

DOCUMENT RESUME

ED 219 360

SP 020 546

AUTHOR Linville, Malcolm E.; Belt, Jacquelyn F.
TITLE Preventive Therapy: Helping Teachers in Training Deal With Future Stress in the Classroom.

PUB DATE Feb 82

NOTE 19p.; Paper presented at the Annual Meeting of the Association of Teacher Educators (62nd, Phoenix, AZ, February 13-17, 1982).

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS Anxiety; *Coping; Educational Environment; Higher Education; Locus of Control; Preservice Teacher Education; *Prevention; Relaxation Training; Self Determination; *Stress Variables; *Teacher Attitudes; *Teacher Burnout; *Teacher Education Curriculum; Teacher Role; Teaching Conditions

ABSTRACT

One of the best ways to deal with the conditions that promote stress in the teaching profession would be to include information about stress and ways of coping with it in a teacher preparation program. If prospective teachers have opportunities to examine the nature of stress and of situations that seem to contribute to tension, they would be better prepared to handle some of the special elements in the teaching situation that contribute to stress and eventual burnout. A teacher education program could help students to become more aware of the meaning of teaching and the significant role a teacher plays in childrens' lives. A teacher education program that gives students an increasing degree of responsibility might help prospective teachers to develop a sense of competency and control. Hope and optimism are fundamental to stability and good mental health and should be encouraged in preservice teachers. Prospective teachers should be taught relaxation techniques and techniques for using time efficiently. They should also be encouraged to form friendships that will allow them to be open about their feelings and concerns. (JD)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ED219369

Preventive Therapy: Helping Teachers in Training Deal
With Future Stress in the Classroom

by

Malcolm E. Linville, Ph.D.
Professor
School of Education
University of Missouri-Kansas City

and

Jacquelyn F. Belt, M.A.
Teaching Assistant
School of Education
University of Missouri-Kansas City

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

✓ This document has been reproduced as
received from the person or organization
originating it.
Minor changes have been made to improve
reproduction quality.

• Points of view or opinions stated in this docu-
ment do not necessarily represent official NIE
position or policy.

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Malcolm E. Linville

Jacquelyn F. Belt

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

SP 020 546

Preventive Therapy: Helping Teachers in Training Deal with Future
Stress in the Classroom

by

Malcolm E. Linville, Ph.D.
Professor
School of Education
University of Missouri-Kansas City

Jacquelyn F. Belt, M.A.
Teaching Assistant
School of Education
University of Missouri-Kansas City

Many teachers have had one or more workshops dealing with Stress and Teacher Burn-out in recent years, and I have met teachers who have attended as many as four such workshops. Some of the workshops have been helpful; others have not. Indeed, one teacher told me recently: "I'm burned out with Burn-out Workshops."

And yet the continuing interest in such workshops probably points to some real needs on the part of teachers that are not being met in other ways. I recently asked 300 teachers questions concerning changes they have observed in their teaching situations in the last five years. Without exception, they have seen teaching as becoming a much more demanding, frustrating, and stressful kind of occupation. Many of their answers have reflected the hopelessness and discouragement that are major elements of teacher burn-out. It has seemed to me a few sessions in a Stress Workshop might not be of much real help to most of these people and that we may be attempting to apply superficial remedies to critical situations. It might be more reasonable to help teachers cope with stress before it has become uncontrollable and to take a preventive rather than an emergency kind of approach. (Perhaps one of the weaknesses of American society in many areas has been the tendency to act when the fire is raging, rather than attempt to educate children not to play with matches.)

It has seemed to me that one of the best ways to deal with the conditions that promote stress in teaching would be to include information about stress and ways of dealing with it in a teacher preparation program. In this way, teachers in

training would have opportunities to examine the nature of stress and of situations that seem to contribute to tension. They could also become more aware of signals that indicate an increase in frustration, and they could be taught ways of dealing with such problems. Through these kinds of learning experiences, prospective teachers would hopefully be better prepared to cope with some of the special elements in the teaching situation that contribute to stress and eventual burn-out.

Before I begin talking more specifically about elements in such a program, I would like to define what "stress" means. At the present time, the word is used loosely to cover everything from a vague uneasiness to an unexpected ache. Technically, however, "stress" refers to physiological reactions that occur when we are threatened by something frightening or dangerous or by something unexpected. When this happens, the heart beats faster, and the individual breathes faster and harder. The blood vessels of the heart, lungs, and skeletal muscles dilate, while those of the stomach constrict. The adrenal glands increase their output of adrenalin which releases sugar from the liver.

