reconciling behavior modification procedures with the normalization principle

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Man differs from other life forms in his determination to shape his own destiny. His goal of eliminating culturally unacceptable behavior has been brought closer to fulfillment during recent years by the systematic application of principles of learning.

Definitions
Generally referred to as 'behavior modification', a group of techniques derived from learning theories has been enthusiastically applied to a wide variety of behaviors which violate cultural values. Those behavioral deviations from cultural norms which are subsumed under the heading of 'mental handicaps' have become the prime (though by no means the only) focus of these techniques.

Systematic application of learning principles to deliberately influence all types of human behavior has been labelled 'behavior influence' (Krasner, 1970a). It includes such techniques as formal education, advertising and propaganda. In a more restrictive sense, 'behavior modification' has been used to describe procedures employed in order to alter behavior that has been judged to be undesirable (Gardner, 1970; Krasner, 1970a). Also rather narrowly, 'behavior therapy' is used by some authors to refer to those techniques which derive from Wolpe (1958) which rely on classical conditioning (Krasner, 1970a). Sometimes, a specific type of learning principle — such as 'operant conditioning' — will give its name to a set of procedures that are based upon it.

The term 'behavior modification' is most appropriate since it deals with techniques aimed at altering all forms of deviant behavior, without restriction to specific types of behavior or to specific types of learning principles.

Advantages of behavior modification
Behavior modification’s increasing popularity can be attributed in part to its many practical advantages, including the following.

The techniques have been successfully applied to a wide range of individuals, including non-verbal and 'seriously disturbed' ones (e.g. Ullmann & Krasner, 1965, Nawas & Braun, 1970).

Using techniques of behavior modification, a broad spectrum of behaviors has been successfully modified, including hallucinations (Bucher & Fabrica-

This chapter is an adaptation of an earlier paper. The reference is Roos, P. Normalization, de-humanization, and conditioning: Conflict or harmony? MENTAL RETARDATION, 1970, 8(4), 12-14.

The techniques can be applied by relatively unsophisticated persons, including ward aides, teachers and parents (e.g. Wahler, Winkel, Peterson & Morrison, 1965; Conger, 1970).

In general, results are achieved in a relatively short period of time when compared with other procedures.

Procedures have been developed which are suitable for group application, thereby maximizing their efficiency (e.g. Schaefer, 1966; Staats, Minke & Butts, 1970).

**Contrast with other therapies**

Behavior modification differs significantly from the dynamically-oriented – or expressive – forms of counselling and psychotherapy which have been the mainstay for dealing with most forms of socially unacceptable behavior. The following are some of the principle differences.

Whereas the expressive approaches are usually based on an historical analysis of behavior, behavior modification focuses on the present ‘here and now’ situation.

Traditionally, adherents of analytic approaches have sought the cause of current maladaptive behavior in past experience, and often even in early childhood. Behavior modifiers, on the other hand, interpret behavior primarily in terms of its consequences. Current behavior is analyzed in terms of those aspects of the present environment which maintain it rather than in terms of antecedent conditions.

In order to explain behavior, analytically oriented approaches have typically depended on intrapsychic constructs, such as Freud’s concepts of Id, Ego and Super Ego (Sutherland, 1957). Behavior modification, on the other hand, focuses on directly observable interactions with the environment.

Most dynamically oriented approaches have stressed the need for highly trained professionals, often insisting on ‘personal analysis’ or other intensive ‘psychotherapeutic’ experience. In contrast, behavior modification has been applied extensively by unsophisticated personnel.

Following Freud’s emphasis on ‘unconscious motivation’ (Sutherland, 1957), psychotherapists have typically resisted dealing directly with observable behavior (often referred to as ‘symptoms’) in favor of directing their efforts to affecting ‘basic personality changes’ or ‘resolving underlying conflicts’. In fact, therapists were warned against ‘removing symptoms’ because of the danger of precipitating a ‘psychotic break’ or generating new symptoms (‘symptom substitution’) (Glover, 1955; Coleman, 1956). Behavior modifiers have rejected these concepts and do not hesitate to deal directly with manifest behavior.

