

We have studied in chapters 3 and 4 about values to guide our lives and about how to control our behavior. In chapters 5 to 8, we turn our attention to four generally unwanted, unpleasant emotions-stress, depression, anger, and dependency. First, we will study stress, anxiety, and fears, because these are the most common emotional problems.

Stress, Trauma, Anxiety, Fears, and Psychosomatic Disorders

- o Overview & new research
- o A case of being afraid of public speaking

🔀 Signs of stress

Sources and types of stress

- o External situations that lead to stress
- o Frustration, threats, and conflicts
- o Prolonged and intense stress

X Dealing with trauma

Becoming absorbed with one's wounds

K Theories explaining stress and anxiety

o Constitutional factors—genes and physical causes

- o Operant and cognitive theories about anxiety
 - Operant conditioning and stress
 - Thoughts and emotions
 - Observational learning and cognition
 - Faulty perceptions and irrational reactions
 - Can we handle it?
 - How and what you think determine stress level
 - Self confidence in coping skills
 - Does thinking explain all fears and anxiety?
 - Thoughts, emotions, and actions are interrelated
- Psychoanalytic theories of anxiety
 - <u>Psychological</u> defense <u>mechanisms</u>
 - <u>Unconscious</u> causes of fear
 - <u>Summary of the</u> means by which stress is developed
 - <u>Summary of</u> the <u>effects of stress</u>

🔀 Ways of handling stress and anxiety

- o How to cope
- o <u>Confront</u> the stressful situation
- Find causes and escape stress
- o Support and self-help groups
- o Relaxation
- o Desensitization
- o <u>Stress</u> inoculation
- o <u>Develop</u> toughness and skills
- o Cognitive methods
- o Summary of how to handle anxiety, fears, and stress

X Treatment of specific anxiety-based problems

- o Anxiety, worry and shyness
- o Insomnia and burnout
- o <u>Anxiety, fears, and</u> phobias (books and sites)
- o Panic attacks and agoraphobia
- o Obsessions and compulsions (books and sites)
- o Personality, emotions, and health
- o Psychosomatic and physical disorders
 - Heart disease, Cancer
 - General health & Prayer
 - Pain--headaches

Overview

Anxiety or tension is our body's way of telling us that something is going wrong and we need to correct it. It is an absolutely essential signal, necessary for our survival and well being. If primitive humans did not have food, the anxious anticipation of hunger motivated them to find food. If a worker hasn't been productive yet today, the fear of criticism from a supervisor or co-worker helps him/her get busy. If I am driving a little too fast on a rainy night on tires with 70,000 miles on them, my concern about safety slows me down. These are valid reasons for feeling that action is needed to avoid trouble.

Isn't it wonderful that we have a built-in automatic warning system? Yes, except when the system goes awry. Sometimes the expectation of trouble or danger is wrong; we exaggerate the problems or become tense for no good reason. At other times, the warning is accurate but nothing can be done, and we fret needlessly about our inability to change the situation. Sometimes, we have this stress alarm going off, but we don't know what is wrong. In each of these cases, we are psychologically and bodily all tensed up to run or fight an enemy, but the real enemy (the creator of the scary situation) is us.

Obviously, a major problem is telling the difference between realistic, helpful tensions, fears, or worries and unrealistic, unhealthy nervousness. This is because we all *could* start fretting about some possibly stressful event at almost any time. Risks are all around us. Thus, unrealistic worries are over-reactions to a tolerable situation or a prolonged over-reaction to a threatening situation that can not be avoided. But how can you be sure a situation won't cause trouble? You can't. How can you be sure you won't handle the problem any better if you worried about it a lot more? You can't be. However, we can learn to recognize *extreme* over-reactions, e.g. being terrified while flying or obsessing for hours about an insoluble problem. But a little worry about crashing while flying is realistic and some thought is necessary to know that you can't do much about a problem. So, how much time should you devote to a particular problem? There isn't an exact answer; that's why some of us let anxiety overwhelm us.

Instead of an over-reaction, some people under-react to a risk. They dismiss or deny it. They never get serious at work or prepare for a "bad spell;" they die on rain-soaked highways. Maybe they are unaware of the danger; maybe they just prefer to not think about it; maybe the situation is so threatening that they are scared witless, and shove awareness of the problem out of their mind. Both over-reactors and under-reactors to a threat are poorly prepared to deal with it. Both need to learn to react differently. This chapter deals more with over-reactors than with under-reactors.

Everyone has some anxiety

The complexity, confusion, and commonness of anxiety is reflected in the many words in the English language for anticipated troubles: tension, feeling on edge, up-tight, hassled, nervous, jittery, jumpy, wound up, scared, terrified, insecure, pressured, alarmed, anxious, worried, dreading what might happen, uncertain, vulnerable, apprehensive, edgy, troubled, and many more. Anxiety is one of the most common symptoms seen in a psychologist's or psychiatrist's office. Mental Help Net provides several articles about stress.

The broadest definitions of stress include the entire complex sequence of events: (1) the event that requires some change (external or mental; real or imaginary), (2) internal processes (perception, interpretation of the event, learning, adaptation, or coping mechanisms), (3) emotional reactions (our feelings) and (4) other behavioral-bodily reactions (nervousness, sweating, stumbling over words, high blood pressure, and all the medical conditions mentioned below). In a more limited usage, *stress* is the upsetting situation and *strain* is the mental and physical reactions. However, most of us use the term stress loosely for both the threatening situation and the anxious reaction.

Stress may refer to meeting any "demand" made of us, even good, reasonable, enjoyable ones. Thus, the experienced jogger meets the demands of running five miles and thoroughly enjoys it. A person given a promotion is delighted even though it means more responsibility and work. Doing well in school involves the stress of learning what you need to know to get high grades on tests. No one could work and raise a family without stress. How could anyone strive for a high, competitive goal or make sacrifices in order to live according to his/her values without experiencing stress? And, surely, stress is part of self-discovery, growth, and using all of one's potential, because these efforts open us up to failure when we find our limitations. Even the most wonderful events of life--loves, friendships, family, sex, travels, holidays--add stress because these situations require us to cope and adapt. So, some writers speak of "good" stress and "bad" stress. We all have both.

In everyday speech, however, we usually find other words, rather than anxiety or fear, for the hard work, uncertainty, and tension associated with doing a good job at work, in school, or in our relationships. We may say, "it's a hard job but he/she is handling it," rather than "his/her job is making him/her highly anxious." When we use the phrase "he is anxious" or "insecure" or "she is nervous" or "jumpy," we usually mean things aren't going well, the person is close to loosing control or threatened with failure. Therefore, words which imply the amount of anxiety and stress being experienced become a commonly accepted index--a barometer--of how well we are coping. Indeed, very high anxiety is an aspect of most psychological breakdowns or disorders. So, the stress-related words mentioned above usually communicate to others that we are having serious difficulty handling some situation. What other emotions and/or terms are closely related to stress? *Fears* are when you feel scared in specific situations. Some are fears of real dangers; a fear of speeding or fighting or driving while drunk is healthy. Other fears, also called *phobias*, are not realistic; phobias of heights, flying, bugs, enclosed places, open spaces, or of speaking to groups are all over-reactions to the actual risks involved. *Panic reactions* are sudden, overwhelming fear reactions, often without an obvious external cause, usually involving rapid breathing, heart palpitations, fear of dying, and a frantic attempt to get to safety. *Anxiety* is an unpleasant tension state, something like fear, in certain circumstances but not associated with a specific stimulus, perhaps not with an external event at all. One might be generally anxious at work, meeting people, taking a class, or in many other situations; yet, no specific aspect of those situations is the identifiable source of the fear.

Because stress, fears, and anxiety are so unpleasant, you might be tempted to seek total relaxation in undemanding situations. Actually, the leisurely, effortless life style is not possible or even desirable for most of us. As I have already made clear, if you seek to do your best, to do new things, to stretch your capabilities, you will be challenged and stressed. Many of us are good students, good workers, or good religious folks partly because we are scared not to be. Many outstanding athletes, students, managers, scholars, professionals, and others obtain part of their drive by overcompensating for feelings of inadequacy.

As we have mentioned, the forewarnings of trouble help us cope and achieve. Thus, tension must, in many ways, be valued and welcomed. Psychologists don't yet know which achievements could have been accomplished without stress (demands from the environment and upon oneself), perhaps almost none. Thus, it seems likely that the better adjusted among us are constantly both reducing some of their unneeded anxieties and increasing other beneficial anxieties. It is a skillful, cogent person who can orchestrate his/her life into a pleasant *and* productive symphony of high and low stresses. Thus far, psychology has focused mostly on lowering high anxiety for good reason: it is a serious and fairly common problem.

The diagnosis of Generalized Anxiety Disorder (GAD) is a chronic, debilitating condition consisting of excessive worry, disruptive anxiety, and distressful tension that has lasted for at least 6 months and maybe for years. It is the second most common psychiatric disorder (after depression); about 5% of the world's population suffers this disorder. Even in developed countries, however, less than 20% of sufferers get proper treatment. It is treatable, but many MDs have trouble diagnosing it and are uncertain how to treat it. GAD frequently results in sleeplessness, irritability, poor concentration, and fearful hyper-vigilance. There may be a variety of other symptoms including fatigue, muscle tension, sweating, heart palpitations, stomach trouble, diarrhea and others. As we will see later, anxiety and depression are frequently and closely associated. Intense anxiety is also a part of or connected with many burdensome psychological or physiological conditions and psychiatric disorders. For instance, some aspect of anxiety accompanies *neurotic* disorders, including *somatoform or somatization or conversion* (a physical problem with a psychological cause), *psychogenic pain, hypochondriasis* (fear and excessive complaints of bodily disease), *dissociative reactions* (amnesia, sleepwalking, multiple personality), *factitious conditions* (faking an illness), *obsessive-compulsive* disorders, *phobias*, and other disorders. Some of these problems are dealt with in the last section of this chapter.

New Research about Fears, Panic, and Anxiety

Behaviors associated with anxiety, e.g. panic reactions, phobias, and worries, are paradoxical since these behaviors, although unpleasant, keep on occurring over and over, perhaps for months or years. Being by their very nature unwanted, distressing, self-punishing acts or experiences, why don't those behaviors gradually go away-extinguish? Why don't people just stop or escape the behaviors? If you were hurting yourself by holding your hand near a stove burner, you'd stop. Why don't you stop getting uselessly scared or worried? The usual answer given by psychologists is that the panic, compulsion, phobia, or worry may be a useful warning that something is wrong or they actually *reduce* our level of anxiety or stress in some way. That "relief" is powerful enough, we must assume, that it overrides the unpleasantness of the act or experience, such as compulsion, fear, or worry.

Psychologists are gradually learning more about the creation of intense physiological stresses (more so in some people than in others) that require rather extreme ("neurotic") acts/feelings, such as intense fears or compulsions, to lessen the tension or dis-ease. Apparently, something in an individual's history makes him/her more prone to use an excessive (and neurotic) tension-reduction method, such as a compulsion, prolonged worry, or a repeated obsession that becomes a part of a disorder.

First of all, it is obvious that anxiety disorders are not easily stopped. Indeed, they often become chronic, presumably because they produce some pay off, some benefit, such as worry or fretting may help us feel we have done our best to deal with a scary situation. It might surprise you how common anxiety disorders are. For reasons we don't clearly understand, certain kinds of anxiety disorders, such as panic attacks and phobia of insects or small animals, occur much more often in women than in men. Perhaps the new research summarized below will provide some hints as to why these disorders develop more often in women. These gender differences start early--by age 6, girls are twice as likely to feel anxious as boys or, at least, they admit feeling anxious.

Research in the last decade or so (much of this information is taken from Barlow, 2000) has shown that anxiety reactions are not just simple conditioned responses (like Little Albert's learned fear reaction to the rat), not just some chemical imbalance (like a physician might have us believe), and not just some cognitive misjudgment of the danger involved (as the Cognitive therapist would tell you). Emotions, in general, have apparently evolved over eons to help us survive, partly by helping us to be mindful of dangers and to help us communicate with others. Likewise, some emotion-based symptoms seem to be inherited from recent ancestors. However, although feeling stress is the nature of our species, emotional responses can certainly be modified by an individual's life experiences and by the species evolution. For instance, some (but not all) fear responses have apparently evolved to enable us to instantly respond (fight or flee) to an immediate danger; the nerve impulses tend to go straight from the eye or ear to our primitive emotional brain, then to the muscles, bypassing the thoughts ("cognition") in the brain's cortex. Most people's fear of snakes is like this.

In contrast with the instant reaction of many fears and panic, anxiety is usually quite cognitive, i.e. how we see a situation determines how we feel about it. Barlow says anxiety results from perceiving one's self as helpless and feeling unable to cope with an anticipated danger or problem. A fear of public speaking might be an example--you aren't going to be physically hurt but your pride and self-esteem may be damaged. Anxiety, thus, involves constant tension--vigilance, expecting trouble, and sensing, perhaps wrongly, that we will be unable to handle a possible danger. He suggests a better term might be "anxious apprehension." Anxiety is futureoriented cognition, e.g. "I will mess things up in the future because that is what I have done in the past." (Note: depression tends to be a past-oriented disorder, "because of my past losses or guilt, I feel bad.") It is important to realize that you may not be aware of the specific trigger or cue that sets off the "danger alert." Also, one may not have specific notions about exactly how he/she will be inadequate in coping with the problem. In the more extreme cases, all these dire expectations of disasters and failures to cope may become chronic and intense, interfering with effective coping by the brain. The panicking brain no longer effectively thinks of solutions; concentration is lost.

Human emotions are not simple. Several things are happening when we are anxious, unreasonably afraid, or excessively scared: primitive alarms are being set off inappropriately, previous trauma has conditioned us to over-respond, and our estimate of the true risks involved has gotten confused. Of course, it is sometimes necessary and healthy to respond to true threats with fight, flight, or freeze responses. But what happens when real threats are actually present but quite unlikely to happen? Some of us mis-calculate and become *overly* fearful and panicky. As the anxiety becomes intense, we often try to handle it in a couple of ways: (1) we avoid the frightening situation (avoiding it may be self-defeating or lead to rituals/compulsions and denial) or (2) we uselessly and excessively worry (which ironically often produces more anxiety, not less) and our body tightens. Both worry and body tension are central features of a Generalized Anxiety Disorder (GAD).

As the result of research, fear reactions are now seen by psychologists as quite different from anxiety responses, although they may feel similar. In the past, fear and anxiety were usually seen as a very similar physiological response, except that fear was set off by a specific triggering external situation and anxiety was a persistent autonomic response to a vague general external situation or to an unknown internal trigger. Today, however, fear and panic reactions are thought to result largely from primitive animal reflexes to danger, i.e. the old fight, flight, or freeze responses that have helped us and our primitive animal ancestors survive for millions of years.

Panic is, in part, like an automated fear reaction, except we don't usually understand what sets off a panic attack. Panic attacks have a cognitive aspect too. Barlow, while explaining panic attacks, has described "false alarms" that contribute to major panic reactions. Panic disorders--the feeling of impending doom--seem to be a complex result of (a) primitive innate biological alarm reactions (emotionality) which generally evolved over eons but also "run in families," (b) our learned psychological coping mechanisms (such as learning that a panic attack gets the attention of others or gets us back to a safe place), and (c) the life stresses we are experiencing (such as a concern that one might lose his job or a lover might leave). Panic may be complex but it is not an uncommon experience--between 10% and 15% of Americans have reported a panic reaction within the last year. So, while the primitive, automatic response may be the crux of fears or panic, they often also have a cognitive part too.

In the 1980's, the general concept of neurotic disorders was discarded and replaced with more specific labels, such as anxiety, mood, somatoform and other disorders. Yet, central to all these disorders is negative affect (fear, sadness, disappointment); the same medicines work on all or most of them; the same behavioral treatments work with most of them; the disorders tend to increase or are relieved together. So, now Barlow argues that anxiety and depression have so many of the same features that both disorders need to be studied and understood together (back to a broad, general neurotic label?). He maintains that anxiety and depression both result from (1) genetic contributions (about 1/3 to 1/2 of the total causes; commonly, families are seen as nervous, tense, high strung), (2) early childhood experiences, like rejection or abuse, that sensitize us to certain adolescent or adult stresses, and (3) psychological vulnerabilities or personality tendencies that direct certain individuals toward a specific disorder, like social anxiety, panic disorder, phobias, obsessions or compulsions, suspiciousness, aggressiveness and irritability, unhappiness, pessimism, disorganization and impulsivity, and many others. Of course, each of these specific disorders has unique characteristics, but they have a similar basic underlying emotion, namely, strong negative and tense feelings.

In Barlow's (2001) new experimentally-based book, the crux of anxiety is described as being an anticipation of trouble and feeling unable to control events in one's life. This suggests that one's sense of self-control (or Bandura's self-efficacy) is of vital importance. Note that "normal" people often believe they have more control over events than they really have (an exaggerated sense of mastery to guell our fears?). Many experiments with animals deprived of control have immediately produced agitation and intense tension. Also, psychological experiments studying the much later impact of early experiences, like animals allowed to control their food and water supply vs. animals having plenty to eat and drink but no control, have demonstrated marked and complex influences on the adult animal's behavior (less emotionality, fewer fears, less stress hormones, different brain organization, more adventurous exploratory behavior). An interesting and surprising contrast is that early *physical* trauma did *not* produce as much adult emotionality in animals (there is some reason to doubt that this holes true in humans). Apparently, gaining a sense of mastery or learning one is able to handle problems early in life, e.g. in monkeys who get good mothering and social support when young, seems to protect the adult from serious anxiety. So, learn your self-help lessons well.

Okay, now we are getting to the crux of this book--self-control and self-confidence. But how does a sense of control develop in humans? Barlow (2000) points out two characteristics of parenting that develop a child's sense of control. Attentive parents, who promptly respond to the young child's needs, wishes, cries, etc., build a sense of safety and an "I-can-get-things-done" expectation. Likewise, encouraging parents, who are less over-protective and let the child explore and handle situations in his/her own way, foster more independence, more security, and more self-confidence in the child. Parental overcontrol does the opposite, leading to less of a sense of self-control in the child (more of an "externalizer"--see chapter 8), to seeing the world as a more dangerous place requiring constant vigilance and help from others, and to feeling more anxiety and depression, perhaps throughout life (unless some self-changes are made or intervention is provided later in life). Thus, in addition to the genes, the learned sense of mastery or self-control determines, in large part, the amount of stress, anxiety or tension we feel. However, there is at least one more important factor--beginning to think of some situation or condition as particularly dangerous.

Although fears are generally based on primitive automatic emotional reactions, more intense panic and specific fears occur when we feel particularly vulnerable--open to being seriously hurt. Some of this vulnerability may be genetic tendencies but much is probably learned, often at an early age. How are these dangers, these "Wow, that scares the hell out of me!" reactions, learned? Sometimes, we see the actual results of a real danger--a heart attack, an auto accident, someone going crazy--and we vividly imagine that might happen to us. Examples: Panic attacks often are exacerbated by the scary thoughts that the tightness in my chest and high anxiety means I'm dying from a heart attack, going to faint, going crazy, etc. Such thoughts greatly increase the panic. Sometimes, we are given specific instructions by others to expect danger, e.g. some social phobics have been told that interacting with others can be disastrous--"they will think you are stupid or weird," "you can't trust them," "you'll make a fool of yourself," etc. Sometimes, we have started to think in a certain way (the source may be totally unknown--a TV, movie, book, or just our own fantasy as a child) that implies some situation is dangerous. Examples of this might be: "Oh, what I just said sounded really selfish... dumb... critical... " which grows into "I'm going to mess up when I talk to them," "I'm not good at socializing," "I can't think of anything to say," or "I get really uptight and start to sweat when I try to talk to someone." We can create, in effect, our own dangers, and may be especially prone to do that if we are given certain genes and childhood experiences.

Unfortunately, as a self-helper you can not un-do many of the early origins of your anxieties--your genes, your traumatizing childhood experiences, or the mistaken but frightening ideas you developed as a child. What you can do now is (1) learn the skills that will help you cope, (2) armed with those coping techniques, expose yourself to the scary situations to learn that they will not result in a catastrophe, and (3) work diligently to test out your anxietyproducing ideas and correct your false beliefs that make your life less happy or unproductive. The rest of this chapter will help you learn useful self-change methods for coping with fears and for developing a realistic sense of mastery. Chapter 12 contains several methods for reducing fears and anxiety. Also, chapter 6, is about dealing with depression, and chapter 14, is about changing your pessimistic or negative thoughts. For interpersonal concerns, see chapters 9 and 10. All these chapters will be of further help in the long process of learning self-control.

An overview of this chapter: we will first consider the signs of stress and the sources of stresses. Then, we will review several theories that attempt to explain why and how stress occurs, why there are such different individual reactions to the same situation, and what the consequences (beneficial and harmful) of prolonged stress are. Lastly, we will discuss controlling our anxiety. Many specialized Web sites will be given there.

The major purpose of this chapter is to give you more understanding of stress so you can handle it better. At the end of this chapter there are descriptions of several methods for managing stress, fears, anxiety, and specific psychological disorders. You may need to refer to chapters 12 and 14, and other chapters to find the details of how to carry out specific self-help methods for reducing anxiety.

A Case Study: Jane--difficulty speaking in front of groups

From grade school through high school Jane avoided speaking up in class or any public speaking. She wasn't shy; in fact she was outgoing and popular. She was comfortable with friends. Even in front of crowds, as a cheer leader, she was usually at ease, feeling confident of her talent, as long as she didn't have to speak. But answering questions in class was hard. Talking to teachers and older people was not easy for her. And when she had to speak in front of class, she felt very nervous, both before the speech and especially during it. She got tense, her voice quavered, she forgot what she wanted to say, her knees got weak, she thought she would really mess up. (Fear of speaking before a group is the most common fear; 41% of U.S. adults have it [Wallace, Wallechinsky & Wallace, 1977].)

Jane really wanted to be an actress and majored in Theater and Speech-Communication in college. She knew she had to conquer the speech phobia. She tried and tried to confront the fears by talking in certain classes. Her determination to overcome stage fright also motivated her to prepare carefully for small parts in plays. She even tried out for the debate team but didn't make it. Later she had a chance to appear on the campus radio as a news announcer. She was scared but she did it.

Eventually, as a senior, Jane became one of the anchorpersons on the campus TV news. She was very attractive; other students seemed envious; she gained confidence. A few months after she graduated, she found work as a TV reporter for a small station. It was scary but two years later she was co-anchor of the local evening news. As she became more experienced, she noticed an interesting thing happening--she became less and less uptight while performing but she remained very anxious and disorganized before going on the air. There was almost a panic reaction, difficulty concentrating, dry mouth, and an upset stomach as she prepared to read the news. When it was air time, she settled down. It surprised her to discover that many seasoned professionals experience intense stress prior to performing. (The great violinist, Isaac Stern, reportedly goes to the stage sometimes muttering to himself, "I can't play. I'm no good." Perhaps that is one reason why so many performers use drugs.)

Signs of Stress

The first task is to recognize what stress (or fear or anxiety) is--to become aware if and when you have it. Ask yourself these questions: Are you often tense, uptight, and unable to relax? Do setbacks disturb you a lot? Do you overlook the small pleasures in life? Do you fret and worry a lot? Do you have many self-doubts and self-criticism? Does your anger flare up more than it used to? Do you have trouble sleeping? Do you feel tired or experience pain? Are you under pressure and/or restless? Answering "yes" to any one of these questions may mean you are over-stressed. Answering "yes" to 5 or 6 of these 9 questions may double your risk of developing high blood pressure.

A brief list of signs would include:

- Psychophysiological responses--muscles tight or aching, nervous tics like in the eyelid, hands unsteady, restlessness, touching yourself repeatedly, clearing your throat, frequent colds, pain, upset stomach, sweating, skin problem or itch, stiff posture, holding things tightly, strong startle response, headaches, high blood pressure, ulcers, heart disease, colitis, hemorrhoids, rashes, diarrhea, or frequent urination. These are somatoform disorders.
- Behavioral-emotional signs--hyperactivity, walking or talking faster, in a hurry, irritation with delays, panicky, blushing, getting tongue-tangled, avoiding people, nervous habits (strumming fingers, eating, smoking, drinking), changing habits (becoming less or more organized), poor memory, confusion, stumbling over words, inattentiveness, excessive worrying, preoccupation with a certain situation, holding a grudge, irritability, crying, obsessive thoughts, compulsive actions, outbursts of emotions, bad dreams, apathy, etc. These are anxiety reactions.
- 3. Tiredness and lack of energy--general lack of interest, bored, watching TV and falling asleep, humorless, sleeping a lot, insomnia, can't get going, sighing, and moving slowly. (Or, sometimes, too much energy, as mentioned above.)
- 4. Anxiety intrudes on our consciousness or cognition in many ways: excessive preoccupation with the threatening person or situation, a desperate striving to understand why someone behaved the way they did, repeatedly obsessing about the upsetting event, unstoppable pangs of emotion (loss, anger, jealousy, guilt, longing, etc.), excessive vigilance and startle reactions, insomnia and bad dreams, aches and pains and other unwanted sensations. Plus all the words mentioned above in the introduction that reflect the subjective feelings we have, including nervous, up tight, scared, apprehensive, etc.

Naturally, no one has all these signs. Having only a few may mean nothing; yet, having only one to an extreme may be a sign of serious stress. You probably have a pretty good idea about how anxious you are; if not, discuss it with someone. There are over 100 personality tests of stress, anxiety, fears, self-doubt, risk-taking, etc., which could help you assess your emotional *dis-ease* (Aero & Weiner, 1981). Chapter 15 provides a journal approach to discovering your unique sources of stress. One of the best known tests of stress is the Type A Personality Test from Friedman and Rosenman (1974) which asks how often you experience racing against the clock, hating to be late, hating to wait, losing your temper when pressured, irritated by other's mistakes, speaking in a loud critical voice, being competitive, rushing to do something quickly, feeling quilty if not working, etc. How often

do you do these things? If a lot, you are likely to be a tense, competitive, ambitious, irritable Type A.

Because stress and anxiety are complex reactions (including feelings, actions, thoughts, and physiology), these emotional states can and have been measured many ways: self-ratings, observation by others, psychological tests, behavioral signs, and physiological or medical tests. The trouble is (1) each person has their own unique way of responding to stress, i.e. heart rate may increase but no stomach distress may occur in one person and the opposite pattern in another person equally stressed. (2) There is very little agreement among these measures, e.g. a person may rate him/herself as anxious but not appear anxious to others nor respond with stress on the physiological measures, like GSR (perspiration), blood pressure, or muscle tension. This is a major problem in studying stress scientifically. (3) The concepts of stress and anxiety are so broad and vague that general measures of anxiety do not predict very well how people behave or feel nor do such measures explain psychological problems or help a therapist develop a treatment plan. Being "anxious" roughly means "I'm having some problems" but more specifics must be known to diagnose and correct a particular disturbance. You may need to go deeper and find out exactly what is causing your stress. There are many possible causes which you need to know about before deciding what causes your anxiety.



