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## A CASE OF EXAMINATION ANXIETY IN AN ADULT

**ABSTRACT:** One female undergraduate college student served as the sole subject, selected on the basis of verbal reports of extreme test anxiety as well as scores on the Fear Inventory and responses to the Revised Willoughby Questionnaire for Self-Administration. The total treatment process, including both relaxation training and desensitization, required 29 one-half hour sessions.

A significant decrease in reported test anxiety occurred. The reported changes were reflected on course examinations and final grades. In addition, the subject had disclaimed any apprehension or feelings of anxiety as the final examinations drew near.

Thus, in keeping with a learning theory approach, it is postulated that fear of examinations was a learned maladaptive pattern of behavior. Therefore, counterconditioning through progressive relaxation and systematic desensitization was utilized to eliminate the maladaptive response.

Only a limited number of studies have been published dealing with test-anxiety as the target problem for the desensitization procedure. Katahn, Strenger, and Cherry (1966), Cohen (1969), Crighton and Jehu (1969), Donner and Guerney (1969) utilized a group approach to treatment while Suinn (1968), and Mann and Rosenthal (1969) combined the individual and group approaches to desensitization of test-anxiety. Emery and Krumboltz (1967), Garlington and Cotler (1968), and Emery (1969) utilized an individual approach to systematic desensitization. The conclusions to be drawn from these few references are far from conclusive with respect to either the efficacy of the systematic desensitization procedure or the individual as opposed to group approach in utilizing this technique. It is suggested, however, that this approach has much promise in the treatment of maladaptive habits formed through a process of conditioning.

The present case study was concerned with the application of sys-

tematic desensitization (Wolpe, 1958) to test-anxiety, or fear of examinations, as expressed by a 34-year-old female college student. When she came for treatment the client was enrolled in the first year of a three-year arts undergraduate program. Due to her rather informal educational background and the time lapsed since previous formal educational involvement she had marked anticipatory examination anxiety. Her background consisted of a public school education followed by practically oriented training acquired through a technical school and a college of pediatrics, all of which was achieved by the age of 18. Upon entering college the qualifying-year requirements were waived and the subject was admitted as a "mature matriculant."

### *Method*

The technique and rationale behind systematic desensitization were explained to the subject. She was receptive to the suggested approach and more than willing to give it a try. The subject completed copies of the Fear Inventory (Wolpe and Lang, 1964), the Bernreuter Self-Sufficiency Scale, and the Revised Willoughby Questionnaire for Self-Administration.

On the Fear Inventory, unpleasant feelings were most strongly elicited by thoughts of failure, taking written tests, and mice, with slightly less aversion being expressed towards speaking in public, being watched working, enclosed places, harmless snakes, and the sight of fighting. A normal score was received on the Bernreuter Scale, thereby suggesting an adequate capacity for self-assertion and independence. On the Willoughby Questionnaire the subject admitted to feelings of anxiety when required to speak or perform in front of a group of strangers or when being observed while working, self-consciousness before 'superiors,' as well as reluctance to voluntarily participate in a discussion.

Six office and fourteen home sessions, each of approximately 30 minutes duration, were devoted to demonstration and practice of the progressive relaxation technique (Lazarus, n.d.). The office sessions also involved the establishment of an anxiety hierarchy regarding exams. A total of 23 situations ranked and rated on a scale from 0 to 100 *suds* (subjective units of disturbance) was arrived at. It is as follows:

- (95) Exam in front of you and are reading the questions, trying to decide what material should go in each answer.
- (90) Thirty minutes remain on a final exam and you feel you have an hour's work left to do.
- (90) While trying to think of an answer to an exam question you notice everyone around you writing very rapidly.
- (85) While writing an exam someone gets up to leave. You feel you have a great deal left to complete.
- (80) Writing an exam and the professor has stopped beside you and is observing over your shoulder.
- (75) It is the night before an examination.
- (70) While taking a final examination you come to a question for which you do not know the answer.

- (65) Attempting to organize the year's work in preparation for the final exams. You wonder if you have good notes and whether you have done enough outside reading.
- (60) Studying for a specific exam. You wonder if you are covering the material that will be asked on the exam.
- (55) Walking into a room where an examination is to be given.
- (50) Awaiting the distribution of examination papers.
- (45) In the examination room with an exam face down in front of you.
- (40) It is four days before an examination.
- (35) It is one week before an examination.
- (30) In the process of answering an examination paper.
- (25) It is two weeks before an examination.
- (25) Before the unopened doors of the examination room.
- (20) Walking with some friends to an examination room.
- (15) On the way to the university on the day of an examination.
- (10) During the first week of lectures in September one of your professors has said, "Naturally, there will be examinations in this course."
- (10) Learned that you failed an exam.
- (5) One of your professors has just announced the date of an exam at some time in the future.
- (5) Passing someone in the hall you have heard them say the word "examination."

Not included in the desensitization procedure was the item, "Professor has just announced that each student must take an oral exam in that course," rated at 100 *suds*. The subject refused to deal with this area, believing an oral exam completely unlikely in an undergraduate course and something she would have to reconsider should the need ever arise.

### *Discussion*

Freedom from anxiety to the items in this hierarchy required only 9 desensitization sessions with complete transfer to the corresponding situations in actuality. Six weeks later the client passed her examinations with little if any subjective feelings of difficulty.

It is of interest to briefly speculate in learning theory terms about how this woman acquired her fear of examinations. It must be noted, however, that this analysis is *post hoc*, based on progressive data accumulation during the interviews with the subject. There is evidence that, in a national language competition, while expecting to place at a high level, she "froze" and was outperformed by an individual felt to be her inferior in this area. In addition, academic striving did not seem to have been stressed in the home nor did the client, either past or present, indicate a strong leaning in this direction. Her primary motivation to acquire a degree was enrichment and self-fulfillment.

Over a period of time examinations became a conditioned stimulus capable of eliciting conditioned responses, namely, the pervasive anxiety and consequent fear. At one point, when the apprehension became too intense, she contemplated withdrawing from university or, at best, simply auditing the courses.

The desensitization process employed as treatment is grounded on the principle of counterconditioning. The stimuli which evoked the maladaptive responses were repeatedly presented at levels of low in-

tensity working from weak anxiety-provoking cues to stronger ones. In this way the anxiety was gradually overcome.

**RESUME:** Une seule étudiante de niveau collégial a servi de sujet dans cette étude. On l'a choisie sur la base de son rapport verbal d'une très grande angoisse dans les situations de testing ainsi que sur la base de ses résultats au Fear Inventory et au Revised Willoughby Questionnaire for Self-Administration. Le traitement au complet, comprenant un entraînement à la détente et la désensibilisation, s'est poursuivi durant 29 séances d'une demi-heure chacune. On a observé une diminution significative de l'angoisse dans la situation de testing. On a aussi observé des changements dans les examens scolaires et les notes finales. De plus, le sujet a rapporté qu'elle n'éprouvait plus de crainte ou de sentiments d'anxiété à l'approche des examens.

Ainsi, conformément aux théories de l'apprentissage, on a postulé que la crainte des examens est un comportement névrotique acquis. Conséquemment, on a éliminé ce comportement au moyen d'un nouvel apprentissage basé sur la détente progressive et la désensibilisation systématique.

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