With the recognition of a functional relationship between anti-social behavior and the environment in which it occurs, and hence of the appropriateness of environmental intervention, there has been an increasing appeal for the use of behavior modification with criminals and delinquents. This has led to the development of many sound programs in the area of prevention and rehabilitation. Two programs of each type are described. At the same time, however, there are several issues which presently plague the effectiveness of behavior modification. In general, these issues relate to the need to establish behavior modification programs on an empirical or analytical basis, the need to focus upon possible side effects which are incompatible with long-range goals, and finally the need to go beyond a demonstration of the power of behavior modification and focus on problems of generalization, bringing the behavior under the control of natural contingencies. (Author/KS)
Behavior Modification with Delinquents: Some Unforeseen Consequences

John D. Burchard
University of Vermont

In recent years there has been a remarkable trend in the application of learning principles to the broad areas of education, treatment and rehabilitation. This has been particularly true in the area of crime and delinquency where programs variously labeled behavior modification, behavior therapy, operant conditioning and reinforcement therapy have been developed in prisons, training schools, institutions, halfway houses and community-based prevention programs.

Although behavior modification programs differ markedly in terms of the specific procedures they utilize each one is usually based on the general assumption that there is a functional relationship between antisocial behavior and the environment in which it occurs. Granted this assumption, then it becomes clear that one way to change delinquent behavior is to change the environment. This then is probably the basic difference between the behavior modification approach and some of the more traditional psychological and psychiatric methods of rehabilitating criminals and delinquents. Instead of trying to change the person through some type of periodic, psychotherapeutic or verbal mediation the focus is on changing the environment so that appropriate behaviors are strengthened or weakened. In general, the environment is arranged so that adaptive behavior is strengthened through rewarding consequences and maladaptive or antisocial behavior is weakened through non-rewarding and/or punishing consequences.

There seems to be little question but that the behavior modification approach has been productive and that much of the present enthusiasm is

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1 This is a revised version of a paper read at the American Orthopsychiatric Association Convention in Washington D.C., April, 1971
warranted. This will be exemplified through a brief reference to four different programs, two which relate to prevention and two which relate to rehabilitation.

One of the preventive programs was developed by Flannery and their associates in Arizona while the second is presently being conducted by Wolf, Phillips and others at the University of Kansas. In both instances the population being served consisted of adolescent boys who displayed a high frequency of antisocial behavior but had not been adjudicated delinquent. Also in both instances the basic procedure was to arrange the environment so that rewards were contingent upon small, successive approximations of adaptive behavior in a variety of situations. The main difference was that the Arizona project was conducted in the natural environment with boys residing at home while the Kansas project was conducted within a home-style, residential setting (Achievement Place). While it is still too early to properly assess the effects of either program, preliminary studies have been quite impressive. Through the systematic manipulation of reinforcement contingencies high frequencies of intolerable, disruptive behavior have been replaced by behavior which is much more adaptive and related to community survival.

Both of the rehabilitation programs took place within correctional facilities. One was developed by Cohen and his associates at the National Training School when it was in Washington D.C. and the other, by McKee and his associates at Draper Prison in Alabama. In both programs the environment was arranged so that aversive consequences were minimized and inmates didn't have to do anything to obtain the basic necessities of penal life. However, for those who wanted to improve their life style points or marks could be earned through small units of academic achievement and cashed in for more interesting food, special privileges, opportunities to spend time in a rec-
reaction lounge, and occasional trips away from the institution. As a result of these systems the attitudes of the inmates greatly improved, on a voluntary basis they began to spend long hours on their behavior-related problems were greatly decreased.

As mentioned above the results of these programs are impressive and the enthusiasm of their proponents seems warranted. However, the entire picture regarding the future of behavior modification does not consist of unqualified optimism. It seems clear that the behavior modification approach will not be the final phase in the rehabilitation of delinquents and criminals; at least not in terms of the present status of behavior modification. There is considerable historical evidence that new treatment approaches, if they are to survive at all, are initially met with overwhelming attention and enthusiasm, are hailed as the solution to all problems and are included in the treatment armament of most respectable institutions and agencies. However, once the initial dust has settled the really significant issues begin to arise. Due to the objective, empirical nature of many behavior modification programs the question of whether or not behavior can really be modified has already received an affirmative answer, at least with respect to many different, overt behaviors. However, there are other issues which currently plague the development and possibly even the survival of the behavior modification approach.

Basically, the issues I am referring to relate to what constitutes behavior modification, the manner in which it should be applied (especially with criminals and delinquents) and the need to go beyond the repeated demonstration of the law of effect and focus on the more important problem of generalization or the transition from the artificial or controlled environment to the natural environment. Without further emphasis and investigation on these issues it is likely that behavior modification will go the way of many fads.
First, there appears to be considerable confusion with respect to what constitutes behavior modification. While it is generally agreed that the techniques are derived from or consistent with the principles of learning (i.e. shaping, prompting, fading, reinforcement, extinction, punishment, etc.) there is considerable variation in the manner in which these techniques are applied. For example, in many situations behavior modification merely connotes the administration of certain procedures. Predetermined behaviors are rewarded, ignored or punished through contingency management. However, there is no systematic data collection or analysis to provide empirical verification of the effects of those procedures. Procedures selected and maintained on an a priori basis ("they were shown to be effective in someone else's program") or on the basis of "good common sense" (T.V. is reinforcing for most kids). Unfortunately, good common sense or knowing what works with others is not good enough; especially in working with delinquents and criminals. It would seem that if the solution were that simple the problems would have been solved a long time ago.

