Described is a project in which parents of profoundly and severely mentally retarded children were taught techniques of operant conditioning to be used in training their children in self help skills such as feeding, toileting, and dressing, with the end goal of reducing the anxiety level of parents. Involved were 25 parents whose children were on the waiting list for admission to the Colin Anderson Center, a West Virginia state institution for the retarded. After a 3-day workshop on the fundamentals of operant conditioning, parents kept progress recordings of their daily work at home training their child in a particular self help skill for 1 month. Then each parent met with the investigator of the project to discuss the training and to have filmed the parent's demonstration of how they taught their children. Following evaluation of the filmed technique, parents returned home to work with their child for another month on the same or another skill. With the help of films made of parent demonstrations after the second month, parents recognized the progress which they and their children had made. Included in the report are five unedited parent descriptions of how they trained their child on dressing and toilet training skills. (KW)
Final Report

Project No. 70-018-015

The training of parents of profoundly and severely mentally retarded children in handling behavior at home

Project Director: Dr. Allen Blumberg
West Virginia University-Kanawha Valley Graduate Center
Nitro, West Virginia

September, 1971

Title I - Higher Education Act of 1965

U.S. Department of Health, Education & Welfare
Office of Education
This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated do not necessarily represent official Office of Education position or policy.
THIS REPORT IS DEDICATED TO THE PARENTS OF THE PROFOUNDLY AND SEVERELY MENTALLY RETARDED WHO WERE WILLING TO TRY SOMETHING NEW.
CHAPTER I

INTRODUCTION

The West Virginia Department of Mental Health states that there are approximately 580 mentally retarded individuals residing at the Colin Anderson Center, the State institution for the mentally retarded. The waiting period for admission to this state institution ranges from 1 to 8 years, depending on the type of mental retardation.

Parents of the mentally retarded whose children are on the waiting list for admission to the Colin Anderson Center are confronted with the problem of what to do with their children during this waiting period.

Although the human tragedy surrounding mental retardation is understood only too well by those persons whose lives have been touched by it, few persons who have not been directly involved are fully aware of the magnitude of the character of the problem that is mental retardation (Edgerton, 1967).

These parents go through the cycle of guilt, shame, hopelessness, and feelings of rejection, before reaching any level of acceptance that their problem concerning their mentally retarded child is real. For years these parents will seek help and advice from professionals, relatives, and friends, as to what is best to do with their mentally retarded child at home while waiting for admission to the State institution. The emotional severity of the years of waiting are known to have had traumatic effects upon the marital stability of the family (Farber, 1960).

The anxiety and frustrations that must be shown by these parents while waiting for admission of their mentally retarded child to the Colin Anderson Center, at its best, is tragic. This is particularly true of the parents of the severely and profoundly mentally retarded whose children are usually of pre-school age and cannot perform the most fundamental self-help skills, such
as feeding, toilet training, dressing, and being able to communicate in some way. The tragedy is that most of these parents feel a sense of hopelessness, particularly if their normal children acquire these self-help skills through some practice along with maturation.

In recent years there has been a growing emphasis toward the recommendation of the application of the methodology known as operant conditioning, particularly for improving the behavior of the mentally retarded as it is related to self-help skills.

Watson (1965) has shown that even the most severe of the mentally retarded can be toilet trained by the application of operant conditioning. Fuller (1949) has shown that this particular methodology can work even with custodial mentally retarded individuals who have been classified as "vegetative" human beings and totally lacking in any skills that constitute self-help.

Within our school program for educating the handicapped child, operant conditioning has been shown to have played a significant role. Hart, Allen, Buell, Harris and Wolf (1964) have shown that the behavior of the nursery school child can be made more socially acceptable by the employment of this particular methodology. Birnbrauer and Lawler (1964) have shown that operant conditioning does help improve the academic learning skills of many handicapped individuals in our special classes.

The most significant and detailed study concerning the use of operant conditioning with an institutional population was done by Lent (1968) in which she showed that the personal and social adjustment of an entire ward of mentally retarded girls could be improved by the employment of this technique.

However, there appears to be a paucity of literature devoted to the use of this method with the mentally retarded at home. Hawkins, Peterson, Schweid, and Bijou have shown (1966) that operant conditioning can improve the behavior
of the severely mentally retarded in middle-class homes. Wahler, Winkel, Peterson and Morrison (1965) have shown that the same methodology is applicable when the mother is used as the behavior therapist for her mentally retarded child while residing at home. What is becoming quite apparent is that undesirable behavior can be treated more effectively where it is most likely to occur--at home.

