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SELF-EVALUATION WITH AND WITHOUT EXTERNAL FEEDBACK TO INCREASE ROOM CLEANING SKILLS IN STUDENTS WITH MILD INTELLECTUAL DISABILITIES OR BEHAVIOR DISORDERS

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SELF-EVALUATION WITH AND WITHOUT EXTERNAL FEEDBACK TO
INCREASE ROOM CLEANING SKILLS IN STUDENTS WITH MILD
INTELLECTUAL DISABILITIES OR BEHAVIOR DISORDERS

THESIS

A thesis submitted in partial fulfillment of the
requirements for the degree of Master of Science in the
College of Education at the University of Kentucky

By

Allison Smith Varisco

Lexington, Kentucky

Director: Dr. Belva Collins, Professor of Special Education

Lexington, Kentucky

2014

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ABSTRACT OF THESIS

SELF-EVALUATION WITH AND WITHOUT EXTERNAL FEEDBACK TO INCREASE ROOM CLEANING SKILLS IN STUDENTS WITH MILD INTELLECTUAL DISABILITIES OR BEHAVIOR DISORDERS

As students with disabilities age out of school-age resources, the need for self-evaluative skills in work tasks becomes more important. This study compared self-evaluation with reinforcement and self-evaluation with reinforcement plus external evaluation when completing room cleaning skills. The younger students did not demonstrate the ability to self-evaluate without external evaluation. Both conditions were effective when evaluating the older group of students. The author proposes additional research in looking at self-evaluative skills for specific age groups and conditions.

KEYWORDS: Self-evaluation, External Feedback, Reinforcement, Mild Intellectual Disabilities, Room Cleaning

Allison Smith Varisco
April 10, 2014

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INTELLECTUAL DISABILITIES OR BEHAVIOR DISORDERS

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April 10, 2014

Dedication

For Riley and Reece, may you always follow your dreams.

For Rusty, the rock of our family, thank you for always loving me
and pushing me to follow my dreams.

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Self-evaluation with and without External Feedback to Increase Room Cleaning Skills in
Students with Mild Intellectual Disabilities or Behavior Disorders

CHAPTER 1: INTRODUCTION

This research study focused on self-evaluating accuracy or compliance in completing room cleaning skills. As students with disabilities age out of school-age resources, the need for self-evaluative skills in work tasks becomes more important. This study compared self-evaluation with reinforcement and self-evaluation with reinforcement plus external evaluation when completing room-cleaning skills.

Data show that most people with disabilities, if employed, are working in the janitorial/cleaning field (Moran, McDermott, & Butkus, 2001). People with disabilities, when presented with a chained task, can acquire, generalize, and maintain skills with many instructional methods.

Roffman (2005) published a list of tips to use when teaching housekeeping skills to teenagers with disabilities. Roffman suggested thinking out loud when completing household tasks. Thinking out loud allows the individual to hear the steps to completion while seeing the task completed. In essence, thinking out loud could be viewed as evaluating as you clean. This technique provides the child with a verbal and physical model.

All people, regardless of disability, need basic housekeeping skills, such as laundry skills, to function in everyday life. These employment data reinforce the need to embed functional skills into teaching curricula (Moran, McDermott, & Butkus, 2001). Housekeeping skills should be taught using a variety of instructional procedures and a variety of people. The instructors should focus on acquisition and generalization of skills

as a means to enhance skill retention. Furthermore, skill retention could lead to employment and job retention.

Review of Literature

In an early study, Cuvo, Leaf and Borakove (1978) used a prompt hierarchy to teach adolescents with disabilities how to clean a bathroom. Six students participated in the study. Their ages ranged from 13-15 years. All participants were ambulatory, did not have sensory or motor impairments, and did not have behavior problems. The researchers videotaped the janitor cleaning the restroom. The footage was shown to graduate students who analyzed the restroom job into six subtasks: (a) cleaning the mirror, (b) cleaning the sink, (c) cleaning the urinal, (d) cleaning the toilet, (e) sweeping the floor/emptying the garbage, and (f) mopping the floor. The graduate students created a task analysis for each subtask. The researchers noted that, while the task analysis was in a specific order, there were many steps that could be completed in a functional order. The researchers collected baseline and probe data and utilized the school's janitor to supervise maintenance procedures. Data regarding generalization were collected throughout. The data revealed that none of the participants generalized the task until acquisition was met on the subtasks.

Other studies reviewed used similar means to teach housekeeping skills to people with disabilities. Cuvo, Jacobi, and Sipko (1981) used the system of least prompts to teach 5 young adults with mild to moderate disabilities laundry skills. Their ages ranged from 19-21 years. All participants exhibited the following prerequisite skills: (a) no major physical or motor disabilities, (b) eye contact and a 30-min attention span, (c) ability to imitate the tasks, (d) accurate response to verbal commands, and (e) reading and verbal

skills. The researchers developed a task analysis by observing school staff and adults in the community. The researcher then performed the task in the training environment. The laundry task was broken into subtasks and categorized into specific and functional orders. The tasks denoted as specific had to occur in that specific order. The remaining tasks could be completed in any order as long as they were completed. The participants were probed on acquisition and maintenance of the laundry task. All participants reached criterion on acquisition and maintenance. The researchers did not collect data pertaining to generalization, but did note that students acquiring one subtask did not generalize the skills to the next subtask. These findings support the results from the Cuvo et al. (1978) study. The researchers suggested that future studies utilize a range of materials, garments and machines to promote generalization (Cuvo et al., 1981).

Smith, Collins, Schuster, and Kleinert (1999) used the system of least prompts procedure with multiple exemplars to teach adolescents with moderate/ severe disabilities how to clean tables. Along with table cleaning instruction, the teacher included non-target information. The non-target information focused on preparing cleaning materials and putting the materials away. Four students participated in the study. Their ages ranged from 16-18 years. All participants exhibited the ability to acquire chained tasks through the system of least prompts instructional method. The researchers collected data on acquisition, generalization and the acquisition of non-target instructive feedback. The researchers found that the system of least prompts was effective when teaching students to clean tables. Furthermore, all participants generalized the task as evidenced by their ability to clean tables of all shapes, sizes, and colors in three different locations. The data regarding acquisition of non-target information showed that all participants acquired a

high percentage by observing others completing tasks. Some suggestions for future research included teaching washing/drying in sequence and comparing the system of least prompts to other instructional methods.

Taylor, Collins, Schuster, and Kleinert (2002) used the system of least prompts procedure to teach laundry skills to adolescents with moderate/severe disabilities. The researchers selected functional sight words to present as non-target information during instruction. The teacher videotaped the assistant and then used the footage to analyze the task. The researchers conducted baseline and training sessions in the school and generalization sessions at two different laundromats. The instructional sessions were conducted in a 1:1 format to minimize distractions. Four students participated in the study. Their ages ranged from 16-20 years. All participants exhibited the following prerequisite skills: (a) the ability to attend to a task for 45 min, (b) auditory acuity and receptive language, (c) visual acuity, (d) motor control, and (e) ability to imitate the tasks. The participants were probed on acquisition and generalization of the laundry task and acquisition and generalization of the non-target information. The data showed that 3 out of 4 participants met criteria on laundry tasks across settings and materials and identified 85% or more of the sight words during the generalization condition (Taylor et al., 2002). The school year ended prior to collecting data on the fourth participant.

Miller and Test (1989) completed a comparison of constant time delay with most to least prompting when teaching laundry skills to students with moderate disabilities. Four students participated in the study. All were 18 years old. The researchers did not identify prerequisite skills but stated that none of the participants had received any previous instruction on laundry skills. The researchers found both instructional methods

to be effective but found constant time delay to be more efficient in terms of instructional time and the number of errors. Regardless of the instructional method, the majority of errors were related to performing steps in an incorrect sequence. With the high percentage of errors, the functionality of teaching skills in predetermined sequences was addressed. The data showed that students acquired laundry skills at a more rapid rate when completing the task in a functional manner.