The body is programmed to react to stress in this way and then to build up its energy stores and return to normal. Mankind could not have survived if the human body had not been able to respond to danger and crisis in an automatic way. If this is the case, then why is there so much commotion about stress?

This is because, in a more primitive society, a David might meet his Goliath, take care of him, and walk away. His heart beat slowed down and he was soon back to normal, ready to take on another giant. But in a complex modern society, the threats and pressures may be constant and unrelenting. Our bodies may tend to react

as if we were facing a low-level kind of stress situation all of the time. The results? In some people, high-blood pressure or coronary disease or ulcers. To support this statement, I am going to give you two rather shocking statistics:

The mortality rate for American males under 55 is twice that of Sweden, Norway, and Denmark; which are considered to be far less stressful societies than the United States, with its mobility and pressures to compete.

Also, the coronary heart disease rate for males aged 35 to 64 in the United States is six times that of Japan, a country which offers the individual a great deal of job security and a much more stable set of values than we find in our society. (Palmer, 1981).

While information of this kind should be a part of a curriculum to help students deal with stress, it is also essential to focus on some of the elements and conditions that can make teaching a stressful kind of occupation. Recently thirty teachers, working at levels from kindergarten to senior high school, listed conditions that they felt contributed to stress in teaching. The conditions that were cited most frequently were, in order: the number of discipline problems (75%); the amount of work required, including preparation and record-keeping (60%); conflicts with administrators (40%); difficulties with parents (35%); and conflicts between family life and school expectations (20%).

It might be beneficial for teachers in training if they were made aware of such areas in which stress is likely to occur and then, through discussion and role-playing, were allowed to begin to explore possible ways of dealing with these kinds of situations. An example might be role-playing situations in which prospective teachers deal with parents: A belligerent, threatening parent; then a parent who has given up -- "I can't do anything with that child" -- and finally a parent who accuses a teacher of prejudice. A second series of role-playing episodes might deal with the

frustrations sometimes administered by administrators. Not to mention frustrating students!

A prospective teacher should also realize that many situations outside the school can add greatly to one's level of stress. There are several checklists developed by Holmes and Rahe (reproduced in Controlling Stress and Tension by Girdano and Liverly) that measure the possible influences of life crises on an individual's level of stress. If an individual has experienced several serious life crises in the past twelve months, crises such as the death of a spouse or a close family member, a divorce or separation, or the loss of a job, then he or she should be quite careful about making other major changes for a while and should possibly seek professional help. A teacher needs to be aware of indications that he or she might be likely to face an unusual amount of stress and should be prepared to take adequate precautions during such a period. (Girdano and Liverly 1979).

We have discussed signs of stress and reasons for stress, and this may add to our store of knowledge, but does it really help us in dealing with the pressures and frustrations teachers are likely to face? What can we do in a training program to help individuals prepare to cope with the conditions that have already resulted in large numbers of unhappy and dissatisfied teachers? Some of these conditions are the province of teacher organizations and negotiations, but others are related to one's personal life and attitudes.

Three such attitudes seem to be related to low or moderate levels of stress. The first of these is the ability to take a rational, detached view of what we are doing and to become aware of the overriding purposes that should guide us in the selection of our daily tasks. This can help us accept some of the small upsets and conflicts and disappointments that we find in most occupations.

Let me describe some interesting research (an example of several studies of this kind) that would support the need for a sense of purpose and direction. In this study, the subjects were shown a motion picture that arouses a great deal of stress in viewers. The film is a safety movie designed to stop carelessness in a woodmill. Several gruesome and realistic accidents occur: the fingers of one operator are badly cut; the finger of another operator is supposedly cut off while a gush of blood spurts out; and, as a climax, a plank is driven through the stomach of a bystander.

One group subjected to this film was told in advance only that there were woodworking accidents in the film. A second group was told before the showing that the film was not real, that actors played the roles, and that the blood was only a red liquid. A third group was asked to take another form of a rational approach; they were informed about the purpose of the film and its value for workers in a woodmill, and were asked to watch carefully as a foreman in the film talked about the need for safety.

