Interventions					
	No Intervention	Count	31	15	46
		Percent 34.4%		100%	43.8%
	1 Intervention	Count	16	0	16
		Percent 17.8%		0.0%	15.2%
	2 Interventions	Count	23	0	23
		Percent 25.6%		0.0%	21.9%
	3 Interventions	Count	15	0	15
		Percent 16.7%		0.0%	14.3%
	4 Interventions	Count	5	0	5
		Percent 5.6%		0.0%	4.8%
	Total	Count	90	15	105
		Percent 100%		100%	100%

Table 14 reports total number of nonphysical interventions used overall between Agency A and Agency B over the six month time frame. Of those, one technique was used 41.9% of the time. A combination of four techniques were used least frequently; (1.9%) of the time.

Table 14

Frequency of Nonphysical Interventions (*N*=105)

# of Interventions	Freq.	%
None	31	29.5
1 Intervention	44	41.9
2 Interventions	19	18.1
3 Interventions	9	8.6
4 Interventions	2	1.9
Total	105	100.0

Table 15 reports total number of physical interventions used overall between Agency A and Agency B over the six month time frame. This data was recorded on Agency A's reports. Of those recorded, challenging behavior(s) ceased using no intervention 43.8% of the time. In 21.9% of cases reported, staff applied two physical interventions in response to an individual's acting out or self-injurious behavior(s).

Table 15

Frequency of Physical Interventions (*N*=105)

# of Interventions	Frequency	%
No Intervention	46	43.8
1 Intervention	16	15.2
2 Interventions	23	21.9
3 Interventions	15	14.3
4 Interventions	5	4.8
Total	105	100.0

Table 16 reports a side by side outcomes comparison between agencies A and B of intervention applied by staff (nonphysical versus physical intervention) and outcome (response to intervention applied). Agency A employed the use of nonphysical interventions 23.3% of the time as compared to Agency B, 80% of the time.

Outcomes following use of physical interventions were reported by Agency A 38.9% of the time and Agency B 0.0% of the time, respectively. In cases where physical interventions were used, the identified behavior(s) continued before de-escalation/cessation 14.4% of the time and 38.9% of challenging behaviors ceased immediately following its use.

Table 16

Outcomes by Agency (N=105)

| Outcomes | | Agency | | |
		Agency A	Agency B	Total
Behavior Ceased with No Intervention Applied	Count	11	3	14
	Percent	12.2%	20.0%	13.3%
Behavior Ceased with Nonphysical Intervention	Count	21	12	33
	Percent	23.3%	80.0%	31.4%
Behavior Ceased with Physical Intervention	Count	35	0	35
	Percent	38.9%	0.0%	33.3%
Behavior Continued Following Application of Physical Intervention Before De-escalating/Ceasing	Count	13	0	13
	Percent	14.4%	0.0%	12.4%
Behavior De-escalated Before Ceasing	Count	10	0	10
	Percent	11.1%	0.0%	9.5%
Total	Count	90	15	105
	Percent	100.0%	100.0%	100.0%

Table 17 reports a side by side comparison of frequency of trigger events by agency. While Agency B reported triggers of Sensory/Tangible, Escape/Avoidance, and Person of ($\eta=3$) each, in 93.9% of cases reported in Agency A, there were no clear trigger events when compared to only 6.1% in agency B.

Table 17

Trigger Event by Agency (*N*=105)

Trigger Event		Agency A	Agency B	Total
	Count	19	3	22
Sensory/Tangible	Percent	86.4%	13.6%	100.0%
	Count	17	3	20
Escape/Avoidance	Percent	85.0%	15.0%	100.0%
	Count	3	4	7
Attention Seeking	Percent	42.9%	57.1%	100.0%
	Count	20	3	23
Person	Percent	87.0%	13.0%	100.0%
	Count	31	2	33
No Clear Trigger	Percent	93.9%	6.1%	100.0%
	Count	90	15	105
Total	Percent	85.7%	14.3%	100.0%

Evidence of Trustworthiness

Qualitative

Several strategies were used to ensure trustworthiness. Internal validity was evidenced through interviews of employees who represented direct support staff as well as lower, middle, and upper administration that triangulated across occupational levels. External validity was evidenced as consistency in the presentation of interview questions was maintained and via the thick descriptions provided by participants in response to the research questions. Credibility was further established via informants who reviewed transcribed data and provided feedback and member checking to confirm findings during

the investigative process. Confirmability was evidenced through researcher reflection

throughout the interview process.