Lengyel, Domaracki, and Lyon (1990) conducted a study to determine whether general case simulation instruction on housekeeping skills resulted in generalized performance. Three students participated in the study. Their ages ranged from 21-40 years. All participants had diagnoses of blindness, intellectual disabilities, and other disabilities. None of the participants had worked in this type of setting. General case instruction involved the following steps: (a) define the instructional universe, (b) define the range of relevant stimulus and response variation within the universe, (c) select examples from the instructional universe for use in teaching and probe testing, (d) sequence teaching examples, (e) teach the examples, and (f) test the nontrained probe examples. The researchers created task analyses on 20 different rooms at an association for the blind. The researchers collected data on acquisition and generalization. The researchers found that the participants were able to acquire the skills and generalize them from setting to setting in the facility. The researchers noted that the functioning level of the participant appeared to correlate with the rate and success of acquisition and generalization. The researchers suggested that this study be replicated in actual job settings. Another suggestion involved data collection after the study to test the correlation between general case instruction and job retention.

Self-determination

In 1996, Polloway, Patton, Smith and Smith published an article related to historical changes in the field of intellectual and developmental disabilities. This article highlighted paradigm shifts in the field. The most important paradigm shift it cited focuses on empowerment, but more specifically self-determination.

The self-determination theory states that people have an innate ability to grow and develop and to strive toward mastering challenges. This theory only holds true when people are supported socially. The network of support usually starts during early educational services and future planning (Bremer et al., 2003). The supports usually include (a) family, (b) friends, (c) teachers, (d) related service professionals, and (e) case manager or social worker.

Wehmeyer and Schwartz (1998), as cited in Bremer (2003), conducted a longitudinal study related to self-determination and positive adult outcomes. This study included 80 people between the ages of 17 and 22. The study was a self-report survey that was distributed prior to high school graduation and then again a year later. All of the students had graduated from high school and all had a learning disability or a degree of intellectual disability. The study found that those who had a high level of self-determination while still in high school indicated a greater number of positive adult outcomes. These positive adult outcomes included having a job, having a checking account, and choosing a place to live. People with disabilities have a greater chance achieving self-determination when they are involved in choosing their residence, choosing their support services, choosing their friends and choosing their life (Bremer 2003).

Another early study (Wood & Flynn, 1978) compared a self-evaluation system to a system of external reinforcement during room cleaning. Self-evaluation is the process in which an individual rates his or her own work. The study used a task analysis with instructions to guide 6 pre-delinquent males through the task of cleaning their rooms and evaluating their own performance. The males resided in a residential treatment facility. Their ages ranged from 10-15 years. The room cleaning tasks consisted of not only cleaning the room, but complying with specific details related to each section of the room. The definitions used for room cleaning were stringent in that rulers or tape measures had to be utilized in order for the room to be checked off. While this may have taught discipline, it did not prove to be practical in a real-life setting. This study did teach a practical and real-life skill of self-evaluation. The study compared self-evaluation of room cleaning with self-evaluation paired with external reinforcement. The study indicated that, while reinforcement from external agents is motivating, the self-evaluation concept is a life skill that is valuable for all people to learn.

Summary of Literature Review

Much of the research in janitorial and cleaning skills is dated; but there is a tremendous amount of research in self-evaluation (see Table 1.1). However, more recent studies, though limited, support the dated research. There is a need for further research in teaching people with disabilities functional tasks to lead full and independent lives.

The earlier Cuvo et al. (1981) article made a suggestion for future research regarding instruction of chained tasks. Their suggestion was to implement the use of multiple exemplars to enhance generalization when teaching chained tasks. The

researchers themselves thereafter followed the advice of Cuvo et al. and paired the instruction of chained tasks with multiple exemplars.

The literature reviewed on teaching chained housekeeping and janitorial skills to people with disabilities revealed that, regardless of the instructional method, all participants progressed over the course of their perspective study. The participants in the studies received 1:1 instruction, had similar personal attributes, and, with the exception of one study, were in the same age group as the participants selected for this study.

Table 1.1 - Overview of Literature in Review

Reference	Participants	Setting	Instructional Procedure	Instruc-tional Arrange-ment	Target Behavior
Cuvo, Leaf, & Borakove (1978)	n= 6 13-15 years IQ= 40-50	Restroom- men’s & women’s	System of least prompts	1:1	Cleaning a bathroom
Cuvo, Jacobi, & Sipko (1981)	n= 5 19-21 years IQ= 36-69	Classroom- academic area & home economics area	Most to least prompts & system of least prompts	1:1	Laundry skills

Table 1.1 (continued)

Lengyel, Domaracki, & Lyon (1990)	n= 3 21-40 years IQ= 32-53 Blind	Blind association facility: conference room, infirmary, model apartment, & office	General case	1:1	Dusting, wiping, kitchen/ bath cleaning, & floor cleaning.
Maag, Reid, & DiGangi (1993)	n= 6 9-11 years IQ= 81-100	Resource room of school	Self- monitoring training	Group setting	On-task behavior
Miller & Test (1989)	n= 4 18 years IQ= 39-54	School laundry room	Constant time delay & most to least prompts	1:1	Laundry Skills
Smith, Collins, Schuster, & Kleinert (1999)	n= 4 16-18 years IQ= 30-45	Kitchen area of classroom, school cafeteria, teachers' lounge, & church	System of least prompts & multiple exemplars	1:1	Table cleaning

Table 1.1 (continued)

Taylor, Collins, Schuster, & Kleinert (2002)	n= 4 16- 20 years IQ= 40-51	Classroom & Laundromats	System of least prompts	1:1	Laundry skills
Wood & Flynn (1978)	n= 6 10- 15 years IQ= unknown	Bedroom	Independent work using a task analysis	1:1	Room cleaning skills

Research Questions

Over the past decade, there has been a push for consumer choice and self-determination (Wehmeyer 2010). In order for people to make choices, they have to be informed. It is our duty to teach functional life skills to all members of our community. We have to prepare the next generations for future employment opportunities. When preparing people for future employment, educators should employ a person-centered approach (Moran et al., 2001). Not all people with or without disabilities are going to enjoy the same jobs. The functional training and teaching should encompass a broad range to allow for consumer choice as it is unrealistic and unethical to expect any subgroup of people to work in the same field. It is our societal duty to find a way for people with disabilities to have their own niche in the workplace. At the same time, certain skills, such as housekeeping and self-evaluation skills, are important for people with and without disabilities.

Given the importance of housekeeping skills and self-evaluation skills for people with and without disabilities, we need to assess self-evaluation skills with reinforcement and self-evaluation with reinforcement plus external evaluation. The following questions were addressed in this study: (1) Will self-evaluation with reinforcement result in students with behavior disorders and mild intellectual disabilities completing the steps of a task analysis to clean their rooms? (2) Will self-evaluation with reinforcement plus external evaluation result in students with behavior disorders and mild intellectual disabilities completing the steps of a task analysis to clean their rooms? and (3) Is one intervention more effective than the other?

CHAPTER 2: METHODS

Participants

Residents. Five residents from an all-female residential treatment facility participated in the instructional program. The participants resided in a dormitory together.

Francine was 15 years old. She was diagnosed with parent- child relational disorder, Posttraumatic Stress Disorder (PTSD), Intermittent Explosive Disorder, and bipolar disorder. Her IQ was 63 and determined using the *Wechsler Intelligence Scale for Children* (WISC- IV; Wechsler, 2003). Francine suffered physical and sexual abuse. Upon admission to the residential facility, Francine's social worker identified the residential school as the least restrictive school placement. She was placed at the residential treatment facility for aggressive behaviors (e.g., hitting, kicking, biting, head-butting, throwing items or any other behavior that hurts others), self- injurious behaviors (e.g., cutting arms or using objects to make abrasions on self), and sexually acting out behaviors (e.g., touching others in a sexual manner). While residing at the facility,

Francine was working on the following goals: (a) improving social skills and interactions with others, (b) improving anger management skills and decreasing aggressive behaviors, and (c) addressing grief and loss issues so that she may develop skills necessary to transition to a less restrictive environment (see Table 2.1).

Hannah was 16 years old. She was diagnosed with PTSD and mood disorder Not Otherwise Specified (NOS). Her IQ was 65 on the WISC- IV (Wechsler, 2003). Hannah suffered physical and sexual abuse. Upon admission to the residential facility, Hannah's social worker identified the residential school as the least restrictive school placement. She was placed at the residential treatment facility for aggressive behaviors (e.g., hitting, kicking, biting, head-butting, throwing items or any other behavior that hurts others) and self- injurious behaviors (e.g., cutting arms and using erasers to make abrasions on self). While residing at the facility, Hannah was working on the following goals: (a) learning appropriate ways to get her needs met so that she can refrain from aggressive behaviors to herself or others, (b) rebuilding a sense of self-worth and building self- esteem so that she could decrease feelings of fear, shame, and sadness; and (c) developing independent living skills necessary to transition to a less restrictive environment (see Table 2.1).

