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The test-anxious student

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Abstract

Ginny is a 25 year old nursing student who returned to school to become a Registered Nurse following several years of practice as a Licensed Practical Nurse. In class she rarely or never asked a question. When called on she blushed and kept her eyes lowered. After failing several examinations, Ginny came to see the writer for help. She expressed surprise that she wasn't doing very well as she studied many hours for each exam. She reported that she worried a great deal about continuing to fail examinations and was really disgusted with herself. Ginny related an astonishing array of physiological symptoms on the day of an examination including an inability to sleep or eat, nausea, lightheadedness, and a feeling of impending doom. Upon entering the classroom for the exam, Ginny's head would begin to throb; her heart would pound (almost audibly, she suspected) and her palms would perspire profusely. She expressed serious doubts about her intellectual abilities even though she had completed university level science courses.

THE TEST-ANXIOUS STUDENT

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Ginny is a 25 year old nursing student who returned to school to become a Registered Nurse following several years of practice as a Licensed Practical Nurse. In class she rarely or never asked a question. When called on she blushed and kept her eyes lowered. After failing several examinations, Ginny came to see the writer for help. She expressed surprise that she wasn't doing very well as she studied many hours for each exam. She reported that she worried a great deal about continuing to fail examinations and was really disgusted with herself. Ginny related an astonishing array of physiological symptoms on the day of an examination including an inability to sleep or eat, nausea, lightheadedness, and a feeling of impending doom. Upon entering the classroom for the exam, Ginny's head would begin to throb; her heart would pound (almost audibly, she suspected) and her palms would perspire profusely. She expressed serious doubts about her intellectual abilities even though she had completed university level science courses.

Definition and Manifestation of Test Anxiety

Ginny displayed many of the classic signs of

test-anxiety. Test anxiety, the topic of this paper, means "anticipatory anxiety in test-taking situations" (Mandler & Sarason, 1983). According to Reister et al. (1977), when a person experiences fearful thoughts and painful physiological symptoms during examination times, he/she learns to expect these manifestations in future testing circumstances.

The behavior of test anxious students appears to have both a physiological and cognitive component (Gelen, cited in Stevens et al. 1983). The physiological behaviors exhibited reflect the degree of arousal of the autonomic nervous system. The cognitive process involves the formation of self-deprecating thoughts and expectations of failure. Liebert and Morris (Reister et al. 1977) reiterated these two major components of test anxiety as worry and emotionality. "Worry" is described as the cognitive concern for test performance while "emotionality" deals with the autonomic arousal part of anxiety. The real or imagined threat of failure on a test and the consistent self-put down combine to activate a debilitating anxiety that effectively interferes with achieving test success. When the

ability of the test-anxious student to perform is consistently interfered with and failing grades occur, the individual may seek or be referred for counseling help.

Interventions

Individual vs Group Therapy

Trimble and Carter (1980) noted that advocates of group treatment found it to be more cost-effective than individual treatments because it required fewer counselor hours for number of clients served. The use of a workshop approach to serve even more students than group treatment was proposed. Test-anxiety workshops were viewed as providing a flexible and convenient response to mid-term and final exam time influxes of students needing help.

Efficiency in the management of both finances and time may dictate the choice of individual or group intervention strategies. Osterhouse (Krumboltz & Thoresen, 1976) reported that group desensitization was equally as effective as individual desensitization. A group treatment format was found

to be economical in terms of counselor time and presence (Altmaier & Woodward, 1981).

Reister, Stockton and Maultsby (1977) investigated the hypothesis that the use of groups as large as thirty could be therapeutic when utilizing rational behavior techniques. The results indicated no difference in the relative effectiveness of this and other methods studied. However, no mention was made in the discussion of the size of the groups used or the significance of group size, even though this was identified as one of three purposes of the study.

Perhaps the most important motive for using a group or workshop format was identified by Taylor (1975). His contention was that students in a group became aware that their concerns were not unique but were common to many other students. The group approach provided a mechanism for students to learn from each other as well as the counselor.

