An Action Research Study of Intellectual Disabilities,
Inappropriate Behaviors and Learned Helplessness

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August 2008
Abstract

This study focused on a population of 36 female patients, aged 25 to 65, who were diagnosed with intellectual disabilities, all of whom had long-standing patterns of inappropriate behaviors. In an attempt to increase more appropriate behaviors in these patients, a set of standardized contingency rules were established. These rules were implemented across the living unit. Learned helplessness was also a concern. The frequency of documented reports of undesirable behaviors and the frequency of documented accidents and incidents for identical time periods of six weeks pre and post treatment implementation were examined. This positive reinforcement approach did show that there was an increase in appropriate behaviors.
An Action Research Study of Intellectual Disabilities, Inappropriate Behaviors and Learned Helplessness

Past research shows that people who have been institutionalized for long periods of time have difficulty adjusting to society (Miller, 1997). In order for people with intellectual disabilities to live independently in society, they must be able to adhere to the rules imposed by the society. The purpose of this research was to examine an intervention of particular rules that when taught would increase appropriate behaviors and decrease inappropriate behaviors indicated in particular by accident and injury reports. The rules that were developed for the living unit as the intervention for this research were written to reflect societal expectations. These rules were written based on the mission statement of the facility that housed women with intellectual disabilities to promote overall independence and independent living. These rules were written by the interdisciplinary unit in which the women reside. The intervention is justified in teaching institutionalized women with intellectual disabilities the expectations of society, attempting to improve their understanding and compliance with the expectations, and reducing the frequency of maladaptive behaviors and injuries associated with the inappropriate behaviors. As a result, the subjects should be more prepared to adapt to society since they are held accountable and not allowed to delve into a sense of self helplessness.

It was felt that an intervention had to be implemented due to some serious inappropriate interactions that had occurred between the women. Some of the incidents included biting, to the extent that major medical attention was required; scratching and fighting to the extent that at one point an individual’s eye lid was torn almost to a point of disrepair.

Inappropriate behaviors are behaviors that are not suitable for normal adjustment to society such as fighting, spitting on others, and chronic noncompliance. Miller (1997) defines
unacceptable behaviors as spitting on another person or physical aggression. Miller goes on to define physical aggression as any overt, observable behavior that inflicts or has clear potential to inflict pain or harm on another person. It is also noted that maladaptive behaviors are common with people who have intellectual disabilities. This population is more likely to show behavior problems that people with typical intellectual functioning. It is also noted that those with intellectual disabilities also show learned helplessness in response to failure and look to others for solutions (Hodapp & Fidler, 1999).

Empowerment is defined as “a social process of recognizing, promoting and enhancing peoples’ abilities to meet their own needs, solve their own problems and mobilize the necessary resources in order to feel in control of their lives” (Gibson, 1991, p. 359). Faulkner (2001a) sees that empowerment is linked to learned mastery, while disempowerment is linked to learned helplessness.

Faulkner (2001b) recommends that staff reduce patient exposure to disempowering situations and to increase the exposure to empowering situations. This can be achieved by changing the attitudes of staff to a more empowering approach to care. Faulkner writes that dependent people demonstrate some most fundamental practices. They have a previous exposure to uncontrollability. They develop motivational deficits and generalize these deficits to alternative situations.

Learned Helplessness is when people experience uncontrollable events, and they form an expectation that future events will be uncontrollable. Leaned helplessness is not inherent, but learned through a chain of events (Valas, 2001). The theory of learned helplessness provides a model for explaining certain behaviors and is a state characterized by a lack of affect and feeling. There is a sense from people that whatever they do, it is futile (Buell, 2005).
Singer, Gert, and Koegel (1999) examine the analysis of everyday moral decision making surrounding the use of aversive treatments for people with severe intellectual disabilities. These everyday decision making rules are referred to as commonplace moral rules. There is a growing body of empirical support that indicates there are nonaversive alternatives for addressing the most serious behavior problems in people with intellectual disabilities. Some of the more serious behaviors of concern are self-injury behavior (SIB), aggression, property destruction, and severe noncompliance.