Table 2.1 - Overview of Participants - Group A

Group A	Age	IQ	Diagnoses	Inappropriate Behaviors
Hannah	16	65	PTSD, mood disorder NOS	Aggression - hitting, kicking, biting, head-butting, throwing items; Self-injurious - cutting arms, using erasers to burn flesh
Francine	15	63	Intermittent Explosive Disorder, Bipolar Disorder, PTSD, Parent-child Relational Disorder	Aggression - hitting, kicking, biting, head-butting; Sexualized behaviors - touching other people in private areas; Self-injurious-cutting arms, using erasers to burn flesh

Eliza was 12 years old. She was diagnosed with PTSD, parent-child relational disorder, anxiety disorder, and bi-polar disorder. Her IQ was 68 (Wechsler, 2003). Eliza suffered physical and sexual abuse. Upon admission to the residential facility, Eliza's social worker identified the residential school as the least restrictive school placement. She was placed at the residential treatment facility for aggressive (e.g., hitting, kicking, biting, head-butting, throwing items or any other behavior that hurts others) and

sexualized (e.g., touching other inappropriately, internet relationships) behaviors. While residing at the facility, Eliza was working on the following goals: (a) developing appropriate anger management skills, (b) improving social skills and interactions so that she could appropriately communicate her needs and wants to others, and (c) learning skills necessary to transition to a less restrictive setting (see Table 2.2).

Camille was 11 years old. She was diagnosed with PTSD, mood disorder NOS, and attention deficit hyperactivity disorder (ADHD). Camille suffered physical and sexual abuse. Her IQ was 68 (Wechsler, 2003). Upon admission to the residential facility, Camille's social worker identified the residential school as the least restrictive school placement. She was placed at the residential treatment facility for aggressive behaviors (e.g., hitting, kicking, biting, head-butting, throwing items or any other behavior that hurts others), and self-injurious behaviors (e.g., self-induced vomiting, head banging). While residing at the facility, Camille was working on the following goals: (a) learning to appropriately express her feelings of grief and loss and develop coping skills to work through the grieving process, (b) increasing feelings of self-worth and decreasing feelings of fear, shame, and sadness, and (c) developing skills necessary to live successfully in a less restrictive environment (see Table 2.2).

Table 2.2 - Overview of Participants - Group B

Participants	Age	IQ	Diagnoses	Inappropriate Behaviors
Group B				
Eliza	12	68	Anxiety Disorder, Parent- child Relational Disorder, Bi-Polar Disorder, Post- Traumatic Stress Disorder	Aggression- hitting, kicking, biting, head-butting, throwing items; Sexualized behaviors- licking others, touching private areas, internet chatting with adult men
Camille	11	68	Post- Traumatic Stress Disorder, ADHD, Mood Disorder NOS	Aggression- hitting, kicking, throwing objects, biting others, pulling hair; Self-injurious- self-induced vomiting, truancy

Sarah was 15 years old. She was diagnosed with PTSD, Oppositional Defiant Disorder (ODD), schizoaffective disorder, and mild mental disability (MMD). Sarah's IQ was 60 (Wechsler, 2003). Upon admission to the residential facility, Sarah's social worker identified the residential school as the least restrictive school placement. She was placed at the residential treatment facility for aggressive behaviors (e.g., hitting, kicking, throwing objects, biting others, pulling hair). While residing at the facility, Sarah was working on the following goals: (a) developing positive anger management skills and

decreasing aggressive behaviors, (b) improving social skills and increasing her ability to have positive interactions with others, and (c) learning skills necessary to transition to a less restrictive setting. Sarah did not participate in the study due to psychiatric hospitalization during the baseline condition.

Treatment team staff identified these participants as having poor hygiene skills and refusing to comply with activities of daily living interfering with their ability to live in a less restrictive setting.

Others. The author was the researcher and the former Dean of Students at the residential facility. The author developed the research proposal while employed and carried out the study after resigning. During the study, the author was employed at a local elementary school, teaching students with multiple disabilities. The author conducted all sessions with the residents. The author had a bachelor's of art in sociology, was working toward a Masters in Special Education, and had 15 years of experience working with individuals with disabilities.

A staff member in the dormitory collected reliability data. The staff members held bachelor's degrees and had experience working with individuals with disabilities. The author conducted a meeting with the staff and discussed the room cleaning program, self-monitoring procedure, and data sheets. The author observed the staff as they role-played recording data. The author conducted monitoring sessions during room cleaning protocol.

Prerequisite Skills

The participants possessed visual acuity, fine and gross motor skills, color identification skills, and receptive and expressive language skills. The participants possessed the ability to read at a 3rd grade level and the ability to follow simple

directions. The participants had been exposed to chores, such as room cleaning, laundry, table washing, and vacuuming. All students had a history of instruction on task analyses. All participants had a history of refusing to clean their rooms and wash their clothing although they had all demonstrated the ability to complete the task with 100% accuracy.

Task Description

During room cleaning activities, participants responded to a task request by following the directions on the checklist (see Figure 2.1) to clean their rooms. During baseline condition, participants requested a staff member to evaluate their performance. The author or a staff member evaluated the room while participants participated in other activities of daily living. During the intervention conditions, participants were instructed to self-evaluate their room cleaning performance with a checklist and return the completed checklist to the author. Participants earned a ticket after they turned their checklist in. During the self-evaluation paired with external reinforcement and external evaluation, participants evaluated their performance and then requested a staff member to evaluate their performance. After both evaluations, the participant earned bonus tickets based on the number of agreements between their evaluation and the staff-led evaluation.

Rationale

The author chose self-evaluation with room cleaning skills as the target task since many adolescents residing at the residential treatment facility lacked life skills. The task was functional and age appropriate and could be generalized to a work environment. All of the participants were working on treatment goals related to learning life skills so they could transition to a less restrictive environment. In addition to performing room cleaning skills, the participants evaluated their performance. Self-evaluation is a valuable skill in

the work environment and may give the participants an edge on their peers when applying for jobs. The author chose participants who demonstrated the ability to complete room cleaning tasks.

Precautions for Program Implementation

Based on information reported at prior placements, all participants had a history of being abused. Due to this information, all participants received ongoing individual and group therapy. Due to the extensive history of childhood sexual abuse endured by the participants and the participants' aversion to touch, the author did not use physical prompts.

Intervention Setting and Arrangement

The intervention occurred in the dormitory, using each participant's room. Each participant's room had a laundry basket, dresser, desk, wastebasket, personal items (e.g., pictures, trinkets) and clothing (e.g. shoes, shirts, pants, socks, undergarments, coat). The author did not allow the participants to interact with other residents in the dormitory while participating in the room cleaning procedures. In the event that a participant had a roommate, the residents took turns in the room so as to not distract one another. The residents were split into two groups, Group A and Group B. The groups were paired by age. The younger and older residents do not intermingle and participated in different interventions, at different times, during the study.

Materials and Equipment

The study involved a vacuum cleaner, blue spray (multi-purpose cleaner), dusting cloth, data sheets, writing utensil, checklists, and tickets.

Figure 2.1.- Clean Room Chart

Name: _____

Complete tasks and fill out each day per week

	<u>Monday</u> <u>yes / no</u>	<u>Tuesday</u> <u>yes / no</u>	<u>Wednesday</u> <u>yes / no</u>	<u>Thursday</u> <u>yes / no</u>		
Make your bed (Blanket on first, pillow and stuffed animal on top of blanket)	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Put folded clothes in drawers	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Organize drawers Drawer 1- undies Drawer 2 – socks Drawer 3- shirts Drawer 4- pants Drawer 5- your choice	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Hang clothes in closet on hangers	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Put dirty clothes in laundry bag.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Clear floor of any paper, toys, books clothing, and garbage	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Put shoes in closet or line them up under bed	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Take out trash and replace bag.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		

Figure 2.1 (continued)

Clean top of dresser (spray blue spray on a paper towel and wipe the dresser)	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Clean shelf in closet (spray blue spray on a paper towel and wipe the dresser)	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Remove any Hygiene items from bed room	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Student signature						

General Procedures

The author task analyzed room cleaning into step-by-step directions. The author selected participants who struggled with compliance with room cleaning and other hygiene related skills. The author used a task analysis and a self-evaluation checklist system to evaluate compliance with room cleaning procedures. The author implemented the program daily, Monday–Thursday, during structured room cleaning time in the dormitory after school. The author conducted one session per day. The author did not cancel sessions if a participant was unable to participate or refused to participate. The author met with all staff prior to the commencement of the study and trained the senior staff members on the procedure. The participants did not complete the room cleaning tasks on the weekends.

