The application of stress management techniques to highly specialized populations and disorders has become an increasingly important clinical endeavor in recent years. Curiously, however, individuals undergoing one of the most stress-laden experiences, graduate school, have rarely been the focus of such efforts. There are three major forms of therapeutic intervention, namely, cognitive-coping, problem-solving, and time management, which may assist students in coping with the stressors imposed by a graduate school career. Intervention strategies which use cognitive processes in evaluating stressful situations include rational emotive therapy, systematic rational restructuring, and self-statement modification. Problem-solving incorporates generating alternatives, making decisions about the alternatives, and verifying the chosen alternatives. Time management offers some general guidelines to help boost individual productivity by: (1) improving efficiency through basic self-management; (2) determining individual strengths and weaknesses; (3) planning work; (4) assessing progress; and (5) analyzing failures and learning from mistakes. These procedures and techniques can be employed on a self-management basis to facilitate adjustment to the graduate school environment. (Author/MLM)
Stress Management Techniques for Graduate Students:
Cognitive Coping, Problem-Solving and Time Management

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I. Introduction

As many of us are all too acutely aware, the graduate school experience is often a stressful one. While moderate stress seems to facilitate performance, excessive stress can become debilitating. Therefore, to preserve their psychological well-being and enhance their professional achievements, it is important for students to be able to effectively deal with the stress of graduate school. This paper is derived from a presentation that was part of an invited conversation hour at the 26th Annual Convention of the Southeastern Psychological Association. It is not intended to represent a comprehensive review of the area, nor does it offer an original conceptualization regarding the treatment of stress. By simply providing information about the various techniques that are available for dealing with stress, it is hoped that students will be better prepared to select procedures that best suit their own individual needs. Although the paper is written with the graduate student in mind, the strategies described herein may of considerable use to counsellors, therapists, and other professionals who deal with stress-related difficulties.

II. Cognitive Coping and Relabeling Strategies

A. Conceptual Considerations

Psychological approaches to stress management have traditionally emphasized mediational processes as the major variables to be considered in the selection of an intervention. Three primary variables mediating the relationship between stressors and resulting stress have been identified: cognitive, personality, and social-psychological. Of these variables, it appears that greatest recognition has been given to the impact of cognitive processes on an individual’s reaction to stressful events.
Presumably, cognitive mediators of stress are so focused upon because of their significant role in modulating the interchange between an individual and the environment. In light of this cognitive emphasis, a brief overview of cognitive processes and stress is in order.

The individual's perception of potential or real stressful events heavily influences the course of coping with such events. Many formulations have suggested the importance of 1) perceived environmental demands, and 2) perceived threats or danger when considering how an individual evaluates a particular situation, as well as 3) perceived sources of coping when describing one's alternatives to dealing with the former events. Intricately related to these perceptions is the notion of perceived control, that is, the relationship between one's behavior and its outcomes. The perception of control has been considered to affect the manner in which one attempts to cope with imminent stress. These two variables, perception of threat and perception of control, have been described in terms of pertinent cognitive processes, namely, appraisal and evaluation. Because of their presumed impact on individual adjustment, the psychological analysis and treatment of stress must begin to consider these influential cognitive processes.

B. Intervention Strategies

The importance of cognitive processes in evaluating stressful situations has led to the development of treatment strategies designed for their modification. A cursory review of some of the major packages will help to illustrate the nature and scope of this form of intervention. Cognitive coping strategies have long been associated with the work of Ellis (1962, 1970), called Rational Emotive Therapy. Its major premise states that maladaptive feelings result from maladaptive thoughts. That is, psychological problems arise from misconceptions and mistaken cognitions
One of Ellis' primary contributions to the area has been the explication of some of these irrational ideas which, he argues, cause and sustain emotional disturbance (e.g.: one should be thoroughly competent, intelligent, and achieving in all possible respects; one must have certain and perfect control over things). These dysfunctional thought patterns would then become the focus of intervention, which in this modality takes the form mainly of direct confrontation.

The individual would then be trained to identify the irrational thoughts which follow an objective experiential event and which, in turn, result in negative emotional states. Subsequently, he would try to exert an impact on the future probability of these internal responses, perhaps by challenging their logical premises, and notice any resulting changes. The individual learns how and when to critically evaluate his personal ideologies. An example of maladaptive cognitions and emotions relating to academic stress from this perspective is found in Table 1.

An approach derived from the work of Ellis is Goldfried's Systematic Rational Restructuring (Goldfried, Decenteceo, & Weinberg, 1974). Based on the premise that an individual's evaluation of a situation determines his emotional reactions to that situation, this strategy is employed to modify the "cognitive set" that is invoked when approaching potentially anxiety-provoking situations. The procedure involves 5 steps which are designed to facilitate recognition and modification of these misguided cognitive events. Briefly summarized, these 5 steps are:

1. Expose individual to anxiety provoking situations.
2. Have him evaluate his anxiety level.
3. Teach him to use this anxiety to notice any self-defeating, anxiety-provoking cognitions regarding the problematic situation.
4. Have client re-evaluate these cognitions.
5. Have client take note of his anxiety level following re-evaluation.