Many adults with intellectual disabilities and with severe behavior problems have been institutionalized. A “Final consideration, many courts and commentators have employed the concept of least restrictive alternatives in regard to the choice of custodial setting. The court, Rennie v. Klien in 1978, feels that this concept should be extended to the choice of medications” (Singer, Gert, & Koegel, 1999, p. 93). Medicating adults with severe intellectual disabilities and severe behavior problems is an option but may not be the best solution. According to Singer, Gert, and Koegel, positive behavioral methods are more likely to promote collateral benefits and are less likely to set the stage for people to act out of misplaced moral indignation.

Method

Participants

The participants included 36 females with intellectual disabilities, ages ranging from 25 to 65. All lived in an institutional dormitory setting in a facility that was owned and operated by the Mississippi Department of Mental Health. Periods of institutionalization for the participants range from 1 to 26 years. Fourteen percent of these women were registered voters in Mississippi and 25% had legal guardians. All received Medicaid benefits. The range of mental retardation varied as follows: 19% were Profound, 14% were Severe, 31% were Moderate, 31% were Mild
and 5% were diagnosed with Borderline Intellectual Functioning. With respect to ethnicity 63% were Caucasian, 35% were African American, and 2% were other. For the purpose of this research, the participants were divided into two groups. Group I consisted of those that fell into the moderate to borderline level of intellectual functioning. Group II consisted of those who fell into the profound to severe range of intellectual functioning.

**Instruments**

Instruments used include Hall Rules, a daily behavior monitoring chart, the “Ball Game Program,” the Behavior Event Report and the Accident/Incident/Observation Report. All of the above instruments were created by the facility or an interdisciplinary unit within the facility.

The hall rules give a general statement regarding socially appropriate behavioral expectations, and outline two main categories of unacceptable behaviors along with the consequences associated with engaging in these behaviors. From these rules, data were collected for this research. Data were only used from incidents of spitting or physical aggression.

The daily behavior monitoring chart is a chart with a list of the participants’ names and a line of boxes that corresponds to each participant’s name with one box for each day of the month. If a participant engaged in an undesirable behavior, as a consequence to the behavior, a mark was placed on the chart for the day that the behavior occurred. Activities were limited subsequent to a mark on the chart as outlined in the hall rules. Data from this chart did not serve as data with respect to the final findings of this project. This chart is only kept for the individuals to know how many times they have exhibited inappropriate behaviors and how many more chances they have left for the month before they lose a privilege to participate in an extra reinforcement trip.
In conjunction with limitations on activities, the “Ball Game Program” was designed to reinforce participants’ acceptable behaviors throughout the month by rewarding them with a special trip. This program was used to reinforce those who exhibit appropriate behaviors and who did not have three strikes for the month. This was extra reinforcement to promote appropriate behaviors. Some target appropriate behaviors include compliance, participation, demonstrating safe behavior, talking in a calm and polite voice, taking care of your personal items and other property, and staying in the correct locations.

The Behavior Event Report (BER) gives specific information regarding antecedents, behaviors and consequences associated with each incident of inappropriate behavior. In accordance with data collection regulations governing Intermediate Care Facilities for Mentally Retarded (ICFs/MR), the BER was designed as a facility-wide standardized instrument and is completed as the observed behaviors occur in the environment. All behaviors were recorded on this form and put into a database. In turn, particular behaviors may be selected in order to generate a particular report from which to obtain only that selected information. Using this form and the database, a report was generated to show all documented episodes of spitting and physical aggression.

The Accident/Incident/Observation Report (A&I Report) gives specific information regarding causes, severities and descriptions of injuries as well as the medical attention for each injury, if necessitated. This is the form used to record data anytime a person is hurt, especially when physical aggression had been displayed. At the facility where this research occurred, no particular person has any individual control over accident and injury reports, since all accidents are recorded. For example, if a person falls, accidentally cuts him or herself when shaving, or bumps into something causing a bruise, the incident is automatically documented.
Design

The design is *ex post facto* with descriptive analysis of data there were already being collected. Data have already been and are being collected at the institution of interest; however, the data were not previously being analyzed. The analysis was conducted after the implementation of a particular intervention that had already been implemented. Percentages were examined from the instruments and then analyzed.