External Situations that Lead to Stress

Changes cause stress

Almost any change in our lives is a stressor because there is a demand on us to deal with a new situation. This is Hans Selve's view, who has spent a life-time studying stress (1982). There are thousands of external causes of stress. Moreover, we can be *overstressed* when there are too many demands at school or work or interpersonally, and we can be *understressed* when there is "nothing to do" and we feel like we aren't getting anywhere. As mentioned before, there are bad stresses and good stresses. Here are some bad stresses (the percentages estimate the difficulty in managing that particular stress relative to death of a spouse, which is 100%: a spouse dies (100%), we get divorced (73%), have a serious illness (53%), we lose our job (47%), change occupations (36%), have more arguments with our spouse (35%), and so on. These are good stresses: when we fall in love and get married (50%), reconciliate after a separation (45%), retire (45%), have a baby (39%), buy a house (31%), get promoted (29%), have an unusual success (28%), graduate (26%), find new

friends (18%), and take a vacation (13%). The more of these major life changes--good and bad--that have occurred in your life during the last year or two, the greater the chances of your becoming physically or emotionally ill (Holmes & Rahe, 1967). Other researchers have found that having just one close, confiding relationship protects us from many of these stresses.

Alvin Toffler (1970) wrote a best seller, *Future Shock*, putting forth the idea that technology was producing such rapid change that people felt unable to keep up with and handle the accelerating flow of information and choices. We are in a mobile society with few permanent relationships. Today almost everything is disposable, even our jobs and friends. We give them up and move on. Certainly, computers, robots, and cheap foreign labor may threaten our jobs. On the other hand, I would suggest that an equal amount of stress or frustration is caused by changes being made too slowly rather than too fast, i.e. racial prejudice and greed don't go away fast enough, we'd like to make some changes at work but can't, or the slow driver in front of us drives us crazy--see frustration and conflict below.

Siegelman (1983) and others speculate that change is upsetting because we are leaving a part of our selves behind. Any change involves a loss of the known--a giving up of a reality that has given meaning to our lives. We are also afraid we won't get the things we want after the change is made. No wonder changes are resisted. Siegelman and others also believe that there is an opposite force to the resistance to change. Of course, many of us seek change; there is an urge to master new challenges, to explore the unknown, to test ourselves. And she says, "Mastering the anxiety of venturing promotes new levels of growth." How do you see yourself? As wanting things to stay comfortable and the same or more as wanting things to change? This is probably an important personal characteristic to be aware of and to consider if you need to change this attitude.

Daily hassles cause stress

Lazarus and Folkman (1984) believe the little daily hassles rather than the major life events bother us the most, causing mental and physical problems. The research at the University of California at Berkeley investigated the hassles of college students, middle-aged whites, and health professionals. Each group had some similar hassles: losing things, concern about physical appearance, and too many things to do. But each group had different concerns too: middle-aged persons worried about chronic money matters, professionals fretted about continuing pressures at work, and students were stressed by wasting time, not doing as well as they would like, and loneliness. Note, these are not major life changes, but chronic conditions.

Stress may come from constant, steady tension in a relationship, continuing lack of friends, no interest or excitement day after day, or inability to find meaning in life, as well as from the big, awful eruptions in life discussed above. Also, the little unexpected occurrences and

disruptions, like a flat tire, an uninvited visitor, a headache, a long form to be filled out, etc. cause stress too. Lazarus's little hassles were found to be more related to physical health than Holmes and Rahe's major life events. So, both big and little events create stress; you need to be aware of both. And, in fact, as Lazarus points out, health can better be viewed as a result of effective or ineffective coping rather than as simply a result of stress in the environment. You may not be able to avoid stress, but you can learn to cope.

Frustrations, threats, and conflicts cause stress

Stressors may be real or imaginary, past or future obstacles or stumbling blocks, i.e. frustrations. If something (or someone) has interfered with our "smooth sailing" in the past, it is called a frustration or a regret. It may upset us and depress us. If the obstacle is expected in the future, it is called a threat. This may be an accurate or an unrealistic expectation; in either case it causes anxiety and worry. A common human dilemma is when our own inner wishes, needs, or urges push us in different directions. This is a conflict.

Psychologists have described *five major types of conflict* that may help you understand your stress:

(1) Approach-avoidance conflict --we both want and don't want something. Examples: any temptation, like sweets, we like it but want to avoid it. You find someone physically attractive but their personality turns you off. You'd love to teach useful psychology to high school students but the pay is low. In this kind of situation, any decision you make has some disadvantage. It's "damned if I do and damned if I don't."

Furthermore, there is frequently an additional feature that makes this conflict more difficult to deal with, namely, the attraction is stronger than the avoidance at a distance (otherwise we'd just leave it alone and forget it) and avoidance is stronger than attraction when we get close to the attractive object. So, we are caught in a trap. It is like being strongly attracted to a glorious person whom we fear may not be interested in us. Thus, we tend to approach him/her and then just as we are about to ask him/her to do something with us, we get "cold feet" and run away, then come back again and so on. So often this happens in love relationships; there is a quarrel and a break up, but at a distance they miss each other and remember the good times and end up getting back together, only to find the other person is still a jerk; they fight again and leave, and over and over. Caught in this kind of bind, the stressful oscillating between approaching and avoiding may go on for a long time.

Note: frustration is like an approach-avoidance conflict except there is a barrier in the way instead of the goal itself having negative qualities that keep us away. For example, it is a conflict when low pay makes us hesitate to take a high school psychology teaching job. It is a frustration when the barrier to high school teaching is the fact that there are no jobs available. Age, gender, and lack of things, like money, ability, and motivation, are common barriers causing frustration. Adolescence has been called a time of storm and stress. In the early teen years, we are considered too young to drive, drink, go steady, work, stay out late, have sex, etc. As a young woman, it is not considered appropriate by many others if you want to work as a carpenter or truck driver, to be a senator or governor or president, play on the boy's football team, or be as loud and dirty-talking and heavy-drinking as males your age. The time when we would most like to have a new, expensive sports car is when we are 16 and have no money. Many of us would love to be a great singer but can't carry a tune. There are endless frustrations to be handled.

(2) Approach-approach conflict --we have two or more good choices but can't have them both. Examples: you have two good job offers, two or three kinds of cars you'd like to buy, two interesting majors to choose between, two possible dates and so on. This kind of conflict is usually easily resolved; we just make a choice. A few people become afraid they have made a mistake as soon as they decide. Many may briefly think later: "Of all sad words of tongue or pen, the saddest are these, 'it might have been'."

Making the choice among two or several good, exciting alternatives may be done carefully and cautiously by an unusually conscientious person; yet, the decision usually poses no big threat, unless one is hoping for a guaranteed perfect outcome. Others might make the same decisions casually or even impulsively. Of course, carrying out our preferred choices among good alternatives may involve considerable stress. When we go off to our favorite college, stress goes with us. When we decide to marry the person we love most in the world, we are anxious. When we try to excel in our favorite sport, there is tension. Each of us may have our own optimal level of tension as we achieve the goals we set for ourselves in life.

(3) Avoidance-avoidance conflict --we have two or more alternatives but none of them seems desirable. It's a "no win" situation, like approach-avoidance conflicts, except no choice looks appealing. Examples: we have a choice of studying a hard, boring chapter or doing poorly on an exam tomorrow. Suppose a woman becomes pregnant but doesn't want to have the baby and doesn't believe in abortion. We may be in an unhappy relationship but be afraid to leave. Suppose a parent or a spouse constantly disapproves of everything we do, but we can't or don't want to leave. These are very uncomfortable situations to be in. Often we try to escape: students drop courses, children run away from home, the young woman puts off deciding what to do about the pregnancy until she has to have the baby. Procrastinating or running away from the problem may only make things worse. At other times, escape is a reasonable choice, e.g. Erica Jong (1977) writes in How to Save Your Own Life about a woman in an unhappy marriage who became so afraid of failure that she couldn't get out of bed. Divorce saved her.

(4) Double or multiple approach-avoidance conflict --we are faced with many choices, each with complex positive and negative aspects. This is like conflicts (1) and (3) combined. The real world is like this sometimes: There is a good movie on (but you might flunk a quiz tomorrow); there is a lot of studying to do (but it's all so boring); there is a chance you could meet someone interesting at the pizza parlor (but it's too many calories); there is a job opening in your hometown (but it might be a serious mistake to quit college). All have their appeal; all have disadvantages; and you have only a few minutes in which to make many decisions like this every day.

(5) Avoidance-approach conflict --some ordinarily avoidable goals are so enticing (opposite of 1) that once you get close you can't stop: you can't stop with one cashew; a sexually attractive and willing partner may be impossible to resist once you get into bed. Emotions are like this--anger can be contained until we get to the boiling point, then we let go full force. Or, we may avoid someone or some activity or food thinking we don't like them, but once we get closer to them we find out we like them.

Being aware of the different types of conflicts could help you recognize troublesome situations in your own life. Such conflicts might be the source of stress and anxiety. Having a philosophy of life (chapter 3) and good decision-making skills (chapter 13) will help resolve the conflicts.

Other external and internal sources of stress

Shaffer (1982) lists 9 external and 10 internal sources of stress. The external ones are noise, polluted air, poor lighting, overcrowding, unpleasant relationships, uninteresting work or poor conditions, life changes (see above), too much or too little responsibility, and too many "rules." The internal sources are poor diet, little exercise, physical strain on the body, rushing or being unable to adjust to the pace of others, experiencing conflict or taking things too seriously, sexual frustration, finding little meaning in life, nervous symptoms, and taking no time for yourself.

A "source" of one emotion (anxiety, sadness, anger, dependency) can be another emotion. There is strong evidence that certain emotions go together, e.g. anxiety and depression, so it is wise to look for both feelings even though you are aware of only one. Sometimes one emotion, say anger, is so disturbing that it is denied (see defense mechanisms), but the simmering hostility can produce great anxiety which may keep us awake at night and stressed out during the day. In that case, focusing on reducing the restlessness may not effectively relieve the anger. You may have to dig out all the feelings.

If you are looking for the sources of your stress, you should consider all the above mentioned external and internal sources, but there are still many more ways to get stressed. Especially neglected in our discussion, thus far, are the cognitive sources (unreasonable expectations, faulty thinking, scary fantasies, and negative selfconcept) and unconscious processes (internal wars between parts of our personality and glimpses of taboo urges). We'll cover these in the next two major sections.

Prolonged and Intense Stress

Early research on psychological stress focused on extreme conditions: combat, concentration camps, nuclear accidents, loss of loved ones, and serious injury. Or, focus was on extreme responses to stress: psychosis, incapacitating anxiety, bleeding ulcers, high blood pressure, heart conditions, etc., which become stressful conditions themselves. Fortunately, most of us don't have to deal with such serious conditions, but we all have some stress.

Later research has studied the impact of stress on work and skills or on morale. To some extent, mild to moderate anxiety increases our performance, especially on simple, easy tasks that we know well. Of course, intense stress usually screws everything up; however, some people "keep their cool" responding to failure or a serious challenge with more determination and effort, and doing better. Most of us get "nervous" and clutch up or give up, especially if the task is very complex.

It is common to assume that men are more "bothered" by problems at work, while women are more troubled by problems with the children or by marital conflicts. But, if women work full-time outside the home, they are as stressed by problems at their work as men are. Likewise, men are as disturbed by difficulties with the children as women are. The emotional reactions to marital problems are complex: men and women are in general equally concerned about their marriages. However, when wives are securely employed and financially independent, men are more concerned with marital problems than women are. If women are economically dependent, they are more troubled by marital conflicts. Actually, your level of concern about your marriage depends on your commitment to and your dependence on the marriage. Other studies suggest that males and females tend to react differently to certain stresses, e.g. men and women respond about equally to a storm, like a hurricane, but women respond more intensely than men to a nasty family fight (Adler, 1993). We are learning new things about our reaction to stress all the time; there is a lot more to discover.

General Adaptation Syndrome--GAS

Almost 50 years ago a young physician, Hans Selye (1974), noticed that sick people often had a series of symptoms, no matter what was wrong. He called it "the syndrome of just being sick." It seems to be the body's way of defending itself against attack by disease or stress of any kind. *Three stages* are involved in what is now called the general adaptation syndrome or GAS. First, is the *alarm* stage: the body responds with panic--a "fight or flight" reaction. The hormones flow, the heart beats faster, we breathe harder, we sweat, our senses are more alert, we are ready for protective action--running or attacking. One can see how this reaction surely helped our species survive for millions of years in the wild. But as we experience this defense today in the form of fear, anxiety, panic, anger, sadness, etc., we lose some of our mental alertness and organization. So a frightened speaker, being more prepared to run than talk, loses his/her train of thought or stumbles over his words. The nervous worker being watched by his/her supervisor fumbles with his tools.

If the stress continues, our body enters the second stage, called *resistance*. Our body must stop being in a state of alarm; our body can't take it. So, the body attempts to adjust to the stress. We calm down a little, but the body is still working overtime; we may become more accustomed to being stressed but our concentration and decisions continue to be poor.

If the stress is very long-lasting (days, weeks, and months), our resistance is further worn down and our bodies become *exhausted* in the third stage. We don't have the energy to continue the adaptation to the stress. The body gives up--parts may have been damaged, particularly the heart, kidneys, and stomach. We may die. Voodoo deaths may occur this way. Commonly, psychosomatic disorders (psychologically caused physical disorders) occur: fatigue, hysteria, aches and pains, high blood pressure, skin rashes, etc. Often we have trouble getting along with others. Mentally we may experience hopelessness, exhaustion, confusion or perhaps a serious mental disorder.



The mystery of the long-term effects of intense stress

A cluster of research findings demonstrate the incredible consequences of childhood traumas (sometimes, not always). It has long been known that people who lost a parent during childhood were more prone to depression as adults. The 5 and 10-year harmful effects of divorce on the children has been well substantiated, and the "sleeper effects" of divorce (such as a fear of intimacy) may occur 10 or 15 years later (see discussion in chapter 10). Children, who's parents divorced, even die 4 to 6 years before children who haven't gone through a divorce. That's incredible. Soldiers who were prisoners of war were 8 times more likely to have had a stroke 50 years later than buddies who were not prisoners. Women who were sexually abused as children have a smaller hippocampus than unviolated women; thus, stress seems to change our brains, our cardiovascular systems, our immune systems, and our hormonal systems. So, when "stressed out" as an adult, the original source may have been years ago or even in your childhood (brilliant! except Freud said that 100 years ago).

About 40% of 10 to 16-year-olds report some sort of trauma in childhood--physical or sexual assault, kidnapping, etc. These traumatized children have more stress symptoms, sadness, and difficulty in school than non-traumatized children (Boney-McCoy & Finkelhor, 1995). That's why therapists explore your history.

Unfortunately, we scientists don't know how these continuing overreactions to stress are maintained over the years (see psychodynamics section later). Of course, theorists speculate, e.g. some think intense stress is primarily a chemical-physiological reaction which permanently alters our body, especially the hypothalamus, pituitary gland, adrenal glands and their various hormones, causing the hypersensitive reactions to ordinary stress. Drugs might be developed to fix these problems. Others think psychological (learned) processes are responsible and need to be changed.

Jeffery Young (1990) has suggested that *early maladaptive* schemas or ways of thinking develop early in life. Such schemas, especially after experiencing high stress, might include ideas that I will be abandoned, that others may deceive or hurt me, that I won't get enough love, that I can't handle life, that I can't be happy without a particular person's love, that I am basically defective and others won't like me, that my wants and feelings are unimportant, that I am entitled to anything I want, that I don't need to or can't control my emotions or behavior, and so on. Our particular schemas form the core of our self-concept, so they resist change. And, the maladaptive schemas from childhood could cause depression, over-reactions to stress (like divorce), physiological changes, high blood pressure and strokes, etc. years later. We are a long way from knowing how to prevent these long-range consequences. Quite possibly the physiological development and psychological processes (conditioning and cognitive) constantly interact and share the blame. Give science another 25 years and we will understand these new mysteries well enough to "treat" the causes. For now, we can do our best with what is known by exploring additional psychological theories about handling serious trauma. Later, we will consider more theories about coping with general anxiety.

Dealing with Trauma

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Trauma has recently become a renewed concern for patients and therapists. Of course, handling catastrophes is a problem as old as mankind because our history has been filled with trauma--disease, injury, storms, starvation, fears, arguments, war, abuse, death, etc. In addition, over 100 years ago, Freud started finding sexual abuse frequently among his psychologically troubled patients. A decade or so later, doubting that incest could be that common, he concluded that the reported sexual activity had probably not really happened but was a fantasy connected with the developmentally important attraction that naturally occurs between daughter and father or son and mother, which he called the Electra Complex and the Oedipus Complex. In time, other internal conflicts and dynamics also became concerns to Freudian therapists, such as Inferiority Complex and various defense mechanisms (see later in this chapter), and for nearly a century verbal psychiatric treatment has focused on resolving these internal problems related to childhood development.

Of course, external traumas, such as accidents and disasters, have often required treatment and/or support from friends. But two fairly recent events have re-focused attention on external stresses: (1) the Vietnam War with its Post-traumatic Stress Disorder (PTSD) and drug addiction and (2) the research confirmation of Freud's original observation of actual sexual abuse of children. Interest in drug treatment developed with the war and the drug counterculture (1966-1973). Likewise, a huge revival of interest in the long-term consequences of childhood abuse started soon after Multiple Personality, Adult Children of Alcoholics, and other disorders were found to be associated with childhood abuse. This completed the cycle of therapeutic interest back to coping with external trauma. A remarkable online history of PTSD Literature has been written by Lisa Beall of Auburn University.

Note: The way the term "trauma" is used here and elsewhere may be confusing in several ways. I and others usually use the word trauma in a very broad, general sense--to me it merely means a very disturbing, stressful experience; it may be intense for a long time or only moderately upsetting for a few days or weeks. Moreover, as I use it, the traumatic stress may come from a real external threat (upsetting physical or psychological circumstances) or from one's interpretation or even false perceptions of circumstances, dangers and faults (a subjective experience). However, the specific APA Manual diagnosis of Post-Traumatic Stress Disorder is limited, according to many diagnosticians, to people who have been in serious jeopardy and experienced intense fear, persons who have personally been exposed to possible death and escaped or been intimately involved with a loved one in such a dire situation. Therefore, because of this diagnostic restriction, "trauma" in the diagnosis of PTSD applies to soldiers who have been in combat, holocaust victims, rape and violent abuse victims or their loved ones, cancer patients or their loved ones, serious accident survivors or their loved ones, and so on. In contrast, to me "trauma" includes assorted non-life-threatening events, including death or suicide of a child or loved one, a very stressful divorce, a debilitating disease, difficult childbirth, natural disasters, a failure or

loss of a job, and many other stressful conditions. For a child, a "trauma" might involve neglect, excessive punishment (e.g. spankings), sexual abuse, emotional abuse (e.g. "you are stupid... mean... worthless"), sibling abuse or rivalry, serious accidents, observing domestic violence, bullying and social rejection, and many other conditions. The "experts" argue about the appropriateness of PTSD being restricted to life-threatening situations but that is the way the APA Diagnostic & Statistical Manual-IV reads for now. Other diagnoses are adequate to describe the psychological disruptions caused by non-life-threatening events or thoughts. Just keep in mind that PTSD, as a formal psychiatric diagnosis, involves a very restricted kind of trauma, but the term PTSD itself is often used casually by doctors and patients to refer to the aftermath of almost any trauma.

There are other major problems with the idea of trauma causing some long-term psychological problem. First, is the fallacy of the single cause, i.e. the tendency to overlook that the victim may have lacked the adaptive coping skills that were needed to handle the crisis, i.e. the individual may have had a predisposing vulnerability to some traumatic situation. Second, the identified traumatic event may have been merely a part of a complex "sick" environment, as when childhood sexual abuse occurs in a generally unhealthy family environment which had failed to provide the child with the confidence and skills to recognize, confront or avoid the abusive situation or to deal with it after the abuse was ongoing. Gold (2000) elaborates on this perspective. This idea is not "blaming the victim" in any way; it is clarifying the complexity of most situations. Third, as will be discussed at length in the next section, there are mental, emotional, physiological, conditioning and other processes at work in the intervening time between the trauma and the emotional consequences weeks, months, or years later. It would be foolish to neglect these psychological or physiological processes; they are crucial in the causal explanatory chain and in therapy. Labeling one specific trauma as "the" cause of a disorder is likely to be sloppy thinking that leads to over-simplification and the perpetuation of ignorance.

Many types of traumas may have major effects on your psychosocial development (see Table 9.2). Examples: if a child is neglected or mistreated, the child's need for a safe, nurturing human attachment is denied, and distrust or withdrawal or irritability may result. If the neglect or abuse interacts in certain ways with the child's personality or temperament, a variety of intense emotions may result at the time of abuse and years or decades later-fears, panic, anger, shame, guilt, depression, submissive dependency, etc. In turn, such feelings may have impact on many aspects of life, especially relationships, both connected and seemingly unconnected with the trauma. Let's look at some of the other consequences of trauma.

If the trauma involves actions by others (or external events) or if one's own actions result in fears, rage, shame or other painful memories, the way some people cope is to unconsciously push the unpleasant thoughts and feelings "out of mind." This denial or forgetting is now called dissociation (Freud called it repression). In addition, memories very often become distorted over time; a house we remember as big seems small to us as adults; bad memories may become more pleasant; and good or normal events can be "awfulized." Intensely unpleasant repressed emotions or memories, called "flashbacks," sometimes keep erupting uncontrollably, set off by "triggers."

Nightmares often occur after a trauma; pessimism may develop; victims may expect the trauma or some other disaster to happen again, including their own death. Of course, most children will avoid any reminders of the trauma. Many times the child appears emotionally numb, as though he/she has no feelings. Sometimes, though, children have a need to re-enact the trauma situation over and over in play. They may try to get the story to end differently.

The self seems, on rare occasions, to try to reduce the internal stress and/or shame arising from certain trauma by doing some self-destructive things, such as self-blaming, even self-injuring, feeling helpless or depressed, using alcohol or drugs, etc. Finally, the effects of trauma can have huge, sometimes strange, impact on our interpersonal relationships, including unconsciously repeating an aspect of the trauma over and over in other relationships (e.g. being abandoned), bonding with an abuser, or becoming over-dependent, withdrawn, distrustful, vulnerable, controlling, or hostile. Allen (1995) provides a good insight-oriented summary of these possible consequences of trauma.

The two most common diagnoses associated with serious traumas are Post-traumatic Stress Disorders (PTSD) and Dissociative Identity Disorders (DID). PTSD has serious impact on your life, usually in three major symptom areas: hyperexcitability (anxiety and over-responding to stimuli), reexperiencing (flashbacks and nightmares), and social withdrawal or emotional remoteness (numbing). Thus, it has similarities with the "shell shock" of W.W.I and the "combat fatigue" of W.W.II. About 30% of Vietnam veterans have suffered PTSD at some time after the war. About 45% of rape victims still have PTSD symptoms after three months and are in danger of the symptoms becoming chronic. PTSD often combines with other psychiatric disorders that frequently follow overwhelming trauma, such as anxiety and panic, depression, addictions, psychosomatic and personality or adjustment problems (Allen, 1995). It is important to note, however, that PTSD, DID, and other lasting emotional reactions are not inevitable following horrendous trauma. Some very strong, healthy, resilient people were terribly abused as children. We know very little, thus far, about why some survive, even thrive, and why some continue to suffer.

The DID reaction is characterized by detaching (forgetting) a part of one's experience, usually a very stressful series of events, from the center of one's awareness. Often the traumatic childhood experience involves sadistic, bizarre or sexual mistreatment by a parent or principal caretaker. The dissociation of the experience serves an obvious purpose; it blocks out painful or shaming experiences, memories, or "states of mind." If you are overwhelmed by a bad experience, avoiding it or repressing it or detaching from it is one way to escape. In this situation, you mentally create another reality. Early in childhood, this avoiding or "tuning out" or "spacing out" can become a habit, potentially a very unhealthy one. Sometimes when people dissociate they feel like they are observing themselves from outside their bodies or they may feel depersonalized (like a robot) or sense others as being mechanical and/or the environment as unreal. While these are unusual mental adjustments to intense trauma, all of us "tune out" parts of our experience at times, e.g., we might fantasize to escape a boring lecture. And, we all have many different states of mind, jolly and optimistic sometimes, crabby at other times. The old label of Multiple Personality has been discarded by therapists because the term implies more than one or several complete and independent personalities. It is better to think of ourselves as having only one personality, even though our total personality may be complicated and split into different states of mind. These different states, some called alternate personalities or "alters," are frequently in conflict with each other but they are still part of the person's total personality, not a separate person. The experience of DID has been described in detail by victims (Cohen, Giller, & Lynn, 1991). Several articles are here: MHN-Dissociation

(http://mentalhelp.net/poc/center_index.php/id/41). Between 1% and 10% of all psychiatric patients have DID. Heated controversies have centered on how often DID occurs and on the extent to which some therapists may subtly suggest to the patient that he/she has multiple personalities, thus, facilitating the development of another disabling disorder.

What are the treatments for these unhealthy reactions to trauma? Both insight therapists and cognitive-behavioral therapists would provide a safe, supportive treatment setting and then gently encourage the patient to talk about their traumatic experiences, to gradually re-experience without undue stress the life events that previously caused them stress and lead to dissociation. Proceeding too quickly may "re-traumatize" the patient. For the insight therapist, the goal is to make sense of your reactions to the trauma. This means helping the patient learn about how stress, fears and reactions to trauma, including dissociation, are developed and how the unwanted/unhealthy reactions can be reduced. Of course, eventually the PTSD and DID patients must not only face the past but also learn to cope (avoid panicking) with current life stresses.

DID patients need to reduce their dread of their dissociated states. By gradually exploring each dissociated part and discussing their feelings about it, they become familiar and more comfortable with all their "states of mind." Resolving the different views and desires among these parts or states of mind ("alters"), a process called integration, is an important but not easy task, usually requiring the help of a therapist. The current approach of insight therapists is to avoid a catharsis or abreaction (a reliving) of the traumatic experience. Instead, the therapist helps the victim develop, after the fact, an emotional toughness so he/she can tolerate ("becoming able to stand") thinking of the awful abuses he/she has suffered. Unfortunately, the ideal treatment by an insight therapist involves hospitalization, then outpatient treatment for a long time, perhaps a year or more, costing well over \$10,000. So, aside from the wealthy and the well insured, few victims can afford traditional long-term insight therapy. There are shorter treatments, of course, and, to a limited extent, things you can do to help yourself.