The subjects' heart rates were monitored throughout the film. Those who were told to consider the purpose of the film, the reason for it, had a much lower heart rate than those who had no intellectual preparation. Actually, the heart rates of those asked to consider the purpose of the film increased very little even when the finger was severed. Those who were told the film was not real had heart rates in between those of the other two groups. So, apparently, those who were intellectually prepared and looked at the "whys" of a stressful situation were much better able to handle it than those who were given no preparation. (Folkins, 1968)

Perhaps in a teacher education program we need to help students toward a greater awareness of the meaning of teaching and of the significant role a teacher

can play in a child's life. This may be especially necessary at a time when many institutions such as the family are changing, if not crumbling, and at a time when old value systems are weakening and losing their aura of solidity. A teacher can provide stability in an era when the shifting sensations of the media and the uncertainties of an angry world make it difficult for a child to find something that can give a sense of direction or order or meaning to all that happens around him (or her). We may need to put much more emphasis on the essential role of the teacher in our society, and also on a personal exploration of reasons for teaching, for wanting to enter a stressful occupation.

A second quality that helps people reduce anxiety is a sense of competency -- a realization that the individual can have some control over his or her environment. In one research study, twenty-four college students spent an hour at a difficult task, and, if they failed in any way, were given an electrical shock. The experiment was arranged so each student received a shock about every forty five seconds. Half of the students, however, were given the opportunity to call for a time-out period of one minute whenever they wanted it. The other half were given time-outs, too, but not upon demand. Both groups received about the same number of shocks, but the students who could ask for a time-out -- the students who had some control over the situation -- had consistently lower blood pressure throughout the experiment than did the helpless students who had no control over what happened. (Hokanson, 1971).

A number of similar studies would support these findings. So we might ask ourselves: To what extent do we give our students an increasing sense of competency, of their ability to control a classroom environment? What are some of the ways in which we might be able to do this?

I would suggest that a carefully designed program of experiences that would give students an increasing degree of responsibility might be one way to develop a sense of competency. These experiences should include opportunities to work in a variety of simulated and real-life situations. Helping students achieve success experiences and the careful use of positive reinforcement might also be beneficial.

A third characteristic that can help us manage even highly stressful situations is that of hope. Since 1955, clinical observation of cancer patients by Le Shan and others have indicated that survival seems to be some degree correlated with an optimistic outlook (Girdano, 1979).

One way to work with teachers in training in the attitudinal area is by discussing the use of theories and other materials for the classroom that illustrate the desirability of such qualities as hope and a reasonable kind of optimism. In the Appendix, you will find "The Story of Mr. Maybe," an example of such a story for elementary school children written by one of my colleagues.

We have looked at some general attitudes that can help a teacher deal with stress. Now let's look at some specific techniques that can be taught to teachers in training.

When an individual feels especially pressured or pushed, there are several ways in which he or she can relieve tension. One of these is a simple muscle-relaxing exercise developed by Dr. Joseph Wolpe in his work with patients who had a high degree of anxiety about being in elevators or flying in airplanes or being in crowded places.

First, the individual makes himself or herself as comfortable as possible, stretching out, breathing slowly in and out, relaxing muscles. Then the hands are clenched into fists, and the muscles of the arms are tensed and slowly relaxed. Next the lips are pressed together and, at the same time, the individual wrinkles his forehead, then slowly relaxes. After this the neck and shoulders are tensed and the stomach is sucked in hard.

The individual relaxes. Then thighs and calves are tensed and the toes are drawn up. After relaxing again, the individual sits loosely and tries to imagine the most beautiful place he or she has ever seen. With eyes closed, he or she pictures visiting that place again. (Wolpe, 1973).

This exercise can also be used in a regular classroom after students have worked and played hard. Certainly a relaxed group of students can contribute to the making of a relaxed teacher.

Another kind of technique that might help us avoid pressure emphasizes a more efficient management of our time. We live in a Time-bound and Time-pushed society, so that most of us are actually slaves to Time, even though the Emancipation Proclamation was issued almost 120 years ago. Take away a wristwatch, you have removed a vital organ for many people in our hurry-up world.

Here are two ways to help prospective teachers learn how to manage their time more effectively. The student is asked to make a time-chart of what he or she does during a typical day, then marks each essential item that should be done immediately. Another symbol or color is used to mark other items that need to be done but could be done on another day. Then the student crosses out the non-essential items.

