BEHAVIOURAL TREATMENT OF PARENTAL ASSAULT ON A CHILD

DONALD A. SANDFORD and RICHARD D. TUSTIN

Psychological Services, Justice Department, Wellington

The use of three contingencies in the modification of a father's aggressive behaviour towards his young daughter are outlined. The subject reported he could not tolerate loud noise, and hit his child in an attempt to reduce her noise level. The treatment programme involved reinforcing behaviour other than aggression in the presence of loud noise and making the child a conditioned reinforcer.

In this paper a procedure is outlined that was used to alter the aggressive behaviour a father showed towards his 13 month old daughter. The daughter was under the care of foster parents because of her father's assaults on her. An analysis of the father's behaviour indicated that he found it difficult to stop her crying. The mother reported that striking the child did stop her crying at least temporarily. The father said that he felt no affection towards his daughter and that she was just an object that was at times highly annoying and at best tolerable.

A treatment programme was offered, the primary purpose of which was to reinforce the father for tolerating loud noises, and not reacting aggressively. By the time the case came to attention, the child was capable of crying for several hours on end. Consequently, treatment aimed at getting the father to tolerate continuous crying for a period long enough for the mother to pacify the child by reducing the aversiveness of the child's crying.

The experimental literature with animal subjects has suggested several techniques for reducing the aversiveness of stimuli. It has been found that aversiveness is related to both the intensity and duration of the stimulus (Church, Raymond, and Beauchamp, 1967). The aversiveness of a stimulus may be reduced by introducing it at low intensity and duration, and slowly increasing these (Azrin and Holz, 1966). Azrin and Holz found that stimuli are less aversive in their effects if responses are also reinforced. Lefcourt (1973) concluded that both human and infra-human species were better able to cope with aversive stimulation if they were given some control over its duration, even if this control was not exercised.

The optimal effect in reducing the aversiveness of a stimulus should be gained if the aversive stimulus is initially of low intensity and duration, and if both intensity and duration are gradually increased at a later stage. The subject is strongly reinforced for remaining in the presence of the aversive stimulus, but has some escape response available to him.

The primary aim of the present study was to reinforce the subject for tolerating the child's crying. The intention was to reduce the need

for the father to escape. The aversiveness of the stimulus during treatment sessions was kept down to a level that was expected to be within the subject's toleration, in order that escape would be unlikely to occur, although an escape response was available.

A second aim of treatment was to make the daughter more reinforcing to the father. Schuster (1969) reports that a stimulus may become a conditioned reinforcer if it is a discriminative stimulus for either the onset of reinforcement or the offset of an aversive stimulus. In the present case, both of these procedures were used. The subject was exposed to an aversive stimulus. If the subject remained sitting passively for a pre-determined period, he was reinforced, and the aversive stimulus turned off. A videotape of the daughter laughing and playing was turned on just before the offset of the aversive stimulus and the onset of the reinforcing stimulus. This was expected to maximize the probability of the child becoming a conditioned reinforcer.

METHOD

Subjects

The parents had been married for 7 months. The wife was aged 21, the husband 31. Both were of normal intelligence. The father had been married previously, and had a son whom he had not seen for four years. The father described himself as an inadequate parent to both of his children.

The daughter was aged 13 months when she first came to attention. Previously it had spent most of its life in hospital because of feeding difficulties. When aged 13 months the child weighted only 15 pounds making it about 7 months retarded in size. The mother had taken a job at the hospital so that she could visit the baby regularly. The father visited occasionally.

The mother brought her husband to our notice because of her fears that he would seriously harm the child who already had bruises on her back, caused by the father striking her. At this point the child had been home for only three weeks. The mother had carried the child on her hip for the last two weeks to console the baby and to keep her from the father.

The child was placed in a foster home while treatment was sought for the father. The foster mother reported that for the first week the child cried when she was alone, and could not be consoled. The foster mother later reported that the child played contentedly. This suggests that the child's crying was due to some factor in the relationship with her parents. The feeding problem that had earlier necessitated hospitalisation was not evident in the foster home. The foster mother reported that the child "eats like a horse".

Stimuli

Two types of aversive noise were used: the daughter and other children crying and screaming, and a tin party hooter (which covered a frequency range particularly aversive to the subject). Two types were

used because the subject reported that all loud noise made him tense and liable to aggressiveness.

The reinforcing stimulus used in Phases 2 and 3 (Treatment) was recorded folk music. The subject had reported a strong preference for this music in our initial interview. The reinforcing sounds were recorded on one track of a four-track tape recorder, and the aversive sounds on the other track. The two tracks had independent volume controls, so that aversive stimuli could be presented while reinforcing stimuli were removed and vice versa. For the purpose of developing sight of the child as a conditioned reinforcer, a visual depiction of the daughter laughing and playing was also recorded on videotape.

Procedure

In the first two sessions of Phase 1 (Pre-treatment), only the aversive sounds and never the reinforcing sounds were presented. A measure was taken of the length of time the subject could listen to the child crying without removing his headphones (the escape response). It was found that the subject removed the headphones before listening to the crying (at 70 db intensity) for one minute on the average.

In Phase 2 (seven sessions), the subject was reinforced for listening to sounds which became progressively more aversive than in Phase 1. Figure 1 shows the temporal relationship between stimulus presentations. The videotape was always turned on before the offset of the aversive noise, and before the onset of the reinforcing noise. The videotape was always turned off after the offset of the reinforcing stimulus. The duration of listening to aversive noise required for reinforcement was determined by the therapist before each session began. The criterion was set such that stimulation was only slightly more aversive than in previous sessions, in order to reduce the probability of the subject actually making the escape response. There were several trials in each session. The stimulus intensity within each trial remained constant, but the intensity could be varied between trials.

