OPERANT PROCEDURES IN MARITAL TREATMENT

APPROVED:

[Signatures]

Jack A. Haym
Major Professor

Douglas A. Johnson
Minor Professor

Harold S. Holloway
Chairman of the Psychology Department

Robert B. Toulouese
Dean of the Graduate School

The ability of marital partners to directly change a currently unhappy marriage to a happy one may be a function of each individual's conscious awareness of the topography, frequency, and other parameters of his own behaviors, as well as the effects or consequences these behaviors bring to bear on his spouse. This study was an attempt to combine the use of relevant behavioral awareness and a token economy to rehabilitate a marriage in crisis.

A couple who were currently experiencing profuse marital discord (verbalizing plans for divorce) served as subjects and provided data for this study. A one-subject design was employed to determine the functional relationship between the experimental procedures and the dependent measures. An assertive training procedure was also used to help the husband develop better social skills. The data indicated that the couple progressively increased their ability to reciprocate rewards on a more equal basis. A two-month follow-up home visit revealed that the relationship was now much more reinforcing and both were happy.
OPERANT PROCEDURES IN MARITAL TREATMENT

THESIS

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James E. Hickok, B. S.
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Applied human operant research has only recently become involved in the area of marital dysfunction. However, those who adhere to more traditional approaches, e.g., neo-analytic insight therapies and Rogerian reflective techniques, etc., have specialized in marital counseling for many years. Some of the early marriage counseling literature dates back as far as 1930. The operant literature in marital work originates from about 1965, with most of the research falling between 1969 and the present.

The development of operant approaches to marital treatment, as well as most other operant research, stems from the work of B. F. Skinner. The term operant "implies an active organism operating on its environment" (Ullman and Krasner, 1969, p. 51). Therefore, operant research deals with the functional relationship between the organism's behavior and the environment.

The operant approaches to marital treatment can be contrasted to some of the more traditional views by focusing on a few of their differences in basic attitudes. Brammer and Shostron (1968) feel that the therapist should not function as an arbitrator and that he should not tell the couple what to do to restructure their lives. They indicate that helping the couple to develop insight will aid them to work out their own problems. This attitude is representative of the passive-reflective or...
non-directive traditional approaches. Lazarus (1968, p. 51), on the other hand, states "that active intervention is essential for the resolution of many forms of marital discord, and that passive reflection often serves only to reinforce existing prejudices and frequently promotes ill-feeling." Stuart (1969), Liberman (1970), Rappaport and Harrell (1972), and Friedman (1972) all emphasize the importance of the therapist's role as an arbitrator in determining behavioral objectives and in specifying what should be done to bring about these objectives.

The recency of operant approaches in marital treatment is evidenced by a paucity of research found in the literature to date. Of the research available, two primary procedural groups can be distinguished. First are the studies focusing on behavioral exchange and contingency contracting. Behavior exchange is a procedure whereby the "couple is asked to accelerate desired behaviors on an equal basis" (Stuart, 1969, p. 687). Each partner agrees to accelerate a certain behavior specified by his or her spouse. Contingency contracting is very similar to behavior exchange in that the partners must each specify the behaviors they want changed. However, the difference is that the couple agrees to, and signs a contract for, the specific consequences of the correct and incorrect behaviors. This will, therefore, increase the probabilities that the program will be carried out.

The second procedural group is oriented more toward guiding the couple into behavioral awareness. In other words, this procedure helps the couple to understand and be able to work with
antecedent and consequential interpersonal events both in and outside of their marital environment. Antecedent events are the events immediately preceding the referent behavior. Consequent events are the incidents immediately following the relevant behavior.

In the first group, Rappaport and Harrell's (1972) behavioral-exchange model emphasizes the importance of the couple's possessing near-equal power within their marriage to be able to compromise and bargain effectively. Once this is determined, the couple is taken through a series of roleplaying procedures to model reciprocal exchange skills and cooperative bargaining. Then the couple independently prepares first a list of three undesirable behaviors and then a list of three desirable behaviors manifested by the spouse. After taking base rates on each of these behaviors, the couple then negotiates a written contract to reciprocally extinguish undesirable behaviors and replace them with the desirable ones.