A final example of this form of intervention is called Self-Statement Modification (Meichenbaum, 1977). The strategy aims at modifying what individuals say to themselves. Explicit training is provided in monitoring negative self-statements and then learning alternative, positive self-statements through rehearsal and continued in-vivo practice. Self-instructional strategies have been used to reduce negative emotional reactions and build complex adaptive repertoires. Table 2 presents some examples of positive self-statements as found in the literature.

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III. Problem-Solving

There is little systematic information regarding the application of problem-solving techniques to an individual's personal affairs. Perhaps the most valuable information in this regard is found in a comprehensive model proposed by Goldfried and Davison (1976). What follows is an outline of the model's major stages.

1. General Orientation

Successful problem resolution requires that one identify a problem-situation as soon as possible. Rather than dwelling on the emotional reactions produced by the situation, the individual should use such reactions as cues to shift attention to the particular events which trigger them.

2. Define the Problem - Formulation

All aspects of the situation should be concretely specified, that is, operationalized. The individual should determine which aspects of the
environment are mostly responsible for the problem, thus calling for a detailed analysis of the situation. Furthermore, one should determine those situational events which might increase the likelihood of an effective problem-solving response. The goal of this stage is to produce an objective, highly specific problem-definition.

3. Generate Alternatives

The best method for determining potential solutions is to brainstorm, that is, list all of the ideas one can think of without evaluating them. It is better to go for quantity than quality when simply specifying alternative courses of action. Progress here is facilitated if one employs a set of questions directed toward various aspects of the problem to be solved or by breaking the problem up into sub-problems.

4. Decision Making

The selection of an effective solution requires some consideration of the likely consequences of each course of action generated above and the utility of these consequences in dealing with the problem as formulated. It is most expedient to select the general strategy for problem-resolution first, and then to determine the most efficient tactic to be implemented. Obviously, the tactic must meet the individual's criteria for solution and should be implemented without producing undesirable side-effects.

5. Verification

Once the tactic is implemented, one should determine if progress is congruent with the criteria for problem-resolution. If the problem is dealt with effectively, no further problem-solving is required. If not, however, the individual can continue to test new alternatives until a suitable solution is found to be effective. It is important for the individual to monitor and evaluate a particular solution in as objective a manner as possible to ensure the collection of accurate information.
Problem-resolution is expedited if the aforementioned stages are implemented in a systematic fashion. Of utmost importance in this effort is the recognition that when placed in a stressful situation, individuals typically respond automatically in less than optimal ways. The problem-solver must make a concerted effort to inhibit this tendency to respond in a stereotypic manner, and to develop novel alternative solutions. The reader interested in pursuing this topic is referred to work by Graha (1978, Chapter 10).

IV. Time Management

A. General Guidelines

Most of us resort to using the cliche' "time flies" when explaining the fact that our productivity has not measured up to standard within a given period of time. However, it is usually apparent that the failure to accomplish these results is more a function of the ineffective use of time than it is to the fact that it indeed marches on so rapidly. It then seems more appropriate to examine some of the issues that influence the manner in which time is budgeted so that priorities can be achieved and our efforts maximized. The following are some general guidelines which might aid in boosting one's productivity:

1. Improve your efficiency through basic self-management

Begin by focusing your attention on only those tasks which deserve immediate attention. Certain ones may be postponed while others may require prompt attention. Ineffective work methods, however long-standing they are, should give way to strategies which are optimally suited to the task at hand. Productivity can also be facilitated by formally structuring leisure activities into a cramped work schedule.
2. Determine your strengths and weaknesses in different areas

It is perhaps the case that most students show differential strengths in their academic and work-related skills. Since graduate school affords little opportunity for skill remediation, weaknesses in important areas may go unattended so that existing skills can be developed. The wise student would, therefore, begin to document his proficiency in the following areas considered relevant for a successful career: administrative (control of work); personal skills (concentration, memory, organization); human relations (working with others).

3. Plan your work

Most students do not budget their time by establishing different levels of goals or priorities guiding their work. In the long run, however, these strategies make up for time lost as a result of incomplete or inaccurate performances. One of the best methods for budgeting time is to designate short, intermediate, and long-range goals. By establishing a set of priorities, effort is minimized while productivity is maximized. The individual is encouraged to determine what results are desired for each assignment, what plan of action would most efficiently yield those results, and to stick with the plan until it can be evaluated.

4. Assess progress

Are the desired results achieved within a given period of time designated by the assignment? The answer to this question is of considerable importance in determining whether a selected plan has been worthy of application or is in need of replacement.