In the Phase 3, the criterion for reinforcement was increased sharply between sessions. The subject appeared to be coping with the gradual increments of Phase 2 without making the escape response. The purpose of introducing sharp changes in Phase 3 was to see whether the subject would begin to make the escape response again. Treatment was terminated after the 13th session during which the subject tolerated 15 minutes of aversive noise without making the escape response.

RESULTS AND DISCUSSION

Figure 2 shows the average duration and intensity of the aversive noises in each session. There is an overall increase in both duration and intensity as treatment sessions progressed. If the subject's behaviour during treatment generalized to the home environment, then it was thought that the maximum duration of 15 minutes of aversive noise to which the subject was exposed would be long enough for the wife to pacify the child.

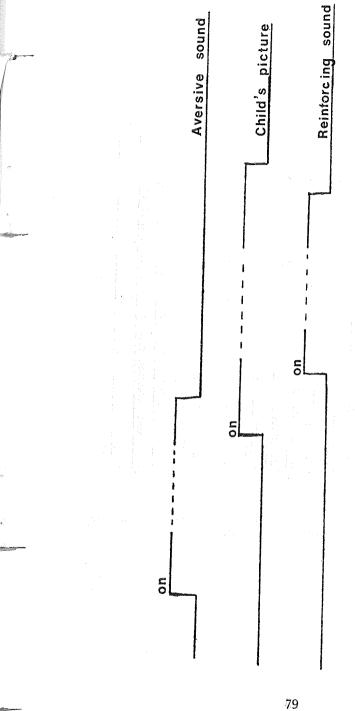


Figure 1. Temporal relationship between presentation of aversive and reinforcing stimuli during Phases 2 and 3. The videotape of the child was presented concurrently with the reinforcing stimulus in the hope that the sight of the child would become a conditioned reinforcer. In Phase 1 only the aversive noise was presented.

TME

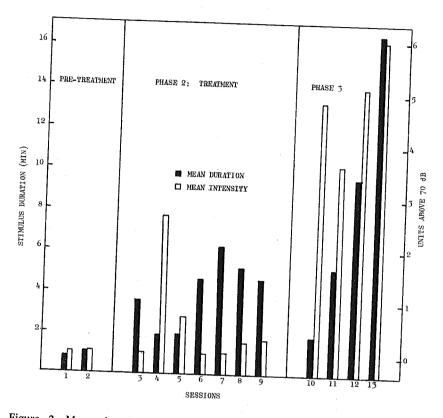


Figure 2. Mean duration and intensity of aversive stimulation during pretreatment and treatment sessions (Phases 2 and 3).

The primary aim of treatment was to positively reinforce the subject for tolerating very aversive noises and for not emitting the escape response of removing the headphones. In the pre-treatment sessions, when reinforcement was not available, the duration of listening was determined by the subject's making the escape response. The duration of listening averaged less than one minute in pre-treatment sessions. In treatment sessions, the longest duration of listening for any trial was set by the therapist. The subject could reduce the duration by escaping, but did not perform the escape response in any of the treatment sessions, always tolerating the aversive noise for the duration determined by the therapist.

It was considered that the usefulness of the treatment programme was that the subject did not escape from the aversive noise during treatment. Hopefully, tolerance of the aversive noise developed in treatment would generalize to other situations and in particular the subject would not attempt to escape by beating his child.

It is of interest to note that the subject suffered from asthma, which seemed to be aggravated by noise. The subject coughed and wheezed continually in the pre-treatment sessions. As treatment progressed, the number of coughs diminished, until there were no coughs in the final three treatment sessions.

It was thought that if the parents were encouraged to practise good child care, the probability of the child crying would be reduced and the father would be less likely to assault her. Both parents were advised to prevent their daughter from becoming upset and crying, by doing things that the child liked. According to the foster mother, these included cuddling (not just holding the child), giving her soft toys, putting her in a shallow warm bath, bouncing her on one's foot, looking at picture books, going outside with adults, and playing with other children. The daughter disliked people in white coats and being corrected by men. When in a confined space such as a high chair, even a man looking directly at the child would cause her to cry. Both parents were advised to avoid these activities.

A follow-up conducted three months after treatment indicated that the father was happier at work and no longer became agitated by the noises around him. (Both parents worked as cleaners at an international air terminal near their home.) It is difficult to evaluate thoroughly the effects of treatment on the behaviour of the father towards his daughter, as the child was home for only two weeks after the time of treatment. During this time, the father did not beat the child. The child was returned to the foster home because the mother had begun working while the child was away, and wished to continue her full-time job. In addition, the foster mother had expressed interest in adoption.

Thanks are due to the scientific Grants Committee of the Lottery Committee, whose grant made this work possible. Appreciation is expressed to Dr. K. G. White for help in presenting this paper.

REFERENCES

Azrin, N. H. and Holz, W. C. in W. K. Honig (Ed.), Operant Behaviour: Areas of Research and Application. New York: Appleton Century Crofts, 1966.
Church, R. M., Raymond, G. A., and Beauchamp, R. D. Response suppression as a function of intensity and duration of punishment. Journal of Comparative and Physiological Psychology, 1967, 63, 39-44.
Lefcourt, H. M. The function of the illusions of control and freedom. American Psychologist, 1973, 28, 417-425.
Schuster, R. H. A functional analysis of conditioned reinforcement. In D. P. Hendry (Eds.), Conditioned Reinforcement. Homewood: Dorsey Press 1969.

An interface of the control of the c