

SPECIFIC RESPONSE BLOCKING, EXPOSURE AND DIFFERENTIAL REINFORCEMENT ELIMINATE DISROBING: A CASE STUDY

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Introduction

Specific response blocking; the prevention of a dysfunctional behaviour, and exposure; confrontation with stimuli that trigger the dysfunctional response have become the behavioural treatment of choice for individuals with obsessive compulsive disorder (Foa *et al.*, 1984). General response blocking in the form of non-contingent physical restraint has been used in the treatment of severe maladaptive behaviour in individuals with intellectual disabilities but specific response blocking with exposure has not been widely used. Physical restraint has major drawbacks in that other responses aside from the target are also blocked and the restraint itself may become reinforcing (Favell *et al.*, 1981).

Disrobing, or clothes stripping, has been treated successfully by overcorrection (Foxy, 1976) and time out (Paul and Miller, 1971). Drawbacks to

these procedures are that they can be aversive and generalize poorly with behavioural substitution often occurring (Rollings *et al.*, 1977). The current study investigates an application of the Foa *et al.*, (1984) treatment conceptualisation for obsessive compulsive disorders to the treatment of disrobing. Such an approach must block only the specific disrobing response from occurring and at the same time confront the individual with participation in situations during which disrobing previously occurred. Such participation is then reinforced.

Case Report

A 41 year old man (A.D.) of Hispanic ancestry diagnosed with profound mental retardation (MA = 1 year 3.5 months, Slosson Intelligence Test) (Slosson, 1978)

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living at a large state operated institution in the United States participated in the study. A. D. is one of 5 children, all of whom were in foster placement during their early childhood. While none of A. D.'s siblings had been diagnosed with mental retardation, an older brother had been diagnosed with schizophrenia. A. D. had no history of psychiatric diagnosis. A. D.'s mother had a history of psychiatric problems but at the time of this study had no psychiatric diagnosis.

A review of the existing record and discussion with A.D.'s caseworker revealed that developmental delay was first noted prior to the age of 2 years. Walking began at about the age of 2 years, at which time A. D. was placed in a "childrens' home" where he remained for 5 years. At the age of 7 years 11 months, A. D. was placed in a large state operated institution. Shortly before placement, A. D. was described as incontinent, unable to feed or dress himself, and as sitting for hours at a time staring at his fingers. At the age of 29 years, A. D. was transferred to a second large state operated institution.

At the initiation of this study, A. D. was able to feed himself with a spoon and drink from a cup. He would sit for short periods of time (1 - 2 minutes) and engage in simple tasks such as placing smaller objects in larger ones. He was continent and self-initiated use of the toilet for urination and defecation. The majority of his awake time was spent pacing nude in a day room and staring at his fingers.

Clothes stripping to total nudity was a long standing behaviour in evidence for at least 15 years. Due to the severity

of disrobing, A. D. was relegated to spending his life indoors and isolated from activities available to his peers. History indicated the behavioural strategies of differential reinforcement, overcorrection, and contingent jumpsuit use had been attempted to eliminate clothes stripping without long term success.

Method

For a one month period prior to the initiation of a laced jumpsuit, the individual was dressed in an unlaced jumpsuit. A daily schedule of activities with 5 peers and a direct care worker, including training in fine motor, gross motor, self-care, and recreational skills was developed. During this time period A. D. was re-dressed each time he disrobed. A differential reinforcement schedule of alternate behaviour (DRA; fixed interval = 1 minute) consisting of praise and a small edible reinforcer was instituted for participation in scheduled activities while dressed in the jumpsuit. The purpose of this one month period was to set up activities which could later be reinforced while the individual was in the laced jumpsuit and to serve as a baseline prior to laced jumpsuit initiation. During this month, the direct care worker was given a stop watch; the watch was started each time A. D. was clothed in the jumpsuit and stopped each time he was totally nude. As the target behaviour was total nudity, staff were easily trained in this procedure. Data were collected during all waking hours.

Following this month, a laced jumpsuit which specifically blocked disrobing was added to the DRA and activity schedule package. This jumpsuit was identical to the jumpsuit used during baseline with the exception of grommets across the back and down both sleeves which allowed for a lace to be inserted and tied. The lacing in no way restricted movement. After a morning shower, the individual was dressed in the jumpsuit and the lace was inserted and tied. For 10 minutes every two hours, the jumpsuit was unlaced. At the end of each week the first author and the staff assigned to A. D.'s living area met to review progress. If compared to the previous week, the amount of time A. D. was dressed increased or remained the same then the time interval for the jumpsuit being unlaced increased. If the amount of time A. D. was dressed decreased then the laceless interval was decreased. The amount of interval increase or decrease was determined by team consensus and ranged from 5 to 15 minutes.