**Contrast with the medical model**

Behavior modification can also be contrasted with the so-called ‘medical model’ of behavior (Ullmann & Krasner, 1965). The medical model has been the most prevalent frame of reference for interpreting culturally deviant
behavior during the past decades. Indeed, much emphasis has been placed — even in popular presentations — on interpreting behavior deviancies (psychoneuroses and psychoses), addictions, and even serious learning problems as 'illness'. The medical model attributes such culturally deviant behavior to a 'disease' process which has somehow 'invaded' the organism. This process is responsible for the observable anomalies (usually referred to as 'symptoms') of the disorder. Remediation is understood in terms of 'treating' the 'disease' and 'cure' occurs when the individual is 'freed' of the disease. On the basis of this model, behavior can be dichotomized into 'normal' and 'pathological' — the latter being the product of 'disease'.

This model has been seriously criticized (Szasz, 1961; Ullmann & Krasner, 1965) as being invalid when applied to problems of behavior and as leading to destructive interactions between 'therapist' and 'patient'. Four of the most objectionable characteristics follow.

The relationship between the 'ill' person and the 'healer' is structured so as to foster feelings of helplessness, passivity, and dependency on the part of the former, while generating inappropriate illusions of omnipotence and omniscience on the 'healer's' part. It has been argued, as a matter of fact, that much of the maladaptive behavior noted in institutionalized persons is a function of the staff's 'therapeutic' interaction. 'Patients' are often told that they should conform to the institution's rules and routines and comply with staff instructions. Adherence to this prescription leads to passive, submissive conformity. Observing this behavior in the patient, staff are then likely to label him 'dependent' and to accuse him of 'regressing to 'infantile' levels of adjustment.

Dichotomizing behavior into 'normal' and 'pathological' suggests that different principles apply to the two forms of behavior. It follows that principles which are found effective in dealing with 'normal' behavior may be abandoned in favor of different approaches to the 'pathological'. For example, in contrasting the prevalence of 'paleological' thinking by schizophrenics with the use of Aristotelian logic by normals (Arieti, 1955), there is the implication that totally different approaches are required. Indeed, therapists have evolved systems of 'treatment' based on this very premise (Rosen, 1953; Whitaker & Malone, 1953).

The illness model implies that 'treatment' requires considerable expertise. Advanced graduate training is usually considered prerequisite to assuming the 'healer' role. This premise has led to two unfortunate consequences: the establishment of technocracies based on management monopolies (Roos, 1969c, 1971) whereby a specific profession maintains itself in a position of power; and 'non-professionals', and particularly family members, are excluded from the treatment process and are generally alienated from the 'patient' on the basis that they 'don't understand' and 'might harm' the unfortunate.

To the degree that behavior is attributed to an 'illness', it is perceived as a 'foreign intruder' and the afflicted individual can readily dismiss any personal responsibility for his actions. In this respect, the model is akin to the theory of 'possession' which was popular during past centuries. This interpretation of behavior fosters feelings of helplessness and passivity which tend to further impede adaptation.
In contrast to the medical model, behavior modification is based on the assumption that all behavior manifests the same basic principles, and is the product of the organism's interaction with the environment. Behavior is modified as a result of experience according to the principles of learning—principles which apply to all forms of behavior and to all types of individuals, including 'psychotic' persons, mentally retarded persons, and others who deviate markedly from the cultural norm. Being a result of learning, deviant behavior is qualitatively no different from 'normal' behavior. The concept that 'symptoms' result from 'underlying personality problems' is unacceptable or irrelevant to the behavior modifier. He is concerned only with observable behavior and makes no inferences about 'underlying' causes. Rather than searching for 'unconscious' conflicts or striving to 'cure' a 'mental illness', the behavior modifier attempts to determine relationships between observed behavior and environmental events, and to modify undesirable behavior by manipulating environmental variables.

