AN APPLICATION OF SYSTEMATIC DESENSITIZATION IN THE TREATMENT OF SPEECH ANXIETY

BY

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AN APPLICATION OF SYSTEMATIC DESENSITIZATION IN THE TREATMENT OF SPEECH ANXIETY

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by

Robert Dennis Potratz

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To the Graduate Council:

I am submitting herewith a Research Paper written by Robert Dennis Potratz entitled "An Application of Systematic Desensitization in the Treatment of Speech Anxiety." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts in Psychology.

Garland E. Blair
Major Professor

Accepted for the Council:

Wayne E. Stamps
Dean of the Graduate School

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I. INTRODUCTION

Today, possibly more than ever before, it appears crucial that people should possess the ability to communicate among themselves. With the increasing complexity of societal change, it is essential that people allocate their energies in such a way as to emphasize a definite directionality toward adequate social and psychological development. In a time when technology is advancing at such a rapid pace, the area of "human interaction" must be stressed in order to combat superficiality, mechanicalism, and apathy among people subjected to these fleeting environmental revisions. The disparity between these two types of advancement, namely technological and social, must be retained at a relatively constant level if humanity is to properly adapt and continue to attain social adjustment. It appears vital that people reserve the ability to communicate inner needs, emotions, or feelings for the reason of more actively recognizing these proclivities within themselves, and also for the purpose of alerting others when self-induced remedy is untenable. The need to propitiate this social-technological disparity is becoming a more apparent factor in achieving human adjustment.

As a result, attempts to distribute progressive energies in areas subsumed under the category of technological advancement can not be applied irrespective to social aspects. Conversely, social

advancement must not preclude technological advancement. Fortunately, in the past, progress in the physical sciences has stimulated advancing strides in the behavioral sciences.

As Phillips (1968) points out, the investigation associated with diseases of the musculature and nervous system has stimulated a great deal of research in related areas. More specifically, there is a great need to alleviate disorders that can not be classified within the nosology employed by clinical speech therapy. Much concern has been expressed (Travis, 1957) in regard to problems of communication that are not caused by physical impediment. For these deficiencies, normal treatment involving clinical techniques has not been effective. According to Phillips, the problem arises as we attempt to understand communication problems that can not be diagnostically categorized, but continue to disrupt the adjustment of the speaker and impede effective communication, (Phillips, 1968). It is within this rather evasive or obscure realm of human interaction that this paper is concerned. In particular, a phenomenon has been selected which some psychologists call "speech anxiety," although others have employed different terminology to describe basically the same problem. Furthermore, discussion will include the consideration of possible treatment procedures with an attempt to compare the efficiency of each. Finally, based upon cited experimental research, systematic desensitization will be recommended as being one of the most effective methods of alleviating speech anxiety.

II. PREVIOUS INVESTIGATION AND DIAGNOSTIC CONSIDERATIONS

Defining "Speech Anxiety"

Authorities have displayed dissidence as to an exact definition of speech anxiety. F. I. Greenleaf (1947) defined the phenomenon as:

> ... an evaluative disability, occurring in social speech situations, and characterized by anticipatory negative reactions of fear, avoidance, and various internal and overt manifestations of tension and behavioral adjustment.

Specifically, he labels this as "social stage fright", but one can easily vindicate the application of this definition to normal social interaction. In addition, alternate terms such as "interpersonal performance anxiety" (Paul, 1966), or "audience anxiety" (Pavio and Lambert, 1959) can be found in the psychological literature. At any rate, the term speech anxiety will be employed to describe this phenomenon throughout the present text.

Symptoms

The question now arises in reference to the recognition of speech anxiety. The symptoms involve a combination of both overt and covert manifestations which present themselves in a complicated fashion. This fact probably accounts for the lack of agreement that exists among psychologists as to a concise, universally accepted definition. Clevenger and King (1961) have developed a "Behavioral

Checklist" (BCL) that identifies eighteen overt manifestations that are associated with speech anxiety. Such clues as lack of eye contact, tense face, heavy breathing, repeated swallowing and others, are felt to be primary indicators of this phenomenon.