There are therapists who tend to assume that one major trauma is the central cause of almost all the patient's troubles. Therapy then often involves reviewing the patient's life and exploring how the original trauma--a death, abuse, rejection--led to his/her distressful experiences. The trauma, even if the events are only vaguely remember, becomes the way of explaining the client's life and, thus, the focus of repeated analysis in prolonged therapy. Other therapists seem to view the traumatic event as a distressing memory that needs to be desensitized, which they set about doing in rather direct, behavioral ways (see stopping bad memories in chapter 14). Then they go on to helping the patient cope with his/her life problems in whatever ways they can without repeated attention to the original trauma. No doubt both approaches are right for some people but do we know which people need which treatment?

What other approaches might help? As Judith Herman (1992) has emphasized, the first task is to stop any currently ongoing trauma, to protect the person from self-harm, and help them maintain normal functions, including work and social contacts. Major life changes may be necessary to avoid some trauma, such as leaving an abusive partner or an abusive family (see chapter 7), leaving your home and country if you are a political refugee, etc. These kinds of major life changes can be difficult and scary. Also, your trauma may upset others. For instance, a husband of a woman, who has been raped, may not be able to listen to her terrifying experience for long without becoming enraged himself, no longer listening to her feelings and needs. She may experience his reaction as rejection and that could make her emotional state worse. But talking to an understanding, empathic person is usually beneficial (avoid people who continue to dramatically emphasize endlessly the horrible enraging aspects of your experience, thus strengthening your traumatic reactions). The helper may be a therapist, a devoted accepting friend, or someone who has recovered from a similar experience. Talking helps you get rid of bottled-up feelings (yet, remember, one should probably avoid an intense emotional discharge of feelings; it isn't necessary--a very gradual process of disclosing your feelings over a period of weeks or months is thought to be better). The idea may not be so much to drain out all the negative feelings, as described in Method #10 in chapter 12, but rather to gain control over the feelings. Talking and expressing your feelings also gives you an opportunity to "make sense of" the trauma or, at least, to feel heard and accepted. You are making the painful memories safe to think about (you will recognize this as a desensitization process-see chapter 12). When you can tolerate most

of the bad experiences in your past, i.e. when you can accept yourself and all that has happened to you, you will probably no longer have PTSD or DID.

The last 25 years have seen heated controversies among professionals over "repressed memories," often involving beliefs that child sexual abuse caused adult problems, and "false memories," usually about sexual abuse memories prompted by probing, suggestive questions by therapists. Other related arguments were about the use of probing therapies and hypnosis to uncover the truth about childhood causes of adult problems. A short history of these hot topics can be found in Frederick C. Crews lengthy review of two books, one on each side: *Remembering Trauma* by Richard McNally and *Memory, Trauma Treatment, and the Law* by Brown, Schaflin, & Hammond (see http://www.nybooks.com/articles/16951).

The Cognitive-Behavioral therapies involve using learning-based techniques to actively change emotions and behaviors, without lengthy exploration of the patient's history, trauma, or understanding. Using these approaches, Marcia Linehan (1993) has researched and developed an extensive individual therapy/psychoeducational treatment program for Borderline Personality Disorders, which often have a history of trauma, dissociation, and intense, poorly controlled emotions. Many of her treatment methods are self-help methods: role playing for learning new social skills, teaching problem solving skills, behavior modification (self-regulation), acting the way you want to feel, cognitive restructuring, emotional control training and others; all found in different parts of this book. Other self-help methods may also be helpful: understanding reinforcement (especially negative reinforcement), desensitization, confronting the fear, learning new communication skills, challenging irrational ideas, determinism for accepting bad experiences, positive attitudes, and many insight techniques, including writing a history of your life or "the story" of your disorder repeatedly. Of course, other kinds of therapy may help too: Group therapy or online discussion groups, Family Therapy, medication, and some of the newer techniques, such as TIR (http://www.healing-arts.org/tir/), for dealing with stress and trauma.

Since one of the central features of a trauma experience is feeling helpless, learning ways to increase your self-control--your mastery of the situation--is an antidote to helplessness and hopelessness. In addition to the self-mastery techniques mentioned above, this sense of "I can handle it" can partly be achieved by simply involving your self in more fun or constructive activities. Getting deeply absorbed in challenging but doable work, recreation, or something intellectual is satisfying-a process called "flow." Flow is when you are performing at your best and loving it (Csikszentmihalyi, 1991). Learning that you can overcome barriers and problems in your life is a powerful step; this feeling of "self-efficacy" can replace discouragement and shame with pride and hope. However, strong emotional reactions often involve complications, e.g. some people who have been traumatized find therapy to be very difficult, even highly traumatic. Partly this is because insight therapies ask you to think and talk about upsetting experiences and Cognitive-Behavioral therapies often involve confronting or re-exposing yourself to disturbing situations. Many traumatized persons remain fragile for years and easily triggered into an unpleasant emotional state over which they have little control. Thus, therapists are cautious and self-helpers must be too.

It is even possible that being capable and successful, being found attractive, having intense pleasure and a lot of fun, or almost any experience, even relaxation, can become a "trigger" which arouses anxiety, guilt, depression, self-criticism, or other negative feeling. In such cases, fun activities and achievements may need to be increased gradually. Improving other ordinary activities, such as sleep, exercise, relaxation, meditation, pleasant fantasies, breaking bad habits, improving eating habits, working more effectively, etc., etc. will also improve self-esteem and mood. Allen (1995) cautiously suggests that even self-hypnosis and biofeedback can increase one's feeling of being in self-control. Serious as reactions to trauma are, they are not impossible to handle. However, professionals disagree on several points, especially the degree helpers should probe to uncover repressed memories and the importance of the victim forgiving the abuser (see chapter 7). These are difficult decisions. Also, depending on your symptoms and situation, it may be important to cope with general anxiety and stress (see the rest of this chapter), shame (chapter 6), anger (chapter 7), addictions (chapter 4), and other problems common after a trauma.

The better general Web sites for understanding and coping with trauma include Trauma Central

(http://home.earthlink.net/~hopefull/home.html), Enpsychlopedia (http://enpsychlopedia.com) and search for Traumatic Stress, David Baldwin's Trauma Information Pages (http://www.trauma-pages.com/ and http://www.trauma-pages.com/disaster.php), National Center for PTSD (http://www.ncptsd.org/), APA Managing Traumatic Stress (http://www.apa.org/practice/traumaticstress.html), Dissociative Disorders

(http://www.mentalhealth.about.com/library/weekly/aa071299.htm), DID and "alters" (http://www.psycom.net/mchugh.html), Gentle Touch Web (http://www.gentletouchsweb.com/) (includes messages, stories, links for all kinds of survivors), Traumatic Stress Studies (http://www.istss.org/), Mental Health Matters-DID

(http://www.mental-health-matters.com/), MHN-Trauma (http://mentalhelp.net/poc/center_index.php/id/109), PTSD Resource Center (http://www.ncptsd.va.gov/), The Re-Experiencing Experience (http://twhj.com/), and MHN-DID

(http://mentalhelp.net/poc/center_index.php/id/41). There are a growing number of specialized Web sites, such as Inpsyte Trauma Psychology (http://www.inpsyte.ca/) (about childhood sexual abuse) and Bully Online (http://www.bullyonline.org/stress/ptsd.htm). Other very large Websites are available, such as Hope E. Morrow (http://home.earthlink.net/~hopefull/), and Gift from Within (http://www.giftfromwithin.org/), that cite national organizations and have good articles on several kinds of trauma: 9/11/01, homicides, crime, military service, auto accidents and others. Support groups are available at Abuse-Free Mail Lists (http://blainn.cc/abuse-free/).

Naturally, since we are dealing with serious disorders, often with unclear origins, most of the many books in this area are written for therapists doing treatment. However, I've already cited a couple of good, easily understood books in this area, Allen (1996) and Herman (1992, 1997). Other clearly self-help oriented books for trauma survivors are available--Rosenbloom, Williams & Watkins (1999), Schiraldi (1999), and Matsakis (1996). Again, many books are specialized (and may, therefore, be more triggering): Terr (1992), Chase (1990), Freyd (1998) and Cameron (1996) describe the horrors of some children's abuse, followed by amnesia or Multiple Personality Disorder. Regina (1999) focuses on serious medical problems. Alderman & Marshal (1998) and Olson (1997) describe ways of coping with multiple personalities. Colodzin (1997) gives practical advice to war veterans and Matsakis (1996) offers specific help to veterans' wives. Davis (1991) also offers general help and advice to spouses of trauma victims. Flannery (no date) addresses PTSD victims and their families. Alexander (1999) and Gordon, Farberow & Maida (1999) provide counselors, parents, teachers and others with advice about identifying and helping traumatized children. Excellent research-based comprehensive reviews of traumatic stress following disasters or abuse are given in recent books: Van Der Kolk, McFarlane & Weisaeth (1999), Gist & Lubin (1999), Levine (1997), Saigh & Bremner (1999), and Figley (1998). There is a wealth of information in this area.

Please see chapter 7 in this book for domestic violence, physical child abuse, and rape. See chapter 9 for child sexual abuse and incest. See chapter 10 for date rape.

Remember, victims of serious trauma often make desperate, sometimes self-defeating, efforts to cope with the intolerable stress. These efforts, including repression, self-blame, self-injury, traumatic bonding, addictions, somatization (conversion of stress into physical symptoms), dissociation, multiple personalities, and other defenses, are unconscious and, unfortunately, they can create almost as many problems as they solve. These paradoxical emotional reactions by clients, such as the "damaged goods" reactions of some incest and rape/abuse victims, may arouse troubling and confusing responses in their therapists and their families. Coffey (1998) has a book that might be read by traumatized clients, their friends and family, and the therapist; it presents diverse professional opinions and advice about the distressing memories. Extensive therapy, family support, and well directed self-help will all probably be needed.

The psychodynamics of trauma reactions

There is a strong natural tendency to think of the actual traumatic experience as being "the" cause of the subsequent psychological distress and disorders that may last for years. Examples: A highly abusive parent is assumed to "cause" the child's high anxiety, bad dreams, social withdrawal and, even as an adult, an inability to get and hold a job. Combat experiences in which buddies are blown up seem to "cause" nightmares, flashbacks, and a variety of long-term health problems requiring repeated VA hospitalizations. Sexual abuse, with threats of death if the "secrets" were told, from 8 to 12 certainly might "cause" social anxiety, an avoidance of men, and a very negative self-concept resulting in suicidal depression and self-injury in middle age. The original trauma in these cases is assumed all too often to provide a full explanation of all that happens, almost like magic stretching over months or years. There must be processes that mediate between the traumatic events and the long-range psychological consequences. The better we understand the precise processes, the better we can cope with prolonged trauma reactions. This section discusses the internal dynamics--the mental processes making adjustment better or worse, the emotional/physiological reactions, the development or lack of coping skills--that play an important role in the way we handle traumas over time.

Research by Goenjian (2000) shows that very serious, life threatening events are more likely than lesser events to produce longlasting traumatic reactions (time doesn't abate some intense posttraumatic stress symptoms but depression tends to fade). Yet, most victims, perhaps 70% to 95% or more, recover from trauma in time without any treatment. We don't yet know exactly how they recover, they seem able to "put it behind them." But because people have this resilience, many crisis workers believe that psychological interventions--debriefing, telling what happened, counseling--do not do much good for most people in a crisis. Often trauma victims are too concerned with finding their family, surviving, grieving deaths, getting away from their abuser, etc. to be involved in therapy and telling a stranger their experiences. Yet, the people who will continue to have psychological reactions for months or years can be helped by a therapist helping them repeatedly confront the distressing memories, according to Richard Bryant at the University of New South Wales. He has found that two warning signs indicate a high possibility of PTSD later: (1) high physiological arousal, such as a heart rate over 90/minute, and (2) psychological reactions of high agitation and reexperiencing the trauma. Only 1 in 4 victims show these warning signs and if they are given brief (re-exposure) therapy, 85% or so of the high-risk group will never have PTSD. So, for that 25%, therapy is very beneficial. However, debriefing of everyone exposed to certain disasters may be unnecessary.

Keep in mind, over half of us by the time we are 20 have suffered at least some trauma. Researchers estimate that at least 60% of men and 50% of women experience a serious trauma, yet only between 5% and 10% of us have diagnosable PTSD or DID or other disorders years later as a result of a specific trauma. While we largely recover, there are so many traumas in life that lots people are carrying scars from old traumas and, at the same time, still hurting somewhat from more recent distresses. Repeated trauma may toughen some but old hurts sensitize many others. That is the human condition. Only a few of us continue to suffer greatly from the same traumas others recover from. Such trauma might be children observing domestic violence, a couple going through a bitter divorce, a person nearing retirement but losing his/her job, etc. Not that these aren't bad experiences, but the point is that most people are not crushed by similar experiences; some even become stronger ("what doesn't kill me, makes me stronger"). Thus, the important question is: What makes some of us prone to serious disruption by trauma while others have the means to handle it? (While we are considering cognitive factors, we should keep in mind that some intense fear responses seem to be permanent while others fade--see conditioning in the next section.)

Peterson and Moon (1999) agree that a catastrophe, such as combat, auto accident, cancer, rape, divorce, death of a loved one, etc., and a mental state, including various ways of coping or catastrophizing, combine to produce an individual's unique emotional reaction to a crisis. It should be helpful to distinguish (a) the inevitable stress and disappointment accompanying a traumatic event from (b) the victim's unhealthy cognitive or physiological reactions which exacerbate the emotional stress reactions. It seems likely that the bigger and more threatening you perceive the catastrophe to be and the less control you feel you have over its consequences, the more upsetting the situation is likely to seem to you. These are similar to the psychological/cognitive conditions that give rise to depression, pessimism, low self-esteem, anger, and other emotions (see later chapters).

Peterson and Moon give some advice about avoiding or coping with catastrophes: (1) guard against unjustified optimism--instead of thinking "Oh, I'll be safe," we can, for example, prevent or reduce auto accidents by recognizing and acting to avoid the true risks of drinking, speeding, tailgating, road rage, sleepiness, cell phones, neglecting seat belts, children fighting, and believing you are a super driver at high speeds. (2) One can shift one's thinking from pessimism to realistic optimism (see learned optimism). There are selfadministered programs (Fresco, Craighead, Sampson & Koons, 1997) for thinking in less catastrophic ways which might also result in reduced trauma reactions. (3) As discussed above, after a catastrophe, debriefing can reduce the chances of PTSD developing in the most vulnerable 25%. Support groups usually help. Also, specific cognitivebehavioral programs have been written, e.g. for rape survivors (Foa, Hearst-Ikeda & Perry, 1995), to reduce the long-term emotional trauma. (4) Finally, chronic anxiety, such as in stress or panic reactions or PTSD, and overly helpless, depressive, or pessimistic thoughts can be treated with Insight therapy, Cognitive or Rational-Emotive therapy, and perhaps Exposure therapy. Other therapy techniques, such as positive reappraisal, distancing, and some of the techniques used with chronic pain, seem to also be effective. So, our response directly to trauma can be reduced. And, we can also have some control over the intensity of our long-term unwanted reactions to trauma.

To illustrate the dynamic influence of our thought processes consider the evidence that some children may have, in effect, "traumatized themselves" by misunderstanding even positive comments made to them at an early age. Likewise, two soldiers can crawl over the same horribly mutilated dead bodies of their buddies and one goes right on fighting effectively but the other is incapacitated with fear and confusion. We must learn the answers as to why this happens in both cases in order to help others and ourselves cope with trauma. What mental processes and traits reduce or intensify our catastrophizing?

After a harrowing experience with profound traumatic shock, distress, and disintegration, how do people pull themselves back together? Janoff-Bulman (1999) says that our basic beliefs are shattered and have to be rebuilt. What are these fundamental assumptions? (1) That our part of the world is a good place. (2) That our world is just; that good things happen to good people and bad to bad; that we usually deserve what happens to us; that life events are within our control. (3) That we are always good, decent, and capable (we over-estimate our strengths and overlook our weaknesses; we claim responsibility for positive outcomes.) Because of these beliefs--really often deceptive illusions--we feel safe and complacent (these beliefs help us cope with depression and self-doubts). When a catastrophe strikes, however, these cherished beliefs are recognized as false...lies and self-deceptions. Thus, crisis workers, who themselves may suffer Secondary Traumatic Stress (http://www.isu.edu/~bhstamm/TS.htm), hear repeatedly "I never thought this could happen to me!" As Ernest Becker has said "seeing the world as it really is is devastating and terrifying..." for both the victim and the rescuer.

Recovery from trauma is a complex process. We try to forget; we withdraw from others; we become emotionally numb and, as much as possible, cognitively push the experience out of awareness. But, bad dreams, nightmares, anxiety, and spontaneous reliving ("flashbacks") of the experience break through our defenses. We feel a great need to understand what happened and why. We compare our experience with others--often we decide "It could have been worse." We so want to get back to our old comfortable beliefs that often we start to wonder if we may have been partly responsible for the distressing event. Janoff-Bulman explains some victims' tendency to self-blame as a rather desperate step towards recovery. How does this happen? By feeling partly responsible for what happened, it restores to the victim some sense of control over the world (Note: this is not the only possible cause of self-blame). Also, this sense of personal control ("maybe I could have done something"), even if totally inaccurate, reduces the sense of uncontrollability of the world. Some self-blamers blame their badness (which can become quite destructive psychologically); other self-blamers blame their actions; both gain a little sense of control. Trauma survivors review the events over and over; gradually many may tend to see some benefits or some meaning coming from the experience (Tedeschi & Calhoun, 1998). Sometimes, the victim believes he/she suffered for a purpose or the crisis gave them a

purpose in life and made them stronger. Successful survivors eventually get back their basic beliefs somewhat like their original ones, only not as positive and confident. They are generally positive but admit that bad things can and do happen. Some develop a better appreciation of life--they see that life's pain and sadness in the valleys accentuate the glorious joy at the mountain tops. Others remain negative, pessimistic, and bitter, ruminating over and over about how terrible things have been and will be.

Supplementing the comforting beliefs are excuses, those little cognitive dynamics used by most of us to help us feel better about ourselves (Snyder, 1983, 1999). But some individuals handle their view of reality and their negative self-concepts very differently. Some depressed or self-critical people actually think in ways that increase their "blame" for mistakes, perhaps exaggerating the stupidity of their actions, while attributing their successes to others. Presumably, in this case, increasing blame validates and supports the person's negative beliefs about themselves and, thus, is paradoxically satisfying. A negative person, expecting to screw up, may also take some strange satisfaction in his/her manipulation of reality when an OK behavior is perceived as a foolish mistake and support for his/her negative selfappraisal. A very different kind of person may get a pay off from distorting reality in such as way to enhance one's belief in self-esteem and self-control or to increase hope. These internal mental processes are mostly automatic or unconscious, not intentional coping. Personality-oriented theorists/researchers describe these kinds of internal manipulations of the perception of reality designed to strengthen or alter positive or negative self-concepts. The process is called "Reality Negotiation."

Another view of the world that I favor is determinism. This is, as much as possible, an accurate objective view of causes, not a distortion of reality. A determinist gives up trying to assign blame or credit... and gives up looking for great mystical purposes or meaning in the trauma. There probably isn't a special reason or a message from God behind every occurrence (see Kushner, 1981). The causes of many events are so complex and remote (far away) that the event couldn't have been anticipated or prevented. Many things happen without anyone being able to figure out exactly why they happened (examples given above: the self-criticism of some 3 or 4-year-olds or the permanent fear/panic reactions following the inability to breathe). In determinism one simply assumes that everything could be seen as the natural unfolding of the laws of nature or behavior, if we were smart enough to know the causes and effects of all events leading to the trauma. Frequently, such a deterministic view radically alters our conception of why something, especially something terrible, has happened. It encourages us to realistically assess the actual causes of an event and the background sources of those causes. Thinking of all things as being lawful, including how to change and cope, may also help us find solutions to our problems and/or ways to accept what has happened. It was lawful, no matter how awful it felt.

Given the right circumstances, there is little doubt that reviewing and thinking through traumatic events that have happened to us can be very therapeutic. What are the favorable conditions? With an empathic therapist or friend who encourages gradual disclosure and understanding of the events and feelings, as might be done by an insight therapist or a therapist using TIR (http://www.healingarts.org/tir/). (Try to avoid talking to people who fuel the fires of hatred and self-blame.) There are also many reports and studies documenting the healing that frequently comes through writing (in detail or over and over) about stressful, traumatic experiences--see Autobiography and Pennebaker's studies.

When traumatized, we are, of course, highly emotional. The task isn't to stop emoting; we need our emotions. We need to be able to handle our emotions--to be aware of them, to control certain excessive emotions that make us irrational and to increase other emotions that motivate us to act wisely, and to understand and use our feelings effectively. For instance, learned optimism helps us overcome helplessness and to see solutions. Optimism may also help us accept some setbacks, failures, and faults, especially if we can make up for want we have done. As in depression, the pessimist can learn to identify his/her negative thoughts and challenge them. Also, life skills, like problem-solving and self-change, can be acquired. Hope and confidence go up when you get things done, make good decisions, and communicate well (all learnable skills!). Wise persons have observed that crises, even awful ones, often offer opportunities and benefits (in the middle of a really bad situation, you are likely to resent being told this, but in time you might see some truth to it). If you can come to see some possible "silver lining," it will help.

Trauma reactions are exhausting, causing us to lose our selfcontrol much like in learned helplessness. We need to regain some control. It is usually important to talk to trusted, empathic, nondirective friends, often telling our story over and over again. Maybe see a counselor. A change of environment, sleep, having a good time with friends, and just rest are often helpful. Many things can reduce the effects of trauma. There are many books and Web sites to read. There are many sources of help and many things to learn. We need a concrete, doable plan to cope and improve our lives. An assorted list of Safe Horizon (http://www.safehorizon.org/index.php) services provide help to persons who have been assaulted, stalked, abused, beaten up, robbed, and so on.

Becoming Absorbed with One's Wounds

Some people can't remember the original trauma that started their psychological crises; other people can't forget the major trauma in their life. This section is about the people whose bad memories or thoughts are the dominant theme of their minds. In some instances,

bad memories seem to feed on themselves...our remembering old hurts/fears arouses emotions which call up more bad memories in an unending circle. It is an unhappy condition to be in. Most people would say, if your thoughts center on old wounds that make you unhappy, scared, angry, or physically sick, then you need to find a way to change those thoughts or reduce those memories.

Warning: The following paragraphs contain ideas that may seem critical and blaming or, at least, unsympathetic to a long-suffering person with deep wounds. If you are such a person, you may not want to read this section now. However, if you feel ready to read it, keep in mind that the author cited below is describing an *unconscious* process, not an intentional manipulation of others.

There is an old concept in psychiatry that certain symptoms may yield some "secondary gain"--some more or less unconscious payoff-for the patient. But, how could having depressing, upsetting thoughts or seeing oneself as weak, sick, abused, or dependent yield some psychological gain to the distressed person? Possible answers are offered by writers in a currently popular area of study called woundology--the study of emotional wounds. Wounds are frequently an aspect of Post-Traumatic Stress Disorders, depression, dependency, long-term anger, forms of anxiety, and many other conditions.

A recent writer, Caroline Myss (1997), who gives herself the revealing label of "energy medicine intuitive," has described at length how some suffering people can become almost completely immersed in the trauma and define themselves in terms of their wounds. When this happens to us, she says it is very difficult to heal ourselves and escape our own personal hole of misery. Myss offers many workshops to persons with long-term disorders. In this setting, she has been taken aback by the degree to which the many people seem to define themselves--their whole being--in terms of the assumed source of their troubles. Examples of the self-descriptions: "I am an incest victim," "I am a cancer victim," "I am an alcoholic," "I am a Borderline," and so on. Their minds seem to be filled with ruminations about their stressful history, their resulting current symptoms, and their interpersonal contacts (mostly therapists, caretakers, support groups, and sympathetic friends with similar pasts or problems). See the discussion of Woundology in the next section.

When Myss has tried to suggest to these people that they may be unduly preoccupied with their trauma and in this way avoiding or resisting mending their problems by changing or getting out of their current situations, they would usually get pissed-off at her. They felt offended...that she unfairly blamed them for their own problems. That reaction is certainly understandable. They are deeply hurt and trying to get better. But what if Dr. Myss's theory is sometimes true? Some suffering people see themselves as innocent victims having nothing to do with causing the upsetting situation. (Of course, some others assume too much blame and guilt, rather than too little. See Guilt and Shame).

Yet, as Myss explains, if a person has had terrible experiences, suffers deeply troubling, intrusive memories, and is burdened with the symptoms of some psychiatric disorder, these consequences can become powerfully effective forces for influencing--even manipulating--others. Example: if your history and psychological troubles get the attention of others and lead to positive relationships with caring helpers, new friendships, nurturing support groups, then your "symptoms" are yielding important, valued payoffs. Understandably, under these conditions, one might unconsciously resist changing one's situation, including getting better. Getting better often involves becoming self-reliant, leaving support groups, stopping therapy, changing friends, and moving on. Big, sometimes scary changes are required. No wonder we sometimes cling to the familiar, even if it involves being emotional and having unpleasant memories. This clinging to what we know is not something to be ashamed of; it is done unconsciously and it is very understandable.

When we get pre-occupied with our histories of wounds and bad times...and obsessed with the troubles we are suffering now, our energy is sapped--we have little time or motivation to learn new coping skills for changing our thoughts, emotions, behaviors. Just sharing our troubles and history with someone, especially someone who listens empathetically is a wonderfully gratifying experience. Many psychotherapy patients know the discomfort and sense of loss when they leave a therapist or a treatment group that has seen us through hard times. Yet, just sharing our history is often not enough to heal us. Often we have to become mindful of alternative ways of being. We have to make hard choices. We need to learn new ways to change ourselves and our situation. We have to see the advantages of changing, even if we have to give up some behaviors and symptoms that have "served us well." Our energy needs to be used in different ways.

Besides possible secondary gain, some bad memories help us make sense of what has happened to us. Oh, I'm feeling and acting this way because of these awful things that happened to me. Understanding why bad things have happened to us is important. If our explanations "ring true" and aren't challenged by others, then they serve our need to understand and we tend to keep them and repeat the how-I-got-upset theme over and over, often in the form of bad, disturbing memories. Of course, if our explanations are uncomplicated and tend to place the blame on someone else (or the responsibility on some external event), then our conscience might especially like them. Some examples: "I distrust women because I have been badly hurt and dumped three times." This man's attitude toward women appears to be entirely blamed on his three former lovers, as though he had nothing to do with the breakups. Likewise, many of our explanations of our problems are overly simple and absolve us of responsibility--"I'm an insecure person because my dad died when I was in the third grade and mom married a self-centered creep" or "I'm totally messed up because my brother abused me from the time I was 6 or 7 to when I was in high school." The causes of our troubles are almost always more complex than implied by these quotes.

Note: In no way should you think that repeated bad memories or thoughts are entirely the result of secondary gain. One doesn't ordinarily have disturbing thoughts, high stress, bad dreams, and other symptoms just to get attention and support. Life is much more complicated than that. Nevertheless, it would be foolish to believe that there are never any payoffs derived from others discovering that someone's life has been difficult and traumatic.