Quantitative

As described earlier, several strategies were employed to make sure the

quantitative data was accurately retrieved and summarized. Permission letters from the

CEOs of both agencies were received, as well as letters of cooperation with instructions

for retrieval of quantitative data. No identifiers were included to ensure anonymity. I

developed a data recording tool which allowed for tracking of number of cases, gender,

target behavior (PA/SIB), type of intervention applied (PI/nonPI), and outcome (response

to intervention). Analysis of data included frequency distributions and visual displays

comparing the two programs. A contingency table analysis measured effectiveness of

interventions applied to ameliorate challenging behaviors in order to provide a summary

analysis and interpretation of results. SPSS version 21.0 was used to compute the

analysis.

Mixed Methods Analysis

Trustworthiness was established through triangulation of qualitative and

quantitative data that compared the rich, thick descriptions of employee experiences with

individual and aggregate documentation of self-injurious and aggressive behaviors and

the consequences (outcomes following type of intervention applied by staff). The

triangulation of results indicated that both agencies believe they are person-centered.

However, without sufficient training of staff through mission and training initiatives,

physical interventions are the "go to" choice as a staff approach to manage challenging

behaviors, which creates greater risk for physical aggression and self-injury in the persons they support. Transferability of the mixed methods analysis is evidenced as it can be carried out in other venues including school and residential settings, as well as at home environments.

Summary

The results of this study reported responses to interview questions that represented both Agency A and Agency B staff. Participants included women and men who worked either in a direct support professional capacity, as well as, lower, middle, and high level administrators.

Open-ended interview questions were structured to elicit responses of participants in order to compare similarities and differences of two, not-for-profit human service agencies that provided day habilitation services to ID adults who exhibited challenging behaviors over a six month period. Frequency of invariant constituents (key responses) were categorized into themes and identified through specific statements made by staff who worked at each agency. Thematic categories included a) distinguishing agency qualities, b) agency philosophy in day to day practice, c) challenging behavior defined, d) behavior intervention strategies, and e) supporting professional success. Participant responses were used, along with individual textural-structural descriptions, to generate composite structural descriptions of Agency A and Agency B.

Data collected from archival records was used to compare the two agencies on the type and frequency of challenging behaviors and how they were responded to. The

results indicate that using nonphysical interventions exclusively assisted in significantly reducing the frequency of both self-injury and aggression over the long term.

Triangulation of qualitative and quantitative data revealed an interesting "picture." It allowed for a clearer understanding of the shared qualities among the two agencies of the beliefs held to positively support program participants at their day habilitation site by developing caring relationships and providing person-centered programming to reduce the likelihood of challenging behaviors from occurring in the first place. It further clarified the understanding of each agency's unique culture through behavior intervention trainings that prompted the application of physical interventions or avoiding its use altogether in response to acting out or self-injurious actions of program participants as part of the de-escalation process. Triangulating the use of archived ABC sheets and Occurrence reports in addition to interviews of staff from different agency positions revealed outcomes in response to type of intervention(s) applied and whether it was effective in reducing these types of challenging behaviors over a defined period of time.

Chapter 5 provides an overview of the purpose, nature, and rationale of the study along with a summary and interpretation of key findings. This is followed by sections that include limitations of the study, recommendations for further research, and implications for positive social change at the individual, organizational, and societal level. The conclusion section rounds out the chapter which illuminates the essence of the study.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this concurrent, embedded mixed-method study design was to compare a program that used nonphysical interventions with one that used physical interventions and examined the differences in frequency of aggression and self-injurious behavior in ID service users. This study also examined the differences between the two programs in staff training and organizational context, in order to better understand how a program's implementation of treatment approaches impacted ID program participants and whether each agency's unique philosophy as demonstrated in day to day practice helped to reduce challenging behaviors over a six-month period.

A mixed methods study illuminated shared qualities and differences of agency staff from AHRC and Delarc as demonstrated by the unique understanding of their agency's philosophy and culture in day to day practice. The results revealed the importance of developing positive, caring relationships which were fundamental to both agencies. Use of non-PIs exclusively revealed a significantly fewer number of reports generated over the same, six month time frame.

Qualitative

I used open-ended interviews of staff from Agencies A and B (AHRC and Delarc, respectively) which elicited responses in order to compare similarities and differences of two not-for-profit human service agencies that provided day habilitation services to ID adults, some of whom exhibited challenging behaviors. Thematic categories were developed from summaries of transcribed interviews of participants in order to answer

the research question that investigated the differences in a) agency philosophy, b)

intervention strategy, and 3) DSP training between an agency that used nonphysical

interventions and one that used physical interventions.

Five thematic categories emerged from the interviews: distinguishing agency

qualities, agency philosophy in day-to-day practice, definitions of challenging behavior,

behavior intervention strategies, and professional success supports. From these, I

generated individual textural-structural descriptions and composite descriptions of

Agency A and B within and across agency comparisons.