Speech Anxiety and Personality

Phillips (1968) says that this problem can be readily seen in a particular type of person; one which he calls "reticent." The person that typically manifests this deficiency in communicative ability may generally be described as shy, fearful and apprehensive. This person recognizes his inability to communicate and consequently avoids situations that demand interaction. As the number of interactive situations increases, he finds it more difficult to cope properly. As a result, the general involvement of the personality becomes increasingly greater. If a communicator knows that he is sometimes capable, he does not generally fear participation. If, however, he consistently fails, his attitude toward communication will become increasingly negative. As he discovers methods of escaping the anxiety-producing situations he tends to habituate them. In addition, generalization of these methods to other situations becomes common. The individual's behavior gradually becomes rigid and stereotyped. Therefore, it can be observed that speech and personality disorders are related malfunctions. Furthermore, Phillips states that if normal communication channels are blocked, a person will find other ways, not always socially facilitating, to

communicate his emotional state. Blockage of channels for verbal expression may result in an adoption of disguised expression not excluding hysterical, or psychophysiological symptoms as a substitute for speech (Phillips, 1968). Resultant manifestations of speech anxiety also affect intellectual behavior involving feelings of general confusion, lack of integration, etc. (Murray, 1937).

However, it would be a gross oversight to concern ourselves only with those people who have reached this relatively advanced stage of impairment. As Lillywhite (1964) points out:

> ... any inability to communicate represents a problem and suggests that it would be helpful if disordered communication could be considered as on a continuum reflecting that each difficulty potentially arises from a variety of causes, pathological, social, and psychological, all of which contribute to a failure to be understood or understand.

Resulting Behavior

Disregarding the intensity of the communication problem, it appears that some common causal factors do exist that may be the seminal aspects of speech anxiety. Of primary importance may be the manner in which the environment is perceived by the person trying to communicate. Attempts to act in accordance with these subjective observations tend to restrict spontaneous expression and alienate one from the objective judgement of a situation. This could account for the subsequent rigidity in the person's behavior. According to Campbell (1963):

> ... acquired dispositional concepts, eg. social attitudes, involve residues of past experience that predispose an individual both to view the world in a particular way and to manifest 'object-consistent' response tendencies.

With these implications in mind, another question should be contemplated. What are the "residual products" of such restrictions that are imposed on an individual's behavior? Although a great quantity of psychological difficulties can result from limitations on communication, two areas appear to be effected and probably play a dominant role in determining subsequent behavior. First, the inability or lack of experience in expressing oneself many times affects an individual's confidence (in self). Studies have shown that confidence increases as an individual becomes more experienced in expressing himself, (Robinson, 1959; Gilkenson, 1942). He views repeated failures in the speaking situation which have a negative influence on later performance.

On occasion, the desire to communicate may be strong enough to produce action, but the attempt is marked by debilitating anxiety in the sense that the communication is usually inefficient in form or delivery. A study by Gynther (1957) on "communicative efficiency" as a function of anxiety-proneness tends to support this observation. In turn, this anxiety and resultant performance has a tendency to augment the feelings of lack of confidence; thus it becomes a vicious circle.

Considerations for Treatment

Considering the overview of this communicative deficiency,

speech anxiety, the next logical question may be in reference to treatment. How can one alleviate the problem? First of all, the individual must recognize that a difficulty does exist. The problem begins to become apparent to him as he realizes that he can not participate even when he needs to or feels a strong desire to do so, (Phillips, 1968). Unfortunately, many times this conscious recognition does not occur until the problem is a well established aspect of the person's behavior. However, as is generally the case, recognition is the first step toward treatment.

Once the individual presents himself for treatment, it is the therapist's responsibility to introduce an appropriate means of mollifying the problem. It seems that the most effective procedure would include a direct attempt to counteract one of the two dominant aspects cited above; namely, the lack of confidence or the debilitating anxiety. By relieving one component of the vicious circle the other would probably eliminate itself, since there appears to be a reciprocal relationship. This presents another problem. Which component should the treatment focus upon and how should it be approached in respect to methodology?

To counteract a lack of confidence one may attempt such methods as exposure to the anxiety-provoking situation or possibly insight-oriented therapy. However, when feasible, it would be an asset to employ the most effective treatment. Evidence (Phillips, 1968) seems to indicate that exposure to the speaking situation does not help

many individuals and sometimes intensifies the existing problem. On the other hand, adduction of causative factors of speech anxiety as stressed in insight therapy has evoked positive change, but generally is not the most impressive approach (Paul, 1966).