Statement of the Problem

Although the literature indicates that the mentally retarded can be improved in learning basic skills, most of the literature is related to the improvement of one specific skill in dealing with a small number of parents. It is the purpose of this project to train a selected group of parents of severely and profoundly mentally retarded children from Kanawha, Putnam, and Boone counties, who are waiting for the time when their children can be admitted to the Colin Anderson Center, in the application of operant conditioning as it relates specifically to such self-help skills as feeding, dressing and toilet-training. It is the purpose of this project to see if the anxiety level that is common among most of these parents could be alleviated if their children, while staying at home, have been able to become trained in the use of these self-help skills.

Project Goals

1. To acquaint a selected group of parents of the severely and profoundly mentally retarded concerning the characteristics of mental retardation.

2. To train a selected group of parents of the severely and profoundly mentally retarded in planning a program for the use of operant conditioning related toward improving their children's ability in self-help skills.
CHAPTER II
PROJECT ACTIVITIES

Part I: Workshop on Operant Conditioning and Self-Help Skills

Dr. Luke Watson and Mrs. Donna Burst of the Columbus State Institute, Columbus, Ohio conducted a three-day workshop on the fundamentals of operant conditioning and its use with the profoundly and severely mentally retarded.

A total of 25 parents of the mentally retarded children were enrolled in either the Charleston Day Care Center for the Profoundly and Severely Mentally Retarded or special education classes for the trainable mentally retarded in the Kanawha County Public School System.

The format for this workshop was as follows:

1. Dr. Watson talked on mental retardation.

2. Dr. Watson explained operant conditioning.

3. The parents were divided into two groups:
   a. Dr. Watson explained how to use operant conditioning in training severely and profoundly mentally retarded children to do self-help skills.
   b. Mrs. Burst demonstrated how to get the profoundly and severely mentally retarded to perform basic self-help skills by using operant conditioning.

4. The parents attempted to try some of these skills with their children under the supervision of Mrs. Burst.

5. Dr. Watson taught the parents how to keep recordings.

6. Finally, an open discussion was held so that parents could ask Dr. Watson or Mrs. Burst questions about implementing these new ideas.

In order to help these particular parents in trying correct procedures in teaching self-help skills to their mentally retarded children, Dr. Watson gave each parent a rough draft copy of his book, \textit{Behavior Modification of Mentally Retarded and Autistic Children}, for personal reference.
At the conclusion of the workshop, each parent was asked to identify one self-help skill to attempt teaching to her child and employing operant conditioning. The parents were asked to keep progress recordings of their daily work with their mentally retarded children. This home training was to last for one month.

Part II: Progress of Parental Applications of Operant Conditioning

After one month, each parent met with the principal investigator of this project to discuss the training of her child in self-help skills by employing operant conditioning. In order to make these individual sessions more functional, the parents were asked to demonstrate how they taught their children to do the fundamental self-help skills. The demonstrations were filmed by means of video television cameras and played back immediately for the parents. This visual means allowed each parent to see how she worked with her child.

At the end of the first set of films, the reactions of most of the parents was surprised at their manner of teaching. Generally, the responses were as follows:

1. I did not realize how overanxious I was in working with my child.
2. I see where I do not show ample emotions or enthusiasm for correct performance.
3. I am so accustomed to correcting the wrong response that I confuse my child.
4. I must break down each step of learning a self-help skill and reward my child for doing each specific step.
5. I wait too long to give the reward.
6. I have been offering the wrong reward; my child wants affection.
7. I do not take enough time; I am so used to doing it for him.

Following each evaluation of the film, the parent was offered suggestions on how to work with the child for another month. Those parents who showed ample progress in teaching their children to do a self-help skill were asked to try a new self-help skill for the next month. In several cases the parents met voluntarily in small groups to discuss how to aid each other in teaching self-help skills.
A month later the parents returned and again demonstrated how they worked with their children. Once more the demonstrations were recorded on film. Each parent was allowed to see both films and asked to evaluate their particular approach in working with their children. In most cases it was apparent that the parents could see progress.

It was startling to many parents and professionals associated with this project to realize that these profoundly and severely mentally retarded children had learned self-help skills in just two months. This realization of progress in learning a self-help skill encouraged many of the parents to continue teaching their mentally retarded children additional self-help skills.

Part III: Parental Methods

The enthusiasm that was shown by many parents who participated in this project created a feeling of encouragement for parents of retarded children on the waiting list for the Charleston Day Care Center for the Mentally Retarded.

The parents in this project were encouraged to put in writing their particular methods that they used in working with their children. These parents were encouraged to write the articles for the benefit of other parents.