As we become more aware of the possible pay offs for having our bad memories and for believing our own explanations so firmly, we may become able to consider more complex and realistic explanations and to appreciate the intricate development of our problems over time. With a more open-minded approach, you may find new factors that could contribute to your understanding. As an illustration, see Becoming Open-minded in chapter 15 and read about the fallacy of the single cause in chapter 14. Reality is complex. If you believe someone else is entirely responsible for your problems, you may not want to think differently but a better understanding of determinism and forgiveness might add to your perspective.

This increase in awareness, however, may become personally threatening. You might want to avoid thinking so much about the causes. You may feel very mixed about the idea of your personal traits and needs contributing to the bad situation. It is tempting to give up trying to understand but you may suspect it is important to realistically understand the traumatic situation and your reaction to it. Hope and optimism are important parts of changing your thinking and yourself.

It isn't just the occurrence of bad happenings that obsess us, it can also be the loss of highly desired situations. Examples: "I hate getting old and wrinkled," "I'm very unhappy being single and alone," "I hate becoming so fat," etc. The Rational-Emotive approach can help you identify your "awfulizing" or unreasonable expectations that are making you frustrated and unhappy.

Myss (1997), who is not a psychologist, suggests there are five major false beliefs, misconceptions, or myths that cause people to be unable or unmotivated to heal their wounds:

First myth: My life has to be organized around my wound experiences. *Consequences*--My bad experiences have completely changed my life. My wounds define my life. Every one of my life problems is interpreted and explained in light of my wounds. Therefore, I need to be with people who understand me and my bad experiences. As a result, most of my human contacts are with people who are especially understanding of my wounds.

Since dwelling on the history of wounds can be disabling and seriously hamper one's hopes of recovery, one should ask him/herself: Does this first myth dominate my life? Do people show a lot more understanding and become nicer to me when I share my problems or
story? Am I aware that I sometimes actually use my history of wounds to influence someone? Could I commit myself to changing?

Second myth: Without my wound, I'd be all alone. *Consequences*--If I recovered from this trauma, I would have to be more independent, more on my own, and less in need of help. In short, I'd be overwhelmed and lonely. Changing is scary--adopting a different personality, thinking about different things, finding a new group of friends. Maybe things are pretty good the way they are, at least I'm not isolated and helpless. Oh, besides, I'm sure my new therapist...support group...meds...self-help book... is going to get me through this.

Do some reality checking by asking yourself: Are my emotional wounds the basis for most of my relationships? Could I be depending on other people's caring nature or even on their codependency? Why am I so afraid of changing? Could I find greater satisfaction and security by developing solutions to my problems and unhappiness?

Third myth: My awful and painful life means that I am sick. *Consequences*--My constant awareness of my wound is never going to go away. I'm doomed to stay this way. This pain serves no purpose. It is just making things miserable for me.

Ask yourself: Am I really sick--and permanently sick? Where does this pessimism come from? Can I see how I unconsciously used my trauma to control people? to change a conversation? as an excuse? to identify with others? to get sympathy? Was that "sick" or just trying to meet my needs as best I could? Have my wounds become an addiction? Am I afraid of becoming healthy? Could I now change and get to a better place, like others have done? Can my pain and unhappiness become a motivation to change and find a better life? Can I use some self-change methods?

Fourth myth: All emotional problems are the result of traumatic experiences. To get better, the primary wound--what started it all--has to be uncovered, brought into full consciousness. Some awful, horribly damaging experience must be buried deep in my unconscious. If I don't know the cause for certain, I can't get better.

Ask yourself: Why must you know the one original wound? How do you know there was one? Isn't it likely that many other life experiences besides trauma, including your own thoughts and emotions, have contributed to your wounds? Even if you were terribly abused as a child, is that likely to be the only cause of some problem as an adult, such as low self-esteem? Didn't someone else model low self-esteem? Didn't you have skills and assets that have gone unrecognized? Weren't there other failures and disappointments throughout life that may have contributed to the low self-esteem? Can you now find and use some of your good traits and values, and, in this way, become more self-accepting? Also ask: Did some good come from your wounds and the healing process thus far? Have you gained any deeper understanding of yourself or of the person(s) or events that caused your wounds? Do these deeper understandings help you think of forgiving some of the wrongs and wrong-doers? Can you see how "putting it behind you" or forgiving someone could help you escape constant victimhood?

Fifth myth: At this point in life I am held prisoner by my wounds. I can't change. My situation is hopeless. Why try if changing is impossible?

Ask yourself: Could it be that believing you can't change makes it easier for you to escape the pressure to change and the hard work of changing? If you realized that thousands of studies show that people can change, would you be more optimistic? Would it be helpful if you knew more about how people with problems and backgrounds like yours have changed? Can you find ways to be more understanding, more loving, and more positive about the future, even if it involves scary changes?

Summing up

Bad memories and thoughts can't be entirely erased but you can reduce their frequency and stop them from dominating your life. Also, if a mental image (memory of some event) has been connected with a strong emotion--fear, sadness, anger, guilt or whatever--there are methods of reducing the emotional reactions so that one can have the thought without the intense emotion. These methods would include desensitization, autobiography, and TIR (http://www.healingarts.org/tir/). Also, see Stopping bad memories.

A variety of other specific techniques have already been mentioned, but more importantly you should carefully consider all five of the major aspects of any problem--the behavior involved (the repetition of disturbing thoughts), the emotions aroused (unhappiness, anger or rage, stress, dependency), the skills you need to learn to use (interpersonal relations), the thoughts that are involved (pessimism, self-esteem, irrational ideas, straight thinking), and ways to gain insight (open-mindedness, self-analysis, autobiography). I hope you will be motivated enough to learn a lot about yourself and about the many methods for coping with the treacherous and catastrophic phases of life.

Finally, I want to be absolutely clear that support groups and psychotherapy are wonderful sources of help. Please make full use of them. The point of this section is that these therapies are not permanent solutions to be used for the rest of your life. Within a matter of several months, these sources of valuable help should have delivered their benefits. My aim would be to help you get on with life.

Theories Explaining Stress and Anxiety

Each person's stress-level is not just the result of the problems that have accidentally occurred in their lives recently. It is more complicated than that (please see New Research in the first section of this chapter). For one thing we are surely, to some extent, in control of how many and what kind of problems come along. More importantly, as individuals we respond to a problem or stressor very differently. Examples: being dumped crushes some of us while others are happily dating someone else in a week or so. Being fired makes some of us feel very incompetent while others are certain they can get a better job. Having a handicap makes some of us think we were meant to be inferior while others become obsessed with becoming superior and do. Our theories must explain these enormously different reactions to stresses. There are several relevant theories and each one has something to teach us about self-help. We will briefly review four explanations of fear and anxiety: constitutional, learning-behavioral, cognitive-humanistic, and psychoanalytic.

Constitutional factors--genes and physiology

It is easy to overlook our biological inheritance but our genes influence our health and our behavior from birth to death. Recent studies of identical twins have yielded impressive results. For example, blood pressure is estimated to be 60-65% inherited; only 35-40% is determined by diet, exercise, learned stress responses, smoking, and other environmental factors. There is pretty good evidence that children of parents with serious psychiatric disorders (schizophrenia and manic-depression) have a somewhat (not greatly) higher risk of having the same problems. If one identical twin becomes schizophrenic, there is a 50% chance the other twin will too. As mentioned before, more schizophrenic children are born in late winter and early spring. We don't know why.

Most personality traits do not seem to be inherited, but there is one exception--shyness (discussed at the end of the chapter). It has also been reported that male abusers in a family in England have an abnormal gene on the X chromosome. However, it is a very rare abnormality; thus, not accounting for all the anger in the world. And, some men in the family had the defective gene but were not abusive.

In terms of other inherited traits, the activity level of 3 and 4-dayold infants is slightly related to the anxiety level experienced by the mother during the pregnancy. Hyperactive parents are several times more likely to have a hyperactive child. Disorders, such as migraine headaches and asthma, also seem to be inherited. Perhaps physiological and chemical processes, like hypoglycemia and proneness to alcoholism or epilepsy, are partly genetic. Identical twins are frequently similar in terms of enuresis, menstrual complaints, and nervous habits, like nail biting, or mannerisms, like rubbing their chin; they even describe their anxiety in very similar words, even if they have been reared completely apart. The power of the genes seems to be amazing, but we have to guard against exaggerating the role of genes.

Frustrations make us upset and making difficult decisions creates anxiety (see conflicts described above). Pavlov's (see chapter 4, classical conditioning) dogs had a "nervous breakdown" when forced to distinguish between a circle paired with food and an ellipse that got closer and closer to being a circle but was not paired with food. Like Pavlov's dogs, many judgments we have to make are hard, e.g. is my spouse joking or serious, is my friend irritated or not? It seems to be "dog nature" and "human nature" to be stressed when we are confused and don't know what to do.

Having an unusual or surprising experience also causes stress. Donald Hebb found that chimpanzees had no fears until 4 months of age. After that, familiar objects and unfamiliar objects (except for a few, like snakes) caused no stress. But familiar objects shown in unfamiliar ways caused fears, e.g. seeing a life-like model of a person's head without the body is a scary experience for monkeys. Most humans are also stressed by viewing a dead or mutilated body.

Pavlov's dogs and Hebb's chimps acquired these stress or fear responses without any prior painful learning experiences being involved. It appears that these reactions are innate in animals. Likewise, protective reactions are instinctive, e.g. baby rats freeze (with terror?) when a cat appears. Over 50% of parents of water phobic children (aged 3 to 8) claim that their child had always been afraid of water without any traumatic initial experience. Certain animals learn certain fears very quickly and others very slowly, e.g. a monkey immediately learns to fear a snake by seeing another monkey terrified by a snake but does not learn to fear a flower in the same way. This may be true for humans too. Perhaps other fears, like speaking in front of groups or encountering a snake, are also partly built into many humans at birth.

Just because you may have inherited a problem, such as being shy or hypertensive, does not mean that you are helpless. It does mean that, compared to others, you may require more effort--relaxation or practice or desensitization or correcting one's thinking--to overcome your constitutional tendency of fear, hyperactivity, speech anxiety, or whatever.

Since drugs (legal and illegal) influence our mood and stress responses, it suggests that internal chemical factors, such as our hormones, might influence our emotions too. The high percentage of women who feel differently before their period further suggests this is true. Indeed, it is important that every woman plot her feelings and moods to determine if there is a cycle involved. Recent physiological research suggests that fears do not necessarily involve the cerebral cortex; sensory nerves in animals, involving hearing, go directly to the amygdala which triggers adrenaline (fear reaction). This may help explain how we humans (if we are wired the same way) can be scared without knowing why.

Operant and cognitive theories about anxiety

Feeling stress and anxiety may involve all three kinds of learning-classical, operant, and observational (see chapter 4). Remember Little Albert and classical conditioning? The loud "bang" was paired with the rat a few times and Albert became afraid (a little) of the rat. Obviously, this occurs; many people have been hurt in certain situations, like auto accidents or climbing on something, and developed a fear (many, of course, do *not* learn a serious fear in the same situation). But psychologists are learning that classical conditioning in humans is far more complex than just pairing a neutral stimulus (S) with a situation (UCS) that automatically arouses a reaction, like pain, fear, saliva, attraction, etc. Let's learn a little more about that.

Researching the development of fears is difficult because psychologists can't experiment with people and try to produce a phobia. It wouldn't be ethical. Instead, clients come to therapists with full blown fears; often they are unable to tell us how their fears developed. On the other hand, if you asked a psychologist how a fear could be created, he/she probably would suggest pairing something painful (shock) or scary (loud noise) with a harmless object (say a basketball). This is a classical conditioning procedure, but it is not likely to work. Remember: if Little Albert had been a little older, Watson's method (classical conditioning) would not have worked. If Watson had tried to condition fear to a white block of wood instead of a white rat, it wouldn't have worked (see last chapter). The CS-UCS connection (ball with shock) proposed by the psychologist is not reasonable; it isn't believable that a basketball will shock you, so reason can override conditioning. But, if you are told (and believed) that the basketball is filled with a dangerous gas which might explode if electrical shocks disturb the air within 10 feet of the ball, you would probably respond with fear if you were shocked holding the basketball and, later, you might fear the basketball alone. Many of our fears seem reasonable to us, but not to others.

A particularly fascinating study about creating fears was done 30 years ago by Campbell, Sanderson & Laverty (1964). Working in a medical setting with medical students as subjects, they paired a simple stimulus--a light or a tone--with a common drug (scoline, used in surgery) that stopped muscle action for about one minute. A person's reaction to temporary paralysis is panic, mostly sheer terror at not being able to breathe (even though they know what will happen). Two results were noteworthy: (1) the conditioning took only one trial, i.e. the panic reaction occurred every time the light or tone alone came on after that, even though there is no "rational" connection between a

light and being paralyzed. It was one trial learning, just like in a serious accident. (2) The terror response never diminished. Naturally the experimenters tried to remove the fear. But they couldn't. They followed, according to learning theory at the time, the extinction procedure of presenting the conditioned stimulus--light or tone--without the unconditioned stimulus--the drug. They provided 100 extinction trials. The fear response did not diminish! The conclusion at the time was that fears may not go away, maybe they are just overridden with stronger relaxed responses.

The old conception of classical conditioning was that an association was learned when a CS and an UCS were paired together several times. That is still the essence of classical conditioning. But, thirty years ago we assumed the mind had nothing to do with this conditioning process. Today, experts say the CS arouses expectancies about the UCS (actually we develop a mental representation of the UCS) and then, as we have experience with the UCS, we evaluate and develop different reactions to the UCS which, of course, influences the final conditioned response (CR). Clearly, a lot of mental events influence the CS-UCS connection.

According to Davey (1992), the new theories suggest a conditioning-cognitive sequence is like this:

1 🗲	2 →	3 →	4 🗲	5
Conditioned	Outcome	Cognitive	Evaluation	Conditioned
Stimulus	Expectations	conception of the	of the UCS	Response
(CS)		Unconditioned	Response	(CR)
		Stimulus (UCS)	(CR)	

Steps 2 and 4 are places where cognitive factors can affect the conditioned response (CR). How is this done? Consider this example, if your lights dim slightly before a very loud noise, what you think all this means makes a great difference in how you respond. If you think the dimming lights and noise means an earthquake is occurring or that your house is falling on you or the electrical system may set the house on fire, you will probably have a strong panic reaction. If, with a little experience, you learn that your huge new sound system dims the lights right before your favorite music blasts forth, you will soon be having a pleasant reaction to the dimming lights. If someone had told you to expect the lights to dim, your startle or fear response would be slight even the first time. If you believe the dimming of the lights is perfectly normal and poses no danger, you have a different reaction than if you believe you have overloaded the circuit and caused a fire hazard. Beyond all this cognitive influence on a classically conditioned response, recent research has found that experience with the UCS (in this case an unexpected loud sound blast) without the dimming lights (during the daytime) can affect your conditioned reaction too. Being told by an expert that loud sounds damage your hearing permanently will also influence your conditioned reaction. Likewise, observing your reactions to the CS or the UCS as well as using various coping strategies can alter your conditioned response (CR) to the conditioned

stimulus (CS). So it is far from a simple mechanical reaction. That huge brain wasn't added to your spinal cord for nothing.

Since many experiences and thoughts will influence how we cognitively evaluate the UCS, and, in turn, change our CR, it is possible that Campbell, Sanderson & Laverty could have reduced the medical students' fear response to the light by administering the paralyzing drug (UCS) 100 times (instead of the CS--the light) so that the subjects would become less frightened by the drug's paralyzing effects. Perhaps, if the subjects had been told and shown that it was impossible for the drug to be administered again, the fear response to the light would have declined rapidly. Perhaps, if the subjects had been told that they could overcome the fear reaction to the light and given training for doing so (with the light being left on while they "talked themselves down"), their response to the light would have become less intense. Also, if the light had been presented many times before the drug was administered, the reaction to the light may have been easier to extinguish. Science is just beginning to learn more about how cognitions interact with conditioning. Cognitive methods are a new tool for expanding self-control in many areas. Some fears are unreasonable and harmful, some are reasonable and helpful, e.g. the anorexic's totally unreasonable fear of food making her fat and the heart attack victim's reasonable and helpful fear of high fat food. In time, the anorexic can change her mind about her body and the person with a heart condition can forget to watch his diet.

There are many other mysteries about fears. New conditioning theories help explain these things. Question: How do some people become phobic without ever having a painful or traumatic experience? Many people are afraid of snakes or mice but have never been bitten. Almost no one who is afraid of flying has been hurt in a plane crash. Lazarus (1974) reported that only 3 percent of his phobic patients could recall an actual event that might have caused their fear. Rimm, et al. (1977) found 50%. Actually, persons who are physiologically unable to feel pain still become anxious and fearful just like the rest of us (Derlega & Janda, 1981); why is this? Answer: Davey provides this example of a fear of public transportation developing without obvious trauma: you see an unknown person die of a heart attack on a city bus, so the connection is made but it has no effect on you until much later when your father dies of a heart attack, after which you become very afraid of riding the bus. Research also confirms that simply thinking about all the horrible things that could happen in a scary situation, say giving a speech, can increase your fear response. Similarly, as we will see in a later section, you can learn fears from models or family traits and never have any painful experience yourself; these vicarious experiences presumably change your "outcome expectancies."

Question: Why do many people have a truly traumatic experience, like a very painful dental treatment, but never get phobic about going to the dentist? Answer: If you went to the dentist several times *before* experiencing serious pain, that might prevent a CR of fear. Also, a fear may not develop if you are able to deny that the UCS (the root canal) was awful, in the same way the dying person denies he/she will die. Various mental strategies help us neutralize a threat or UCS, e.g. we minimize a stress ("Lots of people suffer more") and/or push it out of our awareness ("Just forget about it, it isn't worth getting upset about, think positively"). Giving people information about scary medical procedures *can* reduce their fear *or* panic them. It is not possible to cleanly separate conditioning from cognition.

Operant conditioning and stress

Obviously, some fears have payoffs, i.e. immediate positive reinforcement. Fears of the dark get attention from parents at bedtime or some one to hold our hand walking in the dark. A fear of dealing with a banker or other authority may get someone else to intervene for you. Fears may get sympathy. (Of course, many fears are fun, e.g. hide-and-seek, the roller-coaster, the spook-house, the horror movie, etc.)

More often negative reinforcement is involved in fear development (see chapter 4). Fears are self-developing if you run away from and/or avoid the frightening situation. Let's take a fear of elevators as an example. Suppose you have an important appointment on the 69th floor. But you fear heights, especially in elevators. So, you get more and more anxious as you approach the building. Walking towards the elevator, you think of the height, the long fall and the terrible accident if the elevator fell, and you imagine what it would be like if there were a fire at the same time... Your mind goes crazy. You are so sweaty and scared you can hardly push the "up" button. Then, before the elevator opens, you say to yourself, "I'm not going through this kind of hell; forget this." You may not even notice it, but as you walk away from the elevator, you feel a great relief, enormous stress has been taken away. This relief is negative reinforcement. Of what? Of what you were just doing! Being terrified of elevators and running away. So, you will be even more afraid of elevators in the future.

The possibility that running away from a fear strengthens it has important implications to all of us (beyond the old rule about climbing back on a horse as soon as possible after being thrown). Every time in a lecture you are unclear about something but decide not to ask about it in class, are you learning to be afraid of asking questions? Every time you want to talk to someone or go to a party but decide it would be more comfortable not to do it, are you increasing your shyness or your anxiety at the next party? This theory doesn't explain the origin of an irrational fear, only the growth. Later in this chapter we will see that it is usually important to expose your self to a fear, not avoid it. Still, there is much more to understand about the care and keeping of fears.

Thoughts and emotions

Humans have always had to cope with fears and self-doubts. William James, 90 years ago, emphasized the importance of the sense of self--the "me" as I see me in terms of "Who am I?", "What do I do?" and "What do I feel?" Likewise, more recently Carl Rogers, Abraham Maslow and other humanists have attributed a central role to the self-concept, which is another aspect of the cognitive dimension. We want to feel good about ourselves which usually involves being accepted by others. We strive to express our true selves--to actualize our best selves. According to self theory, stress in part comes from conflicts (1) between our actual self and our ideal self, (2) between conscious and unconscious perceptions or needs, and (3) between our view of reality and incoming evidence about reality. Epstein (1982) adds two more stress-producing conflicts: (4) between differing beliefs or values we hold and (5) between our belief of what is and what should be. So, values and doing or being right affect our stress level.

We all strive to make sense of our existence. Since we can influence our future, we feel some responsibility for our lives. According to the Existentialist anxiety comes from the threat of nonbeing--death and from the dread of having to change (thus, a part of you dies) to become something different. Fears are attacks from the outside, whereas anxiety reflects an internal threat to our very essence as a person. Anything that questions our values, anything that alienates us from others or from nature, and anything that challenges our ideas about the meaning of life causes anxiety. According to this theory, anxiety is not learned, we are born with it, it is the nature of humans. Serious anxiety reduces our ability to guide our lives and we end up feeling life is meaningless; that is called existential anxiety.

For decades, the Adlerians have contended that over-demanding parents produce anxious, insecure children, perhaps because the children never succeed in becoming what they "should be" in the eyes of the parent. Many years ago, a study showed that the closer a boy's self-concept was to his mother's ideal, the less anxious he was (Stewart, 1958). Very recently, addiction counselors have contended that addictions of all kinds are a way of diverting our attention away from a deeper concern, usually self-doubts and low self-esteem. If a person sees him/herself as defective, insecure, "nervous" or fragile, it seems likely that they are going to experience more stress and respond less effectively than a secure person. See chapter 14 for ways to change your self-concept and expectations of yourself.

Eighty years ago, Morton Prince suggested that a phobic person was afraid of having a panic reaction, rather than being fearful of the situation, such as heights, trains, or open spaces. In short, our expectations produced our fears.

Our greatest fear is fear itself. -Franklin D. Roosevelt

Fear brings more pain than the pain it fears.

Several more recent theorists (Bandura, 1977; Ellis and Harper, 1975) believe we can think or imagine ourselves into almost any emotional state. They say our thinking--our cognition--produces our feelings, not classical conditioning. The focus in this section will be on our inner experience--our thoughts--interacting with the external world to generate anxiety or calm.

Past experience determines our view and evaluation of events, others, and our selves, including our beliefs about our ability to handle certain situations. Our beliefs and interpretations of the frightening situation determine our actions and feelings to it. But the process is complex. For instance, cognitive or social learning theorists believe there are several steps involved: first we must *perceive* the situation including our gut responses (our perception may be realistic or distorted), second we *evaluate* the situation (as important or minor; awful or good), third we *assess our ability to handle the situation*, and finally we *decide what to do and respond* with feelings and actions. Let's study this process in more detail to see how it results in fear.

The cognitive theory is clearly a very different notion from stress based on an inborn impulse, an innate need, an automatic reaction, or conditioning (like Little Albert). This theory is also different from Freud's unconscious processes, although some of the cognitive processes may be semiconscious. Cognitive theory returns the mind to a central role in psychology; it contends that our conscious cognitions (thinking) largely determine what we do and feel. Our minds work in wondrous ways and may be rational (accurate) or irrational (wrong), as we will now see from many examples.

How thinking can produce stress and fears in several ways

Within current psychology theory, cognitive explanations of stress are fairly new, at most 20 to 25 years old. So, the theories are not well integrated and organized, as yet. I will start with a brief, crude overview of how we think our way into being upset (when there is little rational reason for the fear). Then I will give you some more detailed explanations and examples of specific kinds of thinking that produces or reduces stress. Finally, near the end of the chapter we will summarize the methods used to correct the thinking that causes irrational distress.

This is an overview. More-intense-than-necessary fears, worries, self-doubts, anxiety, etc. may be caused

- by merely *observing someone* else--a model--who has excessive fear or nervousness, and learning to respond the same way (see discuss of modeling in chapter 4),
- by learning to distort incoming perceptions so that the situation is made to look worse than it is by these *faulty perceptions*, e.g. blushing may interpreted as making a fool out of yourself or speaking too softly to be heard may cause the listener to frown which is then interpreted as disapproval,
- by applying certain unreasonable personal beliefs or expectations to the perceived situation so that disappointments, anger, and/or a sense of inadequacy are immediately created by these *irrational thoughts*, e.g. thinking that others will think you are unattractive or believing that brief pauses in your speech will bore the listener,
- by acting on a variety of *faulty conclusions* an excessively stressful situation may have long-range consequences, e.g. by falsely believing we are boring or can't answer the other person's questions, we abruptly terminate the interaction *or* by having fantasies of some horrible outcome which literally scares us "out of our wits," we do poorly and the situation gets out of our control *or* by self-critically using this stressful incident and failure experience to further lower our self-concept, a serious self-esteem problem develops, etc., etc. There are an infinite number of false beliefs; every human has some, many have many.

These are some of the basic ideas of cognitive theory. There are many different kinds of thoughts that cause stress and fears. Cognitive processes have become the main focus of psychological treatment in the last 15 years or so.

Observational learning and cognition

In chapter 4, we saw that one could learn to be aggressive from watching a model. In a similar way, we can learn fears too (Bandura & Rosenthal, 1966) from watching a fearful person. If a parent has an obvious fear, say fear of flying or of storms or of dealing with authorities, his/her children are likely to assume there are great risks involved and be afraid of these things also. I once saw a client who's entire family had a fear of heights, especially docks over water. They passed it on, via modeling, from generation to generation.

Cognitive theory says both reasonable and unreasonable fears (phobias) are based on thoughts. Of course, it is logical thought that enables us to distinguish between rational fears and irrational fears, but for the frightened person this differentiation is difficult. Yet, our survival depends on cognition--recognizing real dangers, like driving while drinking or smoking while lying in bed or going into business with a dishonest partner. But, why do so many of us learn to greatly fear less dangerous situations, such as asking an attractive person for a date. Could it be a crushing blow to our ego even if the person who turns us down hardly knows us? (No, if we are secure; yes, if we are overly self-critical.) Somehow the ordinarily rational cognitive processes run amuck and exaggerate the dangers, as when beginning spelunkers think the cave will crash down on them or speakers fear the audience will think they are dumb or people avoid revealing their personal opinions and intimate feelings. Let's see how this might happen.

Most phobias are groundless and excessive, such as a fear of harmless bugs, dirt, worms, meeting people, speaking to a large group, and heights. Hauck (1975) suggested that these harmless situations are associated with fantasies of horrible consequences (like the fear of elevators). Thus, our own scary ideas become the "pain" paired with the situation to produce a fear reaction. For example, the shy person thinks about meeting someone and then imagines not knowing what to say and becoming terribly embarrassed. And, thus, he/she becomes even more shy. Likewise, most of us have at least a mild fear of the dark. Relatively few people have been attacked in the dark, no one by ghosts or monsters. Yet, at age 3 or 4 (as soon as our imagination develops enough) we begin fantasizing scary creatures lurking in the dark. Our own fantasies create our fear of the dark.