Malott (1973) also indicates the importance of the couple's bargaining for behavioral changes and then writing up the agreement. However, in addition to the behaviors to be exchanged, he emphasizes the importance of writing into the contract the consequences for failing to keep the agreement. In other words, they are to consequate consistently with reinforcers and punishers as agreed upon in the contract. Malott (1973) feels that much of the problem in marriages today stems from poorly defined roles and their concomitant behaviors. Also, the consequences
of both correct and incorrect behaviors are either inconsistently or poorly applied.

In addition, Malott (1973) sees the problem of negativism in couples as a trouble source. Negativism is a pattern of responding primarily to the problem behaviors in the other spouse. The couple are conscious of (continuously verbalizing) the problems they are having and the behaviors they do not like in the respective spouse. Therefore, by their periodic and sometimes continuous attending to or socially reinforcing the problem behaviors, they are maintaining the very problems they want so much to rid themselves of. Also, typically, when these couples are asked what positive things they like about their marriage, they are hard pressed to verbalize any positive behaviors. Because these positive behaviors are almost never discussed in dysfunctional marriages, they are not maintained and soon fade out of the couple's repertoire. To change this response pattern, Malott recommends aiding the couple to become aware of, by responding to, the positive behaviors in their marriage.

Patterson (1971) likewise designates the significance of pinpointing the behaviors to be exchanged in the contract, along with stipulating the consequences for violations. He encourages couples to learn to contract and exchange independently at home without professional help. By taking the couple through a step-by-step progression, he indicates first how to discuss and negotiate without getting into debilitating arguments. Then the
couple progresses on to specifying one behavior at a time to contract and then exchange.

Contracting with couples has also been tried in behavioral group settings (Lawrence and Sundel, 1972). Each group member, during an intake interview, specifies the behaviors he wants to work on; then a tentative treatment goal is established for each behavior, and the initial contract is established. The contracts and goals can be changed during group sessions if needed. To facilitate behavioral change in the sessions, Lawrence and Sundel (1972) use such procedures as behavioral re-enactment, behavioral rehearsal, and assertive training. These are techniques using primarily roleplaying and modeling, and are employed when the subject does not presently possess a certain behavior in his repertoire or when the one observed is either not effective or inappropriate. The subject is instructed to exhibit a certain behavior, and the group provides feedback. If the subject does not have the requisite responses, then someone in the group models the behavior for him.

Lawrence and Sundel (1972) have also incorporated the use of behavioral awareness, which is the primary procedural area of the next group to be discussed. They train each of the group members to analyze behavior by focusing on the response, and then its antecedents, consequences, and frequency. As progress is made in this analysis of behavior, they are given assignments to specify some behaviors at home and then analyze their contingencies.
In the second group emphasizing behavioral awareness, Liberman (1970, p. 106) talks about the "restructuring of the couple's interpersonal environment." He indicates the importance of changing their ways of dealing with or responding to each other. Typically he finds that the couple are attending to or socially reinforcing the very behaviors that they are complaining about in therapy. The process is then to make the couple aware and understanding of the contingencies that are maintaining the maladaptive behaviors, and then to make the couple's social reinforcers contingent upon adaptive behaviors that they specify.

Contingencies here refer to the interrelationship between three things: "(1) the occasion upon which a response occurs, (2) the response itself, and (3) the reinforcing consequences" (Skinner, 1969, p. 7). The occasion of the response could be compared with the antecedent conditions immediately preceding the response, as discussed by Lawrence and Sundel (1972). Reinforcers are any events that increase the probability of future occurrence of the responses which they follow. The process of having the couple specify the behaviors they want to change is basically the same as the behavior exchange group.

In addition to the tactics of roleplaying, Liberman (1970) also instructs the couple in the operant principles of shaping. He indicates to them that the desired behavior will not always happen overnight, and that they must respond to gradual approximations of that behavior. This procedure differs from the behavior
exchange group in that it does not require the terminal behavior to be elicited upon demand the first time.