Therefore, the following information is a breakaway from the traditional format associated with reports of descriptive studies. Since this investigator desires to have this information of value to other parents of profoundly and severely mentally retarded children, the following parental descriptions of how they worked with their retarded children are left unedited.
"Dressing Skills"

by Marie Cottrell

"We used Joey's sleepers mainly for putting on. He even manages to get his feet in the feet of the sleepers and does very well with them. On his regular pants, he cannot manage the zipper closing or the tab hook or snap. Sometimes the zipper will work for him, but most of the time it does not. He has some difficulty getting the back waistband in the proper place sometimes. The sleepers are knit material with elastic all around the waist, which simplifies putting them on for him. We are still not using a "treat" in itself. It is more a game for him, with praise and "good boy" and loving. He seems to prefer this.

I have tried shoe lacing, hooks, buttons and snaps on clothing with him, but haven't had too much success. His coordination for small things doesn't work out too well. He used a piece of chalk on small slates and does fairly well. I have used large buttons for him to work with to learn buttoning, but not too much success even at that. He is going to the bathroom oftener now on his own, but still doesn't actually use it. This season of the year isn't the best to accomplish much with Joey because he has been so keyed up with excitement from Thanksgiving and Christmas that it is difficult to keep him settled down enough to really try on some things.

He seems to prefer "good boy" and a big hug for his reward in dressing skills. He puts his shirt on unassisted, but sometimes it takes several tries to get it right. If it is not the right way, he takes it off and tries again. He doesn't seem to get impatient with his mistakes. He likes to stand in front of the mirror while putting his shirt on. He gets very excited trying to get the shirt on properly."
"Take Off & Put On Shirt"

by Betty Crowder

"To begin, I was and am very enthused about Professor Watson's method of teaching a retarded child self-help and appropriate behavior.

I first told Brian to take off his shirt. I watched him very closely, so I would know where to start with him. I noticed he could not grasp the bottom of his shirt with both hands and pull it over his head and if he did succeed, it went over his shoulders in a criss-cross fashion. Also, he needed a larger shirt.

I had him to pull his shirt off his right arm. After this step, he could take off his shirt. I rewarded him with a small piece of Fritos, gave him a pat on the back, and told him very enthusiastically, "good boy." Four or five days, morning and evening, I would tell him to take off his shirt and each time a reward, a pat on the back and "good boy." I chained off the reward and kept the bridge "good boy" and a pat on the back.

To put the shirt on, I would tell Brian "put on your shirt." I fixed the shirt with the backside to him, bringing the bottom to the top and showed him how to grasp it, so he could get the shirt over his head.

He could get the shirt over his head and his arms in, but he could not pull it down. I would hold his hands on the shirt and have him to reach up under the shirt, get the bottom and pull it down. The backside was the hardest; I still proceeded with putting his hand on and under the shirt so he could pull it down. I gave him a reward and a pat on the back and a very enthusiastic "good boy." I chained the reward in the same fashion when he took his shirt off.

Once the child learns how to take off and put on his shirt, he can learn how to take off and put on the rest of his clothes much easier because he has more confidence in himself--he has accomplished something very important to him and to his parents."
"Learning to Put on Knee Sox"
by Dorothy Holden

"I removed knee sock, placed it over her foot and to mid-calf. "Kathy, put on your sock." Third attempt was successful. I told her "good girl" and gave her the reinforcement immediately. After she succeeded with this first step three times, we moved on to the second step--repeating above procedure. Then on to third and fourth steps, always giving her the mints or M & M's immediately following a successful completion. She can now put on her own sox entirely unassisted. It is amusing to see her "cram" her foot into her sock and pull it up in one operation, stretching the elastic just as any normal child does."
"Tying Shoes"
by Janet Roush

1. Determine operant level.

2. Use white lace, one half dyed red or another color.
   Thread lace through bottom two eyelets, red on left side; pull to equal length.
   Progress up eyelets having child drop the lace on the side just completed.
   Work up shoe until lacing is complete.
   Make first cross tie. Take white (right) lace and cross over shoe--drop it. Take red (left) lace and cross over shoe--drop it.
   Grasp white (left) lace in right hand and insert under red lace. Pull tight--white lace in left hand--red in right hand.
   Make loop (bunny ear) with right hand--(red) hold tight with fingertips.
   With left hand, loop white (left) string over thumb tip and right loop, then push through self-loop with fingertip.
   Child then releases red bow and catches white loop with right fingertips, at same time grasps red bow with left hand and pulls tight.
"Toilet Training & Putting On Pants"
by Joan Sprouse

"I want to say first of all that Dr. Luke Watson's description and explanation of how they handle toileting at Columbus State Institute was really the first concrete suggestions of what a parent can do that I have ever heard, and I was more anxious to try them out.

