

THE INTERACTION OF DESENSITIZATION
AND MODELING PRINCIPLES IN
TREATMENT OF PHOBIC
BEHAVIOR (1973)

Sunnie D. Kidd
James W. Kidd

The application of social psychological concepts to clinically oriented treatment is beginning to reduce the gap between the psychology of the individual and the psychology of the human being. Behavior therapists have provided an alternative to the more introspective philosophies underlying most of the traditional approaches to the treatment of phobic disorders. With the implementation of procedures such as modeling and desensitization, a direct attack is made upon the disordered behavior.

The pragmatic effectiveness of both modeling and desensitization in the modification of disordered behavior has been well documented (Bandura, Blanchard and Ritter, 1969; Davison, 1968; Bandura, 1969; Jacobs, 1964; Wolpe, 1958; LaFleur and Johnson, 1972; Spiritas and Holmes, 1971). The quickest and most effective way to get a client to behave more adaptively (comfortably) may be to show the kinds of behavior required for rewarding outcomes. Two of the most frequently employed techniques have been in the utilization of a gradually presented hierarchy of imagined scenes by the client, involving the phobic object (desensitization); and more effectively, by actual demonstration of desired behavior indicating rewarding outcomes (lack of fear or disaster). This may be achieved either through films or live demonstration to carry modeling's effects. Active participation by the patient has been shown to be superior to imagination alone in the current research. In fact, active participation of both patient and therapist result in the ultimate efficiency of the procedure (Bandura, Blanchard and Ritter, 1969). This finding sets the stage for a multitude of research ventures investigating the various effects of many social variables (and methods) upon phobic reduction.

The paralleled effectiveness of these two particular approaches, their interaction and an attempt to theoretically integrate the two in treating phobic clients will be the scope of the present writing.

In reality, desensitization is an outgrowth of modeling. It is a response not a method. It is an effect — of treatment employed. Viewed in this light, one could not actually separate the approach method (desensitization) from the effect (desensitization). Modeling, however, actually absorbs the concept of desensitization. The patient is flooded (in effect) with new stimulus information — contrary to their old beliefs and

attitudes. Perhaps the problem lies in our striving to define workable concepts rather than the behaviors involved.

An examination of the commonalities of these two approaches should begin with their shared assumptions regarding the disordered behavior.

A phobic reaction is defined as an unreasonable fear, one which is inappropriate to the stimulus situation. Since both desensitization and modeling are based on learning principles, the phobia is seen as a learned response. Both assume that the behavior can be unlearned and replaced with a more realistic behavior and attitude. Desensitization has been called a “counterconditioning” technique, i.e., presenting an anxiety-provoking stimulus in the presence of a rewarding situation or reinforcement. Through the hierarchical presentation of a feared object, the client is trained in relaxation procedures and “controls” their own level of advancement into the hierarchy. This is a particularly important aspect of desensitization — the client controls the progress. Experimental evidence has been presented in numerous types of research relating to pain or obnoxious stimulation that the client’s tolerance to that stimulus is at a much higher level than when it is controlled by another individual (Schacter, 1959).

Both techniques employ the actual feared object (or class of related stimuli) as the major tool of behavior change — either through imagination, pictures, educational information or actual demonstration or participation. Wilkins (1971) indicates, however, that it appears the only necessary element of the desensitization procedure is the cognitive element of instructed imagination of fear relevant scenes. He states that apparently the cognitive and social aspects of the therapeutic situation, which are common both to desensitization as well as to some of the more traditional forms of psychotherapy, are critical variables for successful therapeutic outcomes. These variables include expectancy of therapeutic gain, the social reinforcing qualities of the therapist, information feedback of approximations toward successful fear reduction, training in the control of attention and the vicarious learning (via instructed imagination) of contingencies of non-avoidance behavior in the fear situation.

This particular statement stresses the crucial importance and relevance of the client’s perception, emotional attitude and self-directedness in behavioral change. The facilitation of social and feedback variables compounded in modeling procedures now seem clear. With application of a therapeutic situation for the specific purpose of behavior change all social forces - as well as individual ones — come to bear upon the desire to change the undesirable behavior — the contributing variables to change are multiplied. With desensitization viewed as an outcome of the modeling approach, why can modeling absorb such a seemingly effective body of evidence? Basically, it is due to the “across the sensory system” intake in

information. Loveless, Brebner and Hamilton (1970) conducted studies and presented reviews on literature on intersensory effects. They conclude that signals in two sensory modalities may theoretically yield a gain of information from increased input redundancy. Put another way, in a modeling procedure involving active participation of the patient, intake of information through several sense modalities compounds the stimulatory effects of brain centers controlling cognitive interpretations (perceptions). Touch, sight, smell, texture, weight — all physical contact or sensory awareness of the phobic object's physical reality are flooded into the individual. Along with these strictly physiological awareness go the social variables contained in imitative behavior and advance knowledge of the outcome. The individual contributes their own system of needs and self-perception to the situation. Modeling in this sense is connected directly with reality — not simply an imagination or mental picture. Actually sitting in a dentist's chair with knowledge that you are having a tooth pulled is much different than imagining to yourself the night before what it will be like. The "realness" of the situation or therapeutic encounter would seem a likely candidate controlling generalization of the new by acquired "non-phobic" behavior outside the therapist's "safe office." In this sense it appears to be a most adequate method for measurement of behavioral change.