Goldiamond (1965) has applied some of his research in self-control procedures to marital problems. These procedures take two forms. The first involves training the couple or individual spouse in applied behavioral analysis and then letting each determine how he wants to change the problem behaviors. The other has the therapist guide the subject in setting up conditions which change his environment and thereby bring his behavior under different control. In other words, this helps alter the stimulus conditions under which the behavior usually occurs. Goldiamond (1965) has found combining this stimulus change procedure with knowledge of behavioral analysis to be an efficacious behavioral-change technique.

Friedman (1972) makes use of a very broad spectrum of behavior interventions. Techniques from both of the primary procedural groups are used. He sets out initially to make the couple aware of interactional sequences. He focuses not only on individual antecedents and consequences, but also on the chain of behavioral events leading up to the maladaptive behavior. The couple is then taught to intervene early in the dysfunctional chain. Modeling and roleplaying techniques are also used in initiating new, more adaptive behaviors.

In addition, Friedman (1972) employs some of the behavior-exchange procedures. He states that the therapist should, when necessary, act as a negotiator. As such, the therapist aids the
couple in specifying what changes one spouse desires in the other and what change in his own behavior he is willing to exchange for the other's. Furthermore, he feels the therapist should use tasks and homework assignments. This helps the couple assert themselves in family interactions and develops improved interpersonal relationships.

Lazarus (1968), who works primarily within a respondent paradigm, indicates the effectiveness of assertive training, modeling, and behavioral rehearsal, as have many of the other researchers. He also utilizes some of the behavior therapy techniques, such as relaxation and systematic desensitization in marital treatment.

Stuart (1969a and 1969b) is the only researcher in the literature who has worked with token economies in marital treatment, and he does not specify the use of relevant behavioral awareness. For this reason, the uniqueness of the present study lies in the fact that this combination of procedures has not been found in the research literature to date.

The present study combined the use of relevant behavioral awareness with Patterson's (1970) research on reciprocity and Stuart's (1969a and 1969b) research with token economies in marital treatment. It also incorporated the operant procedure of assertive training.

It was felt that, from the success of some of the researchers with the use of behavioral awareness, a combination with a token economy could be even more of an effective therapeutic
procedure. Therefore, in relation to behavioral awareness, do couples who are experiencing marital discord really know what they are doing; and, equally as important, do they know why they are doing it? "How should one know that he is loved but by the way people act toward him: what they say, how they look, how they touch, in a word, what they do?" (Knox, 1972, p. 2).

It might be said that they know what they are doing—they are doing everything wrong. However, such an analysis is not helpful here. The thesis is that without knowing what they are doing and the reinforcing consequences that maintain their behavior, they cannot change the behavioral patterns that have brought on the crisis.

This is exemplified in a comment by the husband of the couple serving as subjects for this study, which was indicative of the need for behavioral awareness. Mr. S. came in complaining, "I don't know what she expects of me. I don't know what she wants me to do." Like many couples, both Mr. S. and his wife were behaving on the assumption that the other should naturally know what was expected without the necessity of communication. It was as if their concerns would be known through osmosis or mental telepathy. If they waited long enough, their problems would work themselves out. As a result, neither of them was able to make the other happy or provide reinforcing consequences for the other's behavior. In short, neither partner was aware of what he was doing nor why he was doing it.
Steps were taken to help them become aware, and to use this new awareness to guide more effective behavioral interactions.

The end product of the establishment of behavioral awareness was to form a reciprocity.

Reciprocity describes dyadic interaction in which the person A and B reinforce each other at an equitable rate. In this interaction, positive reinforcers maintain the behavior of both persons. Coercion, on the other hand, refers to interaction in which aversive stimuli control the behavior of one person and positive reinforcers maintain the behavior of the other (Neuringer and Michael, 1970, p. 133).

Patterson and Reid (1970) found these two behavioral systems to be basic to most family interaction. An observation and analysis of the family in reference found the coercive system to be well entrenched.

A reciprocal interchange, Skinner (1953, p. 310) states, is where "each individual has something to offer by way of reinforcing the other, and once established, the interchange sustains itself." In forming reciprocal interaction, Stuart (1969) indicates the importance of shaping the ability of each spouse to mediate reinforcers for the other. This ability to mediate reinforcers is then the behavioral objective of a conscious awareness that precipitates a reciprocal system of interaction.