Of course just saying "fears come from irrational thinking" is not a very complete explanation of behavior. The question is: "why and how do we learn to think irrationally?" Bandura (1977) says false beliefs come (a) from faulty perception (like believing your black neighbors are more violent than your white ones because TV News picture more blacks as criminal suspects) and (b) from faulty conclusions based on insufficient evidence (like believing that *this* airplane you are boarding is likely to crash because you have seen some terrible crashes on TV lately). But why the faulty perceptions and conclusions? There are lots of ways for our thinking to become irrational, so we will discuss this in some detail. Also, in chapter 6 we will learn more about how depression and low self-esteem seems to be produced by negative self-evaluative thoughts; in chapter 7 we will see how anger may be produced by negative thoughts about others, etc. (But which comes first, the idea or the emotion? Cognitive theory says the idea, but it is hard to believe that emotions have no role to play in producing some of the irrational thinking in the first place, right?)

Faulty perceptions and irrational reactions

Anxiety and fears may result from how we perceive and react to situations. It may help to separate the *faulty perceptions*, i.e. learned

biases or distortions that take place in the process of perceiving the situation, from the *irrational ideas*, i.e. almost instant irrational reactions we have to that situation, such as "they shouldn't be doing that" or "I should be doing better than this" or "I can't do anything about this mess."

The faulty perceptions occur when our erroneous expectations, fears, or wishes alter how we see other people and ourselves. We have a certain mental "set" before the event happens which causes us to see the situation in a certain way--we give it our own slant. Examples: a person desperately wants to have a good relationship with his/her lover, and fails to see the lover's loss of positive feelings and interest. A person wants to please others so much that he/she isn't even aware of his/her own needs. A person expects to be inadequate and so sees only his/her weaknesses and doesn't see his/her strengths or opportunities. A person has a pessimistic outlook, so every event is seen as the beginning of a catastrophe. A person has a severe selfcritic, so every action he/she takes is seen as something to be ashamed of. Many of these faulty perceptions, called "maladaptive schemas" by Young (1989), arise from emotions or needs and obviously cause stress.

The irrational ideas are often an instantaneous judgment that what is happening shouldn't be happening. Thus, Albert Ellis refers to "musturbation," i.e. believing that things must go the way I want them to, and if they don't, I have a right to get terribly upset. This demand for things--everyone love me, I be successful, don't blame or hurt me--is certainly going to produce stress, especially when the demands aren't met. These demands surely arise from a long history and a complex variety of emotions, thoughts, needs, fears, and hopes. These cognitive-emotional demands that life unfold differently produce, in turn, many new and disturbing emotions. This theory, which is the basis of Rational-Emotive therapy, will be described extensively in the next chapter and in methods #3 and #11 in chapter 14.

Can we handle it?

As mentioned before, the same stressor, such as having to give a speech, is perceived and responded to very differently by different people. Jane would want to get out of doing it, be unable to think of anything worthwhile to say, and be certain that she would mess up and say stupid things. Another person with no more speaking experience might be thrilled, be eager to begin gathering material, be sure she has important things to say, and fantasizes doing well (in spite of some anxiety). The event has very different meaning to these two women; their expectations of themselves and others are entirely different.

Bandura (1986) as well as Richard S. Lazarus (1984) and his colleagues believe that stress and anxiety primarily arise when we believe we can't handle the approaching problem. Obviously, this involves an appraisal of the nature and seriousness of the threat *in comparison to* the kind and strength of coping mechanisms we think we are capable of using. We can be scared because the stressor (problem) is seen as overwhelming or because we believe we have no way to escape or solve the problem. The questions we ask ourselves are:

1. Is something important to me at stake? If yes, am I in trouble? These are complex judgments. But the answers can center on three areas: (a) seeing the harm as already done, "This is awful, I can't give a speech," or (b) foreseeing possible losses, "Yes, a threat of ______ severity is coming" or (c) seeing the situation as a challenge, "Giving the speech will be hard work and scary but it's a real opportunity, which I can handle."

All other factors being equal, a threatened person, like Jane, would probably do more poorly and be more stressed than a less threatened person. However, as we mentioned earlier and will see in the next paragraph, that isn't necessarily the case. It is possible that the more anxious person would work harder on the speech than a more confident person, and as a result of the thorough preparation do exceedingly well and feel fairly confident during the speech. In short, the perceived threats are reduced by seeing solutions (see next step).

2. "What can be done about this threat?" Coping refers to our attempts to manage external and internal demands or stress; it includes our thoughts, attitudes, skills and actions. This book is filled with coping skills. Our estimate of our own ability to cope is based on many factors, including previous experience in similar situations, exposure to self-help information and effective teachers, self-confidence and risk-taking in general, awareness of how well your personal coping skills compare to others', and faith in support from others (Holroyd & Lazarus, 1982). Self-efficacy is discussed later and extensively in method #9 in chapter 14.

Some of us are risk-takers and some are not. Siegelman (1983) writes about risk-taking in important areas of our lives, such as careers and relationships. Risk-taking is a psychological process involving decisionmaking, attitudes about change, self-concept, and fear of failure. She describes three kinds of risk-takers: (a) *Anxious ones* who make big decisions only with difficulty, after lots of time, effort, indecision and worry. (b) *Balanced ones* who make big decisions carefully, focusing on getting a good outcome and not preoccupied with failing or being perfect. They are flexible, giving more time to important decisions and handling situations differently. (c) *Careless ones* who make big decisions quickly and with unjustified optimism. They deny their anxiety and don't think much about the situation before or afterwards. If you take risks, which type fits you best? Obviously, too much fear inhibits us too much and too little fear doesn't inhibit us enough.

Decision-making is known to deteriorate under intense or prolonged stress; we become confused and irrational emotions may take over (Janis & Mann, 1977). See chapter 13 for ways to improve decision-making as a part of coping with stress.

How and what you think determine your stress level

Humans are constantly anticipating what is going to happen, sometimes accurately and often times incorrectly. We especially dwell on the good and bad possible consequences of our actions and choices. We can imagine how others will feel and act in the future. We can understand and misunderstand why others do and feel the things they do. All these cognitive abilities can serve us well or poorly; careful planning for the future can help us cope and reduce our stress; pessimistic predictions can make us miserable. For some reason, in our current culture, we seem very unaware of the many ways we *could be* viewing and interpreting a situation but aren't. Here is a classical example of cognitive processing:

Suppose you are waiting for your boy/girlfriend who is half an hour late, which is unusual for him/her. You will think, "Why isn't he/she here?" And, you may answer the question from several viewpoints (called schemata by cognitive psychologists) or ways of understanding the situation, e.g. you can apply a *rejection* interpretation: "he/she isn't very concerned about or interested in me," or a *threat* interpretation: "I wonder if he/she has met some attractive person on the way here," or a *catastrophe* interpretation: "Oh, God, I hope he/she hasn't had an accident--I heard a siren a minute ago," or a shame interpretation: "I hope no one sees me waiting here, it's embarrassing to be stood up," etc. All these interpretations would be wrong if he/she simply got caught in traffic. Yet, each different interpretation leads to a different emotion. But, you don't have to force the data into any category (interpretation), you could refuse to draw a conclusion and just find something else to do until the boy/girlfriend shows up." But, most of us have our "favorite" expectations or schemas or ways of looking at things--it is part of our personality. By becoming aware of our tendencies to take certain viewpoints that may be wrong, we can start to change by testing the validity of our interpretations and opening our minds to more accurate ways of understanding our situations (see the later sections describing self-help methods).

Let's consider the kind of cognitive schemas or structures of agoraphobics that lead to feeling afraid of having a panic attack (Hoffart, 1993). Such patients have certain beliefs: (1) once anxiety about becoming terrified starts, it doesn't stop and just gets more intense, (2) specific symptoms will lead to a disaster, e.g. rapidly

beating heart means a heart attack is imminent, dizziness will result in your passing out, mental blocking indicates you are going crazy, and (3) the only way to avoid death or other serious disaster is to get out and keep out of those situations--to avoid getting scared and escape immediately. So, what are the consequences of this kind of thinking? They avoid situations that may bring on panic; they are very cautious in public situations (avoid excitement and stay close to exits); they try to control the symptoms (lean against wall when dizzy); they have an escape plan, carry tranquilizers, go with a friend only on nice days and when they are feeling good. In short, by so carefully avoiding the scary situations, the agoraphobic never questions or tests his/her beliefs about fears, so the phobias only grow, never shrink. So, to reduce fears, the fundamental bases or beliefs (1, 2 & 3 above) on which fears are built must be confronted, tested, and proven wrong. Expose yourself to the feared situation and find out you don't die, indeed the fear or panic decreases.

In case you have difficulty believing that thoughts can have powerful impact on fears, consider this interesting but unusual example of how thoughts can radically influence our strong emotions. Scary sports, like parachuting, give psychologists a rare opportunity to repeatedly observe the relationship between thinking and fear. An interesting thing happens as we become more experienced parachutists. As one would expect, the beginning parachutist experiences increasing stress immediately before the time to jump. He/she is fairly relaxed the previous day and during the night. Early in the morning on the day of the jump, there may be some mild excitement. Even the ride to the airport is pretty calm. As he/she gathers the equipment and prepares to board the plane, the anxiety rises. As the plane takes off, his/her stress increases, until there is very high anxiety while waiting for the "ready" signal from the jumpmaster, approaching the door, looking out, and jumping. Few people do this the first time without feeling terror ... for a few minutes.

Now, what happens with an experienced parachutist? Well, he/she is calmer than the beginner during the last few minutes before the jump. That's no surprise. But why is he/she more calm? Apparently because he/she is busy thinking about and planning or checking every detail of the jump: Is my equipment in order? Do I remember what to do? Where's the landing site? Where are the power lines? What's the wind direction and speed? Cognitive functions are dominant--taking care of business--and override the fear response. What happens with the beginner? He/she is thinking about: Will the jumpmaster see that I'm scared? What if the plane's tail hits me? I hope I don't freeze. I'm really scared. Oh, God, I don't want Ann/Joe to see me splattered on the ground. Again, our thoughts seem to determine our feelings.

There is another interesting finding: the *experienced* parachutist is *more* anxious than the beginning parachutist on the previous day, during the night, early in the morning getting ready to go to the airport, and after the jump is completed. Why? We don't know why. Perhaps the total tension is about the same for experienced and

beginning parachutists but seasoned jumpers concentrate on accomplishing the task (like professional performers on stage) and have to release the stress before and after the jump. Epstein (1982) points out the similarity to being alert and calm during a near accident but becoming shaky and scared afterwards.

If certain thoughts can reduce stress, other thoughts should be able to increase stress. Some interesting research by Andrew Baum deals with persons who had been in Vietnam or near the nuclear accident at Three Mile Island (Adler, 1989). Persons who continued to suffer intense prolonged stress had many more intrusive disturbing thoughts about their experiences than persons with the same background who experienced less stress. The question is: does more intense physiological reactions of stress lead to more worried thoughts (seems likely) or do distressing, unpleasant thoughts raise our stress level (seems just as likely)? Another question is: do low stress people just avoid unpleasant memories and thoughts or have they handled the stress in some other way? One theory, suggested by Wegner (1989) and Pennebaker (1991), and supported by some fascinating studies, is that trying not to think about something stressful (i.e. denying, suppressing, or not disclosing) actually results in more uncontrollable negative thoughts about the situation. The deniers and non-talkers believe they are solving the problem when actually they may be making it worse. What is a better solution? Wegner and Pennebaker and almost all insight therapists would say these people need to think and talk about their stressful experiences and express fully their emotions. Cognitive researchers disagree, believing some people simply think about traumatic experiences differently than others and, thus, experience different levels of stress. Thus, cognitive therapists focus on changing the thoughts, not expressing the feelings. Research of this reduction-of-feelings vs. cathartic disclosure issue is badly needed.

Self-confidence in coping skills

Naturally, if our perceptions and thoughts determine our feelings, then it is a small step to seeking mind control methods, which the Greeks did 2000 years ago. If methods for altering your own thoughts are important, then your faith or self-confidence in using your mind logically and effectively becomes important. Bandura (1977, 1980, 1986) and his Social Learning Theory deserves much of the credit for highlighting the notion of self-efficacy. When cognitive psychology filled the void of behaviorism in the 1970's, the view of man returned to "man is a rational organism" (or, if not rational, at least controlled primarily by the mind). The conscious mind preoccupied psychologists, instead of Skinner's behavior and environment, Freud's unconscious instincts, or psychotherapy's emotions. A cognitive orientation suggested that solutions to our problems involve acquiring the skills, knowledge, and confidence necessary to handle the current situation. That sounded reasonable and hopeful. Thus, the big push arose in the 1970's for cognitive self-control and self-help. And that mental set determined that I sit here day after day summarizing how you can

better use your mind to do what you want to do. Psychologists (Moos & Billings, 1982) have identified many coping skills; see the later section on "How to Handle Stress." We will look deeper into the role played by our self-confidence as a self-helper, called self-efficacy, later in this chapter and in chapter 14.

Does thinking explain all fears and anxiety?

Cognitive theory says that intense, specific fears are not caused by something very painful or frightening being paired with the scary object or event (illustrated by Little Albert in chapter 4) nor is some vague or unconscious anxiety the source of a phobia. As we have seen, the cognitive explanations of unrealistic fears and anxiety are (a) that the perceived threat somehow becomes greatly exaggerated or (b) our capacity to deal with the threat is seen as very inadequate or (c) both. That is, we are saying, "This situation is horrible" and/or "I can't handle it."

It certainly is true that one doesn't have to have a traumatic experience to acquire a specific phobia or intense chronic anxiety. Yet, as already mentioned, basic learning principles could produce a phobia or serious anxiety without a painful trauma being involved. More examples: just imagining thousands of times making a fool of yourself by making comments in class can create a fear of speaking up in class. Avoiding approaching interesting people for years can make it too scary to do. Moreover, cognitive psychology still has no clear explanation of why the mind of a claustrophobic person exaggerates the ideas of suffocating, being trapped and closed in, and loosing control, while another person suffering from panic attacks fears open spaces and is convinced that heart palpitations means he/she is having a fatal heart attack. What makes the mind of a person with a fear of flying jump to the conclusion that a crash is imminent? (Maybe because his/her emotional system, based in part on non-cognitive conditioning, is responding like crazy, in spite of what the logical part of the mind is telling him/her.)

In any case, while the Social Learning theorists make a lot out of self-efficacy, it is no surprise that a person terrified by a large snake will say "I can't get close to that snake," and that this behavioral prediction is accurate. So what, if ratings of self-efficacy correlate remarkably well with actual behavior? Does that prove thoughts produce the fears? No, it's probably the other way around. Most people simply have a good idea of how well they can handle a situation. I'm pretty sure self-efficacy does not explain all behavior, but building our feelings of self-efficacy is surely one of our better methods for gaining some control over our lives.

This three way connection between (1) appraising the dangerousness of a situation, (2) evaluating our ability to handle the situation, and (3) responding with fear or confidence in that situation doesn't provide us with a complete scientific explanation of a phobia! How and why does the belief develop that this harmless snake will hurt

me in some horrific way? How does the idea that a harmless snake might hurt me get translated into a false perception of the snake as life-threatening? Why and how does our cognitive estimate of our ability to handle a specific situation, such as flying, sometimes plummet suddenly? Science has not yet explained why and how exaggerated threats are learned and combined with fluctuating estimates of our self-efficacy in one specific phobic situation. And how do those "snakes are horrible" and "I can't stand it" thoughts produce sheer physical terror instantly?

Surprisingly, high stress people do *not* have a lot more stressful experiences than low stress people (except maybe the 10-15% who "gravitate toward" serious trouble, usually involving conflicts with people). It truly seems that stress for most people comes primarily from the person's own personality or general nature, i.e. they are the type, often with low self-esteem, that respond more intensely to environmental stresses that are common in everyone's life. As scientists trying to explain stress, however, it does little good to simply label these people as "high anxious" or "lacking confidence." Good explanations must be more precise and in more depth than that; we must understand exactly why some people get up tight and fall apart and others do not. Psychology is not doing a good job in this area, as yet.

Cognitive (self-efficacy) theory says, as we've seen, that individuals interpret the same situation differently; they use different schemas or interpretations--some see the problem as a minor nuisance while others see it as a major catastrophe-and assess their ability to handle it differently -- "I can handle it" vs. "it's hopeless." Thus, the level of insecurity differs from person to person. Okay, that sounds good, but still the question is why? Some of us deny problems, while others exaggerate problems. But, why? Some of us overestimate our ability to handle a threatening situation, some are accurate, and some grossly underestimate our coping skills. But, why? An effective theory should be encouraging scientists to explore these whys in detail: what causes the mental processes that lead, in part, to secure coping and to overwhelmed panic. What are the origin and history of the specific thoughts involved in exaggerating a threat? What is the learning history of the thoughts, beliefs, skills and expectations involved in becoming good self-helpers? (Limited ideas about how to build self-efficacy are in methods #1 and #9 in chapter 14.) What kind of societies, teachers, parents, and people, in what circumstances, find this kind of information interesting and worthwhile...and who do not...and why?

Since Cognitive therapists believe that unwanted emotions are caused by thoughts, this theory emphasizes the need to change or remove the harmful thoughts, like self-doubts. (Besides, it's easier to change thoughts than emotions.) But, when faced with the therapeutic task of changing these thoughts, many Cognitive therapists turn to a behavioral method, such as asking the patient to expose him/herself to the scary social situation, etc. That is, it is easier, in turn, to change behavior than thoughts (and perhaps it is more accurate to say that an idea or a belief isn't really affirmed by the person until he/she acts upon it or tests it out in real behavior). Thus, the Cognitive therapist asks the patient to behaviorally check out his/her dire "it's hopeless" predictions or conclusions, or the Rational-Emotive therapist directs the shy client to find out it isn't awful to be turned down for a date, or Bandura helps a snake phobic with a "I can't do it" attitude to gradually approach a small snake and learn for certain "I can handle it," etc. Thus, these therapists, especially the Social Learning theorists, concentrate on building a sense of mastery (by increasing actual behavioral competence), rather than focusing on reducing the anxiety or correcting irrational thoughts or changing the self-talk involved in self-efficacy.

More specific directions for reducing fears, phobias, and selfcriticism are covered in the "Ways to handle stress and anxiety" and the "Special anxiety-based problems" sections. How to stop destructive self-criticism is discussed in Method #1 in chapter 14.

Thoughts, emotions, and actions are all interrelated

As you can see, all three modalities--emotions, behavior, and cognition--become impossibly enmeshed in most real life situations, much like classical, operant, and observational learning are complexly intertwined (see chapter 4). Therefore, any theory which attempts to explain any one of the three modalities, say an emotion like anxiety, without referring to both of the other two is probably questionable. It is guite believable that our feelings are partially based on our views of the world--our thoughts, our beliefs. But our thoughts, views, beliefs, expectations, etc. are surely influenced by our emotions...and our behaviors. It is not a one way street. Indeed, Bandura himself provides an impressive list of ways we mentally justify being behaviorally unkind to others (see chapter 7). These self-serving cognitions (or excuses) are surely influenced greatly by emotions and needs. So, which comes first or which is most powerful: the selfish thoughts, the greedy emotions, or the mean, self-serving behavior? It is a foolish question. We can assume all three complexly interact and grow together. As we accept more of the complexity, we may be on our way to understanding ourselves. I never told you that humans were easy to understand.

It will interest some of you that brain researchers, such as Joseph LeDoux, believe that emotions and thoughts operate on two almost entirely different nerve pathways; thus, we can fear a snake while knowing it can't hurt us. The emotional "startle" reaction to a snake might even be faster than the mental awareness of what it is that scared us. He also says it is likely that recognizing a person is processed by a different set of neurons than the ones that produce an emotional dislike for that person (and, of course, we may like or dislike a person without knowing why). It is also possible that early emotional memories are, for this reason, powerful without any cognitive memories of those experiences. So, we simply don't know much yet about the interconnectedness of emotions and cognitions. There are researchers who doubt that fears and anxiety are produced by cognitions alone and that fearful emotions can be reduced by only changing our thinking. Thoughts, emotions, and actions are so intertwined that possibly you can't change one without modifying the others, but there is no guarantee that changing one, say your thinking, will always change another part, such as your fears (Beidel & Turner, 1986). For self-help, you'll need to use all the methods--cognitive, emotional, and behavioral.

Next we turn to a much older and more complex theory explaining anxiety. It is partly cognitive too; it involves very intricate mental processes, including coping and moral judgments. But, it also recognizes innate biological drives, strong emotions, and unconscious mental processes. No one can thoroughly explore and understand human behavior, especially anxiety, or their own psyche without knowing a little about Freudian theories.

Psychological Theories

Psychoanalytic views

Freud was an acute observer. However, at times he seemed to have weird ideas, so much so he was ridiculed by his peers. But when his ideas are thoroughly understood, they often do not seem so odd. For example, he thought that we experienced "birth trauma" as we were painfully and abruptly squeezed from our warm, safe, dark, quiet place in mother's womb into a cold, demanding, changing, confusing, dangerous world. Weird? Maybe. Maybe not; new newborns are much more aware than we once thought they were. Freud felt birth was our first stressful experience and that it influenced later experiences, like when we were traumatized by mother leaving us for a few hours at age 10- months or being terrified at age 3 when we thought we were lost in a store. Surely earlier experiences affect later ones; our feelings of helplessness, of "something awful is happening," of overwhelming fear could be traced, in part, back to birth.

As the first psychotherapist, starting over 100 years ago, Freud treated many patients with fears and anxiety reactions. He wondered how these emotions could be explained. His explanation started with an infant innately driven by its "id" to eat (from mother's breast), to eliminate, to be comfortable, to be held and loved, and to be touched and have sensual stimulation. If those needs were not met, the child experienced anxiety (a mild form of the first stress--the birth trauma). To meet sexual (love) and death (aggression) needs and to relieve the anxiety, a part of the id develops into a second part of the child's personality, a thinking, reasoning, perceiving, self-controlling part, called the "ego". The ego devises many ways of coping, of meeting its needs, of surviving. One means of coping could be to become unusually close and dependent on one parent--a daddy's girl or a mommy's boy. Or it might be to develop a fear of the dark that justifies demanding that a parent put you to bed and stay there until you are asleep. Or another way may be to become "sickly" to gain attention and love. All these things help us feel less scared. As adults, the ego is still handling "neurotic anxiety" by using "defense mechanisms" and by developing fears and phobias (substitutes for the real concerns), psychosomatic disorders, compulsions and excessive orderliness, obsessions and excessive worries. All of these neurotic symptoms help control or make up for the basic anxiety of not getting the love, security, and sensual touching we want. That's not too weird a notion, is it?

Understanding how we handle neurotic anxiety was only part of Freud's task. Freud treated patients with great guilt who had never done anything wrong; he saw sexual-attention hungry children deny their sexual interests (remember this was the Victorian era); he saw 5 and 6-year-olds who had a crush on one parent become more and more like the other parent. So, he adopted the idea from ancient Greek literature of "Oedipus and Electra Complexes:" we are in love (whatever that means to a 3 or 4-year-old) with one parent but this is real scary because the other parent might get jealous and hurt us, including quit loving us or physically hurt us (castration anxiety!). How do we handle this scary, threatening situation? With a clever stroke of genius! We join forces with the competitor, we start using the same sexed parent as a model. By joining the enemy we have avoided the war; by identifying with the same sexed parent we have found a means of controlling the dangerous (and thus scary and evil) impulses (sexual attraction and hostility) within us. Soon, we no longer crave physical contact with the parent of the opposite sex; boys of 8 or 10 want to be like their dads; girls like their moms. Young boys start to think girls are yucky and a secret voice inside may be saying, "Whew! Thank goodness I'm safe; I'm out of that scary triangle with mommy and daddy."

Part of the process of identifying with the same sexed parent is the internalization of values, the development of a conscience which Freud called the "superego". The superego, the part that makes us good and considerate of others, is an outgrowth of the interactions that many people consider so wicked--the Oedipus or Electra Complex. Because we, as young children, have known birth trauma, overwhelming fear and a sense of utter helplessness, and because we so desperately want love, we handle our fears by developing at age 5 or 6 a set of rules to live by that will help us become a good boy or a good girl. Rules such as: you should not get angry at your little brother and try to kill him...or even think of it. You should not wish you had mommy or daddy all to yourself because the other one would have to die...and you can't think about that, it might come true. You should not do sexual things, like try to suck mommy's breasts or feel daddy's penis...and you shouldn't even think about dirty, nasty acts or

parts of the body. All these "shoulds" come from the superego part of your personality.

And so it is, according to Freud, that the savage beast within is tamed by the ego and superego. And so it is that humans become civilized. But, by the same taming, controlling mechanisms, we are tormented. The superego makes demands that directly conflict with the id; it generates guilt and shame when we do immoral things and even when we have unacceptable urges or thoughts and maybe even when we have unconscious urges. Freud called this "moral anxiety." Much of our depression and low self-regard, perhaps our fear of success and free-floating anxiety, may come from this source.

Freud's notions of the mind have had a profound effect on how we humans see ourselves. We will never be the same again. Few minds have had such wide influence as Freud's. From anxious, tormented, sick people (and from his own self-analysis), he conceived the mind as a complex collection of dynamic, constantly struggling forces trying to control one's life. There are three major parts of our personality: first, the id, which includes the physical or sexual or love instincts and the death or destructive instincts. The id wants to have all kinds of fun, now! Also, it would like to destroy whatever got in its way.

Second, the ego develops from the id. By using reason and contact with the external world, the ego tries to satisfy the id's needs as much as possible without alienating the sources of love. Of course, the ego has to conceal many of its purposes; that is, they must be accomplished secretly or unconsciously in a disguised form. This is especially true after 5 or 6-years-of-age because the third force has now come into being--the superego.

The superego demands that we be good; otherwise, it causes us to feel guilt, shame, and anxiety. The ego has the task of negotiating between the id and the superego. Of course, they never agree. The ego can find a few ways for the id to have a thrill and still avoid chastisement from the superego. It isn't easy, but unconscious manipulations, denial, fooling ourselves, irrational thinking, etc. help one part of our personality deceive the other two parts. Furthermore, the ego must rationally deal with the world, i.e. deal with questions like: what am I capable of doing, what resources can I make use of, how will other people react to my actions, how can I handle their objections, etc., etc. Clearly this boiling cauldron of powerful, unconscious, conflicting forces inside each of us would create stress, right?

Freud saw anxiety as a signal of danger. What danger? The threat of these childhood memories and urges and fantasies coming into our consciousness or actually being carried out. Events that happen to us as adults might set off an old repressed urge or fear, such as losing love. Immediately, we become anxious--often without knowing why. To prevent anxiety, all of us develop massive defense mechanisms to keep hidden the "true" causes of our childhood fears, urges, and shames. Thus, a psychodynamic therapist would assume that an agoraphobic patient is symbolically terrified by a loss of love or separation from a caretaker at home (maybe the birth trauma or castration anxiety or loss of mommy or daddy's love through the identification process or an actual lost of love due to divorce, etc.). In short, our irrational adult fears and phobias are neurotic ways of continuing to cope with childhood traumas. They are manifestations of our earliest conflicts and stresses.