A qualitative component was journaling. It consisted of information such as situations that arose when a decision had to be made in conjunction with the psychologist as to the handling of a behavioral situation. This also helped to obtain additional information in relation to the behaviors as to whether or not learned helplessness may have been a component.

Data Collection

Data with respect to unacceptable behaviors were collected using the Behavior Event Report (BER). For the purpose of this research unacceptable behavior was defined as spitting on another person or physical aggression. Acceptable behavior was defined as the absence of the unacceptable behaviors already defined. Physical aggression was further defined as any overt, observable behavior that inflicted or had clear potential to inflict pain or harm on another person.

Each time a BER was completed, the daily behavioral monitoring chart was marked to indicate that the unacceptable behavior had occurred on that day. Days not marked on the chart served as the documentation that the participant engaged in appropriate behavior on those days.

Data with respect to any observed injuries or evidence of possible injuries were collected using the Accident/Observation/Injury Form (A & I). Data that were examined consisted of BERs that correspond to the identified inappropriate behaviors and A & I reports for each participant over a period of 12 weeks total. Data were collected six weeks prior to the
intervention was implemented and were compared to data that were collected 6 weeks after the intervention was implemented. Data were examined that were routinely collected by staff members on a daily basis. A psychologist provided final reports with the data. Data were examined for pre and post intervention analysis using percentage differences for two groups of participants. Group I consisted of those that fall into the moderate to borderline level of intellectual functioning. Group II consisted of those who fall into the profound to severe range of intellectual functioning. Data were collected for each group pre and post intervention. A journal was maintained to better explain the type of situations that were encountered in an institutional setting.

Data collected in the journal were personal observations and feelings concerning the entire project. Learned helplessness was considered. There are particular questions that arose such as whether or not this particular intervention really helps make lives better for the women in question and whether or not they are learning from this experience.

**Procedure**

Data were being collected but were not being analyzed concerning a particular intervention that had already been implemented. Data analyzed were data collected beginning May 19, 2006. This was six weeks prior to the implementation of the hall rules. The hall rules were initiated on July 1, 2006. Six weeks post documentation of the effect of the hall rules have an ending documentation period of August 12, 2006. Data were obtained from the primary psychologist. Data were collected using the two groups. Data collected concerned inappropriate behaviors. After examining data for the two groups for pre and post intervention, there was a comparison of accident and injury reports as well for pre and post analysis of data.
This intervention was explained to the clients through group sessions by the psychologist and social worker in groups on Fridays. It was repeated for three Fridays in a row and presented on an individual level as needed. It was explained more thoroughly through presentation, explanation, role play, games, question and answer sessions and the posting of rules and charts.

Information from a personal journal provided information as to if these rules have influenced the lives of these 36 women. It also helped contribute additional information as to whether or not the program should be continued. With these rules in place members of the interdisciplinary team felt that these rules made these participants more socially appropriate for the community by perhaps holding them accountable for their actions as noted in the journaling and interviews with the primary psychologist. The qualitative data were also used to examine the issue of learned helplessness.

Results and Analysis

Descriptive statistics were used to describe what the data revealed and determined that the intervention was a success. Qualitative analysis of the journaling was also used to further examine the success of the intervention and to examine the notion of learned helplessness with the women.

Data that were collected over a 12 week period were used for analysis. The data from the first six weeks revealed 130 reports of physical aggression or spitting per the Behavior Event Report. The data from the second six weeks revealed 100 reports of physical aggression or spitting. Data for the first six weeks were compared to that of the second six weeks for two groups. Group One, pre-intervention received 78 reports as compared to the post intervention of 53 reports. This revealed a decrease of 36.6 %. Group Two revealed a decrease in reports also by reporting 52 reports on the pre-intervention side and only 47 reports post intervention. This was
decrease of 27.5%. Group One consisted of those who fell into the moderate to borderline level of intellectual functioning. Group Two consisted of those who fell into the profound to severe range of intellectual functioning (See Figure 1).

Accident and Injury Reports revealed 132 reports before the intervention and only 105 reports after the intervention. Overall, Accident and Injury Reports decreased by 12% (See Figure 2).

The qualitative component was used to supplement to quantitative data and to examine the issue of learned helplessness. Data from the journaling were used to help analyze such questions that arose from quantitative data analysis, observations based on the implementation of the intervention, and to examine the issue of self helplessness.