Method

Subjects

In the first meeting, the following history was revealed. The husband was a young man of twenty-five who earned the family's living as a carpenter. The wife, twenty-six, worked at
home as the primary caretaker of their three young children, ages one, two, and three years. The couple had been married less than a year when their first child was born. They both had graduated from high school and had spent most of their lives in Texas. Both of the subjects' parents also lived in Texas.

The wife indicated that she no longer wished to maintain the marriage, and she spoke of divorce. She felt that her husband's complete physical and emotional dependence on her, his lack of assertiveness, plus his reluctance to permit her out of the house without him, were making her miserable. In addition, he participated only minimally in the care of the children. The wife also mentioned that she was now unwilling to meet her husband's requests for intercourse. In the past, she had had to start the sexual activity whenever the husband emitted subtle verbal and non-verbal cues. If she did not initiate intercourse when, for instance, the husband would say, "It sure has been a long time," he would go into another room and "pout." The nonassertiveness had apparently carried over into several areas of the husband's life. He admitted to having no friends outside of the family, and he was totally dependent on his wife to be his "community." He had not even made friends with the other construction men on his job. He also related that if anything ever happened to his wife, he did not know if he could continue to live. The husband stated that he desired only one behavioral change in his wife, and that was an increase in frequency of intercourse.
Procedure

After providing a brief history, the couple, along with their three children, were observed as a family unit in a "natural setting." The family was observed as they interacted in a playroom. The playroom was equipped with sound and one-way mirrors. The observations revealed that the father was not a functioning member of the unit. He sat outside the "circle" and verbalized very little, allowing his wife to dispense and receive all reinforcement and interaction with the children.

The initial discussions following the observation period focused on instructing the couple in relevant behavioral awareness. Skinner (1969, p. 244) states that "we are aware of what we are doing when we describe the topography of our behavior. We are aware of why we are doing it when we describe relevant variables, such as important aspects of the occasion or the reinforcemnt."

The topographical awareness was then initiated by specifying what they were doing behaviorally to each other. The focus was on their making assumptions about what the other spouse liked and did not like or what the other was thinking or feeling. Emphasis was placed on the importance of their providing feedback to each other. The elicitation of contingent awareness was brought about by the taking of data on their behavior and observing the changes resulting from manipulation of the social environment. They were also instructed, and became familiar with, through discussion, antecedent and consequential events. They became
familiar with these events and how they maintained or changed behavior.

During the discussions on behavioral awareness, the wife soon realized that she had been reinforcing precisely those behaviors in her husband about which she was so adamantly critical, i.e., extreme dependency and non-assertiveness. She indicated how frequently she waited on or served him without his actually requesting it. She had felt that it was necessary to wait on him much as a servant because she thought he would become angry if she did not (angry meaning he would coerce her by quietly pouting).

The wife also mentioned how infrequently her husband made verbal requests for her to do something for him. It was felt that she, by changing some of her antecedent cues or dependency-eliciting behaviors, could assist her husband to be more independent, helpful, and socially assertive. Therefore, she was encouraged not to anticipate or assume his needs and to let him begin to either make the requests or do more for himself.

In addition, Mrs. S. was asked if she ever requested help from her husband in a direct and specific manner, and the reply was, "Now that I think about it, I really don't ask him. I feel that if I really needed help, he would refuse me." She was encouraged to request help from her husband when she needed it.

Since Mrs. S. complained that she could no longer stand being Mr. S's. only "community" and since he expressed a desire to change, assertive training procedures were started. These
ran for about six weeks of the twelve total weeks that the couple was seen. This assertive training was on an individual basis with Mr. S.

Upon talking with the husband, it was learned that he rarely talked with the men he worked with, let alone initiating any new friends for himself or the family outside of work. Parenthetically, the wife mentioned that she was also tired of making all of their friends, the few that they had. It soon became obvious that Mr. S. did not possess the necessary social skills to either initiate social interchange or maintain it once started.