Freud wrote 33 volumes, mostly about anxiety. He was a good writer. Decide for yourself, on the basis of knowledge and reading his books, how much you will believe of Freud's theories. It is important to realize that you don't have to agree with everything Freud said in order to find some wisdom in his writings. You don't have to accept birth trauma or the Oedipus complex and castration anxiety before you can believe in defense mechanisms. Indeed, almost all insightful readers will say, "Oh, I do some things like that," after reading about defense mechanisms.

Psychological defense mechanisms

Freud's daughter, Anna, who did psychoanalysis until she died in 1982, summarized several ego defenses in The Ego and the Mechanisms of Defense (1936). As noted above, the ego protects itself from three threats: (I) the id, because the urges from the id can become so strong that they overwhelm the ego, bringing with them irrational chaos. Thus, we might panic if our sexual or brutally hostile urges popped into our conscience. (2) The outside world or real danger. For example, the ego would realize that a child's parents staunchly forbid any aggression; thus, showing the slightest hint of murderous urges to them would produce severe anxiety. Likewise, a fear of driving recklessly or of being rejected by a lover may have a certain basis in reality. (3) The superego is a threat to the ego too. The basic duty of the ego is to find some satisfaction for the id. If the superego detects any immoral aspects in our behavior, there is hell to pay in the form of self-censure and guilt. The ego tries to avoid this discomfort. But, keep in mind that, according to Freud's original theory, the eqo defenses are successful only so long as the conscious part of the ego is unaware that another part of the ego is defending itself! Uncovering some of your ego defenses may be interesting fun, but your defenses against really threatening urges or ideas are not likely to disclose what they are doing to your conscious awareness.

Anna Freud used the defenses as hints of the repressed, scary impulses (instincts) that were underlying the patient's troubles. For example, the goodie-goodie 5-year-old dethroned king, who never shows anger towards his younger sister, his competitor, is assumed to be hiding his sibling rivalry. The defenses can also give us insight into our own mental processes--sometimes mental gymnastics or contortions. All defenses involve distortions of reality; they are ways of feeling better by fooling ourselves. If we realized these defenses in our lives, we might handle reality better. Almost all adjustment books mention these defense mechanisms, even the writers who are arrogantly critical of Freud. An excellent text about Sigmund and Anna Freud and the ego defenses is by Christopher Monte (1980).

Repression: shoving thoughts and urges that are unacceptable or distressing into our unconscious. This is what happens to the unacceptable urges of childhood--the ego represses them. Taboo ideas, like incest, would probably never get into consciousness or, if they got there, they'd be quickly repressed. Sometimes dreams or slips of the tongue or attempts at humor reveal our unconscious motives. For example, if a teacher ridiculed you in class, you might dream he/she had a horrible auto accident. Or, trying hard to say something nice to the teacher a few days later, you comment after class, "Each of your lectures seems better than the next." Or, if you were unfortunate enough to be asked to introduce your former teacher at a symposium and said, "I'd like to prevent--huh--I mean present Dr.____," some might guess the truth. All these speculations about repressed feelings are just guesses.

Repression must be distinguished from suppression and withdrawal. Suppression is more conscious and deals with unpleasant but not usually utterly despicable acts or thoughts. Examples: You may want to forget a bad experience or an unpleasant chore to be done (a term paper to write or expressing sympathy to a friend whose mother has just died). You just forget to do things or you may deliberately try to think of other things so you can "settle down" and function better. It may, indeed, be rational to worry about one thing at a time (suppressing the other worries) and to withdraw from a stressful situation. Counting to 10 before acting in anger is another good example of brief suppression.

Dissociation: includes processes closely related to repressed and distorted perspectives or memories (see the discussion in Trauma above). Dissociation (or something like it) occurs in several forms, ranging from very common occurrences, like "spacing out" or quickly forgetting an embarrassing moment, to very pathological conditions, like flashbacks, Multiple Personality Disorder (now called DID), or Dissociative Amnesia. It seems to be the nature of the human mind to select a preferred point of view or theory or "the right way" to do things. Once you know or "feel" what is "right," then most different opinions or ideas seem wrong to you. This tendency to accept one side (point of view) results in rejecting many other perspectives, even if each perspective holds some truth that might contribute to understanding/solving a problem. This is called right/wrong or either/or or black/ white or good/bad thinking. In effect, we lose track or discount a little part of reality (in order to hold the belief that we know the truth). If people know you believe one thing, they tend to assume you disagree with the opposite. Examples: if you believe in practical courses, they assume you are anti-academic; if they know you recommend psychopharmacology, they assume you do not

advocate psychotherapy; if they know you are a strong advocate of self-reliance, they assume you seldom vote for a Democrat.

Usually strong trauma, intense pain, or an identity crisis is associated with major dissociation. Combat may produce "battle fatigue" or Post-Traumatic Stress Disorder. Awful accidents, near death experiences, death of loved ones, physical or sexual abuse, severe humiliation, and unbearable losses can lead to memory losses, intense emotional reactions as if you were suddenly back in a traumatic crisis, numbed feelings (e.g. cutting themselves without feeling it), depersonalization (robot-like, "I know what is happening but it doesn't seem like me"), two or more "personalities" inside trying to control the same person, confused or Fugue states, etc. All these reactions serve as a defense against pain, fear, helplessness, panic, and other intense feelings or ideas. It is as though, under stress, our normal stream of consciousness fails to integrate all of our thoughts, emotions, somatic sensations, sense of identity, and knowledge of what happened. Thus, one may remember what happened to them but forget how they felt. Compared to repression, in dissociative reactions memories are splintered and distorted, not just lost. Indeed, there is often a repetition compulsion to repeat some part of the traumatic experience, experiencing it over and over. We have already read about dissociation in Trauma above and we will read more about it in Suicide in chapter 6 and in discussions of serious pathological states in chapter 9.

Denial: refusing to admit or face a threatening situation. Denial can be unconscious as when a dying person refuses to admit what is going to happen or when a person with a heart condition denies that their overeating or smoking is of any consequence. Denial can be semi-conscious as when a person refuses to see any problem in a relationship when it is pretty obvious to everyone else. Denial is probably quite conscious when a post-puberty young man of 13 says, usually with a grin, "I'm not interested in girls."

Research (Roth & Cohen, 1986) has shown that there are two major ways to cope with stress: (a) avoiding, repressing, looking away, forgetting, escaping and letting someone else be responsible or (b) approaching, learning more, obsessing, being vigilant, and taking charge of planning what to do. The first way (denial) reduces stress; the second way (sensitization) increases our chances to cope. We all use both ways, although we may tend in general to be avoiders or approachers, while in specific situations, like facing surgery, we each have our favorite way of coping. Which is the better way?

Denial is probably better when the situation is out of your control (a sudden crisis or in surgery) and approach is probably better when you can do something about the situation (avoid or lessen a problem). The disadvantages of each way are: more stress and useless worry for the approachers, and more failures to act and lack of awareness for the avoiders. As you can see, ideally we would use both avoiding and approaching ways of coping with a particular stress over time. This knowledge about denial is gradually being gathered (Breznitz, 1983). For instance, Lazarus has found that patients facing surgery who deny the dangers and have a false sense of security have a better postoperative recovery (Derlega and Janda, 1981). However, many patients could have avoided surgery in the first place by carefully attending to their health. Thus, denial lets us eat lots of fat, relaxes us during our heart attack, and then again interferes with our taking care of serious health problems

Regression: resorting to earlier ways of acting or feeling, although it is no longer appropriate. Examples: Throwing a temper tantrum like a 3-year-old at age 18. Under stress an adult might curl up in bed, suck their thumb, and clutch their old teddy bear. A 23year-old experiencing serious financial difficulties might feel an urge to return to his/her parent's home and let them take care of him/her. These are not planned actions; they are old habits that return automatically.

Rationalization: Giving excuses for shortcomings and thereby avoiding self-condemnation, disappointments, or criticism by others. Examples: After stealing from a large company, "they won't miss it. Everybody does it." After getting about average grades on the GRE (not good enough to get into Ph. D. programs), "I would have hated five more years of research and theory anyway." This is called "sour grapes," from Aesop's tale about the fox who decided the grapes too high to reach were sour anyway. The reverse is "sweet lemons," an assumption that everything happens for the best, "failing the GRE's was a blessing in disguise, now I know I want to become a counselor--maybe a social worker--and not a Ph. D."

Projection: Attributing to others one's own unacceptable thoughts, feelings, impulses, etc. So, the white person with repressed sexual urges may believe that all blacks are preoccupied with sex. The moralistic spouse, who is tempted to have an affair, begins to suspicion that his/her partner has been unfaithful. A slightly different form of paranoid projection is when a self-critical feeling or idea is attributed to others. Suppose a young woman from a religious family has strong feelings against any sexual urges she might have and, thus, almost never has them. She might start to believe, however, that others are critical of her whenever she wears a dress that shows her shape.

Displacement: redirecting our impulses (often anger) from the real target (because that is too dangerous) to a safer but innocent person. The classic case is the frustrated worker, who can't yell at the boss but comes home and yells at the spouse, who yells at the children, who kick the dog, i.e. we take it out on the people we love. Suppose we were very envious of the relationship between our sister and our mother. Our feelings may never be expressed towards them directly but take the form of resentment and distrust of most other women. Another form of displacement is what Anna Freud described as "turning-against-self." In the last example, instead of the hatred of one's sister and mother being turned on women in general, it could be turned against oneself. This is a commonly assumed dynamic in depression and suicide.

Reaction formation: a denial and reversal of our feelings. Love turns into hate or hate into love. "Hell has no fury like a spurned lover." Where there is intense friction between a child and a parent, it can be converted into exaggerated shows of affection, sometimes sickeningly sweet and overly polite. The feelings and actions resulting from a reaction formation are often excessive, for instance the loud, macho male may be concealing (from himself) sexual self-doubts or homosexual urges. Or, the person who is unconsciously attracted to the same sex may develop an intense hatred of gays. People, such as TV preachers who become crusaders against "loose morals", may be struggling with their own sexual impulses.

Identification: allying with someone else and becoming like them in order to allay anxiety. Remember Freud's notion that the Oedipus and Electra Complexes are resolved by identification with the same sexed parent. Other examples: occasionally an oppressed person will identify with the oppressor, some Jews helped Hitler, some women want their husbands to be dominant and feel superior to them and other women. In other cases, a person may associate with and emulate an admired person or group to reduce anxiety. High school cliques serve this purpose. A new college freshman may feel tense and alone and out of place; she notices that most other students are "a little dressed up," not sloppy shirt and jeans. Her roommates insist on studying from 7:00 to 10:00 every night except Friday and Saturday; they are more serious than her old friends and their conversations reflect these differences. They commented about her "country" accent and the fact that she didn't watch the news. She started dressing up occasionally, watched the news, got more interested in politics, and studied a lot more than ever before. When she went home at Christmas, her friends told her she had changed and dad commented that he was losing his little girl. She didn't know it but she had identified with a new group and learned to feel more comfortable.

Sublimation: transforming unacceptable needs into acceptable ambitions and actions. One may convert a compelling interest in getting a parent's attention into a drive to do well in school. Sexual drives can be pored into sports. Anger and resentment of the advantages of others can be funneled into an obsession to excel in a lucrative career.

Fantasy: daydreams and their substitutes--novels and TV Soaps-are escapes, a way to avoid our real worries or boredom. We may imagine being highly successful when we feel unsuccessful; at least we feel better for the moment. Actually, we often benefit by rehearsing in fantasy for future successes. At other times, fantasies may provide a way to express feelings we need to get off our chest. Fantasy is only a defense when it is an escape. Anticipation of the future through fantasy is a mark of an intelligent species.

Many self-help methods use fantasy: covert rehearsal, covert sensitization, desensitization, venting feelings, decision making, empathy, increasing motivation and awareness and many others. If fantasies can be therapeutic, then they can be harmful, e.g. imagining awful consequences could create fears, sad thoughts may produce depression, reliving an insult in fantasy might build anger. Fantasy may be part of the problem or part of the solution.

Compensation or substitution: trying to make up for some feeling of inadequacy by excelling in some way. Alfred Adler, a freethinking student of Freud, observed that feelings of weakness and inferiority are common when we are young. Much of life, he thought, was devoted to compensating for our real or imaginary weaknesses, i.e. striving for superiority. Both men and women strive for power, competency, courage, wealth, and independence. Karen Horney wrote, "The neurotic striving for power...is born of anxiety, hatred and feelings of inferiority. ...the normal striving for power is born of strength, the neurotic of weakness."

Sometimes we work on improving in the area we are weak in, so the skinny, shy child becomes Miss or Mr. America or the kid with speech problems becomes a politician (like Demosthenes with rocks in his mouth or Winston Churchill). Sometimes we find other areas to make up for our weaknesses; the unattractive student becomes an outstanding scholar, the average student becomes an outstanding athlete, the person in an unsatisfying marriage becomes deeply involved with the children. These are compensatory substitutions. Many are good ways of handling stress; some are not, as when an unloved teenager seeks love promiscuously.

Undoing: if you have done something bad, sometimes you can undo it or make up for it. Example: if you have said some very critical and hurtful things about one of your parents or a friend, later you may try to undo the harm by saying nice things about them or by be being nice to them and apologizing (sometimes it is the overdone apology that reveals the hostility). In essence it is having the decency to feel guilty and do something about it.

Freud used undoing to explain certain obsessive-compulsive acts, e.g. a 17-year-old with masturbation guilt felt compelled to recite the alphabet backwards every time he had a sexual thought. He thought that would undo the sin.

Intellectualization or isolation: hiding one's emotional responses or problems under a facade of big words and pretending one has no problem. Suppose you were listening to a friend describe going through his parents' divorce. He may tell about deeply hurtful situations but show no sadness or anger; he gives a superficial behavioral description of what happened; he might even clinically "analyze" his parents' underlying motives without showing his own emotions. Likewise, people may discuss war without vividly feeling the misery of many people dying. This is a repression of the painful parts. Freud believed that the compulsive hand-washer was trying to cleanse his hands of the guilt of masturbation but the feeling of guilt was separated from the hand-washing.

There are many other defense mechanisms ("acting out" as a way of rebelling and reducing tension, "self-repudiation" to get others off your back, seeking sympathy, etc.). More importantly, there are many other much healthier ways of coping with stress, fears, and anxiety which we will review later in this chapter and in chapter 12.

As Sigmund Freud described ego defense mechanisms, the processes were primarily unconscious. As Anna Freud and later psychoanalysts studied these processes more intensely and re-defined them, the mechanisms came to be seen as more conscious and available to the eqo (the conscious self) for dealing with anxiety. This new focus on the eqo as a coping, self-directing part of our personality came after Freud. For Freud, however, the great driving forces were in the id--the unconscious sexual and destructive instincts. The ego was merely "a rider of a spirited horse" who tried to have some control over the animal instincts. The later "ego psychologists" also extended the role of the ego beyond reducing anxiety and into a means of mastering and enjoying life. Today the Cognitive theorists tend to believe, again, that the ego--the rational mind--is in charge or, at least, has the potential to make a substantial difference. Freud would say, if he were here today, that most of psychology has repressed and denied his disturbing insights into the powerful sexual, selfish, hostile, and irrational nature of man, just as he predicted we would. Could he be right? Are we denying our basic biological and innate drives?

It is likely that each of us can sometimes recognize when we use defense mechanisms. We can't detect every time, but by being very familiar with the common defense mechanisms and by being vigilant, we can investigate our possible use of defense mechanisms and keep ourselves honest. Most of the time (not all, as we saw in denial) it is helpful to stay in touch with reality. Awareness is the mark of a healthy, adjusted person. Work on it.

More recent experimental investigations of defenses

Almost all of the information about defense mechanisms mentioned above comes from pre-W.W.II psychoanalysts. Just to illustrate how "scientific" beliefs wax and wane, history shows that many academic psychologists during the 70's and early 80's rejected the notion of unconscious thoughts and, especially, Freud's notions of unconscious ego defenses. Clinical psychologists, however, in contrast to experimentalists, continued using the idea of defenses. Then in the late 1980's, cognitive researchers began to repeatedly find ample evidence for unconscious mental processes. For example, experimental studies have shown that experiences we have no conscious memory of can have an influence on our performance of certain tasks; factors we have no awareness of can influence our decision-making; procedures that are at first conscious can be repeated often enough that they become automatic and unconscious; in social interactions many people deceive themselves in ways that build their self-esteem; children who claim very high self-esteem are often hiding a profound sense of inferiority, etc., etc. The researchers have often used different terms, such as "scapegoating" instead of displacement, "self-presentation ploys" instead reaction formation, "positive illusions" instead of denial, "counterfactual thinking" instead of undoing, and so on (Cramer, 2000). But, a rose is a rose...

Many benefits will come from the new experimental interests in defensive cognitive processes. For one thing, there are clarifying distinctions being made between coping processes and defense mechanisms. Coping processes are conscious, intentional, learned, and associated with normal adjustment. Defense mechanisms are unconscious, unintentional, self-protective instincts or dispositions, and associated with pathology (Cramer, 1998). This is a meaningful difference, because different self-change techniques will surely be needed for coping than for dealing with defenses.

Another clarification emerging from the research is the distinction between sometimes healthy or adaptive defense mechanisms and very disturbed mental processes. Sublimation, suppression (sort of conscious denial), altruism, humor, and even some denial in children can be healthy and useful in certain circumstances. Also, some defenses may temporarily help one adapt but in the long run interfere with problem-solving: intellectualization, repression, undoing, displacement, dissociation, idealization, misjudging one's power, and others. Still other defenses alter our perception of reality and, thus, interfere with solving our problems: denial, projection, rationalization, and unrealistic fantasies. Some more hidden defenses are revealed by certain maladaptive behaviors: acting out, severe withdrawal, passiveaggressive acts, and so on. Lastly, extremely irrational defenses play a central role in serious psychoses: delusional projection, serious distortion of reality, complete denial of basic conditions, and so on. The more maladaptive defenses that one uses, the more likely one has a serious psychiatric disorder, many symptoms, and interpersonal problems.

If you compare Freud's defense mechanisms with modern research finding, the traditional defenses seem more intuitively understandable and more applicable to a wider range of situations. Eventually, with more and more research, new findings will show us more details about when and how defenses are used in specific circumstances. Then, we will develop better ways to cope than by using defenses that rely on distortions of reality.

Unconscious causes of fears

If exaggerated conscious thoughts of terrible consequences can cause fears, why can't unconscious "thoughts" or urges cause fears? This is speculation but worth understanding. The origin of many fears is mysterious. A fear of knives is fairly common but the person doesn't usually know the source. Hauck (1975) had a patient who looked for worms, snakes, and bugs between the sheets and under her bed every night for months. Freud described a famous case, Little Hans, a 5year-old boy who had a great fear of white horses with black mouths. Where did these fears come from?

Many persons, who develop such a fear of knives that they can't go into the kitchen or have to throw away all their knives, often have a very stressful relationship with someone. It may not be conscious, but it is easy to speculate that inside somewhere there is a fear of losing control over their anger or self-destruction. The knife phobia is symbolic of the stress caused by anger underneath the conscious surface. A person afraid of bugs and worms in bed may have had a traumatic, dirty, disgusting sexual experience, part of which has been repressed. Suppose a young person is sexually approached by an older person; the young person may repress their own sexual interests and the resulting guilt may surface as a phobia of bugs or ugly crawlies in bed. Actually, the specific phobia may spread to a variety of things-older people, specific places (like a woods), of sex with anyone, etc.

After gathering 140 pages of information from Little Hans's father, Freud believed that Little Hans unconsciously feared his father, which got displaced to horses. What was the evidence? It was complicated and fascinating. Read Freud. It basically involved the Oedipus Complex. Little Hans liked getting into bed with his mother early in the morning. He had a fascination at age 3 with his, his father's, his mother's, and animals' sexual parts. His mother had told him his penis would be cut off if he played with it. Also, Little Hans had seen pans of blood after his little sister was born. Not long afterwards, he learned that his mother had no penis, although he had told her he thought she would have a big one "like a horse." One can see how Little Hans or any child might think of the 3-year-old equivalent of "castration anxiety."

Little Hans also became very jealous of the attention given to his little sister (sibling rivalry). He wished she had not been born. And he started to fear (wish?) that his father would leave and never come home. Obviously, Little Hans was very troubled. But how did he get a fear of horses? Consider the ego defenses described above. Surely the competition and hostility towards the father would be scary and be *repressed*. His own resentment towards the father might be *projected* to the father: "I hate him" becomes "he hates me" and wants to hurt me. The unconscious hostile impulses towards the competitor (the father) may seek expression in some way, some reasonably safe way-through symbols or dreams. It's too scary to think consciously about fighting with his father and being hurt, perhaps castrated, but he can develop an irrational fear of being bitten by a white horse with a black mouth. The phobia symbolizes the underlying conflict. And, by the way, the father was, of course, white and had a black mustache!

Summary of the Ways or Means by which Stress is Developed

If psychologists completely understood how stress and fears developed, we would know how to produce and reduce a phobia or an anxiety state. We don't. There seems to be a wide variety of life experiences which result in some form of stress, fear, anxiety, or psychosomatic illness. It would be convenient if life were simpler but it isn't. Perhaps a summary will help you review the ways you might become stressed and anxious

Environmental factors and processes

- Changes, such as sudden trauma, several big crises, or many small daily hassles, cause stress. Intense stress years earlier, especially in childhood, can predispose us to over-react to current stress.
- Events, such as barriers and conflicts that prevent the changes and goals we want, create stress. Having little control over our lives, e.g. being "on the assembly line" instead of the boss, contrary to popular belief, often increases stress and illness.
- Many environmental factors, including excessive or impossible demands, noise, boring or lonely work, stupid rules, unpleasant people, etc., cause stress.
- Conflicts in our interpersonal relationships cause stress directly and can eventually cause anxieties and emotional disorders.

Constitutional or physiological processes

- The human body has different ways of responding to stress; one quick responding nerve-hormonal system involving adrenaline, another long-lasting system involving cortisol, and perhaps others. These systems not only determine the intensity of our anxiety reactions but also our attitudes, energy level, depression, and physical health after the stressful events are over. As individuals, our nervous systems differ; however, according to Richard Dienstbier at the University of Nebraska, we may be able to modify our unique physiological reactions by learning coping skills.
- The genetic, constitutional, and intrauterine factors influence stress. Some of us may have been born "nervous" and "grouches." Almost certainly we are by nature prone to be shy or outgoing, and we inherit a propensity for certain serious psychological disorders. We don't know yet if different treatments are required for genetically determined problems than for learned problems.

Learning processes

- Having a "bad experience" causes us to later be stressed in that situation, i.e. pairing a neutral stimulus (situation) with a painful, scary experience will condition a fear response to the previously neutral stimulus. (classical conditioning)
- Fears and other weaknesses may yield payoffs; the payoffs (like attention or dependency) cause the fear to grow. (operant conditioning)
- Avoiding frightening situations may reinforce and build fears and stress. (operant conditioning--negative reinforcement)

Cognitive learning processes

- Seeing others afraid and being warned of real or nonexistent dangers can make us afraid under certain conditions. (modeling) This can include seeing a movie or TV or reading a book or perhaps just fantasizing a danger.
- Some people have learned to see things negatively; they have a mental set that causes them to see threats and personal failure when others do not. Of course, seeing the situation as negative ("terrible"), unpredictable, uncontrollable, or ambiguous is stressful.
- Many long-lasting personality factors (neuroticism, pessimism, distrust, lack of flexibility and confidence) are related to stress, decision-making, and physiological responses.
- Having a negative self-concept--expecting to be nervous and a loser--generates stress.
- Irrational ideas about how things "should be" or "must be" can cause stress when we perceive that life is not unfolding as we think it should.
- Believing that we are helpless, that we can't handle the situation causes stress.
- Drawing faulty conclusions from our observations, such as scary ideas, like "they don't like me" or "I'm inferior to them," or having unreasonable fantasies of awful consequences ("I'll be mugged") increase our fears and restrict our activities.
- Pushing yourself to excel and/or failing to achieve a desired goal and one's ideal lead to stress.
- Assigning fault for bad events, i.e. placing blame on self or on others, causes stress and anger.
- Realizing we may have been wrong but wanting to be right stresses most of us. Careful, logical decision-makers are usually calm; people who have learned to be indecisive worriers or quick impulsive risk-takers are tense.
- The ideas of dying, of loosing relationships and things we value, of having a meaningless life, etc. scare us.

Unconscious urges and processes

• Having freedom and the associated responsibility can cause anxiety and a retreat into submission to authority (see

Kohlberg's stage 4 in chapter 3), destructiveness, and conformity, according to Fromm (Monte, 1980).

- Unconscious urges from childhood (Freud says sex and aggression; Adler says overcoming inferiority; Horney says resentment of parents) may cause stress.
- Unconscious conflicts--like Oedipus and Electra complexes-cause stress which manifests itself symbolically as fears, phobias, and neurotic symptoms.
- One emotion can be converted into another, e.g. anger (wanting to kill someone) becomes fear (of knives) or lust becomes suspicion that spouse has been unfaithful, but the stress is not entirely avoided by this process.

The list could go on and on. My intention isn't to give you a "complete list" of sources of stress. I merely want you to realize there are many possibilities to explore, if and when you go looking for the sources of one of your anxieties. Be open-minded. Explore every trail. You may discover very different, unique sources. Look in every nook, consider every possibility. It can be an interesting investigation into the workings of your mind.

Summary of the Effects of Stress and Anxiety

The effects or consequences of stress are also numerous; they are both positive and negative. First, the desirable results:

- 1. We need and enjoy a certain level of stimulation...a certain number of thrills. It would be boring if we had no stresses and challenges. Some people even make trouble for themselves to keep from getting bored.
- 2. Stress is a source of energy that can be directed towards useful purposes. How many of us would study or work hard if it were not for anxiety about the future?
- 3. Mild to moderate anxiety makes us more perceptive and more productive, e.g. get better grades or be more attentive to our loved ones.
- 4. By facing stresses and solving problems in the past, we have learned skills and are better prepared to handle future difficulties.
- 5. Anxiety is a useful warning sign of possible danger--an indication that we need to prepare to meet some demand and a motivation to develop coping skills. Janis (1977) has studied one aspect of this process by observing patients scheduled for surgery. He found that patients with mild "anticipatory fear" adjusted better after the surgery than those who were traumatized or those who denied all worries.

Other researchers have found personality differences: some deniers do well post-operatively, others do not. This lead to an investigation of how to prepare different personality types for surgery, i.e. how to help the patients prepare to deal with a serious, painful stress, by Shipley, Butt, Horowitz, and Farbry (1978). They studied two personality types: repressors (deny feelings; "Forget about it; it's in the doctor's hands") and sensitizers (open to feelings; "What are the risks? I'm scared. Will it hurt a lot?").