Five themes emerged from the composite descriptions. The first theme to emerge

(agency qualities) was that Agencies A and B possessed shared qualities of positive,

proactive, and person-centeredness even though one agency employed the use of physical

interventions and the other did not use physical interventions to reduce challenging

behaviors of ID program participants in their care. The second theme to emerge (agency

philosophy) was that both agencies practiced what they considered to be positive,

engaging activities that were described as person centered and built around a person's

choices.

Theme three (definitions of challenging behavior) revealed that participants from

both agencies defined challenging behavior as something that is hard to identify and can

lead to self-injury or aggressive actions. Many participants reported that challenging

behavior can present as dangerous to the person or those in their immediate environment.

Theme four (behavior intervention strategies) emerged to reveal that both agencies used

ABC charting and other tools to try to understand what a person they supported was

trying to communicate. Theme five (professional success supports) emerged as participants from each agency reported different types of strategies to promote professional success of staff.

Quantitative

I used descriptive analyses to compare frequencies of physical aggression and self-injurious behavior, type of intervention applied, and outcomes, revealing several key findings. Of the 105 reports accessed over the six-month time frame, 90 (85.71%) were generated from Agency A and 15 (14.29%) were generated from Agency B. Of these, nine men and six women exhibited challenging behaviors, overall. Four program participants from Agency A (82 out of 90) and four program participants from Agency B (12 out of 15) initiated the reports. Due to the unevenness between those reported between agencies, descriptive rather than inferential statistics were applied.

Of the 90 reports generated within Agency A, approximately one-third ($n=31$) of those indicated no clear trigger event in comparison to only two of the 15 reports generated from Agency B. The remaining triggers within each agency were almost equally distributed with the exception of attention seeking behavior ($n=3$) occurring at a significantly lower rate to other triggers noted within Agency A. Conversely, the attention-seeking trigger was reported as the most common within Agency B (four out of 15) reports. Physical aggression ("Hitting Others" was the most common challenging behavior ($n=170$) compared to self-injury ($n=42$) of the 105 events combined. Surprisingly, there was only a 1% difference in physical aggression noted when comparing the two agencies, proportionately. Similarly, Agency A and Agency B

reported one or two physically aggressive behaviors as the most frequently exhibited within one event. There was an approximate 10% margin of difference of self-injurious events noted between the two agencies.

Overall, there were 148 nonphysical interventions and 173 physical interventions used across the 105 events. While not surprising that all of the physical interventions were generated from Agency A only, an unexpected finding was that within Agency A, more than one third of the 90 events reported indicated that challenging behavior(s) ceased 43.8% of the time without any physical or nonphysical intervention applied.

A summary comparison of intervention outcomes within and across agencies indicated that 13.3% of challenging behaviors ceased with no intervention applied among the two agencies combined. While Agency B reports indicated cessation of challenging behavior with no intervention applied in 20% of the 15 cases, 80% of the time cessation occurred immediately following the use of a nonphysical intervention. Surprisingly, of the reports generated from Agency A, almost one quarter of challenging behaviors (23.3%) ceased following the use of nonphysical interventions or continued before de-escalation/ceasing 14.4% of the time.

A mixed methods study is one study that joins two separate approaches. This study provided a descriptive analysis that looked at operationally similar self-injurious and aggressive actions of ID individuals who attended contextually similar, day habilitation programs. Quantitative analyses comparing differences in approach to intervention and ID program participant response to intervention were enhanced through the use of qualitative analyses via interviews of administrative and direct support

employees. It compared similarities and differences in agency culture through each agency's unique approach to behavior intervention (physical versus nonphysical) strategies. Taken together, the results of this study suggest that the role of agency culture, its mission of person-centeredness, and training of staff play a significant role in the type of behavior intervention approach used to ameliorate challenging behaviors of ID service users. It further suggests that using nonphysical interventions exclusively may reduce the type and frequency of challenging behaviors over time.

Interpretation of Findings

This study compared two human service agency's philosophy and intervention strategies and outcomes, through training and application of behavior intervention practices. One agency used physical interventions to reduce challenging behaviors of ID individuals and the other practiced a "no restraint" policy. Participants from both agencies described their own philosophy as one that was proactive, positive, and person-centered in their approach. While Agency A described learning about and getting to know the persons they supported, Agency B defined it as developing a caring relationship. The essence of both agencies as expressed through interviews of participants however, suggest the importance of building relationships and modeling appropriate social interaction and behaviors in order to better understand and respond to persons who exhibited challenging behaviors. This approach was supported by the study's use of Bandura's (2007) theory of behavior as its theoretical framework, wherein modeling of behavior over time within the person's natural environment is seen as more likely to produce behavior change. This approach to intervention appeared effective in

reducing frequency of challenging behavior, compared to behavior management practices

of applying reinforcement strategies and consequences in the absence of employing tools

to understand why a particular behavior occurs.