Data Collection

The author evaluated the room of the participant post cleaning session. During the sessions, two responses were possible: (a) correct or (b) incorrect. The author recorded a correct response if each step of the room cleaning task was completed. The author recorded an incorrect response if the student did not respond, responded incorrectly, or did not complete the step.

Screening Procedures

The author chose room-cleaning skills for this study as many of the children residing in the facility struggle with keeping their rooms clean. All of the children participating in the study were working on treatment goals related to learning life skills so that they may transition to a less restrictive environment. In addition, the literature on this topic reveals that people with disabilities often find work in the cleaning and janitorial fields.

Prior to the study, the author conducted spot checks on all of the bedrooms in the dormitory. The author conducted the checks on Tuesdays and Fridays while the residents were in school. The author did not inform the participants of the spot checks on their rooms. The author chose varied weekdays as the children spend more time during the week cleaning their rooms.

The author used a room cleaning task analysis when conducting spot checks on the rooms. This is the same task analysis posted in each resident's room. The posted task analysis served as a reference for the residents to use when cleaning their rooms. The task analysis served as the checklist during the self-evaluation conditions of the study.

Baseline - A condition

Each session began with an attentional cue (e.g., “Ready to clean your room?”). After an affirmative response (e.g. “Yes,” or head nod), the author began with the discriminative stimulus, “Clean your room.” All residents in the dormitory had room cleaning directions posted in their rooms. Upon completion of the room cleaning task, the participants were instructed to find a staff member to check their room. The staff member did not give feedback to the participant during the baseline conditions. (This is the standard protocol for room cleaning written in the general expectations for the residents in the dormitory. This protocol served as the baseline procedures for the study.) Baseline data were calculated by using the number of correct responses divided by the number of total responses multiplied by 100 to get percent.

The author used a multiple opportunity format during baseline sessions. The participants were assessed on completion of tasks on the checklist with no emphasis on order of task.

Intervention Procedures

The participants started the intervention condition in one of two groups: (a) self-evaluation with reinforcement (B) or (b) self-evaluation condition with reinforcement plus external evaluation (BC). During the self-evaluation with reinforcement condition, each participant evaluated her room cleaning performance by using the checklist posted in her room. Once the participant evaluated her performance, she turned the checklist in for a reinforcer. (During this condition, staff members conducted spot room checks to check for accuracy.) During the self-evaluation condition with reinforcement plus external evaluation, the participant evaluated her performance and then requested a staff

member to evaluate. The participant received a bonus ticket for every agreement on the checklist.

The participants participated in each intervention for 3 calendar weeks (9-12 sessions depending on holidays, etc.). The author did not fade reinforcement schedules until the end of the intervention cycle. Following this intervention condition, the students reverted back into a baseline condition for 1 week (four sessions) before moving into the next intervention. Structured room cleaning lasted ½ hr per day, if the student did not clean within the structured time, a refusal was marked for all steps.

B condition (self-evaluation with reinforcement). The author used a self-evaluation checklist system to evaluate compliance with room cleaning procedures. The author implemented the program during structured room cleaning time in the dormitory and conducted one session per day. The author did not cancel sessions if a participant was unable to participate or refused to participate. If the participant was sick, it was treated as a skipped session. The author started the session with, “Are you ready to clean your room?” After receiving an affirmative response, the author began with, “Clean your room using the checklist. Please record your response in your folder.” The author waited 10 s for the participant to initiate a response. If the participant initiated a response (moving toward completing a task), the author said, “Great job getting starting. Please remember to use your clean room chart.” The author then left the room. If the participant did not respond within 10 s, the author exited the room and marked a refusal on the data sheet. Each participant evaluated her room cleaning performance by using the checklist posted in her room. Once the participant evaluated her performance, she turned the checklist in

for a ticket. During this condition, staff members conducted spot room checks to check for accuracy.

Students earned tickets upon completion of the task. The author encouraged the participant to keep track of tickets earned for correctly performing the task. The daily tickets were traded in for small reinforcers (e.g., gum, candy) or saved to turn in for larger reinforcers (e.g., books, extra TV time).

BC condition (self-evaluation with reinforcement plus external evaluation)

The author used a self-evaluation with reinforcement plus external evaluation checklist system to evaluate compliance with room cleaning procedures. The author implemented the program during structured room cleaning time in the dormitory and conducted one session per day. The author did not cancel sessions if a participant was unable to participate or refused to participate. If the participant was sick, it was treated as a skipped session. The author started the session with, “Are you ready to clean your room?” After receiving an affirmative response, the author began with, “Clean your room using the checklist. Please record your response in your folder.” The author waited 10 s. for the participant to initiate a response. If the participant initiated a response (moving toward completing a task), the author said, “Great job getting starting. Please remember to use your clean room chart.” The author then left the room. If the participant did not respond within 10 s, the author exited the room and marked a refusal on the data sheet. Each participant evaluated her room cleaning performance by using the checklist posted in her room. Once the participant evaluated her performance, she turned the checklist in for a ticket. During this condition, the participant evaluated her performance and then requested a staff member to evaluate. The author met with the participant and compared

the staff data sheet to the room cleaning checklist. The author discussed the agreements and inconsistencies with the participants. The participant received a bonus ticket for every agreement on the checklist.

Students earned tickets upon completion of the task. The author encouraged the participant to keep track of tickets earned for correctly performing the task. The daily tickets were traded in for small reinforcers (e.g., gum, candy) or saved to turn in for larger reinforcers (e.g., books, extra TV time).

Maintenance Procedures

The author collected maintenance data at 11 and 18 days after the final intervention. The author used a clean room checklist to check for compliance with room cleaning. Each session began with an attentional cue (e.g., “Ready to clean your room?”). After an affirmative response (e.g. “Yes,” or head nod), the author began with the discriminative stimulus, “Clean your room.” All residents in the dormitory had room-cleaning directions posted in their rooms. Upon completion of the room-cleaning task, the participants were instructed to find a staff member to check their room. The staff member did not give feedback to the participant during the maintenance sessions.

Generalization Procedures

The author exposed the participants to a variety of staff members during the intervention and maintenance conditions. The author did not test for generalization across settings. This decision was made due to potential behavioral acting out and protocol set forth by the residential facility.

Reliability

Dependent variable reliability. A staff member collected dependent variable reliability during 25% of the sessions across conditions. Prior to the study, the author trained all of the staff members during a staff meeting. During sessions, the author worked directly with the participant and recorded data while the staff member observed and recorded dependent variable reliability data during one session per week. The author calculated dependent variable reliability using a point by point method in which the number of agreements were divided by the number of agreements plus disagreements and multiplied by 100.

Independent variable reliability. A staff member collected independent variable reliability during 25% of sessions across conditions. During sessions, the author worked directly with the participant and recorded data while the staff member observed and recorded independent variable reliability data during one session per week (i.e., presenting the SD, waiting 10 s for the response, delivering the consequence). The author calculated independent variable reliability data by dividing the number of observed teacher behaviors by the number of planned behaviors and multiplying by 100.

Experimental/ Evaluation Design

The author used a multi-element design across participants to compare self-evaluation with reinforcement (B condition) to self-evaluation with reinforcement plus external evaluation (BC condition). The author grouped the participants by age into one of two groups. Group A started with the BC condition – baseline (A), self-evaluation with reinforcement plus external evaluation (B), baseline (A), and self-evaluation condition with reinforcement. Group B started with the B condition – baseline (A), self-evaluation

with reinforcement (B), baseline (A), and self-evaluation with reinforcement plus external evaluation (BC). Splitting the participants into two groups allowed for a counterbalance to eliminate sequencing interference.