**Criticism of behavior modification**

Behavior modification has not been greeted with universal enthusiasm. Serious criticisms have been directed at the approach and, indeed, some of these criticisms are relevant to the concepts of 'normalization' and 'humanization' which are the subject of this book.

A common criticism of behavioral approaches to modification of behavior is that they are superficial and fail to modify the 'basic' aspects of personality (London, 1969; Nawas, 1970). It can be argued, for example, that shaping a child's responses so that he is systematically rewarded for approaching and eventually hugging an adult does not affect the child's feelings toward adults. His 'basic withdrawal' or 'autism' remains unchanged, according to this position, and the observed changes are merely meaningless 'mechanical' actions. Behavior modifiers have countered by citing evidence that 'feelings' and 'personality change' (concepts which would probably be criticized as meaningless by many behavior modifiers) follow changed behavior. For example, as a child hugs its mother with increasing frequency, it is rewarded by her reciprocal hugging and other socially rewarding behavior. As these responses become associated with reward and pleasure, the child's feelings toward its mother change and become increasingly positive. Behavior modifiers are able to demonstrate impressive changes in behavior which appear to meet the criteria of 'basic personality change' (Ullmann & Krasner, 1965). An oversimplified summary of this issue would be that the traditional psychotherapist attempts to change personality and incidentally obtains behavioral change, whereas the behavior modifier attempts to change behavior and incidentally changes personality. In fact, behavior modifiers would argue that 'personality' is a meaningless term unless it refers to behavior.

Another common criticism of behavior modification is that it is a mechanistic approach to human problems, devoid of such desirable therapeutic ingredients as empathy, understanding, and warmth. This impression is strengthened by the behavior modifier's use of certain equipment and procedures derived from the laboratory (Schwitzgebel, 1968; Watson, 1968). The use of food, tokens or aversive conditions to modify behavior has also fostered the impression of a mechanistic approach to human problems.
Behavior modifiers do, in fact, rely heavily on social rewards such as praise or hugging. Patterson (1970, p. 10), for example, states: ‘In working with human beings a good human relationship, which includes understanding, respect, warmth and genuine interest and concern, is probably the most potent reinforcer.’ Behavior modifiers typically work toward replacing food rewards (primary reinforcers) with social rewards (secondary reinforcers). In some cases, however, individuals must be taught to respond positively to social rewards (by classical conditioning procedures). What appears to be seriously ‘pathological’ behavior is sometimes attributable to failure to establish such social actions as smiling, praising, or hugging as being rewarding.

Roos (1969a) has stressed that mechanical devices and environmental modifications in institutions usually achieve two concrete goals, both of which can be considered humanistic. The first goal is to increase the opportunity for staff to meaningfully interact with residents by relieving personnel of as much routine custodial activities (such as are associated with toileting, housekeeping, food service, replacing soiled clothing, etc.) as possible. The second goal is to enhance the resident’s control over his environment and to reduce the helplessness which frequently typifies the severely retarded or psychotic person. Referring to profoundly retarded children, Roos (1970, p. 14) comments: ‘... a bedfast, nonverbal, profoundly retarded child typically is completely at the mercy of those around him. If through some simple operant conditioning procedures he learns that rolling to one side of the crib turns lights on, rolling to the other side turns lights off, he suddenly gains control over one segment of his environment; he can now decide when, and for how long, he will be exposed to light. Likewise, he can be conditioned to control sound inputs and to select from among several alternatives. If able to flex individual fingers, for example, flexion of each finger could activate a circuit turning on a different type of music or sound so that the child could select from ten alternatives and determine the length of time he is exposed to each. ... In a very real sense, the methods offer a medium whereby the nonverbal retardate can communicate his needs and preferences without use of language.’