Another approach is to consider how you can find time for one thing you really want to do. The student is given a recipe card on which is printed: RECIPE FOR MAKING TIME. Then the student is asked to write on the recipe card one thing he or she would like to do this week that there isn't time for. Under this, the student is asked to write a possible way (or ways) of rearranging schedules so a desired activity could be fitted in. Teachers as well as students need to learn ways of fitting pleasant and relaxing things into schedules that, if we are not careful, can become stretched as tightly as rubber bands. (And remember, when the rubber band breaks, it hurts.)

A third kind of specific technique focuses on learning to be more open about our feelings and more willing to express our problems to others. Sidney Jourard has stated that good mental health may be dependent on the individual's having at least one other person to whom he or she can express openly his concerns, problems, successes, and failures. We all need such a person in our own lives. *

We might help our students in this area by developing more small-group activities in which students can learn to express freely their ideas and feelings, their hopes and their fears. Sometimes, for example, I put a paper sack on my head, a sack made into a mask that symbolizes not me but a teacher in the abstract sense. Then I ask each student in the group to say to the symbolic teacher something the student has wanted to say to a real-life teacher but has never said. The paper-sack teacher does not reply but only listens. It is amazing what students are willing to express in this kind of situation, whether gratitude or anger or fear. When this activity is followed up by other kinds of discussions in a safe atmosphere, I have found that teachers in training become more willing to talk about their real concerns and feelings to others:

I said the words, "In a safe atmosphere." Making the classroom (whether in a college or university or a school) into a safe kind of place may be one of the most essential things we can do if teachers and students are to mitigate the effects of stress. And, as teacher educators, perhaps we need to work more intensively to make our own classrooms the kind of place described by one of my colleagues in a poem called "A Safe Place".

A Safe Place

by Gilbert Rees

In a safe place

I am wanted.

(Me, all the edges

And the angles

And the hidden parts

That are me.)

And no one says,

"You just won't do.

You'll never be

The things I want.

You never will."

No one says that in a safe place.

And no one comes

With sudden anger

Or a "What-am-I-going-to-do-with-
you" look

In hopeless eyes.

Not in a safe place.

For there

If I reach my hand out only a little,

If I gently touch someone,

Then someone reaches back
As gently,
As softly,
And no one breaks apart our reaching,
And no one tears apart our silence
In the safe place
We make
Together.

Perhaps -- more than breathing in and out, or managing time efficiently -- this sense of security can help us face a hurry-up world, a bewildering world which can seem to be nothing more than endless freeway -- "Go, go, go" -- without rest or consolation. And perhaps the best time to create this sense of security is before students start teaching, when they can be helped to look ahead -- and look within.

APPENDIX

The Story of Mr. Maybe

by Gilbert Rees

When Cathy woke up the sun was shining across her bed as if she had a new yellow blanket. But Cathy didn't smile. Because, the first thing, she heard Mr. Maybe say something.

"Maybe you'll miss five words on the spelling test today," Mr. Maybe said.

"Maybe you'll bring home a bad report card next time," Mr. Maybe said.

"Oh," Cathy groaned, "Mr. Maybe, be quiet for once."

There he was, always talking inside her, always saying those "ma be" things she didn't want to hear. Although she had never seen him, she thought he must look a lot like Great-Uncle Charlie. They had gone to Oklahoma City to visit Uncle Charlie once long time ago. He was a tall old man with white hair and all he did was sit on the back porch with a cane beside him watching out for squirrels.

"Those squirrels are after my tomatoes," he said and frowned even more than he usually did. Cathy didn't see any squirrels all afternoon, but the old man kept

Kevin, Cathy's brother, asked for a drink, and Great-Uncle Charlie had said that children nowadays just up and asked for anything although they had too much already. Then he said things in general were in bad shape.

On the way home Mom said that Great-Uncle Charlie was getting crankier all the time and was much worse since he had lost Aunt Irene. Aunt Irene would just say, "Oh, Charli" and talk him out of some of his ideas.

"Well, Mr. Maybe," Cathy said as she got dressed for school, "I think you look like Uncle Charlie."

"Maybe," Mr. Maybe said.

He really liked that word.

At breakfast Kevin kept complaining. He had broken his right arm when he was skating and his arm was in a cast and it made it hard for him to eat cereal.