CHAPTER 3: RESULTS

The following questions were proposed: (1) Will self-evaluation with reinforcement result in students with behavior disorders and mild intellectual disabilities completing the steps of a task analysis to clean their rooms? (2) Will self-evaluation with reinforcement plus external evaluation result in students with behavior disorders and mild intellectual disabilities completing the steps of a task analysis to clean their rooms? (3) Is one intervention more effective than the other?

The results show that both conditions were effective when evaluating the older group of students. The younger students did not demonstrate the ability to self-evaluate without external evaluation.

Reliability

During baseline, training, and maintenance sessions, the average percentage of dependent variable agreement across all students was 100%. Independent variable reliability data during baseline, training, and maintenance sessions for all students were 100% for all researcher behaviors.

Hannah - Group A

Prior to intervention, Hannah mastered room cleaning with 100% compliance across 6 sessions, but was compliant during only 58% of room cleaning opportunities. Though Hannah mastered room cleaning prior to the intervention conditions, the extreme variability decreased when the intervention conditions commenced. During the self-

evaluation conditions of the study, Hannah's compliance with room cleaning was 85%. Hannah's data did not change when the intervention conditions changed. Hannah continued to use the self-evaluation checklist after both intervention conditions. The data showed a decrease in variability during intervention sessions as compared to the baseline sessions (see Figure 3.1). During the self-evaluation condition with external staff evaluation, Hannah's self-evaluation was complete and matched the researcher's checklist with 100% agreement.

Francine - Group A

Prior to intervention, Francine was compliant during 70% of room cleaning opportunities though the data varied from 0-100% compliance. During intervention, Francine claimed the self-evaluation checklist as her job and compliance with room cleaning was 99%. The data show a decrease in variability with only 1 session at 0% during intervention sessions as compared to baseline sessions (see Figure 3.2). Francine organized her room cleaning binder and was able to show her completed and accurate charts to staff members. Though the study focused on Monday-Thursday, Francine cleaned and evaluated her room every Friday and on most Saturdays and Sundays. During the self-evaluation condition with external staff evaluation, Francine's self-evaluation was complete and matched the researcher's checklist with 100% accuracy.

Camille- Group B

Camille cleaned her room 39% of opportunities during the baseline condition. Her compliance ranged from 0-100%. Camille did not demonstrate an ability to comply with the self-evaluation condition of the room cleaning protocol. She did not fill out the task analysis checklist and submit to staff after cleaning her room. Her overall rate of room

cleaning stayed in the 45% range during the self-evaluation intervention. During the self-evaluation plus external evaluation, the data were more stable showing that Camille complied with the self-evaluation checklist and room cleaning protocol with 82% (see Figure 3.3). During the self-evaluation paired with external evaluation, Camille completed the checklist and her self-evaluation matched the researcher's checklist with 92% agreement.

Eliza- Group B

During the baseline condition, Eliza cleaned her room 56% of opportunities. She struggled with using the self-evaluation task analysis checklist when staff members were not present for the external reinforcement. Eliza completed the self-evaluation checklist during sessions #19-22 with 82% completion of room cleaning tasks. For the remainder of the self-evaluation without external evaluation intervention, she did not fill out the checklist, but it should be noted that she complied with room cleaning tasks at 49%. Her overall rate of room cleaning compliance was 60% during this self-evaluation condition (see Figure 3.4). During the self-evaluation condition with external evaluation, Eliza's compliance with room cleaning rose to 79% and matched the researcher's checklist with 93% agreement.