Yet another criticism of behavior modification is that it is a ‘controlling’ procedure which robs the subject of self-determination and human dignity (London, 1969). Patterson (1970, p. 4) recognizes the issue when he states: ‘With the increasing development and use of effective methods of control of behavior, the ethical problem must be faced. We must be concerned about who controls whom, when, to what extent, and for what purposes or toward what goals.’ Behavior modifiers are in danger of being perceived as omnipotently manipulating their helpless clients. The apparent potency of the procedures tends to add to this critical appraisal of behavior modification.

Behavior modification is not, of course, the only form of intervention which is vulnerable to this criticism. As pointed out by Ullmann & Krasner (1965), many of the traditional forms of psychotherapy incorporate potentially highly controlling techniques, including hypnosis, ‘manipulation of the transference’, ‘direct interpretation’, ‘attack of ego defenses’, and so forth. Even the so-called client-centered approaches have been shown to subtly ‘control’ the client’s behavior by selectively reinforcing certain types of verbal behavior (Murray, 1956, 1962; Truax, 1966). The criticism is even
more applicable to shock-therapy and neurosurgery, and especially to the
various forms of chemotherapy which have enjoyed considerable popularity
in recent years.

Behavior modification may be more vulnerable to criticisms of ‘controlling’ than other approaches because of its generally greater effectiveness in
altering behavior into specified channels. For example, a procedure designed
to eliminate self-destructive behavior in an autistic child, but failing to do so,
would hardly be criticized as being ‘controlling’. A highly successful tech-
nique, on the other hand, which rapidly eliminates the problem behavior,
would be much more vulnerable to being perceived as a ‘controlling’ force.
It may well be that behavior modification’s often dramatic success has
earned it the reputation of being ‘controlling’.

Another important consideration is that behavior modification typically
entails stipulation of specific target behaviors, so that ‘success’ can be con-
cretely documented. Other approaches, on the other hand, tend to focus on
ill-defined goals (such as ‘decreasing repression’ or ‘fostering self-actualiza-
tion’), and often rely on equally vague constructs to reach these goals.
Adherents of such approaches may deny they ‘control’ their clients, in spite
of evidence suggesting ‘control’ is exerted by differential responsiveness to
clients’ verbalization (Murray, 1956, 1962). Others have openly advocated
‘directing’ and/or manipulating clients as a desirable strategy (e.g. Thorne,
1950).

‘Controlling’ behavior is obviously not confined to behavior modification. Behavior modifiers seem to differ from some of their colleagues not in that
they attempt to control behavior while others do not, but rather in that they
are often successful in achieving control, they are more aware of their at-
tempt to control, and they are less hesitant to admit their intent to control.

Control need not, however, be an inherent part of behavior modification.
The procedures are, as a matter of fact, well-suited to vesting the locus of
control in the client rather than in the behavioral manager (Krasner, 1970a).
Behavior modifiers have, for example, accepted requests for ‘symptom’ alle-
vation as a legitimate therapeutic goal, and they have candidly discussed
with their clients the therapeutic process as a cooperative effort to reach the
Adherents of ‘dynamic’ personality theories, quite on the contrary, typically
reject requests for ‘symptom removal’ and insist on directing their efforts to
achieving goals which may be of little interest to their clients (e.g. ‘person-
ality reorganization’, ‘development of insight’, or ‘exploration of conflicts’).
Also, the behavior modifier typically explains to his client the rationale for
procedures used, and may even train him to use the procedures himself. For
instance, behavior modifiers have tried to involve their clients in selecting
target behaviors, establishing reward systems, and developing program goals
(Krasner, 1970b; Kanfer, 1970). In contrast, a ‘dynamically-oriented’ col-
league is likely to issue dogmatic orders which are likely to leave the client
confused or puzzled (e.g. ‘tell me everything that comes into your mind’ or
‘let’s just chat together three hours a week for the next few months’).

