BEHAVIOR MODIFICATION OF SOCIAL INTERACTION WITH DEAF CLIENTS IN A HALFWAY HOUSE FACILITY

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The focus of this study was on the effectiveness of utilizing behavior modification techniques in developing weekend social and recreational activities in young deaf adults in a halfway house rehabilitation facility. The behavior modification techniques employed were basic social reinforcement methods of informing the subject of the recreational options available and then reinforcing (counselor attention) his/her use of those facilities. The social and recreational behaviors included a wide range of activities within the community ranging from going shopping, to bowling or going on a picnic. It was necessary for the behaviors to involve social interaction at some level.

For a special population of deaf persons who have been residents of various educational institutions, interaction with the hearing world can be an extremely difficult proposition. Often, some neither understand what is being said to them nor can they make themselves understood when attempting to interact with the general population. Also, in some schools for the deaf social and recreational options fall within a very limited range. Reality seems to indicate that it is imperative for people to develop a rather sophisticated set of social interaction behaviors as part of their overall independent living skills. Without these skills, a deaf person may lead a boring and mundane life and not have any concept of how to deal with the 'hearing world' on a day to day basis. By this it is meant that, for a variety of reasons, some deaf persons may lack confidence to seek out and obtain services ranging from daily living needs to medical and legal assistance.

The halfway house for the deaf is a fairly recent innovation in the field of deaf rehabilitation. However, client need for such a facility has been recognized by several persons in the field. Rodda (1974) commented that "clients who are physically, educationally, or cognitively retarded lack the minimal practice skills for survival in a competitive, technological world." Quarrington and Soloman (1975) stated that the "normalization of deaf students will require major advances in the training and education of deaf students in residential programs."

Granberry (1976) went on to identify the three basic kinds of clients who would need a halfway house facility: "Clients with history of long-term institutionalization, clients who have been institutionalized only briefly but have little to return to in the community, and clients who have never been institutionalized but are at a critical stage of maladjustment due to some crisis." The stated objectives for the clients at the Fountain House in New York City (Badanes, 1973) include the social and vocational rehabilitation of formerly institutionalized deaf psychotic patients. Rice and Milligan (1973) similarly defined the function of the Hot Springs Rehabilitation Center as the personal adjustment and development of independent living skills by their clients. Personal adjustment includes classroom instruction in communication skills, basic academic subjects, personal hygiene and grooming, vocational tutoring, intreperson relationships,

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and basic concepts essential to independent living. The objective of independent living training is to facilitate the transition from a sheltered living situation to independent community living with a minimum of difficulty.

The need to develop social interaction in an overall rehabilitation plan for deaf clients has been widely recognized. Hackett (1975) stated that "different behaviors are expected in different situations. That's an important socialization rule." With this in mind it is important to realize that social development is often retarded in clients who have been institutionalized. Rodda (1974) stated, "Such clients usually have an extremely limited social life, making only fringe contact with other persons in their environment." Also Quarrington and Soloman (1975) found social maturity to be lower for children in residential programs who visited their homes infrequently compared to their counterparts in day school programs. Wechsler (1960), speaking to this issue, stated, "Group homes involve a group situation to promote interaction and resocialization. They encourage recreational and other contacts with the outside world." Granberry (1976) described one of the major functions of a halfway house for the deaf as "socialization and resocialization." He stated that in the daily life of the house there are many opportunities for the residents to learn these skills. Finally, Krupnick (1976) ties socialization and rehabilitation together when she states, "Many job failures among the deaf are a result of lack of skills in the areas of interpersonal relationships and social adaptability."

The social reinforcement techniques employed in this experiment have been established in several studies in the past: Ayllon and Michael (1959) and Ayllon and Houghton (1962) to psychotic behaviors; Brady and Lind (1961) to functional blindness; Wolf, Risley, and Mees (1964) and Ferster and DeMyer (1961) have applied them to the treatment of autism in children; Harris, Johnson, Kelly, and Wolf (1964) to regressed motor behavior of a preschool child; and Hart, Allen, Buell, Harris, and Wolf (1964) to operant crying. In each of these instances improvement in behavior was achieved.

It was hypothesized that a group of young deaf adults in a halfway house setting, with whom behavior modification techniques were employed, would increase the number of weekend social and recreational activities in which they participated. Social reinforcement, in the form of counselor attention to the client, was the primary behavior modification tool utilized. Informing the client of the various recreational options was prerequisite to the reinforcement. The social and recreational activities that produced data included any activity outside the halfway house that required social interaction with the outside world at some level.

Method

Subjects:

The subjects were eight deaf members of the Independent Living and Training Program in Tucson, Arizona. They ranged from nineteen to twenty-eight years of age. There were six males and two females. Of the eight, five also had other disabilities; two were epileptic, one had cerebral palsy, one was borderline mentally retarded, and one was brain damaged. All eight were considered to be below normal educationally, vocationally, or socially.

Instruments:

An observation form was utilized to record the number of times each client left the halfway house and what activity he/she participated in during each weekend of the research period. The experimenters then reviewed these forms to determine which of the outside activities constituted recreational or social interaction behaviors.

Design:

A one-group pretest-posttest design was utilized in the study. The design was chosen because the Independent Living and Training Program is the only halfway house of its kind in the area, so a population from which to choose a control group was not available.

Also the experimenters felt that due to the size of the population and the experimental techniques employed, it would not have been feasible to divide the halfway house members into experimental and control groups.

This experimental design does not control for the effects of maturation of the clients. On the other hand, the clients were unaware that their behaviors were being recorded so it is not likely that the results were subject to a Hawthorne effect.