Figure 3.1- Hannah

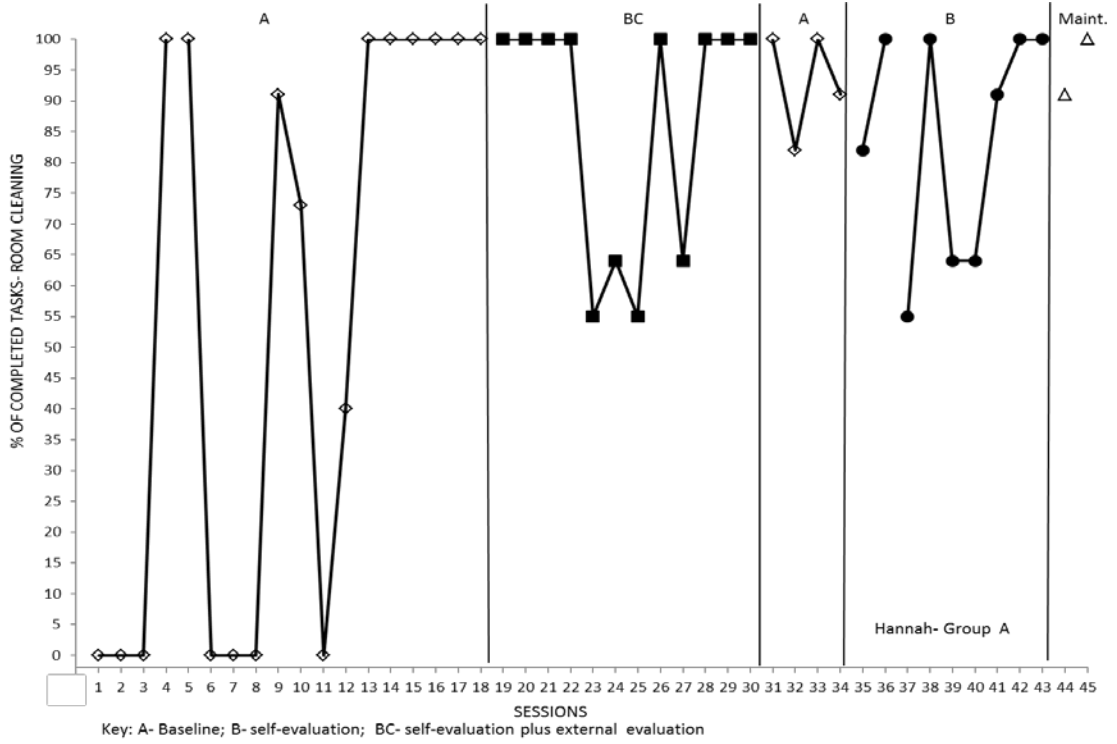


Figure 3.2- Francine

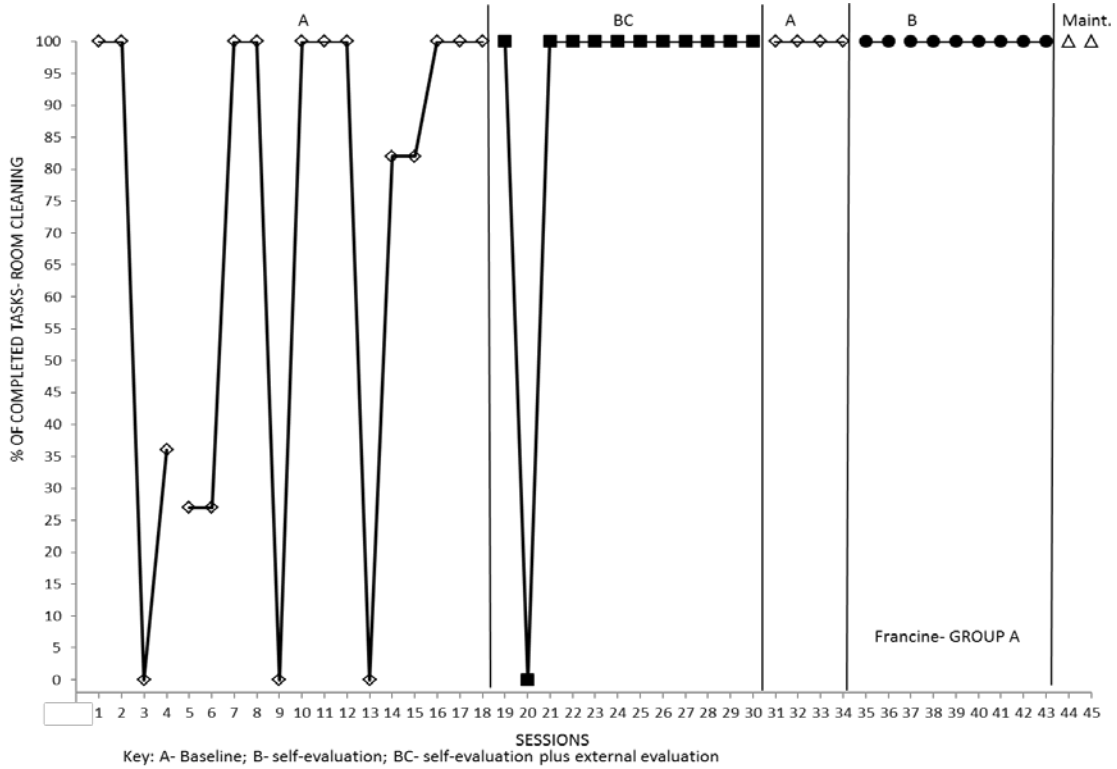


Figure 3.3- Camille

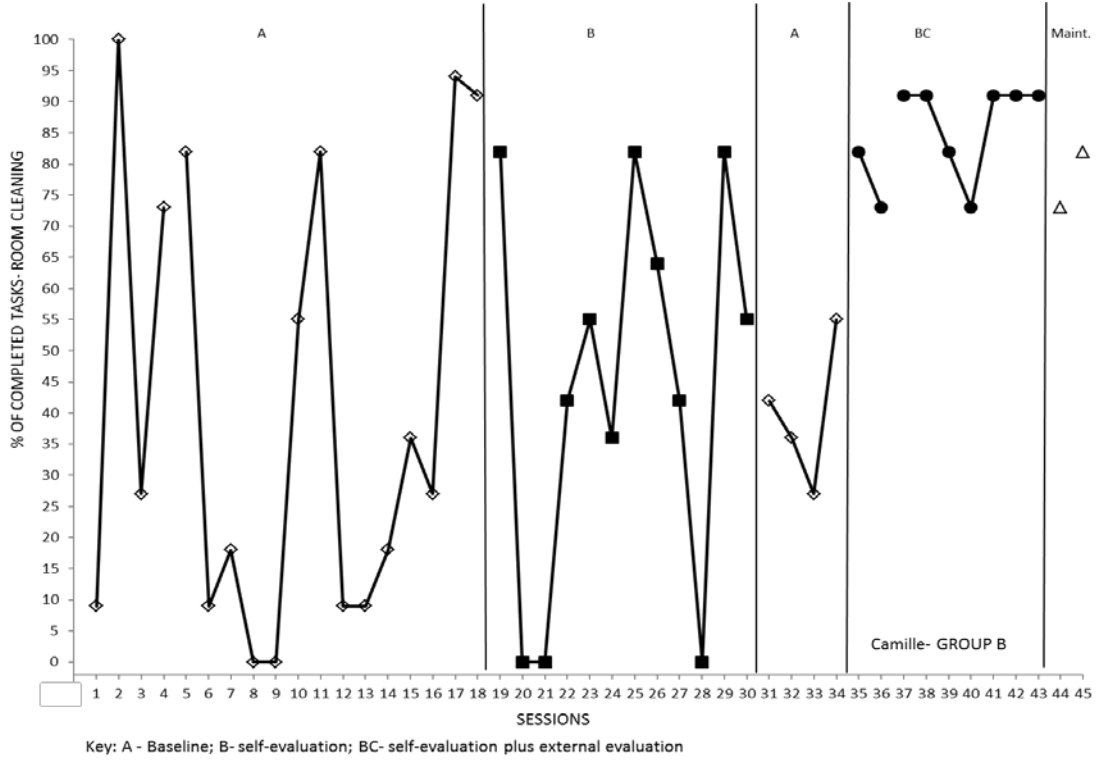
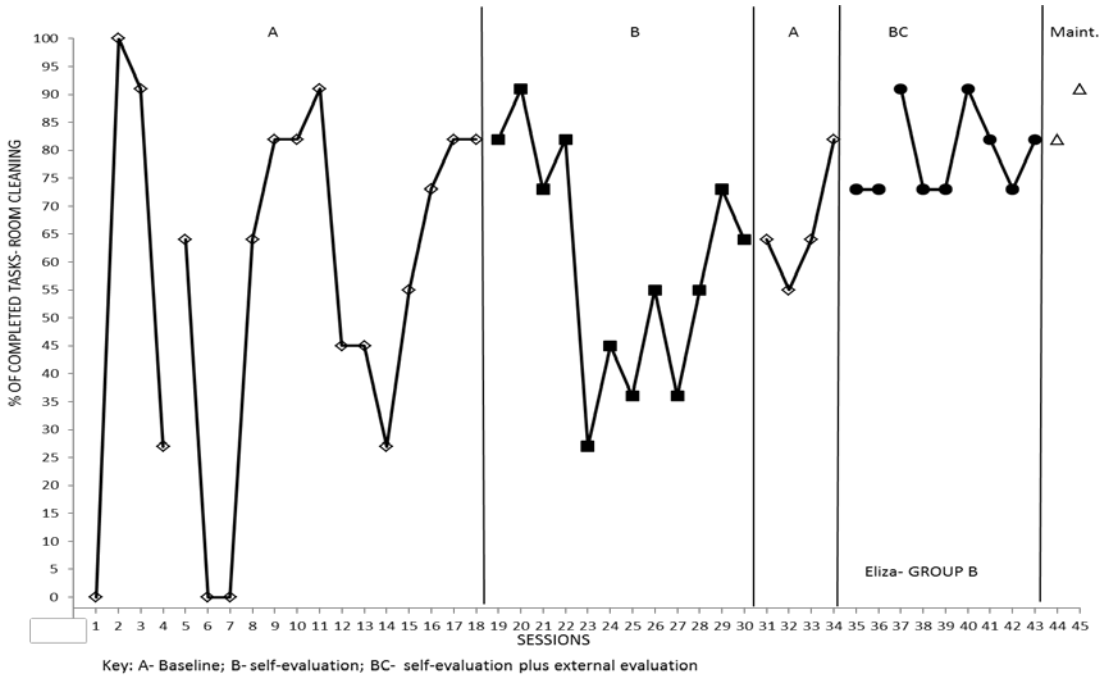


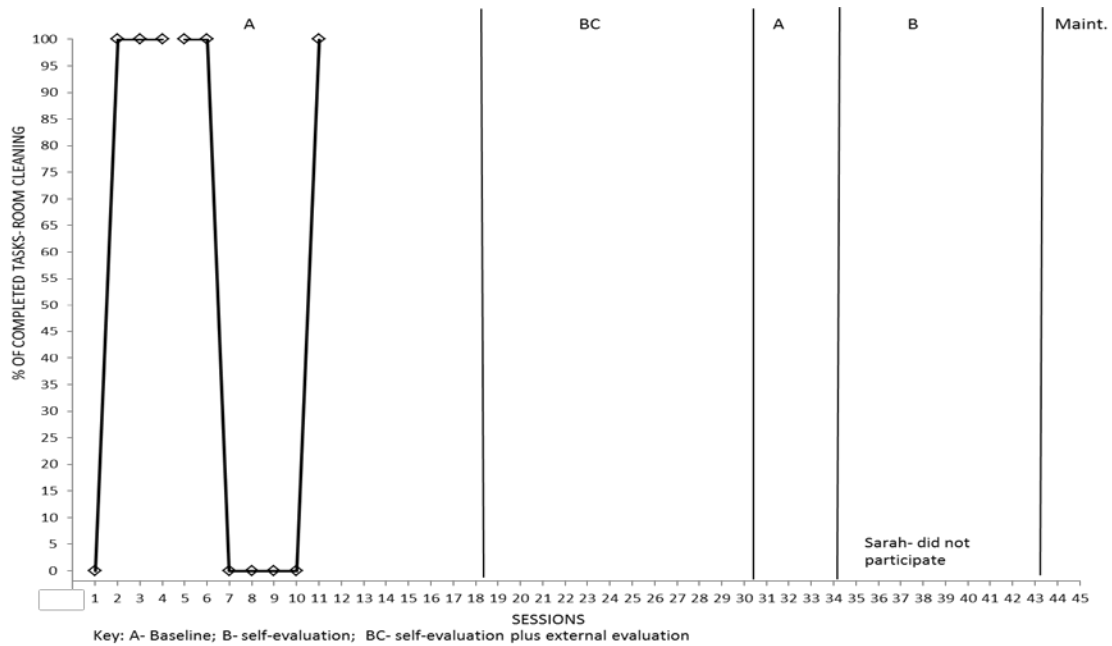
Figure 3.4- Eliza



Sarah

Prior to intervention, Sarah was compliant during 83% of room cleaning opportunities (see Figure 3.5). Sarah did not actively participate in the research project. She was unable to maintain safe behaviors and was hospitalized prior to the intervention condition.