Clearly the role of social learning was evidenced through the responses to

interview questions of participants from both agencies included in this study. However,

the role of Applied Behavior Analysis (ABA) cannot be negated. This was evidenced by

employing the theoretical model of producing a replacement behavior through the use of

reinforcers and consequences (positive or negative) as evidenced via behavior

intervention practices used by both agencies in this study. Agencies A and B applied

primary and secondary reinforcers to elicit a particular response and consequences (e.g.,

physical restraint and/or removal of preferred reinforcers). The findings of this study

suggest, however, that both theoretical frames are effective tools when incorporated into

the behavior change process in this setting. Efforts to use nonphysical interventions

exclusively to promote reduced aggressive and self-injurious behaviors seemed to be

reflected by the small number of reports (*n*=15) that were generated by seven program

participants who attended Agency B versus the higher number of reports (*n*=90)

generated by eight program participants who attended Agency A.

This study's findings also are aligned with previous findings that effective

communication between all staff levels promotes a cohesive mindset and consistent

approach to intervention practices (Finlay, Antaki, & Walton, 2008; Seuss, 2000; Baker

& Bissmire, 2000). The findings further suggest that even though one of the agencies

included the use of physical interventions, employees from this agency expressed the

preference to avoid its use if at all possible, with the exception of intervening only during a dangerous, presenting event.

The voices of Agency B participants are also consistent with the literature describing the importance of cohesive connectedness via consistent training in an intervention approach (Agbe'nyiga, 2011; Bisconer, Green, & Mallon-Czajka, 2006; Deveau & McDonnell, 2009; Singh et al., 2009). Agency A's expansion of the CQL training initiative suggested movement in a similar direction; however, poor communication practices and inconsistencies in Agency A suggested the need for improvement in this area. Terry, Hussain, and Nelson (2011) found that upper level management need be accessible, consistent, and transparent in communication during a change process.

Limitations of the Study

Because the research sites were chosen out of convenience and one of the two agencies defined themselves as "restraint free", generalizability was limited to the two sites that participated in the study. Transferability, although limited, was enhanced through the detailed presentation of each agency's philosophy, staff trainings, definition of challenging behavior, and approach to intervention and their outcomes through documentation practices and staff response to interview questions. The interviews, although relatively brief, provided rich descriptions of each participant's understanding of their agency's unique approach to positive behavior change in day to day practice. I attempted to describe the agencies and the research procedures so as to be consistent with accepted terminology and transparent with respect to the details provided.

I acted as the sole interviewer and analyst of the qualitative study. The limitations of the qualitative study regarding credibility and rigor were enhanced through the use of audit trails, transcribed tapes, member checking, peer review, and in maintaining consistency in questioning. However, rigor could be improved through the use of a co-analyst.

The limitations of the quantitative research was primarily a function of (1) the small number of cases (program participants who exhibited challenging behaviors) relative to the number of reports generated; and (2) the large discrepancy in the number of cases per agency. If there were more incidents reported from the nonphysical intervention agency, then inferential statistics would have been viable. If the study time frame involved collecting a year's worth of data, perhaps a more representative picture of these data could have been presented.

The use of mixed method research (triangulation) facilitated the comparison of two agencies that enhanced credibility of the data (Creswell, 2003; Yin, 2009). Incorporating qualitative data (interviews of employees) and quantitative data extracted from archived Occurrence Reports and ABC Sheets allowed me to compare and contrast each agency's culture and the type of intervention used to reduce challenging behaviors of the ID person's they supported over a pre-defined period of time.

Using a mixed methods approach strengthened the study as the results provided a rich and complex portrait of how organizational mission, culture, training, and implementation come together in determining the day-to-day practices of staff. I was both surprised and pleased to learn of the similarities in philosophy across the staff of the

two agencies. Further, the results of this small study suggest how far care for this population has come from the Willowbrook days. The mixed methods approach also revealed quite clearly how organizational training and culture is implemented in daily practices. While both agencies are committed to person-centered, positive care, those who worked in the agency that used nonphysical interventions exclusively "saw" fewer cases; and had to intervene on fewer occasions. This was demonstrated by the significantly small number of reports generated by the nonphysical intervention agency (n=15) compared to the physical intervention agency (n=90). Training in the use of physical interventions versus nonphysical interventions was illuminated via interviews of each agency's employees.