The assertive training took the form of behavioral rehearsal and weekly behavioral homework tasks. The behavioral rehearsal entailed having Mr. S. practice introducing himself to the therapist as if he were a complete stranger. The therapist initially modeled some of the verbal and non-verbal responses that were troublesome for Mr. S. For example, his eye contact was primarily with the floor and surrounding environment, almost never with the eyes of the social contact. Also, his voice level was low, and the other party would frequently ask him to repeat himself.

As improvements were made in this area, the focus was more on maintaining a conversation once started. It was felt that if Mr. S. could predetermine one particular subject he could talk about, at least minimally, the other party could then pick up the conversation. He also rehearsed some of the initial social formalities, e.g., "How are you?", "Where are you from?", 
"What kind of work are you in?" etc. After two weeks, the therapist arranged for two people (one male and one female, both strangers to Mr. S.) to come to the session. This allowed the husband to rehearse with someone other than the therapist.

The next step involved having Mr. S. introduce himself to one of the men he worked with and to initiate a conversation. After this first attempt he was to make one new friend a week. This was his weekly behavioral homework task. In addition to the new social activity outside of the family, he was encouraged to initiate activities for the entire family, e.g., going on picnics or a trip to the zoo. He was also urged to assist his wife with specific child care chores. Mr. S. expressed surprise that his wife wanted his assistance and was not averse to the idea of helping her.

Concurrently during the husband's assertive training, the token economy was started. After the first two weeks of discussing relevant behavioral awareness, Patterson's (1970) research on reciprocity and Stuart's (1969 a and b) work with token economies were explained to the couple. Stuart's (1969a) research found a token system to be effective in priming the reciprocal mediation of rewards, especially where coercive relationships are entrenched.

A behavior exchange was then instituted, using a token economy. The wife rated time out of the house alone as a strong reinforcer, and the husband wanted increased sexual activity with
his wife as a reinforcer, as first priority. The wife's out-
of-house time was exchanged on a one-, two-, and three-token basis with physical intimacy with the husband. Light petting, heavy petting, and intercourse activities were equivalent to a one-, two-, and three-token exchange for hours out-of-house. More specifically, Mrs. S. earned tokens as follows: one token—engaging in light sex (kissing and hugging only with a five-minute time limit); two tokens—engaging in heavy petting (anything other than intercourse with fifteen-minute time limit; and three tokens—engaging in intercourse (no time limit). Mr. S. earned one token for allowing Mrs. S. to do something outside of the house while he watched the children for one hour, two tokens for allowing Mrs. S. to do something outside of the house while he watched the children for two hours, and three tokens for allowing Mrs. S. to do something outside of the house while he watched the children for three hours.

The token economy was operative for six weeks. Then the system was discontinued for two consecutive weeks before reinstating for another two weeks. This was to see if the token system itself had effected change in the number of tokens earned and spent. Standard poker chips were used in the system.

Results

The primary focus of the couple's data-taking behavior was on the behavior exchange and the token economy. Each spouse recorded the number of times per day that the wife spent out of
the house for one, two, or three hours, and the frequency of the husband's initiating light petting, heavy petting, and intercourse.

To monitor individual recording errors, both partners recorded their data independently. These records were then compared for validity considerations, and only on one occasion, one day of one week, were there any discrepancies.

The results of the token system began showing some favorable rate increases by the third week, and then continued to rise. One interesting effect of dividing the sexual behavior into three distinct categories was that it made the husband much more aware of foreplay and its effect on the wife. Previously he had not used this stage of sexual behavior, and consequently neither had been able to enjoy it fully. It resulted in the wife's beginning to enjoy it more and be more responsive to his approaches. She also related that she was more receptive now because he was beginning to initiate sexual activity rather than her initiating it upon his subtle, non-assertive cues.

The wife also commented on the fourth or fifth week that she didn't have as much interest in getting out of the house any more when her husband was home. She was beginning to like to be around him. However, she was encouraged to continue. In relation to this are the following verbal reports made by Mrs. S.:

I realized that his gloomy or happy facial expressions are the result of whether or not I have smiled at him that day.

I realized I always talked for him and continually put him down by making caustic remarks. When he does his own talking, I find myself feeling that he is more of a man.
I can't believe how much he has changed, and the kids are sure enjoying him!