One group of patients was shown an informative film about the medical procedure; a second group saw the same film three times. A third group didn't see it at all. There were repressors and sensitizers in all three groups. The results? The sensitizers were quite anxious if they hadn't seen the film, but the more they saw it the less stressed they became. Thus, for sensitizers it is helpful to have a realistic, detailed view of what will happen and to know the hazards as well as the help and support available. But what about the repressors who start out "dumb and happy?" Without the film, they are much more relaxed during the painful medical operation than the sensitizers, but with one prior viewing of the film, their heart rate during the operation was very high, considerably higher than even the unprepared sensitizers. However, if repressors had seen the film three times, they were fairly relaxed during the medical procedure. Thus, some people--repressors--need to deny and avoid and think of other things or have lots of advanced warning, information, practice, reassurance and support in preparing for a stressful event.

You should note two things: (I) this study involves a rare event--a life-endangering time when someone else is in control of your life. There is little you can do except try to keep your panic under control. (2) This study involves only one personality factor from among hundreds and only one approach to allaying fears from among hundreds. But it illustrates the complex kind of information you and I need to run our lives most effectively. We need more scientific knowledge, and a willingness to learn and use that knowledge in our own lives.

The negative effects or consequences of stress and anxiety

- 1. Several unpleasant emotional feelings are generated--tension, feelings of inadequacy, depression, anger, dependency and others.
- 2. Preoccupation is with real or often exaggerated troubles-worries, concerns about physical health, obsessions, compulsions, jealousy, suspiciousness, fears, and phobias.
- Most emotional disorders are related to stress; they either are caused by stress and/or cause it or both. This includes the concerns mentioned in 1 & 2 and the many psychological disorders described in an Abnormal Psychology textbook.
- 4. Interpersonal problems can be a cause or an effect of stress-feeling pressured or trapped, irritability, fear of intimacy, sexual problems, feeling lonely, struggling for control, and others.
- 5. Feeling tired is common--stress saps our energy.
- 6. Many bad habits (e.g. procrastination, see chapter 4) and much wasted time are attempts to handle anxiety. They may help relieve anxiety temporarily but we pay a high price in the long run.
- 7. Psychosomatic ailments result from stress--a wide variety of disorders are caused by psychological factors, maybe as much as 50% to 80% of all the complaints treated by physicians.
- 8. High stress almost always interferes with one's performance (unless it is a very simple task). It causes inefficiency at school and on the job, poor decision-making, accidents, and even sexual problems. In chapter 4 we discussed achievement needs and how test scores relate to anxiety. Sarason (1975) found that students with high test anxiety do more poorly on exams, especially important tests, than less anxious peers, but they profit more from the teacher's hints, suggestions, and advice about taking the test. Janda (1975) observed that males with sexual anxiety had difficulty perceiving the difference between warm, friendly, approachable women and cold, aloof ones. Other males notice the difference easily.
- 9. Anxiety and fear causes us to avoid many things we would otherwise enjoy and benefit from doing. People avoid taking hard classes, trying out for plays or the debate team, approaching others, trying for a promotion, etc. because they are afraid. It's regrettable. Let's do something about it.

Ways of Handling Stress and Anxiety

How to Cope With Stress, Anxiety, and Fears

After determining the nature and seriousness of the stressful situation you are in, your next task is to decide what you can do about it. Do you need professional help? If not, how well can you handle the threatening or challenging situation you face? Your answer to this guestion--your ability to cope--determines, along with your assessment of the importance and severity of the problem, how anxious or scared you will be. This is where your skills, knowledge, practice, experience, optimism, courage, etc. come into play--where they pay off for you. This is where you pit all your self-help ability against the threatening forces created by your situation. Your level of anxiety will indicate the outcome of this battle: if you develop and carry out a good battle plan, you should hold the anxiety to a moderate level (assuming the stresses are controllable). If you feel helpless, deny or run away, or, worse yet, blame yourself for the problems, you will have a high level of distress in the long run (Kleinke, 1991).

Several studies have evaluated the effectiveness of ordinary methods of dealing with stressful situations (Billings & Moos, 1981; Lazarus & Folkman, 1984; Carver, Scheier & Weintraub, 1989). The most effective methods of untrained people were: take responsibility for planning a way to cope, take rational composed action and avoid rash impulsive reactions, seek advice and support, look for something to "get out of it," i.e. to learn from difficult situations, express feelings privately but not publicly, stay confident, and use humor. The poorest responses to stress were: being hostile and confrontive, publicly venting strong feelings, self-blaming, indecisiveness, ignoring or denying or downplaying the problem hoping it will go away, keeping feelings to self or suppressing emotions, giving up trying, and escaping by watching TV, working, eating, smoking, or drinking a lot.

In short, people who handle difficult situations well are (1) quick to take responsibility for handling the problems that come along, (2) confident of their ability to deal with life's challenges, (3) actually able to assess the situation accurately, get help as needed, and devise a good plan, after considering many alternative approaches, and (4) effective in carrying out the plan, learning and growing with each problem so they can face the future with optimism. Well, of course! That's Superhuman! The question is how do you learn all these good things, right?

Coping is not a process that comes easy or natural to anyone (although skilled copers make it look easy). It requires a conscientious, determined effort to *learn about specific ways of coping* with diverse stresses *long before the troubles arrive*, an openness to many solutions, careful observation of many peoples' coping experiences, the courage to try different kinds of solutions, and a willingness to honestly evaluate the effectiveness of your efforts to handle stressful situations. Coping with stress requires effort over time and involves the same self-help steps as any other problem (chapter 2).

Now, let's get familiar with a wide variety of theoretically sound ways of handling stress. Since there are so many sources or causes of stress, there will be many possible "cures" or means of relief. Moreover, your stress-reduction techniques need to be tailored to you personally. The only way to know if some self-help method will work for you is to try it. That may seem overwhelming but you need to be familiar with many approaches because you will face many different kinds of stress in your lifetime. The more competent you are with many alternative solutions to problems, the better your chances of winning your battles with stress. Do not try to control stress with cigarettes, alcohol, excessive eating, shopping, gambling, excessive TV or music, etc.

Some treatment methods will probably work for you whether you understand where your stress came from or not. A quick, easy solution is great... sometimes. For instance, a relaxation technique or tranquilizing drugs will slow and calm you down. If the stress is shortlived, a little relaxation may be all you need. However, if the threat you face is persistent, relaxation or drugs, either legal or illegal, deal only with surface symptoms, they do not remove or alter the underlying threatening causes. So, when the relaxation or drug effect wears off, the original stress usually comes back. And, you are back where you started. As with behaviors, many stresses can not be mastered without understanding the causes and history of the emotions. The treatment you need may have to be tailored to your specific problem (which includes your unique underlying sources of anxiety, if any). Miller and Smith (1993) provide tests to determine the source and type of stress you are experiencing, then they suggest techniques for your type of stress. It may be reasonable, though, to try a quick, easy method first and see if it works.

Some self-help approaches may, at first, seem unlikely to work. For instance, say, you want to reduce your tension and anxiety, to escape the pressures you are feeling. What probably seem to you most likely to be effective are techniques that would help you calm down and relax. And those methods are certainly reasonable choices, but research has shown that having positive experiences and feelings decreases our negative emotions, including stress, anxiety, depression, anger and dependency. So, an anxious person might also want to focus on increasing the positive events and feelings in their life. This might include planning and doing interesting things, stopping to "smell the roses," looking for the positive aspects of your situation, reading and practicing positive self-changes (more optimism, more happiness, higher self-esteem, greater toughness), taking pride in planning and using ways to handle the anxiety, having more fun, seeking more and deeper social contact and support, etc. There are many ways to get where you want to go--be open-minded but make use of research-based self-help methods.

The purpose of the chapter, thus far, has been to give you an in depth "understanding" of stress which will, in turn, give you confidence and motivation to DO SOMETHING! Here is a list of possible self-help approaches, but first heed this caution.



WARNING: If you have serious psychological problems, you should seek professional help immediately and not attempt self-help at all by yourself.

What are serious problems? Being so anxious or confused that you can't read extensively and carefully plan a self-help approach. Being so distressed that you feel you must have quick or instant relief. Being so upset that you seriously think of suicide. Being so uncomfortable that you drink or use drugs excessively. Being so physically disabled, especially with heart disease, brain damage, asthma, ulcers, or colitis, that you require medical supervision and approval before undergoing stress of moderate intensity. Being so psychologically concerned that you already take psychopharmacological drugs or have a

psychotherapist with whom you should consult about any self-help efforts. If any of these conditions apply to you, see a professional (or continue with the one you are seeing).

Attacking the behavioral-environmental parts of the problem

Confront the stressful situation

There are researchers who contend that the most effective way (maybe the only way) to reduce a fear or phobia is to repeatedly face and handle the scary situation (Marks, 1978; Jeffers, 1987; Greist, Jefferson & Marks, 1986), if you can. You need to find out that the imagined awful consequences don't actually occur (Epstein, 1983; Rachman, 1990). So, if you are afraid of swimming, go swimming every day and do it safely. If you are uncomfortable meeting people, go to parties and socialize more, go out of your way to meet new people. If you are afraid of speaking up in class, try to ask a question or make a comment, when appropriate, every day in some class. Take a speech class.

This idea of getting back on a horse that has thrown you as soon as possible is not a new idea. Almost 100 years ago, Freud said that talking to a therapist would not overcome specific fears; instead you have to confront the frightening situation. Most therapists today agree that it is essential to practice approaching and handling stress, rather than avoiding it. First, it may help to learn a good approach by watching others (a model), seeking advice (read chapter 12!), or correcting some false ideas you have about the situation (see cognitive methods). Then, one might want to covertly (in imagination) rehearse or to role-play with a friend an improved approach to the situation (see chapter 13). Certainly some planning and practice may be helpful, but don't get bogged down overpreparing. Go do something! Take a friend along if there is any danger or if you need support. You may also prefer to expose yourself to more threatening situations gradually, developing skills and confidence as you go. Marks (1978) suggests it doesn't matter much if you are scared, what matters is that you have the courage to do it and stay in the scary situation long enough to master it. The details for confronting a fear are given in chapter 12.

Keep in mind that we are speaking only of physically harmless situations. On the other hand, if you are afraid of water, a very *real* fear if you can't swim, it would be both physically dangerous and emotionally traumatic--just plain stupid--to go into deep water. Always protect yourself from real dangers!

Exposure doesn't always work well, however. Hoffart (1993) found that about 50% of agoraphobics (afraid of having a panic attack in public places) drop out or do not respond to exposure therapy. Almost half of agoraphobics who stay in therapy and get some benefit continue to have some symptoms. This has encouraged the development of other methods, especially cognitive techniques. Also, social phobics get only modest benefit from exposure to social situations. Stopa and Clark (1993) have an explanation of why cognitive methods may work better with social phobics, namely, social phobics don't pay attention to actual feedback from others but are preoccupied with their own negative thoughts ("I'm boring... stupid... silly") which causes them to avoid interacting. Perhaps (a) social skills training, (b) more focus on other people's reactions, and (c) attempting to be more outgoing would make socializing more rewarding. Certainly, stopping the automatic barrage of negative self-evaluations while interacting would help.

Compulsions and little rituals of behavior, like washing our hands excessively or checking the locks on the doors and windows several times every night, are an attempt of reduce our anxiety. To stop these useless behaviors, the most common approach is to expose ourselves to the situation that sets off the compulsion but prevent the behavior-the useless rituals--from occurring. See a discussion at the end of this chapter about obsessive-compulsive disorders.

Find causes and escape stress

If you don't know the causes of your tension (called free-floating anxiety), a careful analysis will be worthwhile. As with any other behavior, consider the suggestions in method #9 in chapter 11. Make up a rating scale for your anxiety. Whenever the stress increases, record in a journal the severity and what is going on: when it is, where you are, what you are doing, whom you are with, what you are thinking, what you would like to be doing, what else you are feeling, etc. Try to figure out the causes. Remember social uneasiness, depression, anger, and other reactions to stress may be inherited. Also, chemicals and physiological conditions, like poor sleep, diet, premenstrual changes, and hypoglycemia (low blood sugar), cause emotions too, so look for those causes as well.

Escape the stress --if practical, one might simply avoid the uncomfortable situation. Changing your environment is an important self-help method. This approach is most appropriate for a short-term stress, but it can also involve escaping a constantly stressful environment for a few minutes of relief. For the person under continuous pressure--a demanding job, conflict with a co-worker, your own competitive drive, undergoing a life crisis--it is good to "take a break" every 2 or 3 hours by scheduling and insisting on some time for yourself. What can you do? Meditate. Nap. Exercise (60% say exercise mellows them out but few do it). Call a friend. Take a break to socialize. You can do other things to improve your environment: avoid the person who "drives you crazy." Take the bus instead of driving. Reduce the noise. Also, be sure you allocate your time wisely; do the most important work first, allow a little extra time, learn to say no.

If you are in an unavoidable stressful environment, build up your strength whenever you can. Get exercise and plenty of sleep, find something interesting to do during your time off--a good book, a craft

or hobby, a vacation. Relax listening to music or playing a game or watching mindless TV. Occasionally, take time for yourself, away from everyone if possible. Do new and fun things on weekends.

Be sure to examine your own attitude to see if the "pressure" is coming from you. Are you a perfectionist or a irritable Type A personality? Do you always have to sound brilliant and look sharp? Are you frequently angry? Is this because you blame others for your troubles? Are you anxious to beat out someone in your department? Ask yourself: how important is this? Maybe you should take the pressure off yourself and lighten up. Do you always try to please others, putting in extra time on the job or spending holidays with relatives or doing what your spouse wants or doing something every weekend with the children? Decide what *you* would like to do part of the time! Try doing something different.

Sometimes a particularly troublesome task, person, or topic of conversation could be avoided without any serious loss. By just not attending to the sources of threat, we can avoid some stresses. Remember, the experienced parachutist checks the equipment carefully but doesn't think much about both his/her main *and* reserve chutes not opening. Use thought stopping on useless worries (see correcting misperceptions and the discussion of worries later).

A word of caution: remember escaping from fear is reinforcing. Also, avoiding a scary task strengthens the frightening ideas and neglects testing the false ideas that produce the fears. So, when you stay away from a person or a situation that upsets you, you are likely to tell yourself "I'm coping with this pretty well," but the fears are still there. Your life is still restricted. Indeed, the longer and harder you work to avoid the upsetting situation, the more intense the fear of that situation may become. Besides, you have no practice coping with these kinds of situations. So, use this method with caution.

Support and self-help groups

Talk about your concerns with a friend, someone in a similar situation, a teacher, or a professional counselor. Share your feelings. A supportive, non-evaluative friend lowers our blood pressure during stressful tasks. Type A middle-aged males with few friends were three times (69% vs. 17%) more likely to die than Type A's with friends (Orth-Gomer & Unden, 1990)--but do tense, sickly, dying males just not attract friends or do friends improve our health? In any case, it seems likely that we are less afraid and have more courage when someone is with us holding our hand (Rachman, 1978).

It has been estimated that 85% of us have struggled through some stressful experience in the last five years. Mates are our most likely source of support, then relatives and friends, then less likely coworkers, parents, and children. If professionals are consulted, it's most likely to be the family physician and clergy. Talking with anyone is a good first step but neither (MD nor minister) may be good choices for extensive help; physicians primarily give drugs, seldom information about how to cope; some clergy specialize in building guilt, not reducing stress. For the most competent professional help with anxiety, go to your Mental Health Center for treatment or call and ask them to recommend a good private practitioner.

Currently, many millions of Americans are in support or self-help groups dealing with over 350 different kinds of problems. Self-help, sometimes called mutual help, groups are a growing source of help. AA was one of the first such groups, then women's consciousness-raising groups caught on in the 1960's. Now there are self-help groups for almost every conceivable problem. They often limit admission to people who have personally had the problem being discussed; usually no professionals or "experts" are admitted. This makes it clear that your improvement is your job, not in the hands of a "doctor." Members of the groups share experiences, exchange practical information or advice, and provide emotional support. Members feel better about themselves by helping each other. Often the groups are so helpful that members become intensely involved and dedicated. It is comforting to be truly welcomed and understood by fellow sufferers. There is no charge.

Science is just beginning to evaluate the effectiveness of different sources of support for different problems. A famous 10-year study at Stanford found that cancer patients who participated in a support group lived twice as long as those who didn't meet with a group. Groups no longer have to meet face-to-face; within the last five years, four research publications have documented the effectiveness of *online* cancer support groups. Likewise, drug abuse prevention groups run by older students (but still peers) get better results than teacher-led groups. Many self-help group members are veterans of drug treatment and psychotherapy; many believe they have gotten much more from self-help groups than from professionals. The Self-Help Sourcebook Online (http://www.selfhelpgroups.org/) summarizes more research suggesting groups provide help also with diabetes, heart problems, child abuse, mental illness (to both the patient and the family), children of alcoholics, and other disorders or difficult circumstances.

Self-help or mutual-helping groups provide many benefits: suggestions about how to cope, a chance to learn from others' experience, support and encouragement, meaningful and needed friendships, and a reduction of guilt (by finding others like yourself), and an increase in hope (Hodgson & Miller, 1982). Another major advantage of mutual-helping groups is that they are not only a source of support but they are also a place where the helpee can become the helper. It's probably as beneficial to be a helper as to be a helpee, maybe more so (Killilea, 1976). For more information about such groups refer to Lieberman and Borman's (1979) *Self-help Groups For Coping With Crises*. But the early data suggest that social support is not always helpful (although usually it is), that the "supporter" can be drained and the "supportee" pressured, that many poor people prefer isolation to exposure to a middle class helper, that relatives (e.g. 20% of the mothers of young mothers) may be intrusive and bossy, that the best source of support depends on the problem, that it is not the amount of support but the nature of the help that counts, and that it may not be the actual support so much as believing that dependable support is available if and when it is needed that does the most good. There are even times that you shouldn't help a friend: when he/she doesn't want help, when he/she has enough help already (you should especially avoid interfering with therapy), when he/she is doing something you consider morally wrong, when he/she asks for but never takes your advice, and when he/she is using you.

One study illustrates the complexity of deciding "when will support help?" Veiel (1993) found that depressed women who had been hospitalized but were now recovered were harmed by post-hospital stays at home surrounded by close family support. The more relatives and fewer friends they had and the more they stayed at home and didn't work outside the home, the more likely these women were to become depressed again. It is not clear what caused the detrimental effects, but we shouldn't conclude that support is always helpful. Note that similar depressed women discharged from the hospital before full recovery benefited from family support (as did recovered women who worked and both recovered and unrecovered men). The important point is: some friendships and group interactions are harmful. For instance, groups of depressed people who merely share the misery of their lives and neglect self-help may prolong each other's depression. Likewise, there is clear evidence (Dishion, McCord & Poulin, 1999) that interactions between delinquent adolescents lead to more trouble with the law, drug use, violence, and even maladjustment as an adult. Science is slowly discovering when and what kind of "support" is unhelpful. Just as all therapy may not be helpful, all socializing is not helpful either.

What does this mean for self-help? First, don't hesitate to seek help if you need it. And, don't hesitate to offer help. If a friend of yours is having a hard time, avoiding him/her is far more often a mistake than a wise decision. So, reach out and show your friend your concern, then observe to see if he/she wants your help and in what ways. You don't think you can help others? There are organizations that specialize in teaching practical ways of becoming a better helper, one-on-one or in a group. Try Re-Evaluation Counseling (http://www.rc.org/) or Co-Counseling (http://www.cci-usa.org/) . Both encourage a simple, believable way of helping and being helped, based on the benefits of expressing strong feelings safely, called discharging. Second, if the first group or source of help you reach out to doesn't seem to be beneficial, quickly try another source of help. Caution: going to a group with much more severe handicaps than you have, can be traumatic. Another Caution: interacting at length with people who have habits and attitudes you do not want to acquire is probably unwise. Thirdly, one group, no matter how good, probably

won't be the best source of help with all the problems you might face in a life-time. Fourthly, self-help groups do not provide all the help you need; you may need professional help (see Find a Therapist) and you must use self-help methods outside your group (Tessina, 1993).

In effect, you are changing your environment by seeking new sources of support or help. Sometimes new viewpoints are necessary; intimate friends (lovers, best friends, parents) may be too involved to be good helpers. Beyond family, friends, physician, and clergy, there is a bewildering array of possible sources of support, especially now that the Internet is so popular. Just as it is difficult to know about and to locate available self-help books, so it is difficult to know the government supported agencies and the private self-help groups that offer help in hundreds of problem areas. If you want to try a local support group, start by calling your local Mental Health Center for information. Sometimes the local newspaper and phone directory lists groups. Also, the local United Fund and community library might have a list of self-help groups. Perhaps easiest and best is to look up Self-Help Sourcebook Online (http://mentalhelp.net/selfhelp/) which is a great resource to help you find local groups by location and by disorder/problem. You can also write or call American Self-Help Clearinghouse, St. Charles-Riverside Medical Center, Denville, NJ 07834 (Phone: 1-201-625-7101). If there isn't a local group of interest to you, this organization will help you establish your own self-help group. The National Self-Help Clearinghouse, 25 West 42nd St., New York, NY 10036 (Phone: 1-212-642-2944) is also helpful. A book by Wuthnow (1994) provides information about the pros and cons of joining a support group. Likewise, there are articles and studies discussing the advantages, disadvantages, and effectiveness of online self-help groups, e.g. go to http://www.mentalhelp.net/ or to http://www.google.com/ and do a search for "effectiveness of selfhelp groups." Also see Dr. Suler

(http://www.rider.edu/~suler/psycyber/acoa.html) and Storm King (http://webpages.charter.net/stormking/).

People have been drawn by the millions to groups--perhaps appropriately called communities-on the Internet. How do you find the best ones for you? I favor the online support groups designed for many specific concerns, such as at Mental Earth Community (http://www.mentalearth.com/) or PsychCentral's Forums (http://forums.psychcentral.com/). Comprehensive listings of online support groups are provided by Support Groups.com (http://www.support4hope.com/index.html) and by Dr. Grohol (http://psychcentral.com/resources/Other/Support_Groups/), and Topica offers email discussion lists (http://lists.topica.com/). Email support groups are also listed by Support Path.com (http://www.supportpath.com/) and Grohol's forums (http://forums.psychcentral.com). Many of the major medical Web sites and sites for specific psychological problems, like depression, panic disorder, battered women, rape victims, STD victims, etc. have their own online discussion groups. Likewise, AOL has its own Online Psych. Everyone could find a group of interest.

A few of the supportive agencies and groups in regard to stress are:

- Local Mental Health Centers; Alcohol and Drug Abuse Centers. Professionals work in these agencies; make use of them. Fees are based on ability to pay.
- Local Alcoholics Anonymous (AA), and Al-Anon or Alateen for relatives of alcoholics. These are self-help groups; no professionals and no charge. See alcoholism in chapter 4 for Web sites.
- Local and online self-help groups based on AA principles: Gamblers Anonymous, Overeaters Anonymous, Neurotics Anonymous, Psychotics Anonymous, Parents Anonymous (for abusive parents), and others. See chapter 4 for possible Web sites.
- Local and online groups for phobic, abused, abusing, depressed, manic-depressive, schizophrenic, obsessive-compulsive, workaholic, sex addicted, over spending, etc. persons.
- Local and online groups for people who are going through a crisis, such as death of a spouse or child, divorce of parents, suicide by a relative, being fired, being dumped, suffering AIDS, serious injury, mastectomy, vanished children, etc.
- Local diet and exercise clinics (see comments in chapter 4); online dieting and eating disorders groups. See chapter 4.
- Parents without Partners
 (http://www.parentswithoutpartners.org/), Big Brother/Sister
 Organizations
 (http://www.bbbs.org/site/c.diJKKYPLJvH/b.1539751/k.BDB6/H
 ome.htm), Scouts, local sports-recreation programs, Foster
- Grandparents, and others.
 Department of Family and Children Services, especially to investigate child abuse; Welfare Departments; Food Stamp Program.
- Women's organizations such as Women's Centers for abused women, Women Against Rape, Day Care Cooperatives, university programs in Adult Reentry and Woman Studies, Family Planning Centers, YWCA, Displaced Homemakers (employment services), Professional Women's Organizations, Equal Rights Organizations and others.
- Organizations for the aged include Gray Panthers (http://www.graypanthers.org/), Foster Grandparents, Visiting Nurses Associations (for health care at home), Elder Hostel Program (travel and education), Senior Citizen Centers, Council on Aging or state Department of Aging, Meals-on-Wheels have free meals for the elderly, and volunteer programs at nursing homes and hospitals and so on.
- For employment problems: Employee Assistance Programs, state Employment Office, Job Training Programs, Displaced Worker Projects, Occupational Safety and Health Hot Lines, community colleges offer various technical skills courses, and there are many occupational-professional-union organizations.

- Personal growth groups, Marriage Improvement Programs (http://www.smartmarriages.com/directory_browse.html), encounter groups, workshops or courses on interpersonal communication or specific concerns, self-help classes, etc.
- Many support groups are focused on specific health problems: cancer, heart disease, leukemia, loss of a child, mentally and physically handicapped children, etc. See the health Web sites given later in this chapter.

Warnings: A few self-help groups, similar to religious cults, become dominated by a highly controlling leader who demands loyalty to him/her or to the group. Be leery of any group that attempts to control your life. Likewise, avoid groups which offer mystical experiences, such as talking with the dead or curing physical diseases, or which specialize in uncovering repressed memories, such as childhood sexual abuse or past lives.

Relaxation training

One obvious way to counter stress and anxiety is to learn to do the opposite, to relax. 2,500 years ago, Chinese philosophers, who believed suffering was a part of existence, suggested a way to avoid frustration: give up your wants and ambitions! They made a good point but Westerners find it hard and undesirable to be goalless. Besides the Buddhist's way, there are many other ways to relax: (a) progressive (Jacobson, 1964) or deep-muscle relaxation, (b) stretching or breathing exercises, (c) cue-controlled relaxation (pairing relaxation with a word like "relax" and using the word as a command when needed), (d) suggested relaxation of the body ("you are getting relaxed, your arms are getting warm and heavy..."), (e) suggested relaxation fantasies ("you are on a warm, sunny beach..."), (f) cognitive and sensory tasks ("listen to this story...think about your vacation...concentrate on..."), (g) meditation or Benson's method of relaxing, and (h) biofeedback. Methods of relaxing are described in chapter 12. Of course, there is also exercising, having sex, sleeping, reading, watching TV, socializing, and diverting attention to pleasant tasks.