Figure 3.5- Sarah



CHAPTER 4: DISCUSSION

The following questions were addressed in this study: (1) Will self-evaluation with reinforcement result in students with behavior disorders and mild intellectual disabilities completing the steps of a task analysis to clean their rooms? (2) Will self-evaluation and reinforcement plus external evaluation result in students with behavior disorders and mild intellectual disabilities completing the steps of a task analysis to clean their rooms? (3) Is one intervention more effective than the other?

The younger group (Group B) did not respond well to the self-evaluation condition of this study. The task required the residents to complete room cleaning with independence and without external praise. During the post-room cleaning conference, the residents stated that they wanted to clean their rooms, but it was hard without having someone to talk to. The residents also stated that they liked comparing their folder to the staff folder. During the self-evaluation condition, they were only required to turn in their folder.

The older group (Group A) enjoyed the freedom of the independent condition. During the post-room cleaning conference, the residents talked about their job and evaluated their performance throughout the conversation. The older group felt “trusted” when staff did not walk in behind them to “check” out things. The older group requested to continue working on their room cleaning skills even after the study finished.

Effectiveness Data

This instructional procedure, self-evaluation with reinforcement plus external evaluation, was effective in teaching residents compliance with cleaning their rooms and to self-evaluate their behaviors. The students in Group A responded to the self-evaluation intervention and were able to accurately report how well they cleaned their rooms; however, the students in Group A had received the self-evaluation with reinforcement plus external evaluation condition first, and this may have improved their performance in the self-evaluation condition. The compliance data were low for Group B during the self-evaluation condition, with the participants refusing to self-report their progress or refusing to comply with room cleaning. The self-evaluation with reinforcement plus

external evaluation proved to be more successful as the residents responded positively to the external evaluation and were able to clean their rooms in a more efficient manner.

This study will add to the literature in the following ways. First, it adds to the literature through preparing young adults for the workforce by using a checklist in a residential setting. A checklist gives a framework for students to follow. Using the checklist, students can work independently and evaluate whether they have completed all steps of the task at hand. Second, it adds to the literature by showing that teaching young adults to accurately report how they have completed a task will save employment supervisors time and money. These checklists provide a sense of accomplishment and self-worth. Third, people with and without disabilities have to report to a supervisor when employed. This system would prepare the young adults for external reinforcement and feedback that all employed people deal with.

CHAPTER 5: LIMITATIONS

The author started intervention with ascending baselines, or baseline at 100% for a couple of participants, this was a limitation to the experimental control. Nevertheless, even with this limitation, the interventions, especially self-evaluation with reinforcement plus external evaluation, did result in more stable and accurate performances across all participants.

CHAPTER 6: CONCLUSION

The participants in this study acquired self-evaluation skills on two different levels. Group A was able to accurately self-evaluate with a high level of compliance to the room cleaning tasks. Groups A and B were able to self-evaluate and compare their self-evaluations to the researcher's evaluation of room cleaning skills, averaging 90%-

95% agreement. The participants increased compliance with room cleaning beyond the initial baseline condition. Group A participants averaged better than 85% during the self-evaluation condition, though they had started with the more intensive intervention (self-evaluation plus external evaluation and reinforcement), and the second intervention (self-evaluation only) actually served as kind of thinning of reinforcement. Group B participants averaged 60% during the self-evaluation condition, but then improved with the addition of self-evaluation plus external evaluation and reinforcement to 82%.

Looking back, it would have been beneficial to change the self-evaluation protocol for Group B. Time constraints did not allow amending the conditions, but, in future research, all participants would benefit from starting with self-monitoring plus external evaluation.

The author did not test for generalization across settings. This decision was made due to the potential of behavioral acting out and protocol set forth by the residential facility. In the future, all participants would benefit from additional vocational skills training and job coaching in the community.

The participants would benefit from learning how to keep other spaces in their living environment in an organized fashion. The author found that the participants often left their belongings in the general living areas and rarely cleaned after themselves in the bathroom and kitchen areas. All participants struggled with completing their laundry tasks and keeping their clothing in an organized fashion. While the room cleaning compliance checklist helped keep the laundry sorted, at times the children folded soiled laundry mixing it with their clean. All participants would benefit from a task analysis

catered toward washing and drying laundry and keeping their clean and dirty clothing separated.

APPENDIX A

Consent to Participate in a Research Study

Self-evaluation with and without External Feedback to Increase Room Cleaning Skills in Students with Mild Intellectual Disabilities or Behavior Disorders

WHY IS YOUR CHILD BEING INVITED TO TAKE PART IN THIS RESEARCH?

Your child is being invited to take part in a research study regarding compliance and self-evaluation of room cleaning skills. Your child has been invited to take part in this research because he or she will benefit from the practice and evaluation of their own room cleaning skills. If you allow your child to participate and your child complies to do so via the assent form, he or she will be one of about six people to participate.

WHO IS DOING THE STUDY?

The person in charge of this study is Allison Varisco (Principal Investigator) of the University of Kentucky, and former Dean of Students at Maryhurst School of Jefferson County Public Schools in Louisville, KY. She is being guided in this research by Belva Collins (Chair). There may be other people on the research team assisting at different times of the study.

WHAT IS THE PURPOSE OF THE STUDY?

By doing this study, we hope to learn whether students can accurately report their progress by using a checklist and if they comply with more tasks when required to self-evaluate?

WHERE IS THE STUDY GOING TO TAKE PLACE AND HOW LONG WILL IT LAST?

The research procedures will be conducted at Maryhurst with students from Maryhurst School. Students will practice cleaning their rooms and will be evaluated by Allison Varisco and will also be asked to evaluate their own performance.

The total amount of time your son or daughter will be asked to volunteer for this study is approximately 30 minutes per day, 4 days a week. The study will last about 6 weeks.

The researchers will be reviewing each student's education record. Information from the record will be included in the study.

WHAT WILL YOUR CHILD BE ASKED TO DO?

Students can expect to clean their rooms as they normally would. They can also expect the principal investigator (Allison Varisco) to evaluate their compliance/ completion of the room cleaning tasks. I will request the student to evaluate their completion of the room cleaning tasks.

I will use a task analysis and a self-evaluation checklist system to evaluate compliance with room cleaning procedures. This program will be implemented 4 times per week. I will conduct 1 session per day. I will not cancel sessions if a participant is unable to participate or refuses to participate.

During sessions, two responses are possible: correct or incorrect. I will record a correct response when the student initiates the step within 10s of the task request and continues to work until completion. I will record an incorrect response if the student does not respond, responds incorrectly, or does not complete the task. I will record an incorrect response if the student requires verbal prompts to complete the task.

ARE THERE REASONS WHY YOUR CHILD SHOULD NOT TAKE PLACE IN THE STUDY?

Your child should not take place in the study if he or she already completes room cleaning tasks with 100% accuracy. If the student already completes room cleaning tasks with a high level of accuracy, then the research would not be as strong.

WHAT ARE THE POTENTIAL RISKS AND DISCOMFORTS?

To the best of our knowledge, the things your child will be doing have no more risk of harm than you would experience in everyday life. It is important to know that students may choose snacks (as a reward) and the research involves room cleaning tasks that require use of a vacuum and spray cleaners. However, adult supervision will occur during 100% of the research.

WILL YOU BENEFIT FROM TAKING PART IN THE STUDY?

Some students have experienced an increase in skill productivity as it relates to cleaning and housekeeping tasks. We cannot and do not guarantee that you will receive any personal benefits from taking part in this study. Your willingness to take part however, may, in the future, help society to better understand this research topic.

DOES YOUR CHILD HAVE TO TAKE PART IN THE STUDY?

If you decide for your child to take part in the study, it should be because you want her to volunteer. You and your child will not lose any benefits or rights you would normally have if you choose not to volunteer. You can ask for your child's participation to stop at any time during the study and still keep the benefits you and your child had before volunteering. If you decide for your child not to take part in this study, your decision will have no effect on the quality of care or service she already receives.

WHAT WILL IT COST FOR YOUR CHILD TO PARTICIPATE?