One of the major assets of the behavior modification approach is that it is amenable to continuous, empirical verification. Procedures can be selected, maintained and modified on the basis of their effects on behavior and not on the basis of common sense, subjective impression or guesswork. This emphasis on the dynamic aspect of behavior modification, the interaction between procedure and effect, has resulted in the process being relabeled applied behavior analysis. The main point then, is that systematic empirical analysis of the effects of specific behavior modification procedures should be an integral part of every behavior modification program. Without carefully defining and monitoring the behaviors to be modified the value of a behavior modification is extremely limited.
The second issue pertains to the manner in which behavior modification programs should be applied, especially with delinquents and criminals. There is little question regarding the power of contingency management. If the consequences are of sufficient magnitude, whether positive or negative, it is relatively easy to produce at least a temporary change in behavior. But are there any negative side effects associated with that change in behavior? It is a question which warrants further consideration.

Much has been written regarding the possible negative side effects of aversive control. While punishment or the threat of punishment frequently results in an immediate change in behavior it weakens the relationship (or, in behavioral terms, the reinforcement contingency) between the person who administers, and the person who receives the punishment. Also, although punishment may produce a persistent effect in the presence of the punishing agent, there is the question of the effect in the absence of the punishing agent. At least in some situations punished behavior occurs more frequently in the absence of the punishing agent.

Negative side effects may not occur only in the context of punishment. There is some evidence that for some individuals the process of managing reinforcement contingencies, even where the contingencies are primarily positive, produces undesirable side effects. The negative side effect is that after the contingency is removed the behavior which was previously required to get a particular consequence occurs less frequently than it did before the contingency was applied. For example, an adolescent is told that in order to be able to watch T.V. at night he must clean his room. Because T.V. is a powerful reinforcer for this particular individual he cleans his room while the contingency is in effect. However, after the contingency is removed he cleans his room less often than he did before the contingency was applied. Is this
because he wants the contingency to be reinstated? Or is it because he doesn't think it is important that he cleans his room? Or is it because of something else? The reaction is similar to what the social psychologists refer to as "reactance", a motivational opposition to a decrease in freedom. Certainly one's freedom is limited in a contingency management program, especially one in which the consequences one previously enjoyed on a noncontingent basis are all of a sudden made contingent upon some difficult or undesirable behavior.

The point being made is that in administering a behavior modification program the guiding principle should not be to utilize the procedure which produces the greatest and most immediate change in behavior. Depending upon the procedure and how it is administered it is possible that there will be negative side effects which will be incompatible with long range goals. This is particularly true with punishment and may even be true in programs in which the contingency management involves gross or unsubtle limits of "choice" or "freedom". It is frequently asked why the old training school-reformatory point systems proved to be so ineffective when they appeared to involve contingency management. It would appear that the contingency management used in those programs was based almost entirely upon aversive control. Either one "behaved" or he lost something desirable. Possibly it is reinforcing not to engage in such behavior in the absence of such control, call it reactance or whatever.

The final issue pertains to the problem of generalization. As mentioned above there is little question regarding the power of behavior modification techniques. In most instances it has been found that a behavior can be modified in a desirable direction if the consequences (especially the immediate consequences) can be manipulated or controlled. However, in the process of controlling a consequence an artificial contingency is introduced. And while
the artificial contingency may produce successful behavior modification there is still the question of how to bring the modification under the control of natural contingencies. To illustrate the problem it may be possible to get a delinquent youth to display good manners by paying for tokens for successive approximations of appropriate behavior at meal time. Depending upon the severity of the problem, establishing good table manners could be an impressive and worthy achievement even though accomplished through artificial contingencies. However, if the rehabilitation (or habilitation) is to be complete it is necessary to eventually bring the good table manners under the control of natural contingencies. There are few places in society where a person will get paid for displaying good manners.

Due to the behaviorists' zeal for empirical verification (or at least some behaviorists) the magnitude of the problem is demonstrated repeatedly. That is, in order to demonstrate that a particular technique has produced a significant change in behavior the behavior modifier will frequently switch from the treatment conditions (i.e., the artificial contingency) to a no treatment condition (which frequently represents the natural contingency). This is the typical ABA experimental design. And what the behavior modifier typically finds is that once the treatment conditions (the artificial contingencies) are removed the behavior quickly reverts back to its pretreatment level or frequency. To use an example with table manners, once good table manners were established the tokens might be removed (or administered noncontingently) to see if it was the contingent administration of tokens that produced the good table manners. And under such conditions one is likely to find that the level or frequency of good table manners will decline.

While it is necessary to perform manipulations such as those involved in the ABA design, it is important not to stop with the demonstration of a causal
relationship between a behavior and a particular consequence. The fact that the behavior deteriorates when the contingencies are removed points out the problem of generalization. It is time for those interested in behavior modification programs to move beyond the repeated demonstration of the law of effect and to focus more on building increasing resistance to those effects. Although there have been some efforts in this direction, much additional research is needed.

To summarize, there has been increasing appeal for the use of behavior modification with criminals and delinquents which has led to the development of many sound programs in the area of prevention and rehabilitation. At the same time, however, there are several issues which presently plague its effectiveness. In general these issues relate the need to establish behavior modification programs on an empirical or analytic basis, the need to focus on possible side effects which are incompatible with long range goals and finally the need to go beyond a demonstration of the power of behavior modification and focus on problems of generalization.
References