Qualitative data reveal that prior to the intervention physical aggression and spitting on others was a daily occurrence with no consequences. For example, one individual would hit another and if the person was calm after hitting the other person, then no consequences were encountered. Soon the staff began to notice that after an individual would display physical aggression the person immediately became calm. It was then later realized in a team meeting that engaging immediately in appropriate behaviors would keep the individual from being escorted to a safe room or encountering certain consequences. The individuals were able to continue with a regular routine. It was on May 3, 2006, that the Interdisciplinary Team decided that spitting and physical aggression would have to have consequences. On this day, guidelines were put into place. Individuals were made aware of the new intervention, and it was started on June 1, 2006. The team began to see the learning among the participants. It was hoped that this intervention would help these women become more accepted into the community and be viewed as productive citizens who exhibit appropriate behavior. The team felt that a learning community
type program had been designed, that it would work, and that cooperation from the women would grow. It was felt that many of the women before the implementation of the program were in a learned helplessness state. The theory was that before the intervention the women thought that every time they acted appropriately or did what they were asked to do, they felt they should be rewarded even if it were only that they were provided a soft drink. This type of thinking was common place with the participants prior to the intervention implementation. There is one participant who routinely asked, “I made up my bed, so can I have a Coke now?” This same woman also would ask, “I did not go to fitness today, but I walked up and down the hall, so can I have a Coke now?”

After many episodes of this type behavior, the team realized it was necessary to create a more appropriate community type citizen and to bring them out of a learned helpless state. After week one of implementing the intervention, it was noted in the journaling that behaviors were not decreasing. For example, one participant continued to spit on others, especially staff. If this particular participant did not get her way, she escalated the tantrums, showed physical aggression, and while being escorted to the safe room, spit on staff. She would intend to spit in the face of staff and tell them she had tuberculosis. On June 7, 2006, the team decided to address verbal abuse in the hall rules also. If one exhibited verbal abuse, then she would be escorted to the safe room for 30 minutes. Another participant cursed others if she felt that other person looked at her in what she perceived was a wrong way. She would call people inappropriate names. This behavior also declined once implemented into the rules. After the rules were stopped, cursing for this participant reached a climax again.

On week three of the intervention, the team members were receiving good reviews from other staff members who were not using the program. They made comments such as, “What are
you all doing? Maybe my floor needs to try that” (Staff A, personal communication, July 29, 2006). By week three, physical aggression and spitting were on the decline, as noted by the primary psychologist in her Morning Briefing Section. Most of the ladies were calm and participating in their daily routines without any physical aggression. By that time it appeared they were trying to act appropriately to receive back their recreational time. One participant, who had missed the most activities due to her behavior, was even asking, “How do I get off the list? I want to start going to the night activities and other places.” The team was beginning to see women behave more appropriately in the community and not exhibit as sense of learned helplessness.

At week four, some participants had been on the list for a month. Some participants began to complain to higher administration. These participants were experiencing consequences of the interventions that were in place. As week five of this intervention continued, the qualitative data supported that the inappropriate behaviors were tapering and even the numbers of participants positively affected by the intervention was increasing (See Figure 3).

By week five, even the woman who had missed the most outings in the beginning of the intervention was now stopping by the office on a daily basis to inquire if she had had any reports for that day. She was becoming conscious that her behavior and consequences were related. She really wanted to get back to the night activities because this is where she could see her boyfriend. She was realizing that she was being held accountable for her actions, and learned helplessness approaches were not working to her benefit. She was beginning to change her behavior.

By week six, the physical aggression and spitting that were occurring were very small in number, and the team only had only five of the thirty-six ladies on the list for consequences. The staff members were trying to help these five women exhibit appropriate behaviors so that they
could earn their preferred activities back. The participants were also working hard to act appropriately, because they witnessed others going places and having fun, and they wanted to join.