According to Dr. Watson, the child must first learn what the toilet is for, how to use it, and to use it when taken there. Then you chart his eliminations, noting the times of day he uses the toilet and what he does there, and each time he eliminates in his pants and whether he has wet or soiled them. To be truly effective, this must be done for about a two-week period. When some kind of pattern emerges, you make every effort to get the child to the toilet at the times he seems most likely to void.

Ricky had reached the point where he used the toilet each time he was put on it, although if he needed to void when his pants were on he would do so. At this stage, according to Dr. Watson, they dress the boys in boxer-type pants that they can easily get down by themselves and they tell them, "OK, you know where the bathroom is and you know how to use it, so from now on if you have to use the toilet you just go use it." Of course, each child is carefully watched and each time he goes to the bathroom on his own he receives an immediate reward. If he doesn't make it to the bathroom no big fuss is made; he just gets dry pants. Adapting this theory to our home situation, I began October 1st by removing Ricky's outer parts when he came home from school, leaving him in his underpants and rubber pants and told him, "If you have to use the potty, take off your pants and go." When he did go on his own, he was given a reward of a bite of cookie or candy immediately and much praise. During this period, he was still taken to the bathroom at regular intervals at school and I always had him urinate just
before I dressed him to take him out anywhere. No reward was given at these times, unless he had a BM. (And before going to bed.)

He really grasped the idea much quicker than I had expected. At first he was running to the bathroom every 15 to 30 minutes, void a small amount and then run around without any pants until I caught up with him and put them back on him. Of course, during this time he learned to enjoy running around without his pants and I found it very difficult to keep any pants on him. I also occasionally found little puddles here and there. However, I had this problem for only a matter of about 3 weeks. He really did a very good job of going to the bathroom from the very beginning, and really seemed to begin to appreciate dry pants and a dry bed, which had never particularly bothered him before. In fact, he did so well I discontinued the food reward for urination after about 2 weeks, but continued the verbal reward of praise each time he wet in the toilet. I did continue to use the food reward along with praise for a BM for about a month longer than I did for urination.

He soon started making less frequent trips to the bathroom and the time between trips became progressively longer. By the time he started back to school after Christmas vacation wet pants were virtually a thing of the past and so the 3rd week in January I removed his rubber pants—and prayed a lot. After a week and a half at school without rubber pants and without any wet pants he attended a recreation night for retarded children at the YWCA. I put rubber pants and a diaper liner in his underpants since he would not have access to a toilet for quite some time. He wet in the toilet at 6:30 p.m. and we left the house at 6:45 p.m., picked up another child and went to the Y. The other child's father picked the children up at 9:30 p.m. and Ricky arrived home about 9:45 p.m. I got his outer pants off at once and he immediately doffed his underpants and headed for the bathroom and did he ever let go! I checked his underpants and
liner and they were quite damp with perspiration, but NOT WET! Friday, January 22nd was the last time Ricky wore a pair of rubber pants and from then until this date, March 25th, he has only had two accidents in his pants. He still occasionally wets the bed in the morning, but this generally happens when he hasn't had enough sleep and he has trouble getting awake enough to get out of bed before the urge hits him.

Ricky was doing well at taking his underpants off and going to the bathroom when he needed to. However, after he used the toilet he would run around without any pants until I caught up with him and put his pants back on him. Therefore, I felt the next step was to teach him to put his pants back on by himself, so this was the skill I decided to work on for the two-week period. He already could pull his pants up from the ankles, so he just had to learn to get his feet through the leg holes.

I placed two kitchen chairs facing each other for us to sit on. I showed Ricky the pants and said, "OK, Ricky, let's put on your pants." My first step was to put his right foot through the proper leg hole and then place Ricky's hands on the left leg hole, making the opening as large as possible. Then, holding his hands in place, I'd say, "Ricky, put on your pants," and guide his hands to get the leg hole in position for him to get his foot through it. After he got his foot through the leg hole he would stand up and pull his pants up to the waist. While he was doing this, I kept encouraging him and each time he made a correct move I'd say, "That's right" or "Very good" and just as soon as he got his pants up to the waist I immediately put a small bite of cookie or peanut butter cup in his mouth, saying "Good boy!" or "Very good!" with all the enthusiasm I possibly could and give him a big hug. We repeated this procedure four to six times at least once and sometimes twice a day, and also each time he took his pants off and went to the bathroom.
For twelve days he made virtually no progress—I had to help him almost as much as I did the very first time we tried it, and I must admit I was rather discouraged. However, I kept at it and it paid off. Late in the afternoon of the 13th day, after I put his pants on his right foot, he took hold of the pants and put his left foot through the left leg hole all by himself. The remainder of times that day he fumbled and needed help.