There are no costs associated with taking part in the study.

WILL YOU OR YOUR CHILD RECEIVE ANY REWARDS FOR TAKING PART IN THE STUDY?

For taking part in the study, after each session, your child will receive the opportunity to choose a snack from the snack box. There will not be any financial rewards or payments for taking part in the study.

WHO WILL SEE THE INFORMATION THAT YOU GIVE?

Your information will be combined with the information from other people taking part in the study. When we write about the study, to share with other researchers, we will write about the combined information we have gathered. Your child will not be identified in these written materials. We may publish the results of the study; however, we will keep private your child's name and other identifying information. We will retain final data for 6 years after the study is over.

We will keep private all research records, identifying your child, to the extent allowed by the law. However, there are some circumstances in which we may have to show your child's information to other people. For example, the law may require us to show your child's information to a court. Also, we may be required to show information, identifying your child, to people who need to be sure we have done the research correctly; these people would be from the University of Kentucky.

We will make every effort to prevent anyone who is not on the research team from knowing your child's information, or what that information is. For example, your child's name will be kept separate from the information you give, and these two things will be stored in different places under lock and key.

CAN YOUR CHILD'S TAKING PART IN THE STUDY END EARLY?

If you decide for your child to take part in the study, you still have the right for your child to decide at any time that you no longer want him or her to continue. You and your child will not be treated differently if you decide for her to stop taking part in the study.

The individuals conducting the study may need to withdraw your child from the study. This may occur if your child is unable to follow the directions given, if the study is more of a risk than benefit, or if the researchers (funding the study) decide to stop early for a variety of scientific reasons.

WHAT IF YOU HAVE QUESTIONS, SUGGESTIONS, CONCERNS, OR COMPLAINTS?

Before you decide whether to accept this invitation, please ask any questions, which might come to mind, now. Later, if you have questions, suggestions, concerns, complaints about the study, you can contact the investigator, Allison Varisco at asvarisco@gmail.com. If you have any questions about your rights or your child's rights, please contact the staff in the Office of Research Integrity at the University of Kentucky at (859)257-9428 or toll free at 1-800-400-9428. We will give you a signed copy of this consent form to take with you.

WHAT ELSE DO YOU NEED TO KNOW?

Allison Varisco is providing financial support and materials for this study.

The study will take place and will assess room cleaning and self-evaluation skills. I am asking for your permission to use your child's data.

You will be told if any new information is learned which in turn, may affect your child's condition or influence your willingness to continue supporting your child's participation in this study.

Signature of person agreeing to allow child's
participation in the study

DATE

Signature of person agreeing to allow child's
participation in the study

DATE

Name of authorized person obtaining informed
consent

DATE

APPENDIX B

Self-evaluation with and without External Feedback to Increase Room Cleaning Skills in Students with Mild Intellectual Disabilities or Behavior Disorders

You are invited to be in a research study conducted by Allison Varisco from the University of Kentucky. When a person is in a research study, they are called a “subject.” You are invited because you will benefit from practicing how to evaluate your cleaning skills.

If you agree to be in the study, you will be asked to evaluate your cleaning skills Monday through Friday after you clean your room. On occasion, Mrs. Varisco will also evaluate your cleaning skills.

There is no payment for participating in the study.

Your family will know that you are in a study. If anyone else is given information about you, they will not know your name. A number or initials will be used instead of your name.

If something makes you feel bad while you are in the study, please tell Mrs. Varisco. You can also ask your parent or guardian any questions you may have about this study.

You agree that you have been told about this study, why it is being done, and what to do. You know that the study will take place. You know your parent or guardian has agreed to let you take part in the study. I am asking for your permission to use your room cleaning data.

Signing this paper means that you have read this or had it read to you, and that you want to be in the study. If you do not want to be in the study, do not sign this paper. Being in the study is up to you, and no one will be mad at you if you do not sign this paper. No one will be mad if you change your mind later.

Signature of Subject

Date Signed

Signature of Parent/ Legal Representative

Date Signed

APPENDIX C
Clean Room Chart

Student Name: _____ Week Of: _____

Task completion= yes; Refusal or incomplete= no

	<u>Monday</u> yes / no	<u>Tuesday</u> yes / no	<u>Wednesday</u> yes / no	<u>Thursday</u> yes / no		
Make your bed (Blanket on first, pillow and stuffed animal on top of blanket)	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Put folded clothes in drawers	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Organize drawers Drawer 1- undies Drawer 2 – socks Drawer 3- shirts Drawer 4- pants Drawer 5- your choice	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Hang clothes in closet on hangers	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Put dirty clothes in laundry bag.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Clear floor of any paper, toys, books clothing, and garbage	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Put shoes in closet or line them up under bed	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Take out trash and replace bag.	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Top of dresser clean	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Closet shelf clean	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
Remove any Hygiene items from bed room	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		

References

- Bremer, C. D., Kachgal, M., & Schoeller, K. (2003, April). *Self-determination: Supporting successful transition* (NCSET Research to Practice Brief Vol. 2 No. 1). Minneapolis: University of Minnesota, National Center on Secondary Education and Transition
- Cuvo, A. J., Jacobi, L., & Sipko, R. (1981). Teaching laundry skills to mentally retarded students. *Education and Training of the Mentally Retarded*, 54-64.
- Cuvo, A. J., Leaf, R. B., & Borakove, L. S. (1978). Teaching janitorial skills to the mentally retarded: Acquisition, generalization, and maintenance. *Journal of Applied Behavior Analysis*, 11(3), 345-355.
- Griffen, A. K., Wolery, M., & Schuster, J. W. (1992). Triadic instruction of chained food preparation responses: Acquisition and observational learning. *Journal of Applied Behavior Analysis*, 25, 193-204.
- Lengyel, L. M., Domaracki, J. W., & Lyon, S. R., (1990). General case simulation instruction of generalized housekeeping skills in blind, multihandicapped adults. *Journal of Visual Impairment and Blindness*, 166-170.
- Maag, J. W., Reid, R., & DiGangi, S. A., (1993). Differential effects of self- monitoring attention, accuracy, and productivity. *Journal of Applied Behavior Analysis*, 26, 329-344.
- Miller, U. C., & Test, D. W., (1989). A comparison of constant time delay and most to least prompting in teaching laundry skills to students with moderate retardation. *Education and Training in Mental Retardation*, 363-370.

- Moran, R. R., McDermott, S., & Butkus, S. (2001). Getting a job, sustaining a job, and losing a job for individuals with mental retardation. *Journal of Vocational Rehabilitation, 16*, 237-244.
- Polloway, E.A., Smith, J.D., Patton, J.R., & Smith, T.E.C. (1996). Historic changes in mental retardation and developmental disabilities. *Education and Training in Mental Retardation and Developmental Disabilities, 31*, 3-12.
- Roffman, A. (2005). Playing house the grown-up way: Teaching teens the art of housekeeping. Retrieved November 7, 2005 from <http://www.schwablearning.org/articles.asp?r=991&g=2>
- Smith, R. L., Collins, B. C., Schuster, J. W., & Kleinert, H. (1999). Teaching table cleaning skills to secondary students with moderate/ severe disabilities: Facilitating observational learning during instructional downtime. *Education and Training in Mental Retardation and Developmental Disabilities, 34*(3), 342-353.
- Taylor, P., Collins, B. C., Schuster, J. W., & Kleinert, H. (2002). Teaching laundry skills to high school students with disabilities: Generalization of targeted skills and non-target information. *Education and Training in Mental Retardation and Developmental Disabilities, 37*(2), 172-183.
- Wehmeyer ML. 2010. Self Determination. In: JH Stone, M Blouin, editors. *International Encyclopedia of Rehabilitation*. Available online: <http://cirrie.buffalo.edu/encyclopedia/en/article/34/>
- Wehmeyer, M. L. & Schwartz, M. (1998). The relationship between self-determination, quality of life, and life satisfaction for adults with mental retardation. *Education and Training in Mental Retardation and Developmental Disabilities, 33*, 3-12

Wechsler, D. (2003). *Wechsler intelligence scale for children* (4th ed.). San Antonio, TX: Psychological Corporation.

Wood, R., & Flynn, J. M. (1978). A self-evaluation token system versus an external evaluation token system alone in a residential setting with predelinquent youth. *Journal of Applied Behavior Analysis, 11*, 503-512

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