Recommendations

This mixed methods study triangulated the use of archival data and open-ended interviews of direct support and administrative staff to examine how culture, training, and the management of challenging behaviors of intellectually disabled program participants was experienced. How employees felt supported professionally through communication, training, and perceived level of connection to the behavior change process was demonstrated through the "cultural values" of each agency's day to day practice carried out in response to the type of system it employed (Stewart, 2002; Jaskyte, 2010; Richard, McMillan-Capehart, Bhuian, & Taylor, 2009).

The literature asserted the importance of tracking of data for review, oversight, and modification of behavior intervention strategies to reduce restraint practices (Hawkins et al., 2005). Considering the descriptive analysis of this mixed method study,

I recommend further research to compare time limited use of physical interventions incorporated into the behavior support plan as a pre-test measure, followed by training in specific nonphysical intervention practices and concurrent staff directives that would require a no restraint practice incorporated into the behavior support plan as a post-test to determine whether challenging behavior diminishes or ceases over a predetermined period of time.

To enhance transferability, it is recommended that this type of mixed method study be conducted in residential settings. It is also recommended to lengthen the data gathering period so that analysis over an extended time frame would afford the possibility of tracking approach to intervention and outcome measures on both a case by case basis as well as group outcomes (agency comparison) in order to increase the possibility of carrying out inferential statistical analyses.

Finally, a survey research design to ascertain number of nonprofit, human service agencies that serve the ID population across the United States would likely glean information regarding which agencies use physical interventions and which have a policy of no restraint in place to establish a baseline for further research. A study of this kind would provide more epidemiological evidence of behavior intervention practices in response to guidelines established following the period of deinstitutionalization (e.g., SCIP).

Implications

The results of this mixed methods study have the potential to affect positive social change on several levels. From an individual perspective, change of mindset around how

a person perceives challenging behaviors would influence their interactions and response to challenges when a situation presents. Initiating and developing positive relationships with ID persons would assist in creating trust and openness in a person supported to try something new when offered so that alternate behaviors can replace what some may perceive as maladaptive (challenging). Clearly, the study suggests that training and organizational support would contribute to the well-being of persons receiving support.

Implications for positive social change on an organizational level include to present the results of these studies to professionals working with the ID population in order to encourage change in agency structure, culture, and staff identity. Changes in the application of positive behavioral supports through staff development of skillsets would facilitate a movement away from the longstanding, Skinnerian models of management towards more social learning approaches to behavior change as posited by Bandura. A social learning framework would meld reinforcement strategies with relationship building, trust, and learning through modeling of behavior within the context of the person's natural environment as the social learning theory suggests.

Lastly, I plan on presenting the results of this study to nonprofit service providers and NYSACRA (New York State Association of Community and Residential Agencies) as well as to state level policy makers in OPWDD (Office of Persons with Developmental Disabilities). These agencies have the decision-making power to revise existing, manualized behavior intervention protocols and trainings of staff who implement them.

Conclusions

Every interviewee expressed sincerity, caring, and concern for the program participants in their care. Study participants from both agencies expressed the importance of developing good relationships and in providing an engaging program environment that incorporated individual preferences into activities that were geared towards building upon a person's strengths as opposed to their limitations or behavioral challenges. Staff from both agencies defined challenging behavior in strikingly similar ways. Communication i.e., the limits to an ID person's ability to express wants or needs, was viewed as the overarching reason that prompted reports of incidents of self-injury or aggressive actions. Most compelling, however, was the revelation of staff representing both agencies that the real challenge lies not necessarily within the ID person, but within the staff themselves. There was consensus among study participants that not knowing why a particular challenging behavior was exhibited supported the view that getting to know a person and their unique abilities and challenges, was the foundation for the development of person-centered behavior support plans to ameliorate self-injury and aggression of those they supported.

Moreover, employees from both the SCIP agency and Shift Happens agency participated in positive behavioral support trainings. Applied Behavioral Analysis was a core tenet of each agency's support plan development; one that incorporated the use of functional analysis tools such as ABC Charts and other assessments as part of the discovery process. Employees from both agencies participated in the development, implementation, and revision process as well.

Although Agency A and Agency B day habilitation sites were descriptively similar, both contextually as well as in the qualities of staff they employed, there was a distinct difference in staff response to challenging behavior. While the SCIP trained agency used physical interventions, the Shift Happens trained agency did not.

The implications of making the choice to apply physical interventions or avoid it altogether is monumental. This study demonstrated that while staff who used physical interventions think like staff who used nonphysical interventions, a marked difference was that within one organizational context it was viewed as permissible, but in another organizational context, it was not. The profound difference, as demonstrated through the results of this study, is that given the same period of time, given both circumstances, the nonphysical intervention agency had significantly fewer occurrences (reports) than that of the physical intervention agency.