I'm amazed; he got off work to bring me over here—he didn't even go to the hospital when I had each of the children—he has never taken me anywhere before.

The guys where he works seem to stare at me when I come to pick him up. He said he told them he has it really great at home.

The data in Figure One indicates that there was no decrease in the slope, or the combined sexual rates, during the reversal period (tokens out). It is believed that as the couple became more aware of their sexual topography, the reinforcers became

![Graph of cumulative frequency](image)
more intrinsic and the behavior began maintaining itself. Bandura (1969) has indicated that when response feedback becomes a self-reinforcing source, then behavioral maintenance becomes less dependent upon extrinsic reinforcers. It was during the fourth or fifth week that the wife's subjective report of her feelings about their sexual relations began changing considerably from what they were initially. She admitted that she was beginning to enjoy it now.

Figure Two is more indicative of the proper reversal decrease in slope. Both figures indicate how the reciprocity began
working. The rates can be seen to increase at the same time and magnitude during the fourth and fifth weeks. Since there were only six chips in the system, it made it imperative that the couple learn to exchange on a more equal basis. This was designed to keep either partner from saving up several tokens and therefore not exchanging and reciprocating on a basic one-to-one basis.

It was during the third week that Mr. S. was given some explicit rules about the use and importance of preparatory sexual foreplay. He was encouraged to initiate more hugging and sexual petting without it necessarily always leading to intercourse. It was the fourth week that Mr. S. came in and reported how he was becoming aware of a change in his wife's responses to his sexual approaches. They both were becoming much more aware of what they were doing and why.

In relation to the husband's assertive training, the results were encouraging. After three weeks he reported making two new friends and even trying a social conversation with his boss. On the fifth week he arrived and proudly announced that he initiated a bachelor's party for a friend getting married. This was a first for Mr. S., and both he and his wife were quite proud.

A two-month follow-up home visit indicated that the couple was very happy. The wife was not leaving the house as much as during treatment. She enjoyed being there more when the husband was home. They both reported that they felt much more
sexually compatible now. Their rate of intercourse was averaging twice per week as compared to twice per month before treatment. They were also sharing in the care of their children, and the husband was observed to interact much more frequently with the children.

Discussion

Observing the data as it is generated through daily recording and graphing of frequency could allow a person to see the impact of his responses on another. If the marriage relationship has been particularly aversive to the couple, it would seem that true reciprocal cooperativeness and affection would be the social system chosen over the one of coercion. However, some behaviors are maintained, it would seem, because no more desirable alternatives are available or are thought to be available (Berscheid and Walster, 1969). Therefore, the lowest-level reward outcomes are accepted as "that's all there is." Simply, people are unhappy unless they know what they are doing and why they are doing it in a relationship. Awareness can be changed by helping the couple to see the results of the "input" on the "outcome."

Marriage in this country has not been a stable institution, as the facts on divorce rate attest. Shersky and Mannes (1972) note that "We marry in America with less knowledge of what we are doing than when we buy a car." HEW statistics show 455 out of every 1,000 marriages made in the country last year (1971)
are destined to wind up in the bitter and unhappy toils of the divorce court.

There are inevitable problems that result when two people live together, but these are not unique to marriage—they can be found in any social setting. These problems are often not seen for the real hazards that they are. If they are noticed, it is often voiced that if people "try hard enough," the friction will subside. Friction-creating problems usually are the "small" nuisances such as household duties, privacy or lack of it, and various idiosyncratic personal habits. It is felt that if a couple can bring under control the nuisances of daily living, they can more readily be placed in contact with the reinforcers emanating from a spouse who can learn to be behaviorally attuned to what makes his or her mate happy.

It is realized that because of the multiple-procedural approach, it would be difficult to specify exactly which aspect of treatment was responsible for the observable changes. However, that was not the objective of this study. This study was intended to show the effectiveness of these particular procedures applied systematically as a group. It could also be argued that this particular approach would only be effective with lower socio-economic and less well educated couples. Only further studies with other couples will be able to answer that empirical argument.
REFERENCES