5. Analyze failures and learn from mistakes

It is easy to lose sight of the fact that failures often provide valuable information regarding the handling of a particular task. The corrective feedback which may accompany an inadequate performance can
be employed to select a more satisfactory plan.

B. Self-Management Applied to Study Behavior

For most of us, the task of structuring our schedules to include sufficient time for studying is a most unwanted one. Students tend to study when the opportunity presents itself and in whatever situation they find themselves. Therefore, the time and place for study is left up to circumstance, rather than a specified routine. However difficult it is to examine one's ineffective study habits and then reprogram the environment to produce more efficient ones, the long-term benefits associated with such improvements far outweigh the initial effort which must be expended. And, if one considers the premium placed upon a high grade point average and the importance of self-directed achievement throughout the graduate career, the necessity for the use of self-management techniques becomes even greater. A few of the major strategies designed to increase study time will be described based on the work of Williams and Long (1979):

1. Select a goal

   While most students opt to increase the amount of time studied, one could also work toward improving overall efficiency. Whatever the goal, it must be realistic.

2. Monitor target behavior

   Keep a concise record of the amount of time studied. This data should tell you where you are having the most difficulty. Record every instance of studying, the time and place of study, and how long you remained on task. It is desirable to collect this information for a minimum of one week.

3. Change setting or environment

   To increase the likelihood of studying more, the environment in which one usually studies should be rearranged. All of our behaviors, including studying, occur in the presence of certain salient stimuli (events). The
presence or absence of these stimuli may determine to what extent one studies and makes adequate progress (e.g. t.v., friends, drinking, talking).

The major factors to consider here involve time and place. One should develop a time for study so that study behavior is triggered by that time period. Designate fixed time intervals for work which cannot be changed. Furthermore, limit the number of stimuli present in that setting which might interfere with your work. If you begin to fall off task, leave the area and do something else; but before you leave, complete a little bit of work. The goal is to associate one specific area with studying and no other behavior or activity.

4. Establish effective consequences

After completing an interval of study behavior, it is desirable to reward this activity by engaging some other, more preferred activity. This reinforcing activity or event should become available only if the study requirement has been met. As progress is achieved in a gradual fashion, the individual can increase the amount of study time required for reinforcement. Hopefully, such rewards can be dispensed with as the natural benefits associated with improved studying behavior occur.

V. Summary

The techniques and strategies described in brief in this paper are just a few of the procedures which can be employed to facilitate one's adjustment to graduate school. While they certainly do not ensure that progress will be made, they may minimize some of the difficulties frequently experienced by students in personal and academic areas. It is hoped that sufficient information has been provided to allow for their successful and efficient implementation.
References


Footnotes

1 Thanks to Pamela G. Dorsett for this example.
Table 1

An example of academic stress

Situation

You have two weeks to prepare for an exam and to complete a written assignment. The week before you couldn't spend as much time on coursework as you needed to because of research and/or your job. It's the first test and the first written assignment for each course, and you really wanted to do well on both.

Cognitions

1. It's only the beginning of the term and I'm already behind. How will I get caught up?
2. It's gonna be terrible if I don't do well on these first assignments.

Feelings/Emotions

1. Dread working so hard over the next two weeks.
2. Afraid of doing poorly; apprehensive.
3. Angry that research/job had required so much time.
4. Frustrated that didn't have more time to spend on coursework.
5. Despondent over possibility of failing at the beginning.

Behavior

1. Complain to friends and classmates about situation.
2. Stay up late worrying about performance.
3. Refuse several invitations for leisure activities to improve productivity.
4. Become irritable and short with people.
5. Begin looking for alternative career.
Table 2
Examples of positive self-statements

<table>
<thead>
<tr>
<th>Preparing for a stressor</th>
<th>Confronting and handling a stressor</th>
<th>Coping with the feeling of being overwhelmed</th>
<th>Reinforcing self-statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>what is it you have to do?</td>
<td>you can convince yourself to do it; you can reason your fear away</td>
<td>when fear comes, just pause</td>
<td>it worked; you did it</td>
</tr>
<tr>
<td>you can develop a plan to deal with it</td>
<td>one step at a time; you can handle the situation</td>
<td>keep the focus on the present; what is it you have to do?</td>
<td>it wasn't as bad as you expected</td>
</tr>
<tr>
<td>just think about what you can do about it; that's better than getting anxious</td>
<td>don't think about fear; just think about what you have to do</td>
<td>label your fear from 0 to 10 and watch it change</td>
<td>you made more out of your fear than it was worth</td>
</tr>
<tr>
<td>no negative self-statements; just think rationally.</td>
<td>this tenseness can be an ally; a cue to cope</td>
<td>don't try to eliminate fear totally; just keep it manageable</td>
<td>it's getting better each time you use these procedures</td>
</tr>
<tr>
<td>relax, you're in control</td>
<td></td>
<td></td>
<td>you can be pleased with the progress you're making</td>
</tr>
</tbody>
</table>

(Hechenbaum, 1977)