It could be argued, then, that behavior modification, as such, is no more
‘controlling’ than other forms of intervention. The manner in which the
procedures are used, rather than the procedures themselves, determines the
degree to which manipulation or control is involved.
De-humanization and normalization

The concept that environmental conditions can aggravate deviancy is now generally accepted. Particular attention has been directed to the adverse effects of institutional placement (Goldfarb, 1945; Spitz, 1945, 1949; Provence & Lipton, 1962; Shotwell & Shipe, 1964; Stedman & Eichorn, 1964). Vail (1967), for example, has outlined the impact of life in psychiatric institutions in terms of ‘de-humanization’. He examines the consequences of mass-living, lack of privacy, loss of personal property and other results of attempting to manage large groups, often with inadequate resources.

The ‘principle of normalization’ parallels Vail’s concern over dehumanization and has likewise developed largely as a reaction to institutional patterns. It has recently gained considerable support by workers in the field of mental retardation, and is having a major impact on the design of programs as well as facilities for retarded persons (Bank-Mikkelsen, 1969; Gunzburg, 1970; Nirje, 1970; Roos, 1970; Zarfas, 1970). The widespread acceptance of this principle in the field of mental retardation is reflected by the conclusion of a recent symposium of the International League of Societies for the Mentally Handicapped (Roos, 1969b, p. 24): ‘The principle of normalization is applicable to a wide variety of residential settings, and it should serve as the basic guideline for the design of facilities and programs. Normalization techniques which have proven very successful with most retarded children and adults may be modified to the degree that such modifications are more successful in developing normalized behavior in individual retardates.’

In designing residential facilities, the prototype is that of ‘homelike’ settings; small, cottage-like residences; and small groupings of residents (Gangnes, 1970). Private or semi-private rooms are replacing the ‘dormitories’ or ‘wards’ of the traditional institution. The actual size or style of the residence is less important, however, than having it blend harmoniously into its neighborhood. Although the Scandinavian architectural features have been lauded, the basic principle is that the living conditions in the facility approximate those found in relatively typical homes in the culture. Hence in large urban centers such as New York City, facilities are being designed to blend with the surrounding apartment buildings.

One of the basic premises of normalization is that behavioral deviancy can be reduced by minimizing the degree to which persons are treated differently from ‘normal’ persons. Conversely, deviancy is enhanced by treating persons as if they were deviant (Wolfensberger, 1969b). To the degree that they are grouped together and segregated from the mainstream of society, individuals will be perceived as different from others and will tend to behave differently. Likewise, facilities which differ from culturally normative living arrangements will generate behavior which deviates from the cultural norm.

Behavior modification has been criticized as de-humanizing and as violating the principle of normalization, partly because of the perceptions of behavior modification as being ‘controlling’ and ‘mechanistic’, as already discussed. Below, an attempt will be made to demonstrate that behavior modification can be quite consistent with normalization principles.

Behavior modification and normalization

Review of the extensive literature on behavior modification leads to the conclusion that behavior modification, including selective use of aversive
conditioning, is not necessarily de-humanizing. Specific behavior modification techniques could be used to achieve de-humanizing results, but so could most other techniques in current use. Behavior modification is not inherently more de-humanizing than other approaches, and it is probably less de-humanizing than some, such as certain forms of somatotherapy and neurosurgery.

Although behavior modification may, in specific instances, seem to conflict with the principle of normalization, the conflict is often more apparent than real. For example, child-rearing practices in most contemporary cultures rely heavily on selective reward and punishment. Parents react to those of their child's actions which they hope will be repeated with approval, while they punish or disregard behavior which they hope will not be repeated. Formal schooling, and even advanced education, incorporate systems of contingent rewards. Our whole vocational structure has likewise been based on 'reward for performance', one of the basic principles of operant conditioning. In short, most of the normative cultural means for developing, maintaining and eliminating behavior really embody some of the basic principles of behavior modification.

It can likewise be demonstrated that behavior is continually modified as a result of daily interaction with the environment. Although most people may remain quite unaware of it, careful observation reveals that responses occurring with high frequency have been regularly followed by environmental events which maintain the behavior (i.e. which are rewarding). Hence, both in structured learning situations and in everyday life, the principles of behavior modification are continually in operation. From this standpoint, these principles are certainly 'normative'.