What is important is the differences in organizational culture, considering all the shared characteristics among the two agencies. The difference in the type of training may have influenced the type of staff response to challenging behavior. While both agencies included nonphysical interventions as part of the strategy and support of ID persons who exhibited self-injurious or aggressive actions, the cultural belief of staff trained in the use of SCIP was that the use of physical interventions was required to facilitate cessation of these types of behaviors.

This study demonstrated through outcome measures and the distinct differences in frequency of challenging behaviors over the same period of time, that a culture that actively supports the exclusive use of nonphysical interventions can actually promote

positive behavior change. The evidence suggests that incorporating restraint-free,

positive behavioral supports does work and can be used in most settings. And, most

importantly, more institutions can begin to consider shifting away from using physical

interventions towards a restraint-free approach because ultimately it is what staff most

desires.

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Appendix A: Quantitative Data Collection Sheet

Date	Gender	Pinching C	Spitting	Hitting/Pu	Scratching	Pushing O	Hair Pullir	Property Destructior	Cutting Se	Schratchir	Hitting Se	Head Banç	Pinching S	Pulling Ov	Skin Pickir	Tricholom	Tricholomania

Appendix B: Invitation to Participate, Informed Consent, Qualitative Interviews

INVITATION SEEKING VOLUNTEERS FOR RESEARCH STUDY

Invitation to Participate

You are invited to participate on a voluntary basis in a research study about agency philosophy and approach to behavioral interventions; its application of "type" of intervention, and response to intervention applied (how it impacts self-injurious and aggressive behavior) of intellectually disabled individuals within the context of a day habilitation program. The study will include interviews of agency staff to gain an understanding of views, attitudes, professional development initiatives, and how each agency's vision is realized through its staff actions.

Frances Mascolo-Glosser is a doctoral student at Walden University. She is also a Behavior Intervention Specialist employed at one of the participating agencies but does not act in a direct support capacity nor does she provide direct supervision to agency

employees. This research is being conducted by Ms. Mascolo-Glosser as part of her dissertation study.

Background Information:

The purpose of this study is to reveal emerging themes and patterns across two different human service agencies by comparing how its unique philosophy and approach to behavior intervention strategies is carried out through the various roles within the respective agency contexts. It emphasizes how staff mindset is influenced by their agency's vision for potential growth and independence. The researcher is interested in gaining a broader understanding of staffs' role in promoting adaptive behavior change of the population it serves, particularly those who struggle with challenging behaviors.

Criterion to Participate:
1. Interested staff must me employed by the agency for a minimum of three years and,
2. have experience working with intellectually disabled program participants who struggle with challenging behaviors.

Procedures:

The procedures for agency staff who agree to participate in the research study include the following:
1. Volunteers will participate in one semi-structured interview that will take approximately one hour of their time. Date and location will be determined by the researcher and study participant to provide the utmost confidentiality and level of comfort to accommodate personal preferences. Follow-up questions may be asked of each participant to assist the researcher in response clarification.
2. Participants will receive the researcher's telephone and email address should further clarification be needed as themes/patterns begin to emerge.
3. Interviews will be tape recorded, transcribed, and coded at a later date.
4. All documents will be safeguarded in a locked file cabinet for a period of seven years at which time all study documents will be destroyed. The researcher and one gatekeeper from the respective agencies will have a key to access the locked cabinet.

Voluntary Nature of the Study:
Your participation in this study is completely voluntary. Should you participate and decide at a later date to withdraw from the study, you may do so at any time without hesitation. This will not have any negative impact on your position within the agency. Within 24 hours, all documents compiled up to and including date of withdrawal will be destroyed.

Confidentiality:
Any information you provide will be kept strictly confidential. No personal or distinguishable identifiers will be included. Categorical identifiers will be coded to protect anonymity and include the following: a) gender, b) age, c) employed at agency "A" or agency "B" (circle one), d) # of years employed at agency "A" or "B", e) agency position/title, and f) daily/weekly/monthly or "occasional" interaction with program participants(circle one).

Please contact Frances Mascolo-Glosser if you are interested in participating in this study or to receive clarification regarding the interview process. The researcher understands that phone or email clarification requests will in no way imply consent to participate in the proposed study unless otherwise specified by the respondent. The interested party (should they agree) will receive an informed consent form requiring signatories of the researcher and participant as part of the documentation requirements in advance of the interview process.

Ms. Mascolo-Glosser can be reached during normal business hours at: (845) 343-0871, extension 4345 or by email at: frances.mascolo-glosser@orangeahrc.org.

CONSENT FORM

You are invited to take part in a research study about agency philosophy, approach to

behavioral interventions and level of effectiveness in reducing self-injurious and aggressive

behavior of intellectually disabled individuals. The researcher is inviting agency staff who have

been employed within the agency for a minimum of three years and that have experience

working with program participants who struggle with challenging behaviors to participate in the

study. This form is part of a process called "informed consent" to allow you to understand this

study before deciding whether to take part.