Kevin banged down his spoon.

"Maybe I'll never get to play baseball again," he said. "My arm hurts."

"Now, Kevin, the doctor says your arm's coming along fine. He'll take the cast off next week," Mom told him.

"And then I won't be able to throw or bat right, ever. I'll just have to watch."

Cathy wanted to tell him she would help him practice when his arm was better, but then she heard Mr. Maybe again.

"Maybe he'll say something about dumb girls if you say that," Mr. Maybe was definite about this.

So Cathy moved away from Kevin and finished her cereal. She thought she'd better hurry or Mr. Maybe would tell her she might miss the bus. But he didn't seem to think this was necessary.

At school, Cathy studied her spelling words, but she missed one anyway. She spelled "barbecue" B-A-R-B-E-C-U because she thought about a Barbie doll and got mixed up.

"I told you you'd miss a spelling word today," Mr. Maybe said. "I mentioned a bad report card, too."

Mrs. Ballard laughed about Cathy's spelling mistake, but Cathy didn't think it was funny. She liked a perfect score.

After recess Cathy had to help Ethel June with the spelling words for tomorrow. Ethel June had come from another school, and they had different books there, and she didn't know a lot of words they spelled in Cathy's school.

Ethel June just couldn't spell most of the words when Cathy said them. Cathy tried to be very patient.

"No, Ethel June," she said, "it's two 'c's' and then two 'e's' S-U-C-C-E-E-D. Succeed."

All at once Ethel June put her head down on her table. "I can't spell right," she said. "I can't. Maybe I'll fail everything. Spelling and everything. It's so hard. Maybe I'll be in fifth grade all my life."

"Maybe," Cathy said doubtfully. She didn't know what else to say. Ethel June wasn't a very good speller.

After awhile Cathy went back to her table, and they sang a song about a camel that went courting.

The song went:

"If I should ask you to be wed,
I'm sticking out my neck." he said."

Cathy laughed with everybody else at this, but then she stopped. She had forgotten whether camels had one hump or two.

"Maybe that'll be on a test." Mr. Maybe was right there. "And you don't know."

Would he never be quiet? "Maybe, maybe," all day long. And it wasn't just the Mr. Maybe inside her that said it. Kevin had said "Maybe" about his arm, and Ethel June had said, "Maybe I'll fail."

There were a lot of Mr. Maybes around, Cathy thought. Not just inside her. Inside everybody. And they all were seeing the bad side of things. Just like Great-Uncle Charlie

Mom had said that Uncle Charlie was better when Aunt Irene was there. Cathy thought for awhile. "Maybe," she said, "Mr. Maybe needs a Mrs. Maybe. To tell him there might be another side to things."

But how could she find a Mrs. Maybe? There were a lot of details and arrangements to be worked out.

All at once Cathy knew. Where to find a Mrs. Maybe. And how to manage the whole thing. She could be Mrs. Maybe herself. And when Mr. Maybe said she was going to fail a geography test on all the capital cities of South America, she would inform him she had studied hard and knew Montevideo was the capital of Uruguay and she just might get them all right.

Mr. Maybe might answer, "Oh, ho" (which is just what he did) but she got everything right on the test.

And she tried the same thing when he said they would get her out right away in kick ball, that the ball would just hit her shoe and give a little bounce. Instead, she kicked it hard and she almost got to second base.

The next day, when it was time to help Ethel June with the spelling words, Cathy decided that Ethel June needed a Mrs. Maybe, too. So she said, "Ethel June, you are trying hard, and I'm going to try hard to help you. Mrs. Ballard said you're a good worker, and I just don't think you're going to fail. The first word is NECESSARY. We'll have to spell that one about five times."

Usually Ethel June got about seven words right out of the twenty on the spelling test, but today she got thirteen and Mrs. Ballard told her she was proud of her. She did miss NECESSARY, but that word had some complications.

Cathy found that at first Mrs. Maybe was kept very busy. She had to talk to Kevin a great deal, and Kevin seemed to have a very loud and cranky Mr. Maybe inside him, especially since his arm was stiff when it first came out of the cast. But it

got better, and he could throw pretty well.

Then Cathy found a funny thing was happening. Mr. Maybe didn't have so much to say. Some days, when she woke up, he didn't have anything to say at all. He was perfectly quiet.