On August 17, 2006, team minutes reveal that the rules were still in effect and were “working wonders.” Life for the staff and women appeared much more conducive to accepted societal mores, and all seemed to benefit in some way. There were very few undesirable behaviors exhibited, and fewer people were hurt. It was much quieter on the floor and everyone seemed to be getting along better. During the month of September, the journal entries showed continuous documentation that the rules were a success, and inappropriate behaviors were very few. September also showed a significant decrease in behavior reports and a drop in accident and injury reports. Direct care workers from other floors were even talking to their team members about creating some type of plan like this particular intervention (Staff B, personal communication, September 16, 2006). One of the new members of administration questioned the program and commented what a great success it was (Staff C, personal communication, September 26, 2006). However, during October, it was documented that some of the new members of administration were beginning to look at the hall rules closely as documented in interviews with the Director of Behavioral Services (Staff D, personal communication, October 9, 2006).

Meetings began to take place between Department Directors and a new administration. It was felt by administration that the rules were too harsh. By the end of October, the team agreed to stop the intervention. The decision was quickly made to stop the intervention immediately as opposed to waiting for the results of the analysis of data (Staff D and E, October 29, 2006).

Discussion
The purpose of this research project was to examine the hall rules when taught and implemented as an intervention and determine if this was effective in increasing productive behaviors while decreasing inappropriate behaviors and decreasing accident and injury reports.

Problems encountered were the reorganizing of the facility and management, who thought the intervention was too harsh. Therefore, as of November 1, 2006, this program was discontinued and as of January 20, 2007, BEFs were already beginning to reveal that behaviors of physical aggression were becoming once again more prevalent.

This intervention process could be used by others who work in this or similar fields to help people with Mild, Moderate, or Borderline Intellectual Functioning become more accountable for their behaviors and, therefore, give them more of a chance to be independent and accepted in the community by lowering the inappropriate behaviors and perhaps help eradicate or lower the sense of self helplessness.

It was discovered that these women who have intellectual disabilities and behavioral issues can exhibit appropriate behaviors when they make the connections with the consequences for their behaviors and do not fall prey to a sense of self helplessness. They appear to have learned that exhibiting appropriate behaviors allowed them the opportunities to engage in the outings.

Medicaid requires that $360 a year is spent on the individual who receive services in this Intermediate Care Facility. The facility agrees to give the individual a service objective to shop in the community. With this shopping service, the individuals are required to shop in the community once per month. Team Minutes on January 18, 2007, confirm that shopping requirements were reviewed, and it was stated that regardless of an individual’s behavior she must shop in the community. If these women are displaying inappropriate behaviors on their
scheduled day to shop, and they still get to go shopping, then the inappropriate behaviors are inadvertently reinforced! This appears to also reinforce a sense of learned helplessness with the women.

An initial objective for the team in implementing the program was to try to avoid reinforcing inappropriate behaviors and thereby lowering the sense of self helplessness for the women. The program appears to have taught the women that if they engaged in inappropriate behaviors, such as physical aggression, or spitting on others, they would not be able to engage in desired activities. They were going to have to earn their desires and wants by exhibiting appropriate behaviors. This program placed demands on the individuals and the staff and held everyone accountable. For example, before this program, the staff would take individuals to a recreational activity at night if they wanted to and if there was enough staff. With the intervention, that was discontinued. If the individual earned the activity for the night by displaying appropriate behaviors the participant would get to go to the activity and staff had to take them. This program also made it clear as to who earned the activity and who did not. It was felt that this intervention would work if the consequences were significant enough to the participants. This is supported by the data.

The intervention was discontinued. Since then the team has questioned how to now go about best helping the women exhibit behaviors appropriate for the community so they will continue on the path of being accepted and not digress back into engaging in inappropriate behaviors and the sense of self helplessness. It is a concern that the data, once the intervention was terminated, are suggesting that the new trend appears that the women are beginning to go back to exhibiting inappropriate behaviors due to a sense of self helplessness in relation to their behaviors not being associated with consequences.
The data strongly support the use of the particular program that was implemented. Holding the women accountable for their actions appears to have helped them better understand their behaviors in relation to particular consequences, hence lowering the evidence of a sense of self helplessness.
References


Figure 1: This chart compares the pre-intervention to the post-intervention of group 1 and group 2.

**Behavior Report Data**

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Figure 2: This chart reveals the pre-intervention versus the post-intervention of Accident and Injury Reports.

**A&I Report Data**

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Figure 3: Number of people who broke the rules; Percent of people who broke the rules.