This study is being conducted by a researcher named Frances Mascolo-Glosser who is a doctoral
student at Walden University. You may already know the researcher as a Behavior Intervention
Specialist but this study is separate from that role.

Background Information:
The purpose of this study is to reveal emerging themes and patterns across two different human
service agencies by comparing how its unique philosophy and approach to behavior intervention
is carried out through the various roles within the respective agency contexts. It emphasizes
how staff mindset is influenced by their agency's vision to realize growth potential and
independence of the intellectually disabled individuals that the agency supports. The researcher
is interested in gaining a broader understanding of staff roles to promote adaptive behavior
within this fragile population, particularly those who struggle with challenging behaviors.

Procedures:
If you agree to be in this study, you will be asked to:

5. participate in one semi-structured interview session that will take approximately one
    hour of your time. Date and location will be determined by the researcher and study
    participant to provide the utmost confidentiality and level of comfort so as to
    accommodate personal preferences. Follow-up questions may be asked of each
    participant to assist the researcher in response clarification.
6. communicate with the researcher by telephone or in person should further clarification
    be needed as themes/patterns begin to emerge. This may require a brief, second
    interview session at the participant's convenience and location to complete the
    interview process.
7. acknowledge that interviews will be tape recorded, transcribed, and coded at a later
    date.

Here are some sample questions:
1. Please describe your earliest memory of an interaction you had with someone who lives with an intellectually disability.
2. Describe for me your understanding of society's beliefs about the intellectually disabled when you were growing up.
   - Has it changed over time? If so, please describe those changes as you understand it to be.

Voluntary Nature of the Study:
This study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. No one at AHRC or Delarc will treat you differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind later. You may stop at any time.

Risks and Benefits of Being in the Study:
Being in this type of study involves some risk of the minor discomforts that can be encountered in daily life, such as fatigue or becoming emotional. Being in this study would not pose risk to your safety or wellbeing. The potential benefits of your participation may impact the lives of those you support at your agency through the development and implementation of action plans based upon some of the responses you provide to the researcher. Additionally, the results of this study may impact you as an employee through the facilitation of new policies, procedures, and ongoing training initiatives with the potential for professional growth within the agency's structure.

Payment:
Participation in this study is completely voluntary and no payment, thank you gifts, or reimbursements of any kind will be offered, before or at the conclusion of the interview process.

Privacy:
Any information you provide will be kept confidential. The researcher will not use your personal information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in the study reports. Data will be kept secure by storing audio and other completed documents in a locked file cabinet. Computer based analysis will be stored within encrypted files that are password protected. Data will be kept for a period of at least 5 years, as required by the university.**Contacts and Questions:**

You may ask any questions you have now. Or if you have questions later, you may contact the researcher via telephone during normal business hours at (845) 343-0871, extension 4345 or any time by email at: frances.mascolo-glosser@orangeahrc.org. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 612-312-1210. Walden University's approval number for this study is **09-25-14-0072920** and it expires on **September 25, 2015.**

The researcher will give you a copy of this form to keep.

Statement of Consent:

I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By signing below, I understand that I am agreeing to the terms described above.

Printed Name of Participant

Date of consent

_____

Participant's Signature

_____

Researcher's Signature

_____

Appendix C: Letters of Cooperation

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August 15, 2014

Dear Frances Mascolo-Glosser,

Based on my review of your research proposal summary, I give permission for you to conduct the study entitled "Reducing Challenging Behaviors in Intellectually Disabled Individuals: A Comparison of Organizational Culture, Treatment Approach, and Well-Being of Persons Supported" within AHRC. As part of this study, I authorize you to submit photocopied invitation letters to the Newburgh Administration Center (NAC) and John McManus Day Habilitation site (MAC). The invitation letter will be sent to the staff's agency email or internal mailbox. Criterion to participate must be clearly defined within the contents of the invitation letter.

You will also be granted access on a pre-authorized date or dates, if needed, to extract archived data provided to you by the Day Habilitation site's program director during a predetermined data set. The agreed upon time frame to extract data begins on January 1, 2014 through June 30, 2014; from Occurrence/Incident reports and ABC sheets only.

You will also provide a summary of the interview to each participant to review for accuracy. And, the participant will have the opportunity to revise or remove content at that time.

Individuals' participation will be voluntary and at their own discretion.

We understand that the organization's responsibilities include: providing access to private areas such as the conference room, staffs' break room, or other vacant room at the sites to conduct interviews and extract archived data. At the agency's discretion, the gatekeeper may ask that you relocate to a different area within the building site during the data collection and interview process as the need arises. You further understand the interview portion of the proposed study is confidential; therefore no supervision activities will be conducted as described within the consent and confidentiality agreements. We reserve the right to withdraw from the study at any time if our circumstances change.