Behavior modification, as a technique for altering specific behaviors, differs from other applications of learning principles in that it is more structured, more systematized, and explicitly delineates the relevant variables. The usually haphazard use of praise and punishment is replaced by clearly structured reinforcement schedules related to defined target behaviors, which are themselves systematically altered to gradually bring behavior more and more in line with the desired behavior - a procedure generally referred to as successive approximations. Specific behavior modification procedures have been discussed in detail elsewhere (e.g. Ullmann & Krasner, 1965; Rubin & Franks, 1969; Neuringer & Michael, 1970), and it is not the purpose here to present the methodology of behavior modification. The point to note, however, is that its application differs only in the degree of specificity and objectivity from what occurs in our everyday life. As such, behavior modification is compatible with the principle of normalization.

Even so, there are instances when the actual procedures used by behavior modifiers are different enough from 'normative' procedures to present at least superficial disparity with the normalization principle as defined by Nirje (1969b). Extinction procedures, for example, which rely on not responding in the 'normal' (i.e. culturally common or acceptable) manner could be interpreted as non-normative. Hence, when a teacher systematically ignores some specific highly disturbing classroom behavior of one of his pupils, it could be argued that he is violating - at least to some degree - the normalization principle. His 'normal' pattern of responding would probably be to attend to the behavior in some obvious manner.
More serious objections could be raised to the use of specially designed equipment which differs significantly from that found in our 'normal' environment. It could be argued that to the degree that equipment differs from that found in the person's normal environment, the 'patterns and conditions of everyday life' are not 'as close as possible to the norms and patterns of the mainstream of society' (Nirje, 1969b). It is difficult to ascertain at what point adherents of normalization and behavior modifiers would part ways with regard to this issue, or if, indeed, there would be any real conflict at all. Advocates of normalization certainly endorse extensive use of prosthetic devices to minimize the effects of physical limitations. Likewise, there is no argument with use of devices to enhance sensory functions (hearing aids, glasses, etc.). As a matter of fact, such prosthetic devices are used so extensively in our culture that they would be considered 'normative'.

On the other hand, the use of devices designed to cope with intellectual or emotional factors may be questioned. To the degree that training incorporates such devices which are not in common use with 'normal' persons, it differs significantly from the normative cultural patterns. Clothing designed to facilitate the teaching of dressing skills, eating utensils modified to enhance self-feeding training, or specially designed furniture to foster training (rather than to minimize the limitations of physical handicaps) (Roos, 1965; Kimbrell, Luckey, Barbuto & Love, 1966) may differ significantly from what is used in everyday life, and hence might be considered as incompatible with normalization. Use of highly specialized equipment, such as remote shocking devices (Schwitzgebel, 1968) or automated toilets (Watson, 1968) would be more extreme examples of deviations from normative patterns.

Modification of the total physical environment so that it departs from the 'normative' homelike situation advocated by adherents of normalization obviously violates the principle of '... making available to the mentally retarded patterns and conditions of everyday life which are as close as possible to the norms and patterns of the mainstream of society' (Nirje, 1969b). Although homelike settings have been widely advocated for residential facilities for retarded and emotionally disturbed residents, it has been suggested that non-normative environments specially designed to meet the unique needs of some profoundly retarded or otherwise seriously handicapped persons might be more desirable (Bensberg, Colwell, Ellis, Roos, & Watson, 1969). Advocates of this position contend that homelike environments have not proven conducive to either training or optimal functioning of persons with serious cognitive impairment, and they suggest that settings which are human-engineered to the special needs of such persons might prove more beneficial. These same authors suggest that normative patterns of life — such as the 'normal rhythm of life' (three daily meals, approximately eight hours of sleep at night, etc.) — may not be as desirable for some seriously impaired individuals as alternative patterns.