In addition, the present trend in psychotherapy is emphasizing direct and rapid change in behavior. A view that is becoming more widespread is that therapy involving insight is unnecessarily slow.

Accordingly, the evidence suggests that one may find a more efficient treatment in a direct attempt to nullify the debilitating anxiety. However, a prerequisite for proper treatment is to have at least a basic understanding of what is being treated. Existing definitions of anxiety are rather perfunctory and possess minimal value in elucidating the concept. Generally speaking, anxiety "is a complex state characterized by a subjective feeling of apprehension and heightened physiological reactivity" (Levitt, 1966). A more relevant question would pertain to why the anxiety can be called debilitating. An important reason for the incapacitating effect of anxiety can be attributed to the tension that accompanies it. Tension, in one sense, refers to the slight muscular contraction that can be noted as one experiences anxiety. A dominant feature of the inability to perform is this subsequent restriction of physical freedom. Whereas anxiety refers to a psychological state, tension refers to a physical state. As Levitt (1966) points out, "tension is an intervening variable, a state which links unconscious anxiety to manifest behavior." Thus, there

is considerable agreement among psychologists that anxiety is characterized by subjective, consciously perceived feelings of apprehension and tension (Spielberger, 1966).

Deep Muscle Relaxation

The use of deep muscle relaxation, originally developed by Jacobson in 1938, is a widely employed means of inhibiting tension and the accompanying anxiety. It is a technique used extensively in behavior therapy not only in treatment of anxiety states such as speech anxiety, but also can be applied to a variety of neurotic trends and phobias.

Systematic Desensitization

In the mid-1950's, this approach was combined with a more contemporary development that is based upon the principle of reactive inhibition which holds that the introduction of a response that is antagonistic to anxiety will lead to suppression of the anxiety response causing the strength of the stimulus-anxiety bond to decrease. The "anxiety antagonistic response" that is usually employed is relaxation. Today, this approach is known as systematic desensitization. Being derived from learning theory, it holds that maladaptive behavior, such as the persistent experiencing of anxiety in a speaking situation in which there exists no significant probability of danger, is learned. Investigations have revealed that desensitization is an extremely effective treatment in reducing the anxiety associated with the speaking

situation (Paul, 1966; Calef and MacLean, 1970).

Fundamental Operations

The treatment, as it is utilized in current therapy, consists of three fundamental operations: (1) training in deep muscle relaxation; (2) the construction of anxiety hierarchies; and (3) the counterposing of relaxation and anxiety-provoking stimuli from the hierarchies (Carkhuff, 1969). The construction of an anxiety hierarchy involves listing anxiety-provoking stimuli on a gradient, from the least disturbing entry to the most disturbing. Generally, more than one hierarchy is used in the treatment.

Subsequent to the relaxation training and hierarchy construction, the patient, while in a deeply relaxed state, is asked to imagine the weakest anxiety-provoking situation for a period of 10 seconds. At the end of this time he is asked to stop visualizing that scene and concentrate only on relaxation (lasting at least 30 seconds). If he experienced the slightest amount of anxiety while imagining the scene, he is to signal using an established cue such as raising the left index finger. In addition, the therapist must be alert for insidious indications of anxiety (respiration, facial expression, etc.) and when recognized, immediately suggest relaxation.

As the individual no longer reacts to a particular imaginary scene progress is made to the next, more anxiety-provoking scene. Usually, the patient overcomes anxiety to mildly disturbing entries, but tenaciously responds with anxiety to more difficult ones. As a

general rule, an item should be presented at least two times, even when no anxiety response is experienced. In addition, presentation of new items should not exceed four in any one session. Undue or prolonged reaction may reflect faulty hierarchy construction. The therapist must exercise caution to insure that the increment of anxiety is not overly diverse relative to the preceding item in the hierarchy. A bland, gradual increase in successive items is an essential quality of an adequately constructed hierarchy.