The 14th day he got his pants over his left foot three times all by himself.

The 15th day we taped a work session at the Day Care Center. The first time I gave him a little help with the left leg. The second time he got his left foot through by himself. The third time I handed him his pants, made sure he had them in the proper position and said, "OK, let's see what you can do all by yourself" and I sat back and watched. He pushed his left foot through the left leg hole, then his right foot through the right leg hole, stood up and pulled his pants up—just like he'd been doing it all his life! Mission accomplished!"

NOTE: Three months later Ricky still needs a little help and encouragement at times as he sometimes gets both feet through the same leg hole or his pants on backwards. This is due to his not paying attention to what he is doing. When this happens, I get his attention, get him to watch what he is doing and most every time he can get them on quite well by himself.
CHAPTER III
OUTGROWTHS FROM THIS PROJECT

A. Innovative Ideas

1. The West Virginia Commission on Mental Retardation and the Division of Day Care Centers for the Mentally retarded, Department of Mental Health have used this project as a model for similar training programs in other areas of the state.

This type of training program has proven beneficial for the parents of the mentally retarded who have children on the waiting list for local day care centers and for the Colin Anderson Center.

At the Charleston Day Care Center for the Mentally Retarded one staff member has been assigned to making home visits to those parents who have retarded children at home. This staff member has helped many parents to train their retarded children in self-help skills.

2. Station WMUL, the local educational channel, cooperated in making a half hour television production of this project. Three parents who participated in this study and their retarded children demonstrated the use of operant conditioning in teaching self-help skills to their children. It is one of the few television shows either nationally or in the state of West Virginia to allow the filming of profoundly and severely mentally retarded children.

This television film and the original training films of the parents working with their retarded children are now part of the permanent collection of the West Virginia University-Kanawha Valley Graduate Center Special Education Instructional Materials Center collection.

3. Several of the parents who participated in this project are seriously contemplating the writing of booklets describing how to train mentally retarded children in self-help skills by using operant conditioning. These booklets in layman terminology may prove beneficial to many such parents who are desperate for help.
CHAPTER IV
CONCLUSIONS

The parents of the profoundly and severely mentally retarded are usually stereotype as living with little hope. These parents are confronted with the reality that their children do not meet even the most fundamental standards for admission to special education classes in the state of West Virginia. These parents also realize that there are few if any day care centers to take care of such retarded children. It is also tragic to note that few if any of our training programs in special education at our schools of higher learning or even any of the state agencies that work with the mentally retarded have programs to train people to work with profoundly and severely mentally retarded individuals.

These particular parents are in desperation for any type of help that will show them how to teach their retarded children the fundamental self-help skills. Thus, it is assumed that all such parents have negative attitudes concerning the future of their retarded children.

Although it cannot be conclusively documented, it appears that in this study the stereotyping of parental personality as being always negative is unfounded. This project investigator is of the opinion that what is really operating is a positive correlation between parental personality and the ability of the retarded child to learn any self-help skill.

The parent who has self-confidence will try any new method as long as this parent can be convinced that the method has merit. The retarded child of such a parent made the most progress in this project.

The parent who lacks patience, unless she sees immediate success, usually winds up doing the task for the child. The retarded child of such a parent made limited improvement in this project.
The "lay professional" parent although having a great deal of intellectual knowledge about mental retardation, usually lacks ability to apply the knowledge to her own child. In this project the retarded child of such a parent made better progress while working with foster parents.

The martyr complex parent usually finds it difficult to accept the fact that the child can do anything. In this project the retarded child of such a parent made little if any progress in learning self-help skills.

The growing enthusiasm about the use of operant conditioning with the mentally retarded has deluged the literature. These reports deal with the use of operant conditioning with the mentally retarded in clinical settings to working with these individuals in their natural home setting.

The primary feature of this project was to translate into layman terminology the precise technique related to operant conditioning in the training of profoundly and severely mentally retarded children for self-help skills.

It is also expected that perhaps the parents who have participated in the project may help the professionals in special education to learn how to translate operant conditioning procedures to parents.

There is also the hope that from this project parents of profoundly and severely mentally retarded children will find such an improvement in their childrearing practices that this, in turn, may make living more satisfying for them as well as for the brothers and sisters of retarded individuals.

Finally, some of these parents, through seeing improvements in their retarded children, may find the strain of being on the waiting list to the Colin Anderson Center more acceptable or such parents might become so impressed with the improvements in the behavior of their retarded children as to consider the reevaluation of future plans.
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