Deviation from normative environments has been justified if it proves more successful in achieving training goals, in increasing the individual's control over his environment, or in releasing staff from time-consuming routine functions which interfere with meaningful interaction with trainees (Roos, 1970). Using Watson's automated toilets as an example (Watson, 1968), Roos (1970) has argued that this equipment may be more effective than human trainers in that it is better suited to detect the desired response
and to furnish immediate reinforcement. In addition, staff would be relieved of the tedious task of monitoring toilet behavior, thus allowing more time for social interaction with the trainees. Roos (1970) has likewise suggested how even profoundly retarded multi-handicapped individuals could develop some control over their environment by application of relatively simple human engineering.

The use of aversive conditioning, particularly punishment, has been especially criticized as a dehumanizing practice. Behavior modifiers themselves have been divided in their endorsement of aversive practices (Bucher, 1969; Watson, 1970). Some insist on using only positive reward, claiming that punishment (and avoidance and escape conditioning as well) is less effective and has potentially destructive consequences (Colwell, 1966). Punishment only suppresses responses, they assert, whereas use of rewards develops desirable responses. Aggression and/or avoidance responses are likely to be evoked toward the person responsible for punishment (Azrin & Holz, 1966; Powell & Azrin, 1968). Concern has also been expressed that aversive conditioning will implicitly sanction cruel or punitive treatment, particularly by ward attendants or similar personnel.

Advocates of aversive conditioning, on the other hand, feel these risks can be minimized, and that they are greatly outweighed by the benefits of the techniques (Hamilton, Stephens, & Allen, 1967; Kushner, 1970). Aversive conditioning has been used primarily to eliminate (or decelerate) behavior which is highly debilitating to the individual and/or his environment. There is now considerable evidence that judicious application of aversive conditioning can be dramatically successful in suppressing long-standing highly incapacitating behaviors (Wolf, Risley, & Mees, 1964; Lovaas, Freitag, Gold, & Kassorla, 1965; Tate & Baroff, 1966; Bucher & Lovaas, 1968). It can be argued, therefore, that selective application of aversive conditioning can be a highly humanitarian procedure. It can free individuals from crippling behavior, enabling them to interact more meaningfully with their environment and thereby enhancing their opportunities to develop their human qualities. In short, while deviating from the principle of normalization in its procedures, aversive conditioning has been successful in yielding more normative behavior.

Some therapists insist on consent by their clients as a necessary prerequisite to aversive conditioning. For instance, Rachman & Teasdale (1969, p. 74) conclude that: 'Aversion therapy should only be offered if other treatment methods are inapplicable or unsuccessful and if the patient gives his permission after a consideration of all the information which his therapist can honestly supply.' It is not surprising that individuals may elect the brief discomfort of aversive conditioning if it offers possible relief of chronic behaviors which are a constant source of frustration and misery.

Means and ends
It is essential to recognize that the principle of normalization, as defined by Wolfensberger in chapter 3, refers both to a means and to an end, or as Wolfensberger states: '... both a process and a goal'. In contrast, Nirje's (1969b) definition was strictly in terms of means and, indeed, until recently emphasis has been placed on the process of normalization rather than on normalization as an outcome. Adherents of normalization may have inferred
that normative procedures would yield normative outcomes, but this assumption does not necessarily follow logically nor has it been fully established empirically.

As a process, normalization and behavior modification are both techniques or procedures for accomplishing specific goals. The enthusiasm generated by these procedures can lead to the unfortunate tendency to view the application of the procedures as a goal. Programs or facilities then are evaluated in terms of the degree to which they embody these particular approaches. The danger of basing evaluation on such a premise is that it begs the question by assuming that a given approach is by its very nature the most desirable approach possible. Action based on this assumption would be based on faith rather than on empirical evidence.

Outcome measures, rather than the degree to which procedures conform to a given model, are the appropriate basis for evaluation. That is, the effectiveness of a program or facility should be judged by the degree to which it succeeds in accomplishing its goals, not by the degree to which it incorporates behavior modification principles or by the extent to which it adheres to the normative practices. It thus becomes possible to compare the effectiveness of normalizing and behavior modification procedures in terms of the degree to which they succeed in accomplishing specific goals.