During baseline, A. D. was clothed an average of 8% of the time. During month 2, the first month of laced jumpsuit use, A. D. was only clothed while the jumpsuit was laced. In the third and fourth months of the procedure, A. D. remained clothed in the jumpsuit without it being laced 4% of the time. For months 5 and 6 however, A. D. was only clothed while the jumpsuit was laced. At month 7, A. D. again remained dressed without the jumpsuit being laced 4% of the time. Being dressed without the lace increased steadily (no data were available for

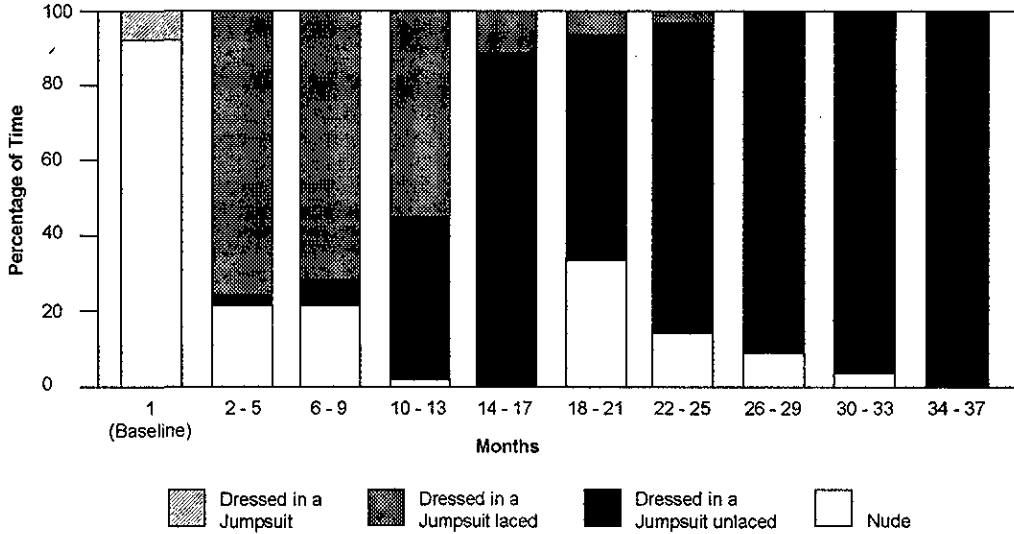
month 9) until the sixteenth month when A. D. remained clothed without the lace 100% of the time.

At month 19, disrobing reappeared with complete regression occurring during month 20. At this point the laced jumpsuit was re-introduced. During month 19 of the study, all individuals residing at this facility had their daily schedules administratively changed and were not allowed to remain in their living area at all during the hours of 9.00 a.m. to 5.00 p.m. The laced jumpsuit was again faded after 3 months of use and A. D. remained clothed over 90% of the time for 6 months reaching 100% at month 29. Disrobing again appeared briefly at month 31 and A. D. then remained dressed for 6 continuous months. FIGURE 1 presents the data for baseline and 9 four-month post baseline intervals.

Discussion

These results provide evidence that a procedure based upon specific response blocking, DRA, and exposure to daily activities was useful in eliminating disrobing behaviour. Such an approach does not have the same drawbacks associated with it as previous approaches to this problem (Foxy, 1976; Paul and Miller, 1971) in that it is not aversive, and precludes the need for a lengthy generalisation phase, as treatment is accomplished within the individual's environment. At the conclusion of this study A. D.'s treatment team was discussing ways of generalizing the effect to other clothes. At this time it was not

FIGURE 1
Mean percentage of time nude, dressed in a jumpsuit and dressed in a laced jumpsuit for 37 months



known if A. D. would remain dressed in a shirt and pants if they were presented to him. If the treatment generalized to other types of clothing it would provide evidence that the procedure treated some overall anxiety to clothes wearing as opposed to the jumpsuit itself having become a discriminative stimulus for the receiving of the scheduled reinforcers. The relative contributions of the DRA schedule and the response blocker need to be further detailed.

The results also suggest that a technology for the development of specific response blockers should be pursued. Other compulsive behaviours in individuals with intellectual disabilities, when viewed from the Foa *et al.* (1984) framework, may also be amenable to this treatment modality. The regression noted in this study bears further

investigation. Although it appeared that disrobing had been successfully eliminated, a strong enough stimulus was able to reinstate clothes stripping. Disrobing was more amenable to change during the second than first course of treatment. In the case presented in this study, disrobing was of a frequency to severely limit the individual's access to normal daily activities. Before this procedure is implemented one should determine whether the behaviour is amenable to change through less intrusive measures.

Summary

During a 37 months period, specific response blocking in the form of a laced jumpsuit, exposure to daily activities,

and differential reinforcement of alternate activities were used to eliminate long standing disrobing behaviour in an individual with profound mental retardation. The advantages of such a procedure include avoiding the use of aversive procedures and allowing the individual to remain with a peer group while treatment is completed, precluding the need for a generalization procedure.

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