Systematic Desensitization

Various strategies have been employed to deal with test anxiety in students. Systematic desensitization was initially conceived by Joseph Wolpe in the 1950's as an individual treatment method

(Krumboltz & Thoresen, 1976). Osterhouse (Krumboltz & Thoresen, 1976) described the components of a group procedure for a systematic desensitization treatment plan including instructions given to the clients regarding the impossibility of being both afraid and relaxed at the same time. Based on this fact, the group was taught relaxation techniques and subsequently practiced these methods until learning how to relax. The next step involved the use of a preconstructed test-anxiety hierarchy which included fifteen situations ranging from the first mention of a test to the actual test period. Items were ranked by the student from least to most anxiety-producing. Individual items were presented to the group by using an average response of all the group to the situations starting with the least anxiety-provoking and progressing to the most. Each situation was presented a minimum of three times with relaxation achieved to be considered desensitized.

A study by Denny and Rupert (1972) utilized systematic desensitization, adding the component of self-control by instructing clients to continue to attempt to relax when visualizing a tension-producing situation. Once relaxation was again achieved, the

scene was terminated. By encouraging self-control, desensitization appeared to shorten the number of treatment sessions.

Another form of desensitization test-anxiety using vicarious stimuli was examined using videotapes in a small group format by Altmaier and Woodward (1981). A comparison of vicarious desensitization alone and in combination with study skills training was employed. The results demonstrated the potential of the treatment modality since there was a significant reduction in test anxiety. Systematic desensitization teaches relaxation skills to manage somatic tensions and inhibit the "emotional" component of test anxiety (Stevens et al. 1983).

Cue-Controlled Relaxation

The cue-controlled relaxation procedure is a strategy designed to enable clients to achieve relaxation in response to a self-induced cue word (e.g. calm or relax). The study by Russell and Lent (1982) examined the efficacy of cue-controlled relaxation and systematic desensitization alone and in combination. There was also an attention placebo and no treatment group. The results of this study

surprisingly showed that none of the treatment groups was superior to the no-treatment group. Previous research by Russell and Wise (Russell & Lent, 1982) had supported the use of cue-controlled relaxation. Future studies using fewer conditions were suggested.

Structured Psychodrama

Psychodrama is based on the simulation of environmental and psychological realities. In this protected, simulated condition, the client explores, through acting, past, present and even future behaviors with controlled adverse consequences. The protection facilitates confrontations with fearful situations while experiencing new, non-threatening emotions (Kipper & Giladi, 1978).

The use of structured psychodrama was investigated by Kipper and Giladi (1978). Students were assigned to one of three groups receiving either structured psychodrama, systematic desensitization or no treatment. The major difference between classic spontaneous psychodrama originated by J. Moreno and this method was the highly structured format of the intervention. One technique employed was the "empty chair", in which the client/student talked to an

imaginary person or personal quality represented by the empty chair. The second technique involved the client changing his identity with a significant other as enacted by a helper. This was called "role reversal". The third was called the "double" technique. This involved a helper as an extension of the client´s self to enable fuller expression of feelings and thoughts in a given situation. The test-anxiety hierarchy outlined in systematic desensitization was the basis for enactments using the three psychodramatic techniques to role play the situations. Results of Kipper and Giladi´s research (1978) demonstrated that both modes of treatment were equally successful. Test anxiety was reduced on two objective measures. Psychodramatic techniques increase the likelihood of a student dealing with mainly the "emotional" component of test anxiety (Kipper & Giladi, 1978).

Study Skills

Improving academic skills when used in conjunction with other treatment programs has been suggested as an effective approach to test anxiety (Lent, 1983). The research by Lent, Lopez and Romano (1983) was

based on the assumption that underprepared students often have poor study and test-taking skills. A test anxiety reduction intervention incorporating both a strong anxiety reduction and a study skills component offered the most promise. Peer tutors (undergraduates) conducted weekly reviews of lectures, administered a practice quiz, answered specific questions regarding course materials and gave training in test-taking methods and other study skills (e.g. note-taking). In combination with cue-controlled desensitization, promising results were obtained in reducing anxiety during tests. Improved study skills help the student manage the "worry" component of test anxiety by building self-confidence and increasing expectations for success (Lent, 1983).

Rational-Emotive Therapy

The clinical effectiveness of rational emotive therapy was discussed by several authors including Ellis and Harper (1975) who first described the premise that thinking produces emotions. The ABC theory of emotions focuses primarily on the "worry" component of test anxiety with the A part consisting of the specific event including events or observable

changes in the environment, thoughts or perceptions. The self-talk part or B is the evaluative thoughts about A upon which C, the emotional response either negative, positive or neutral, is based.