I confirm that I am authorized to approve research in this setting.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the research team without permission from the Walden University IRB.

I understand that a summary of the final dissertation will be provided after approval by Walden University.

Sincerely,

Christopher Fortune
christopher.fortune@orangeahrc.org

NYSARC   *"Chapter of NYSARC Inc., a not for profit tax exempt organization serving individuals with developmental disabilities and their families"*

DATA USE AGREEMENT

This Data Use Agreement ("Agreement between AHRC/Delarc and the researcher") is effective beginning January 1, 2011 and ends March 30, 2011, is entered into by and between Frances Mascolo-Glosser and AHRC/Delarc. The purpose of this Agreement is to provide Data Recipient with access to a Limited Data Set ("LDS") for use in research in accord with the HIPAA and FERPA Regulations.

1. Definitions. Unless otherwise specified in this Agreement, all capitalized terms used in this Agreement not otherwise defined have the meaning established for purposes of the "HIPAA Regulations" codified at Title 45 parts 160 through 164 of the United States Code of Federal Regulations, as amended from time to time.

2. Preparation of the LDS. Data Provider shall prepare and furnish to Data Recipient a LDS in accord with any applicable HIPAA or FERPA Regulations

3. Data Fields in the LDS. No direct identifiers such as names may be included in the Limited Data Set (LDS). In preparing the LDS, Data Provider shall include the **data fields specified as follows**, which are the minimum necessary to accomplish the research: ABC Sheets and Occurrence/Incident Reports.

4. Responsibilities of Data Recipient. Data Recipient agrees to:

    a.   Use or disclose the LDS only as permitted by this Agreement or as required by law;

    b.   Use appropriate safeguards to prevent use or disclosure of the LDS other than as permitted by this Agreement or required by law;

    c.   Report to Data Provider any use or disclosure of the LDS of which it becomes aware that is not permitted by this Agreement or required by law;

    d.   Require any of its subcontractors or agents that receive or have access to the LDS to agree to the same restrictions and conditions on the use and/or disclosure of the LDS that apply to Data Recipient under this Agreement; and

    e.   Not use the information in the LDS to identify or contact the individuals who are data subjects.

5. Permitted Uses and Disclosures of the LDS. Data Recipient may use and/or disclose the LDS for its Research activities only.

6. Term and Termination.

    a.   Term. The term of this Agreement shall commence as of the Effective Date and shall continue for so long as Data Recipient retains the LDS, unless sooner terminated as set forth in this Agreement.

    b.   Termination by Data Recipient. Data Recipient may terminate this agreement at any time by notifying the Data Provider and returning or destroying the LDS.

    c.   Termination by Data Provider. Data Provider may terminate this agreement at any time by providing thirty (30) days prior written notice to Data Recipient.

    d.   For Breach. Data Provider shall provide written notice to Data Recipient within ten (10) days of any determination that Data Recipient has breached a material term of this Agreement. Data Provider shall afford Data Recipient an opportunity to cure said alleged material breach upon mutually agreeable terms. Failure to agree on mutually agreeable terms for cure within thirty (30) days shall be grounds for the immediate termination of this Agreement by Data Provider.

    e.   Effect of Termination. Sections 1, 4, 5, 6(e) and 7 of this Agreement shall survive any termination of this Agreement under subsections c or d.

7. Miscellaneous.

    a.   Change in Law. The parties agree to negotiate in good faith to amend this Agreement to comport with changes in federal law that materially alter either or both parties' obligations under this Agreement. Provided however, that if the parties are unable to agree to mutually acceptable amendment(s) by the compliance date of the change in applicable law or regulations, either Party may terminate this Agreement as provided in section 6.

    b.   Construction of Terms. The terms of this Agreement shall be construed to give effect to applicable federal interpretative guidance regarding the HIPAA Regulations.

    c.   No Third Party Beneficiaries. Nothing in this Agreement shall confer upon any person other than the parties and their respective successors or assigns, any rights, remedies, obligations, or liabilities whatsoever.

d. <u>Counterparts.</u> This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

e. <u>Headings.</u> The headings and other captions in this Agreement are for convenience and reference only and shall not be used in interpreting, construing or enforcing any of the provisions of this Agreement.

IN WITNESS WHEREOF, each of the undersigned has caused this Agreement to be duly executed in its name and on its behalf.

DATA PROVIDER   **DATA RECIPIENT**

Signed: _____   Signed: _____

Print Name: _____   Print Name: _____

Print Title: _____   Print Title: _____