Desensitization usually consists of about twenty sessions, with the first five or six concentrating on relaxation training and the discussion of pertinent information (including hierarchy construction). The meetings last from thirty to sixty minutes; this time being flexible depending on the progress of the patient. For example, the therapist may want to end a session if he recognizes that there may not be ample time to present the next item. A therapy session should always be concluded with a rather "easy" scene.

III. METHOD

The Present Study

A twenty-one year old female was finally selected from an undergraduate psychology class on the basis of what appeared to be the most authentic case of speech anxiety as recommended by the class instructor. The therapy sessions were conducted throughout the entire spring quarter (1971). Sessions were conducted twice a week, for approximately one hour. The initial five sessions consisted of relaxation training and hierarchy construction. The treatment lasted for a total of seventeen sessions. Beginning with the first session, sincerity of purpose was stressed. Fidelity to this purpose applied to both therapist and subject.

The subject reported that exposure to people, especially in large numbers, stimulated subjective disturbance and speaking to more than one or two people caused extensive anxiety. She described a speaking situation involving a great number of people, as being very traumatic for her. As a rule, she was unable to comment in the classroom. She reported that several times she wanted to speak up, but the thought of doing so created an excess of anxiety and consequently effected her confidence in herself. Therefore, she would repeatedly relegate her desire to communicate. As a result, this habit gave her more reason to be anxious and less confident.

Hierarchy Construction

In consideration of the subject's difficulty with effective communication, it was finally decided that two separate hierarchies would be constructed. (These hierarchies are reproduced in the Appendix.) The first hierarchy, which can be labeled "being with people", involved imaginative situations such as "going shopping", "being in a crowded movie theater", etc. It was designed to counteract her general feelings of apprehension when with people and also as a preparatory experience for facilitating actual communication. The second hierarchy consisted of chimerical scenes involving direct communication with others. Less provoking items included such imaginary scenes as communicating with the family or a friend. More disturbing scenes involved commenting in the classroom or giving an oral report to a large class. This second hierarchy was oriented in such a way as to include a personal communication problem that accentuated itself upon one person. She experienced a rather complicated difficulty with this person and felt that in due time she would be confronted to speak. Upon inception of treatment, she was certain that the anxiety accompanying this task would render her incapable of effective communication.

At any rate, during the course of treatment, the subject was very cooperative. At all times she seemed to indicate a strong desire to improve. Although a specific scale was not employed, the "therapist" noted what appeared to be a general rise in self-actualizing tendencies

from inception to conclusion of therapy. She seemed more spontaneous, self-accepting, and satisfied with herself. What appeared to give impetus to this trend was that twice toward the end of treatment she was confronted with situations (in reality) that were included in the hierarchies. Parenthetically, it may be added that they were the more difficult, anxiety-provoking situations. On both occasions she reacted in a very relaxed manner, reporting that she felt a minimum of tension. The last few sessions she remarked several times that both family and friends had commented on the change they noticed in her behavior. She felt that she had progressed much more than she thought possible. It was not uncommon to hear her say such remarks as "I'm so proud of myself", or "This has done so much for me".

A Measurement of Progress

In an attempt to secure a more vivid description of what she felt to be progress, she was asked to simply rate herself on three scales from zero to ten. The first rating took place after the tenth session and the second rating upon conclusion of the seventeenth or last session of treatment. The necessity for a candid classification was stressed.

The first scale was a "relaxation scale". She was instructed that assuming she entered therapy at zero, and ten represented complete relaxation, to rate her progress accordingly. The first rating (tenth session) revealed that she felt her progress to be worthy of a five. This exceeded the progress on the remaining two scales

(to be reported below) which is logical since emphasis had been placed on acquiring the ability to relax, especially during the initial five sessions. The second rating (seventeenth session) on the relaxation scale she estimated to be seven. In discussing this scale with the subject, it was agreed that it represented her general ability to relax, encompassing all settings (private and public) as a whole. The second scale was labeled "being with people" and was representative of the feelings she experienced while exposed to a gregarious environment. With zero being indicative of her reactions toward people prior to the initial session, her first rating showed a progression of four. With ten being "completely at ease" with people, her second rating was nine. The third scale focused upon communication and the feelings that accompanied it. It included the amount of anxiety experienced and her feelings of effectiveness in the speaking situation. At the tenth session (first rating) she rated progress at three and at the conclusion of therapy (second rating) she rated improvement at seven. To summarize, on a continuum of progress from zero to ten, scale one (relaxation) revealed an increase of seven points. She estimated progress on scale two (being with people) to be an increase of nine scale points. Finally, improvement was indicated on scale three (speaking with people) to be equal to an increase of seven scale points.