Program goals are selected on the basis of value judgments. Until recently, for example, institutional programs often aimed at the reduction of behavior considered to be a nuisance to the staff (fighting, cursing, demands for attention, etc.). Procedures successful in reducing such forms of behavior were judged to be effective and were incorporated in the institutional armamentarium. Other goals have now been deemed more desirable, such as increasing the number of discharges from institutions and increasing the economic productivity of institutional residents. Roos, McCann and Patterson (1970) recently suggested that programs for mentally retarded individuals be judged effective to the degree that they enhance human qualities (as culturally defined), increase complexity of behavior, and foster the ability to cope with the environment.

Normalization, as a goal, does not refer to the use of specific procedures or settings, but rather it defines desirable program outcomes as the establishment and/or maintenance of ‘. . . personal behaviors and characteristics which are as culturally normative as possible’ (Wolfensberger, chapter 3).

The appropriateness of goals selected for judging programs is a matter of values, whereas the degree to which programs succeed in reaching the goals is an empirical issue resolvable by application of research methodology. For example, the goal of normalization for retarded persons can be accepted or rejected, depending on what is considered to be desirable for such individuals. Having once decided on specific goals, however, the degree to which individual procedures are successful in reaching the goals is determined by empirical investigation.

More specifically, it can be argued that it is desirable for individuals whose behavior varies significantly from culturally-sanctioned patterns to alter their behavior so as to minimize its deviancy. Another way of stating this goal is that mentally retarded or disordered persons should behave as ‘normally’ as possible. The adoption of such a goal is a value judgment. By defining the principle of normalization as referring both to a goal and to a
process, Wolfensberger suggests we are dealing with a dual concept. The appropriateness of normalization as a goal is not an issue open to investigation — it is strictly a matter of values. On the other hand, the effectiveness of normative procedures in reaching this goal is very much an empirical matter, open to empirical investigation.

Most behavior modifiers adopt the goal of developing behavior which is as normal as possible. In this respect they accept normalization as their goal. They may contend, however, that with certain individuals (such as profoundly retarded persons, procedures which vary quite markedly from normative approaches are the most effective means for reaching this goal. This contention could, of course, be tested empirically. It would be relatively simple, for example, to compare the effectiveness of homelike environments and normative procedures with conditioning procedures (including aversive conditioning) and human-engineered environments on decreasing the frequency of self-destructive behavior. In such comparative studies, the possible long range consequences of using non-normative procedures must be evaluated. Of course, included in a study of such long-range consequences must not only be the changes brought about in a person by the direct interaction of the methods used upon him, but also the indirect effects created by the interpretation of him in the minds of others — an interpretation which may affect the way they respond to him and others like him in the long run.

The assumption that normative approaches are the most effective strategy for generating normal behavior is still largely untested. Empirical studies, using a wide spectrum of subjects and conditions, are needed before this assumption can be accepted as scientifically valid. The conclusion of a recent symposium of the International League of Societies for the Mentally Handicapped (Roos, 1969b, p. 24) seems to be a reasonable operational principle, 'The principle of normalization . . . should serve as the basic guideline for the design of facilities and programs. Normalization techniques which have proven very successful with most retarded children and adults may be modified to the degree that such modifications are more successful in developing normalized behavior in individual retardates.'

Conclusion

In summary, normalization as a goal is generally accepted by behavior modifiers, as it is by those who apply normative procedures. Behavior modification procedures and the use of normative procedures are rapidly gaining support as effective approaches to altering deviant behavior. Although specific techniques derived from the two approaches may differ, they are usually compatible and directed at the same ultimate goal. Assuming that fostering normative behavior is a desirable goal, departure from normative procedures seems justified only in those cases where alternative procedures prove to be more effective in reaching this goal.