After he didn't say anything for two whole days, Cathy began to worry. After all, he had been around for a long time. And you miss people who have been around, even if they are unpleasant.

"Mr. Maybe," she said, "where are you? Are you still there?"

She heard a feeble little voice, way inside.

"I'm still here. But I find that I am being constantly overruled. So most of the time I just keep still. I have my dignity, you know."

"I am only trying to help you change your ways," Cathy said.

"I am too old to change my ways." Poor Mr. Maybe did sound old. "I am thinking of going into a rest home."

"If you do," Cathy said "I will visit you once a week. And bring you cookies. For once in a while you might be right. Everything won't always turn out just so."

"Maybe it won't." Mr. Maybe's voice was louder.

"But it won't always turn out all wrong, either."

Cathy was very definite, and Mr. Maybe groaned. She sat up in bed and stroked the new yellow blanket the sun made across her knees, and then she smiled.

BIBLIOGRAPHY for "Preventive Therapy: Helping Teachers in Training
Deal with Stress in the Classroom"
by Malcolm E. Linville, Ph.D., University of Missouri-Kansas City.

- Balmer, R. G., Dembo, T., and Lewin, K., "Frustration and Regression: An Experiment with Young Children." University of Iowa Studies in Child Welfare, 18: 386.
- Burns, Jr., Lyle E. and Ekstrand, Bruce R. Psychology: Its Principles and Meanings, Second Edition (New York: Holt, Rinehart and Winston, 1976.)
- Bowlby, John, Attachment. (New York: Basic Books, 1969).
- Folkens, C. H., Lawson, K. D., O'Neil, J. M., and Lazrus, P. S. "Desensitization and the Experimental Reduction of Threat." Journal of Abnormal Psychology, 1968: 73, pp. 100-113.
- Gann, Kathleen, "Nine Stress-reducing Techniques for Teachers," Learning, 9:8, March, 1981, pp. 90-91.
- Girdano, Daniel and Everly, George. Controlling Stress and Tension (Englewood Cliffs, N. J.: Prentice-Hall, 1979).
- Gross, Martin, The Psychological Society, (New York: Random House, 1978).
- Harlow, H. F., Learning to Love, (San Francisco: Albion, 1971).
- Hilgard, Ernest R., Atkinson, Richard, and Atkinson, Rita, Introduction to Psychology, Sixth Edition (New York: Harcourt, Brace, Jovanovich, 1975.)
- Hokanson, J. E., DeGood, D. E., Forrest, M. S., and Brittain, T. M., "Availability of Avoidance Behaviors in Modulating Vascular-Stress Responses." Journal of Personality and Social Psychology, 19:1, July, 1971, pp. 60-68.
- Jacobson, E., Progressive Relaxation, (Chicago: University of Chicago Press, 1938).
- Liljetors, I. and Rahe, R. H., "An Identical Twin Study of Psychosocial Factors in Coronary Heart Disease in Sweden." Psychosomatic Medicine, 1970 32, pp. 523-542.
- Lynch, James, The Broken Heart, (New York: Basic Books, 1977).
- Martin, Barclay, Abnormal Psychology: Clinical and Scientific Perspectives (New York: Holt, Rinehart and Winston, 1977).
- Palmer, Stuart, Role Stress, (Englewood Cliffs, N. J.: Prentice-Hall, 1981).
- Rathus, Spencer A. and Nevid, Jeffrey S., BT: Behavior Therapy, (New York: New American Library, 1977).
- Richter, Curt P., "On the Phenomenon of Sudden Death in Animals and Men," Psychosomatic Medicine, 1957: 19, pp. 191-198.

Selye, Hans, The Stress of Life, (New York: McGraw-Hill, 1967).

Thomas, Alexander and Chess, Stella, Temperament and Development, (New York: Brunner, Mazel, 1977).

Tiger, Lionel, Optimism: The Biology of Hope, (New York: Simon and Schuster, 1970).

Trotter, Robert J. and McConnell, James, Psychology: The Human Science, (New York: Holt, Rinehart and Winston, 1978).

Wolpe, Joseph, The Practice of Behavior Therapy, (New York: Pergamon Press, 1973).

Zimbardo, Philip G. and Ruch, Floyd L., Psychology and Life, Ninth Edition (Glenview, Ill: Scott, Foresman and Company, 1977).