It should be noted that although subjective assessment lacks the "superficial sophistication" of a standardized instrument for measuring

anxiety, some authorities feel that subjects that tend to be anxious and have experienced this phenomenon are excellent raters of their own level of anxiety (Spielberger, 1966; Gilkenson, 1942; Phillips, 1968).

IV. CONCLUSION

A Need for Flexibility

In the treatment of any ailment, be it physical or psychological, it is important to employ the most effective methods or techniques. At times, especially in reference to behavioral sciences, a clear-cut, superior medium for inducing positive change is not evident. But, it seems reasonable that the therapist should make it a point to keep abreast of evolving methodology and be constantly flexible enough to adapt to a more efficient means of accommodating the ill.

Desensitization has been found to be an efficient means of dealing with a variety of psychological problems. It is a reasonably economical, brief, uncomplicated method of ameliorating a patient's problem. The therapist should thoroughly understand the theory of desensitization and appreciate that careful application of the technique is necessary, since applied improperly, it can have aversive effects on the patient. Furthermore, the therapist should be objective enough to adapt improvements in a technique or utilize others that have been found to be more appropriate. The implications are just this: There is a recognized tendency to view desensitization as a panacea; a rather specific, concise way of treating a wide array of psychological disturbances. However, although desensitization possesses a degree of flexibility, it should only be employed after an assiduous review of

available possibilities.

Subject's Written Comment

In counteracting symptoms of speech anxiety, desensitization has proved to be a very successful method for many patients. In the present study, it was found to be a rewarding experience not only for the "therapist," but also for the subject, as can be seen from her written comment submitted at the conclusion of the treatment:

> The outcome is surprising. I am more at ease with people now than I have been in several years. Speaking is less of a chore and for some reason, periods of silence bother me less.
>
> I thought at first that I would feel silly sitting in front of another person and tensing then relaxing my muscles. I didn't, mainly because ("the therapist") was patient and I never felt rushed.
>
> I admit that at first I was a little doubtful that this could work for me. I've had difficulty speaking especially in front of groups of people since I can remember.
>
> The mere thought of an oral report would cause me a great deal of anxiety. I was also especially wary of talking about anything that I felt strongly about. Partly because I didn't want to expose myself to others, and partly because I knew I would reach a certain point, get frustrated and clam up.
>
> None of the sessions with ("the therapist") were trying even the first ones. As time passed I would look forward to the meetings because I felt so much better when I came out.
>
> The most difficult part of the desensitization process was not relaxing, but imagining the various anxiety-causing situations, especially

those that I had not yet encountered.

During the quarter (treatment period) some of the anxiety-causing situations arose. I handled them better than I expected which encouraged me to work harder.

I'm very pleased with the outcome. It's the first self-constructive step I've taken in a while.

APPENDIX

CONSTRUCTED HIERARCHIES

It should be noted that the stimulus scenes are presented with increasing intensity; scene number one provoking only a mild degree of anxiety prior to treatment.

Hierarchy I: "Being with people"

1. Being in John's department at school. *
2. Being at a standing party.
3. Sitting around a large table at the student center.
4. A couple of friends visiting at the house.
5. Going to the movies alone.
6. Being at a sitting party.
7. Going shopping.
8. Walking into the student union.
9. Walking into the classroom just before class is ready to begin.
10. Registering for classes.
11. Walking into class late.
12. Passing John on the other side of the street.

Hierarchy II: "Speaking with people"

1. Speaking to your father about something unimportant.
2. Talking to your mother about John.
3. Someone mentioning John's name.
4. Speaking out in Dr. D's. class.
5. Presenting a report to a small class of four or five - with an outline.
6. Seeing John across the student center.

*fictitious name employed.

7. Speaking out in Dr. B's. class.

8. Talking to your father about John.

9. Presenting a report to a large class with an outline.

10. Speaking to others when John is present in the same room.

11. Speaking to John.

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