The self-talk or evaluative thoughts of B are both rational and irrational in nature. The irrational thoughts are simplistic and absolutist type statements, such as "This is the worst!" or "It´s awful!" Ellis and Harper (1975) speculated that the habit of irrational thinking is learned. The therapeutic process involves the client recognizing irrational thoughts and practicing forming rational beliefs. Anxiety is believed to be the result of irrational thinking.

Jacobs and Croake (1976) speculated that if Ellis´ hypothesis is correct, then it would follow that people can be reeducated and gain insight into negative self-talk and replace it with rational thoughts. The results of their study supported the hypothesis that education/discussion groups using rational emotive techniques did decrease anxiety and self-reported problems in college-age students. This particular research did not focus only on test anxiety but on eleven areas of social, personal and other

general problems.

The application of rational emotive therapy to a specific case was illustrated by Achebe (1982). Cognitive restructuring or adapting a more appropriate attitude was used as a valuable learning experience by the student. A combination of assertiveness training, modeling and disputing defeating self-talk was utilized.

Taylor (1975) developed a procedure for utilizing a rational emotive therapy approach to test-anxious clients. Audio taped lectures, role play taped rational emotive therapy sessions and homework assignments were designed to reduce the irrational beliefs associated with test anxiety. The results of this research were mixed due to the method of post-test for test anxiety which was apparently difficult to assess.

Providing students with a means to prevent "goofing off" when studying was the counseling approach for a workshop developed at a community college in South Carolina (Taylor, 1975). Ellis' model of rational emotive therapy was used to help students to relearn attitudes and behaviors that would enable them to be more effective students and to

evaluate their thoughts and attitudes toward studying. This workshop consisted of eight 90 minute sessions held twice a week. Homework assignments utilizing a self-help mental health aid of Maultsby (Taylor, 1975) were completed and analyzed by students. Other homework involved the student keeping a diary of their feelings while studying. Keeping track of their feelings such as anger or boredom was important as indicators that something was wrong. The "something" was the person's self-defeating thoughts. In the first five sessions, discussions continued to unmask irrational beliefs of the participants and methods of questioning and disputing them. During the last three sessions a switch in focus to behavior occurred. Instructions were given that it was not enough to think better, but they also needed to act. Behavioral techniques offered participants a problem-solving method to challenge self-defeating beliefs. These techniques were a means of reinforcing newly attained cognitions. Self-reinforcement, written reminders, and environmental contingencies were introduced for use by students. During the sessions, members were encouraged to bring and complete tasks, e.g. one member practiced making up and answering sample

questions. Improved study attitudes and a more active part in their studies were reported following the workshop by the majority of the participants six weeks after the workshop. A third outcome was increased grade point average. Students demonstrated an average gain of .53 on a 4 point scale. The specific impact of the workshop on grade point gains was seen as difficult to assess. Modifying cognitions during rational emotive therapy is the key to successfully alleviating the "worry" component of test anxiety (Taylor, 1975).

Conclusions

One pattern appearing consistently throughout the literature was the use of the group as a therapeutic milieu. The benefits appeared to be recognized by most authors. Techniques designed to modify cognitions that evoke anxiety and to manage the bodily symptoms minimize the components of test anxiety most effectively. However, because of conflicting results obtained in test-anxiety research it is difficult to assess the results of the studies. No consistent objective means of measuring pre and post study results are reported so comparison is difficult or

impossible. Perhaps the most significant objective measurement of post-treatment gain was the increase in grade point average documented by Taylor (1975). The difficulty was in attributing the gain to the workshop only.

One major point reiterated often in the literature was that self-reports by students were extremely favorable and clients perceive rewards from all methods of treatment. Being actively involved in the process of behavior change may accrue benefits to the participants whether the results are scientifically measurable or not. Several of the papers suggested this is an outcome. Taking control of behavior is seen as a necessary component of anxiety reduction. The method used may not be as important as the direct involvement of the student in attempts to develop new behaviors. "Unlearning" ineffective, rigid, or uncomfortable behaviors is the potential end result of the interventions. The ability to utilize flexible and adaptive behaviors that are cognitively controlled by rational judgments is the desired outcome for the test-anxious student. What is learned can be unlearned. Further research should include examining student's grade point

averages for semesters following participation in a study and continued comparisons of the strategies. Confronting the anxiety and the underlying fear in an active manner and in a supportive group milieu may be the most significant recommendation for test-anxious students.

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