Another point worthy of consideration follows from the above statement. In imagery, (desensitization) the image is attached to a particular "free floating" type of anxiety, with a chance for stimulus generalization. The anxiety has no release, no physical outlet. The tension states remain within, difficult to evaluate or control. Although language provides a variety of manipulable symbols or labels, the stimulus input and methods for expression are limited to that source.

Vicarious learning in modeling is used as a basic explanatory concept as in desensitization in that the desired behavior is observed (rather than imagined). This continues to leave the construct internal, requiring logical leaps to reality (generalization) and involves value judgment and comparison on a mental level. Physical activity appears to "internalize" behavior and resultant attitudes. A physical response is required, to enhance reality.

"Modeling situations should be strong enough to effect the desired response (Bandura, 1969)." If it is not, it is not correctly designed. Should this statement hold, the influence of therapist and patient variables would be held to a very low minimum. The design and consistency are earmarked by Bandura as the definers of the outcome quality. Personal involvement is essential for any kind of progress.

Perhaps instead of having a hierarchy of fear-related objects or scenes we should employ a hierarchy of suffering fears. The condition of fear itself may be prominent in a behavioral repertoire and only through a rather

incidental situation have become a localized phobia on one object as a release. This elimination of minor or seemingly unrelated fears would serve a multiple function. Obviously, a self-rewarding paradigm of fear elimination would relieve numerous self-doubts, bolster confidence and provide an incentive for self-directed approach behavior toward the phobic behavior. Motivation and confidence would be building within — the most effective end — and the most resistant to deterioration.

One vehicle available to utilize all the most crucial social and modeling variables would occur in a group therapy setting composed of individuals suffering from the same phobic fears. A certain type of “built in” empathy, cohesiveness and sharing would be personally felt and offered to each in the group. The variables of similarity, like, dislike and identification would be brought into a strong influential position. The methods, techniques and such abound in variety and seem worthy of further investigation.

Lazarus (1969) utilized such an approach using desensitization procedures in a group setting with a number of different kinds of phobic disorders. The experimental design was to compare group desensitization with more conventional methods of group dynamics. He found a much shorter time required to effect a recovery and suggests that therapists of every type could helpfully employ systematic desensitization as an adjunct to their traditional techniques in the management of phobic disorders.

With the assumption that modeling procedures contain within themselves the elements of desensitization, it would follow that it may be a most promising and effective technique for modifying phobic disorders. It would appear that a group setting would be a promising venture to employ the maximum benefit derived from the social forces brought to bear upon the individual in an effort to modify undesirable behavior.

Notes

- 1) Bandura, A., *Principles of Behavior Modification* (New York: Holt, Rhinehart and Winston, 1969).
- 2) Bandura, A., Blanchard, E. B. and Ritter, B., “The relative efficacy of desensitization and modeling for inducing behavior affective, and attitudinal changes”, *Journal of Personality and Social Psychology*, 13, 1969, pp. 173-199.
- 3) Davison, G. C., “Systematic desensitization as a counterconditioning process”, *Journal of Abnormal Psychology*, 73, 1968, pp. 91-99.
- 4) Jacobs, J. D., “Using the psychological film with hard to reach patients”, *Social Work Review*, 1, 1964, pp. 11-15.

- 5) La Fleur, N. K. and Johnson, R. G., "Separate effects of social modeling and reinforcement", *Journal of Counseling Psychology*, 19, 1972, pp. 292-295.
- 6) Lazarus, A. A., "Group therapy of phobic disorders by systematic desensitization", *Journal of Abnormal and Social Psychology*, 63, 1961, pp. 504-510.
- 7) Loveless, N. E., Brebner, J. and Hamilton, D., "Bisensory presentation of information", *Psychological Bulletin*, 73, 1970, pp. 161-200.
- 8) Schacter, S., *The Psychology of Affiliation* (Stanford: Stanford University Press, 1959).
- 9) Spiritas, A. A. and Holmes, D. S., "Effects of Models on Interview Responses", *Journal of Counseling Psychology*, 1971, 18, pp. 217-221.
- 10) Wolpe, J., *Psychotherapy by Reciprocal Inhibition* (Stanford: Stanford University Press, 1958).

Reprinted from the *Stanislaus Journal of Psychology*, 3, no. 3, 1972.