Procedure:

A baseline was established by counting the clients' outside social interaction behaviors for three successive weekends. Behavior modification techniques were then implemented. These techniques included: 1) Listing various possible activities on the halfway house blackboard so that the members could sign up for whichever activity they wanted to attend; 2) Arranging for transportation to and from the activity; 3) In some instances, attending the activity with the client; 4) If it was a competitive situation, perhaps placing small wagers (25¢ to 50¢) on which team might win; and 5) Discussing in detail with the client the activities they had attended upon their return to the halfway house. Three weeks after the implementation of the behavior modification techniques the clients' outside social interaction behaviors were again counted for three successive weekends.

Results

The mean number of weekend social and recreational activities increased for the group after intervention with behavior modification techniques. A t-test for matched groups showed that there was a significant difference at the .99 level of confidence between the pretest and posttest social interactions (t equal 3.386, df equal 7, alpha equal 0.01).

Only one client showed a decrease in social interactions and he, ironically, had the highest number of interactions on the pretest. The range of increased interactions was from −1 to +7 with a mean increase of 3.

Figure 1 shows the total number of social interactions for each of the subjects during the pretest and posttest periods.

FIGURE 1

Client	Pretest	Posttest
1	8	7
2	5	10
3	2	9
4	7	9
5	3	7
6	5	6
7	2	4
8	4	8

Conclusion

The hypothesis was supported by the findings of the study. The group of young deaf adults in the Independent Living and Training Program participated in a significantly greater number of weekend social and recreational activities after the behavior modification techniques were employed.

From Figure 1 it can be inferred that clients 1, 4, and 6 all appeared to be comfortable with their level of social interaction at the time of the pretest and they did not show a marked increase in social and recreational behaviors. In contrast, the remainder of clients at least doubled their number of interactions from pretest to posttest. It should also be noted that of the clients with whom the behavior modification was most effective, three were multiply handicapped and two were not.

Of course, the ultimate goal of the behavior modification was that the social interaction becomes reinforcing in and of itself so that the behaviors, once established, would resist extinction. To test that, however, was beyond the scope of this research design. Future research in this area should certainly include a follow-up study.

Future research should also further investigate the use of social reinforcement as a means to modify many other behaviors among deaf clients in a halfway house rehabilitation facility.

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Summary

It was hypothesized that a group of young deaf adults in a halfway house setting, with whom behavior modification techniques were employed, would increase the number of weekend social and recreational activities in which they participated. A baseline was established by counting the designated behaviors over three successive weekends. Social reinforcement was then used to increase the number of social interactions demonstrated by the clients. A posttest was performed, counting the number of interactions for three successive weekends after the behavior modification intervention. The results supported the hypothesis as the group's mean number of weekend social and rectional activities did increase significantly.

REFERENCES

Badanes, J., "A Halfway House Program for Deaf Psychiatric Patients," *Journal of Rehabilitation of the Deaf*, 1973, Vol. 6(4), pp. 33-37.

Granberry, H. Robert, "Why Not a Halfway House for the Deaf?", *Journal of Rehabilitation*, Jan.-Feb. 1976, Vol. 42(1), pp. 37-47.

Hackett, Regina, "In Praise of Praise," *American Education*, March 1975, Vol. 11(2), pp. 11-15.

Harris, Florence R., Johnston, Margaret; Kelly, C. Susan; and Wolf, M. M., "Effects on Positive Social Reinforcement on Regressed Crawling of a Nursery School Child," *Journal of Educational Psychology*, 1964, Vol. 55, pp. 35-41.

Hart, Betty M., Allen, K. Eileen; Buell, Joan S.; Harris, Florence R.; and Wolf, M. M., "Effects of Social Reinforcement on Operant Crying," *Journal exp. child Psychol.*, 1964, Vol. 1, pp. 145-153.

Krupnick, Nancy, and Krieger, George W., "The Deaf in the World of Work," *Journal of Employment Counseling*, Dec. 1976, Vol. 13(4), pp. 182-188.

Quarrington, Bruce and Soloman, Barbara, "A Current Study of the Social Maturity of Deaf Students," *Canadian Journal of Behavorial Science*, January 1975, Vol. 7(1), pp. 70-77.

Rice, B. D., and Milligan, T., "A Structured Approach to Independent Living Training for Young Multiply Handicapped Deaf Adults," *Journal of Rehabiltation of the Deaf*, April 1973, Vol. 6(4), pp. 38-42.

Rodda, Michael, Ph.D., "Behavioral Disorders in Deaf Clients," *Journal of Rehabiltation of the Deaf*, April 1974, Vol. 7(4), pp. 1-13.

Wechsler, H., "Halfway Houses for Former Mental Patients: A Survey," *Journal of Social Issues*, 1960, Vol. 16(2), pp. 20-26.

Secondary References

Ayllon, T. and Haughton, E., "Control of the Behavior of Schizophrenic Patients by Food," *J. exp. Anal. Behav.*, 1962, Vol. 5, pp. 343-352.

Ayllon, T., and Michael, J., "The Psychiatric Nurse as a Behavioral Engineer," *J. exp. Anal. Behavior*, 1958, Vol. 2, pp. 323-334.

Brady, J. P., and Lind, D. L., "Experimental Analysis of Hysterical Blindness," *Arch. gen. Psychiat.*, 1961, Vol. 4, pp. 331-339.

Ferster, C. B. and DeMyer, Marian K., "The Development of Performance in Autistic Children in an Automatically Controlled Environment," *J. Chronic Dis.*, 1961, Vol. 13, pp. 312-345.

Wolf, M. M., Risley, T. R., and Mees, H. L., "Application of Operant Conditioning Procedures to the Behavior Problems of an Autistic Child," *Behav. Res. Ther.*, 1964, Vol 1, pp. 305-312.