Since we each respond to stress in a different way--some worry, some get mad, some get stomach or headaches, etc.--we each need to find our own way to relax. Ask yourself if your anxiety is more physical or mental. When you are anxious, if it is mostly physical, your heart will speed up, you'll feel tense, perspire, freeze up, hands or knees will shake, hands are cold and damp, stomach will get upset, and you need to go to the bathroom. If your anxiety is mostly mental, your mind can't concentrate, you have scary thoughts, worry a lot but can't make decisions, and become obsessed with the problem you face. If your reaction to stress is mostly physical, try relaxing your physical body by exercising, deep muscle relaxation, stretching, taking a bath, getting a massage, etc. If your reaction is mostly mental, try relaxation fantasies, meditation, cognitive tasks, reading, TV, calming self-instructions, pleasant fantasies, etc. Haney and Boenisch (1987) will help you find relief.

There is accumulating evidence that the effects of relaxation, no matter how achieved, last for a couple of hours beyond the 15 to 20 minute relaxation training period. This is true for exercise too. The exact mechanism for this is not clear, however. The relaxation may linger on or the stressed person may learn to briefly re-relax themselves throughout the day. The latter view is suggested by Stoyva and Anderson (1982) who contend that chronically anxiouspsychosomatic-insomniac patients have lost their ability to rest. Biofeedback confirms this theory somewhat since anxious people maintain physiological tension and psychological uptightness much longer than other people. Thus, the best approach may be to teach ourselves how to relax every few hours during stressful days.

We may even be able eventually to develop a more relaxed personality. Try to stay calm. Attend closely to what others say and do. Don't interrupt. Talk less and speak softly, slowly, and in a gentle manner. Don't get angry; just try to understand the other person's viewpoint. Say enough to show you are empathic. Breathe slowly and smile a lot. But don't be phony.

Relaxation methods have helped with many kinds of stresses-general anxiety, Type A personality, and psychosomatic disorders. Many of the professional treatment programs emphasize frequent relaxation of the muscles and reducing mental strain, such as selfcriticism, worry, and the excessive demands that we make of ourselves ("do the laundry, fix the car, prepare a speech..."). Indeed, one study indicated that relaxation does not occur because we relax our muscles but rather because we relax our brain and stop sending out "try harder messages" to our body (Stilson, Matus, & Ball, 1980). How to relax by changing our thoughts is described in chapter 14. Some of us apparently need to relax muscles, others need to stop certain thoughts, others need to exercise, others need to sleep more or better, others need to cuddle and have a massage, and others need to read or listen to music, i.e. "different strokes for different folks." If you don't know what you need to relax, try different approaches (see chapters 12 and 14). Don't use smoking, drinking, bingeing, and coffee as a way to relax.

Some self-help approaches may, at first, seem unlikely to work. For instance, say, you want to reduce your tension and anxiety, to escape the pressures you are feeling. What probably seem to you most likely to be effective are techniques that would help you calm down and relax. And those methods are certainly reasonable choices, but research has shown that having positive experiences and feelings decrease our negative emotions, including stress, anxiety, depression, anger and dependency. So, an anxious person might also want to focus on increasing the positive events and feelings in their life. This could include planning and doing interesting things, stopping to "smell the roses," looking for the positive aspects of your situation, reading and practicing positive self-changes (more optimism, more happiness, higher self-esteem, greater toughness), taking pride in planning and using ways to handle the anxiety, having more fun, seeking more and deeper social contact and support, etc. There are many ways to get where you want to go--be open-minded but make use of researchbased self-help methods.

Desensitization

A method that must be considered for overcoming unreasonable or excessive fears. This well researched procedure is based on the belief that a strong relaxation response can gradually overpower and inhibit a fear response to a particular stimulus. The desensitization method involves first relaxing, then imagining mildly scary situations, and works up to relaxing in the most scary (but not actually dangerous) situations. This is a painless method of reducing anxiety or fear reactions because you *must stay deeply relaxed* throughout the entire process. It avoids all stressful actual confrontations with the scary situation, being done entirely in one's imagination. So it is easy to carry out and always available--it just takes fantasy (see in vivo and Exposure for versions that require confronting the real situation). The method was developed by a psychiatrist, Joseph Wolpe (1958), and based on classical conditioning, using the same principles as Watson and Jones in the 1920's.

Extensive research has evaluated desensitization, indicating it is an effective method, but powerful placebo or suggestion effects are just about as effective, suggesting the method may not add a lot beyond the expectation of improvement. Wolpe (1980) has claimed that the method is also helpful with many psychosomatic disorders because it reduces the underlying anxiety. No competent self-helper should overlook desensitization as described in chapter 12; it is potentially useful in any situation with any unwanted emotion.

Flooding and venting feelings --experiencing and releasing intense emotions is thought to be beneficial in a variety of ways. First of all, Freud sought intense emotional reactions in therapy, called *abreactions*. These repressed memories usually involved very painful early childhood experiences. The patient would relive these experiences and as a result gain insight into the source of his/her current problems. With this new understanding, the fear, neurotic behavior, or psychosomatic complaint will go away, supposedly. Primal therapy, which uncovers the hurts of birth and early childhood, is based on the same assumptions. The newer therapies by John Bradshaw and others, which reclaim and nurture the hurt inner child, also relive the disappointments of childhood. In a sense, like desensitization, this is confronting the inner sources of fears and traumas, usually from childhood and often well repressed (see the end of this list).

Secondly, Stampfl & Levis (1967) developed a treatment method that involved telling phobic patients horror stories that aroused their intense fears. It was called implosive therapy and is now known as *imaginal flooding*. The idea is for a phobic person to imagine scary situations and experience the fear as intensely as possible. Usually the therapist vividly describes the scary scenes, deliberately frightening the patient as much as possible (he/she is told the purpose). The phobic person continues imagining the stressful scenes for a long time. Gradually the emotional reaction to the ghastly images declines. Eventually the patient is imagining the terrifying fantasies but not responding with fear. In this way, much like cue exposure for compulsives, the connection between a stimulus (flying) and a response (fear) was broken, i.e. unlearned. And, the patient has learned that he/she can stand intense fears.

Thirdly, another way to reduce a fear using flooding is to place yourself in the actual frightening situation until the fear "runs down." As in Exposure, the confrontation could result in a strong fear response initially that gradually declines. Suppose you had a fear of heights or elevators. Getting on an elevator might be terrifying but if you stay on it all day, you learn three things: (a) nothing terrible happens (beyond the initial stress and possible motion sickness), (b) by the end of several hours you are going up and down without fear, and (c) you are not weak, you can stand stress, you can master the fear. Flooding is the treatment of choice for agoraphobia.

Fourthly, a similar approach, using flooding, involves the *paradoxical intention* of trying to increase a fear or anxiety. For example, a female student in my class had a fear of the dark, particularly coming home and imagining that someone was lurking in the dark to assault her. She had never been attacked but it was a serious and long-standing fear. First, she tried self-desensitization. It did little good. Then she decided that whenever these scary fantasies started, instead of resisting them she would try to see just how scary she could make them. Much to her surprise, after trying to really scare herself a few times, the fears diminished. It seemed to her as though the unwanted fantasies went away (gave up?) as soon as they lost the power to upset her.

People who have panic attacks often think they are going to faint or are having a heart attack and will die. So, therapists using paradoxical intention may ask the patients to exaggerate their symptoms, e.g. they might be instructed to become frightened and sweat or to faint or to try to bring on a heart attack. Of course, these dire expectations, that phobics desperately try to avoid, can't ordinarily be produced even when they try hard to do so. So, people can learn to "take charge" of their symptoms and, thus, the attacks lose their power to scare the victim. Lastly, see the extensive discussion of catharsis in chapter 7. It is commonly thought that getting feelings off your chest is helpful, especially sadness and anger. Certainly many people find it helpful to "have a good cry" or to admit openly that they are nervous and to "let go" of those feelings. Telling others about our fears and doubts may be the first step to finding out we aren't weird and to overcoming the stress.

Stress inoculation

Epstein (1983) believes stress and anxiety are naturally reduced in daily life by repeatedly and gradually thinking about more and more upsetting aspects of a frightening situation. If the emotions become too intense, however, the fears may build instead of diminish. But if our anxiety responses remain within certain limits as we ruminate, we can reduce our fears by imagining over and over specific details of confronting our boss or jumping out of an airplane. It is a natural healing process. If true, it is another explanation for desensitization. We may not need to be deeply relaxed.

What are the therapeutic implications of Epstein's notions? That we can reduce unrealistic fears by experiencing (in reality or in fantasy) the scary situation so long as the feared harm doesn't occur. We must fully experience the stimulus situation without distortion or defenses. So start with less scary aspects and work up to the most scary (like the desensitization hierarchy--see chapter 12). As we experience the stimulus and the fear, we come to realize that it is our view of the situation--our incorrect expectations--that make it so scary, not the actual stimuli. We learn to see the situation realistically. We gradually reduce the fear response--so that we can be fairly calm parachuting out of a plane at 10,000 feet. That is stress inoculation.

For some people, stress inoculation is basically learning to "talk yourself down" or facing a stress and finding ways to handle it. For others (Meichenbaum & Cameron, 1983; Meichenbaum, 1985), "stress inoculation training" is a complex therapy process (see method #7 in chapter 12). It is a major part of Cognitive Behavior Therapy and involves (a) helping the patient become a better observer and a more accurate interpreter of incoming information. (b) Teaching stress management skills, such as social interaction, problem solving, and how to use self-instructions for relaxation, self-control, and praise (see method #2 in chapter 11). (c) Help in applying the various self-help skills in life. In short, this method is designed to be used by a therapist, although the techniques are similar to what you are learning in this book. In fact, written how-to instructions for stress inoculation were recently provided test-phobic students (Register, Beckham, May & Gustafson, 1991). The written material alone helped.

Use "nervous energy" --channel the anxiety created by stress into constructive, beneficial activities, such as taking a course, preparing for a promotion, helping others, etc. Hans Selye believed that meeting challenges, like competing in sports or being active in a cause, produced "good stress" which gives us a rush or a "high" feeling. Good stress keeps us motivated and enthusiastic about life. So, Selye recommended that we expose ourselves to as many good stresses as we can handle, so long as we don't get over loaded. When a person becomes over loaded with good or bad stress, he/she should use the energy in a way that works off some tension, e.g. playing tennis, jogging, walking, doing aerobics, hard physical work, etc. In short, make stress work for you. Turn frustrating obstacles into exciting challenges.

A related concept is that we need some stress--some pressure, not too much--to do our best. Every athlete knows that he/she needs keen competition to become his/her best. Every student should be aware that the quality of his/her education is, in large measure, determined by the motivation and ability of the competing students. The wise person seeks, welcomes, and uses this pressure to achieve his/her own highest potential.

Develop toughness and skills

Physical demands must be made on the body to develop strength, we must be exposed to bacteria and diseases to develop immunity to them, and humans may need to be exposed to stresses and emotions before we develop coping mechanisms and toughness. Type A personalities with their hurried, competitive, tough, aggressive behavior are actually weak at coping with stress, their bodies take a long time to return to normal after becoming upset (and they have a lot more illness and die earlier). Dienstbier (1989) points out that people in very demanding and responsible positions develop very healthy reactions to stress, *providing* they are in control and have an opportunity to cope. If you give someone lots of responsibility and little power, however, they develop very unhealthy reactions, including feeling helpless.

How do you develop toughness? By being repeatedly exposed to demanding situations while having the skills, power, courage, and confidence to deal with the challenges. It may help you become psychologically tough if you physically exercise, but I suspect you must gradually handle more and more stressful, difficult problems and interactions at work or in your personal life, not just in the gym. Thus, using relaxation methods to overcoming fears is only the beginning; true toughness and durability comes after hard knocks. As we discussed in Exposure above, our attitude has to change from "I can't stand it" to "I can handle it."

Salvatore Maddi and Suzanne Kobasa (1984) studied healthy executives and tried to discover ways of increasing toughness. They found hardy people were (a) committed to their work (they, like selfactualizers, have a mission they believe in), (b) have a sense of control over what happens in their life, and (c) zestfully seek and take on challenges, feeling they will learn from the experiences. They seldom get sick. They were tough. Maddi and Kobasa then tried to teach less hardy managers to be psychologically tougher using three methods: problem-solving to reduce the stress (much like the chapter you are reading right now), focusing (for gaining awareness of hidden emotions, see method #5f in chapter 15), and self-improvement projects (to improve self-esteem and a sense of mastery). So, by learning self-help, you are getting tougher (IF you expose yourself to tough situations and come out a winner most of the time). You have to move on from just handling anxiety to taking the many risks involved in making lots of positive things happen in your life.

Skills training --if we feel inadequate, one solution is to become more adequate, even over-compensating for our real or imagined weakness. Chapter 13 provides a variety of skills which might reduce stress. Examples are: problem-solving ability, decision-making skills, social skills, assertiveness skills, empathy responding skills, time management skills, study skills, leadership skills, etc.

Cognitive methods

Observational learning and modeling --watch a person similar to you handle the frightening situation. This is called "guided mastery" or modeling. Cognitive therapy has repeatedly shown that humans can learn to overcome fears by observing others, preferably not an expert and not a person overwhelmed with fear. If you wanted to be comfortable handling snakes, it wouldn't help much to watch a snake handler catch and milk rattle snakes. But watching a snake phobic person cautiously and nervously approach and briefly touch a harmless, pretty, little snake would help you, with encouragement, to do the same thing. Modeling is discussed in chapter 4.

Cognitive treatment methods --if you change your assessment or interpretation of a scary situation, your emotions in that situation will often change. That is the basic idea of cognitive methods, but there is a wide, almost overwhelming variety of ways to alter your view or interpretation of a situation. Let's see if we can clear this up somewhat.

Some cognitive methods consist of changing your self-talk and thinking, e.g. substituting constructive, positive self-statements for self-defeating statements to reduce your fears. As we just saw, this is the essence of stress inoculation, usually called a cognitive-behavioral method. There are certainly other methods, sometimes called cognitive, which involve learning how to think differently: learning problem-solving, skills, and planning methods; using paradoxical intention and flooding; developing healthy attitudes and toughness; and gaining insight. Some writers even differentiate between cognitive methods that simply change your thinking or automatic assumptions (changing "I will fail" to "I can handle it") and other cognitive methods that require you to challenge the logic or validity of your own ideas or conclusions or schemas ("feeling dizzy means I'm going to pass out"). The latter is considered by some to be "deeper" or *real* cognitive therapy.

First, let's compare two different treatment approaches based on different theories. There is a squabble between conditioning and cognitive explanations of fears. You may need to understand these different theories in order to select the self-help method that best fits your condition. Each theory recommends somewhat different treatment methods, e.g. exposure to the scary situation vs. changing erroneous ideas (next 3 methods) or guided mastery. If phobias are largely conditioned physiological reactions, then you should be able to reduce the phobia response by exposing yourself for a long time to the harmless but frightening object or situation (although this alone would surely change your appraisal of the situation). But, if phobias are largely caused by your own erroneous beliefs or thinking, you would need to correct your appraisal of the situation, learn some skills useful in that situation, correct your false conclusions about the situation, and re-evaluate your ability to cope with that situation. A therapist, self-help quide, or ordinary person acting as a model would probably be helpful when using many cognitive techniques with strong fears or panic.

Despite being very different theories, the treatment of fear based on conditioning and cognition have a lot in common. Both eventually require the frightened person to confront the frightening but harmless situation. This exposure will usually gradually extinguish the intense fear response *and* cause the person to think more realistically about the situation. Which is the critical change? The scientist needs to know. It doesn't matter much to the phobic, *if* his/her treatment method works. If the method you try doesn't work, just select another method.

Is it possible that some fears are based more on conditioning and others are caused more by fantasies and faulty perceptions or thinking? Yes, very likely, although psychologists can't, at this time, tell one kind of fear from another. Joseph Wolpe used desensitization with a patient fearful of cockroaches. It didn't work. Then he learned that her husband was nicknamed "Cockroach" and that they had serious marital problems. After Wolpe did marital therapy, the relationship improved and the cockroach phobia went away without special treatment. Wolpe now believes about 1/3 of phobias are cognitive and don't benefit from desensitization, which he "invented." So, when we are distressed, we will just have to try different treatments and see what works best for us. Knowing the different theories, however, helps you find or devise different approaches to changing.

Fortunately, the research to date indicates that *both exposure to the frightening situation and correcting our faulty perceptions and conclusions* are generally effective in reducing fears. As you consider the next three cognitive methods try to decide which would work best for you.

Correcting faulty perceptions --validating or having our perceptions confirmed by others is sometimes a critical step. We are frequently not aware of our specific misperceptions, but we can, in most cases, learn to recognize our tendencies to distort, such as exaggerating our importance, denying our responsibility, expecting the worst, being overly optimistic, blaming ourselves, distrusting others, and other ways. If we are aware of our own perceptual biases, we must constantly check our impressions or views in that area with others. If we are not aware of our perceptual distortions, we must occasionally compare other people's honest assessments with our own to make sure we are seeing things accurately.

If persons, who are afraid of spiders, see pictures of spiders paired equally often with a tone and a shock, they will strongly believe that they have seen spiders associated much more often with a shock than a tone (de Jong, Merckelbach, Arntz, & Nijmam, 1992). This distortion of reality does not occur in people who are unafraid of spiders. Thus, if you are phobic, you can not blindly accept "what you see with your own eyes." You must make systematic observations, keeping careful records. And you must check out your observations with others.

Martin Seligman (1991) and many other researchers have shown that optimistic or pessimistic "explanatory style"--how you automatically see and explain things--influences many things, including how well you do in school and on the job, and even your general health. That is, optimists do better. So if you have a pessimistic, "I'm helpless," attitude, it needs to be changed (see chapters 6, 8, and 14). How? Test out your expectations. If you believe that you can do nothing that would help with a problem you have, try some approach anyhow and see if it fails. If it does, then make three or four more good efforts using a different attack, and see if they all fail. Likewise, if you believe that no one would help you or be honest with you, test out three or four people and see if your predictions are accurate. In time, you can develop a more optimistic attitude based on actual experience; look for the opportunities to learn and grow that are hidden in every problem.

Cognitive therapy also uses distraction and "rational responses" as substitutes for depressing or catastrophic perceptions of the situation. Example: a person with a panic disorder may first experience nausea, then shakiness, heart racing, lack of breath, and finally panic. The accompanying thoughts are "I hope I don't get upset here," "I'm getting sick," "I'm having a heart attack!" "I'm going to die," "I've got to get out of here," and later "I'm a nervous wreck... I'm going crazy." The therapist might teach this person to reproduce the same physical symptoms by hyperventilating, to control the tension by distraction ("sit down, read the paper, and relax"), and to replace the catastrophic thinking with rational, reassuring thoughts: "I can prevent this panic attack," "my heart is beating fast but that is okay," etc. You can teach yourself these kinds of things. Helplessness and self-efficacy seem to be the opposite ends of the same dimension; increasing self-confidence in self-control is discussed in Planning self-improvement (see pages below) and in method #9 in chapter 14. More details about correcting our faulty initial impressions are given in method #5 in chapter 14 (straight thinking). Another excellent but complex (realistic!) example of checking out our interpersonal perceptions is given by R. D. Laing (see method #7 in chapter 13).

Changing the way we see the world is not a quick and easy process. You will have to check out your views in many situations over and over. It's hard but if your initial perception of reality is wrong, all your subsequent thoughts based on those impressions are faulty too. That's serious.

Stop irrational thinking --after perceiving the current situation, we compare what is happening (as we see it) with what we want to happen or believe should be happening. When we, others, and the real world are not as good or as satisfying as we had hoped, we get upset. Thus, the Rational-Emotive therapist says it is our beliefs that cause stress, self-doubts, shame, depression, anger, and most emotions. We can learn to recognize our irrational demands and reactions when life doesn't work out as we would like. Examples:

Rational-Emotive therapy techniques (method #3 in chapter 14) will help you to identify a variety of irrational ideas and to think logically. Example: "It would be awful if ____(*Joe*) ____ didn't like what I did" is a common thought. But someone not liking what you did is merely a temporary nuisance or disappointment, not an awful, catastrophic life event. Indeed, if you knew the person well, you might understand exactly why he/she doesn't like it (they are responding "lawfully" for them). It isn't the reaction you want, but you can handle it.

We are all prone to automatically think "wouldn't it be awful if I got fired... if my lover wanted someone else... if I got cancer... " or even "if she/he turned me down after I asked her/him for a date... if I flunked this course... if I dented the car... if I said something silly... if my fly/blouse came open... " The truth is that life goes on and very few events are truly "awful," most unfortunate incidents are naturally occurring, often unavoidable, short-term inconveniences (see discussion of determinism in chapter 14). Also, most worries never happen! Many therapists ask clients to imagine the worst possible outcome in their situation, and then ask, "So what would happen, if that occurred?" Or, the therapist might ask, "What effect will this have on your life 1 or 5 years from now?" Usually there is a solution or some outcome that isn't entirely awful forever.

Besides being upset if things don't go as we'd like, other common irrational ideas produce stress, such as "if anything could go wrong, I should worry about it a lot" and "if I or anyone does anything bad, we should be blamed for it and punished." These thoughts suggest we are striving for more control over the world than is possible. Others tell themselves, "I can't do anything about what happens." This also causes stress, because we see ourselves as having no control over the world.

Perfectionists need to give up impossible goals (see chapter 6). Do the best you can and accept the outcome. Inspire and help others all you can and accept whatever happens to them too.

The Rational-Emotive therapist tries to quickly identify the client's irrational expectations and ideas. He/she goes on to show the patient how unreasonable, foolish, and harmful these ideas are. Then the client is shown more reasonable ways to think (talking to him/herself) and is told it is his/her choice as to what beliefs to have, i.e. to be irrational and "upset" or rational and "at peace with the world."



Correct faulty conclusions --although our brains have enormous capabilities and are basically responsible for our domination of all other animals and much of the physical world, we are also remarkably prone to reason illogically. Methods #1 and #8 in chapter 14 describe many examples of faulty and/or negative thinking; none of us think straight all the time. In Correct misperceptions above, the biases and needs have instantly distorted our perceptions; in contrast, here we are talking about false interpretations of our perceptions (accurate and inaccurate) as well as wrong conclusions finally drawn as a result of a faulty reasoning process. It is the difference between instantly sensing the boss is mad when she/he is not and falsely concluding he/she is mad after interacting for several minutes. Our thinking might go like this: "She hardly spoke to me and seemed preoccupied. I'll bet she read my report and didn't like it. I wish I had spent more time on it. She always asks about my weekend, but today she didn't talk about anything but work. I think she's irritated. She has a short fuse anyway. I'll bet I catch hell." Thoughts evoke feelings whether they are true or not. The boss may merely be absorbed with an important dinner date. We may not be fully aware that we are drawing a conclusion, we are just "thinking," but we are very aware of the resulting stressful emotions. If we closely attend to our reasoning and question the basis for our conclusions, we can detect and correct many of our false ideas.

However, without double checking our thinking, we misinterpret many everyday events and draw false conclusions that drastically alter our lives for the worse, e.g. "I will never amount to anything," "no one will ever love me," "I was born to be a trouble-maker," "I'm not very smart," "you can't trust anyone," and on and on. These dramatic general conclusions must be tested out and corrected one small step at a time. In addition, there are many other specific stress-producing false notions:

- The obsessive-compulsive disorders think "I have germs on my hand, I must wash" or "I hate to see the house all messed up" and the phobic says, "I feel sure this plane will crash before I get to Kokomo" or "I hate mice--they scare me to death."
- The worrier spends hours thinking but he/she creates more anxiety than solutions; see discussion in the last section of this chapter about how to control worries.
- The self-doubting depressed person has many stressful "cognitive distortions," such as concluding that everyone will find you boring just because one person seems uninterested in what you have to say (see chapter 6).
- The person who has panic attacks interprets certain bodily sensations as being a sure sign of an impending disaster: getting breathless means he/she is about to stop breathing and die, a pulsing forehead means he/she is having a stroke, feeling shaky means he/she is loosing control and going crazy (Clark & Ehlers, 1993). The shy person thinks everyone sees his/her sweaty palms, shaking knees, or confused mind; they think other people don't have these kinds of reactions.
- Many of us have misconceptions and unreasonable assumptions which cause problems, such as "I should be happy like other people are" (when they aren't happy), "other people think and feel like me" (when they don't), "I can't change--it is my nature" (when you can change), "I got it from my dad" (when you didn't), and so on (Flanagan, 1990).

We humans think in many ways that handicap and disturb ourselves. Whenever you are upset, go looking for your irrational thoughts (see methods #3, #4, and #8 in chapter 14). Notice that it takes careful self-observation and self-awareness to detect these psychological pitfalls, because the thoughts occur so quickly and automatically. You need to train yourself to be a good self-observer. How? For a few days pay attention to the situations that upset you, your physical symptoms (and what they suggest to you), your inner dialogue and thoughts about the causes and consequences of your fears. Do this by keeping a journal and recording your thoughts about your anxiety and fears on a tape recorder. Then, learn to detect your self-critical inner voice and uncover your internal mental pictures or beliefs (schema) about your fears by reviewing your journal and carefully listening to your recordings. This will take a few hours. Ask yourself how accurate your self-judgments, your explanations of your fears, and your views of your situations really are. Ask if these ideas help or harm you. Write down your negative expectations, your questionable ideas, and harmful self-judgments. These ideas become the basis for the next step, namely, testing the validity and reality of your thinking.

You will note that both behavioral and cognitive approaches involve exposing yourself to the frightening situation, but the exposure is *done* for different reasons (Hoffart, 1993). The conditioning oriented behaviorist simply directs you to break the connection between the situation and the fear response. Any old exposure will do (if it is long enough). The cognition oriented therapist, however, collaborates with the patient to clarify the patient's hypotheses about what will happen in the frightening situation. Examples: if the nervous person says "I'll fail" or "they will reject me" or "I'll blush and sweat and that will be awful" or "I'll get so upset, I'll go crazy" or "if I panic, I'll die" etc., the cognitive therapist suggests another more realistic alternative outcome. Then it becomes a simple matter of testing these different hypotheses (or schema), i.e. find out what will really happen in the scary situation. One might ask "how could I test my notion that they will laugh at me... that I will faint... that he will get mad...?" This will involve exposure to the situation to test the distressed person's thoughts and explanations about his/her fears. Always have an understanding friend with you.

We must give up our defenses against the fears. Hoffart described an agoraphobic patient who avoided and protected herself from the feared situation in every way possible: she attended to shop windows instead of people, tensed muscles to avoid shaky knees, held on to a railing if she got light-headed, always thought "how can I escape quickly?", avoided speaking to people, and went home at the first sign of stress. Some of her hypotheses about what causes or prevents her fear (as well as her expectations about the consequences of a full blown panic attack) will need to be tested. The outcome of the "tests" will surely result in *her giving up her defensive "solutions" to the fear*, her changing her thinking and gaining self-confidence. Gradually, the fears should decline and the self-efficacy build.

Cognitive therapy for people suffering panic attacks might involve these kind of procedures:

1. Since patients with a panic disorder are super alert to their bodily functions and prone to misinterpret bodily sensations, such as breathing hard, palpitations, or dizziness, it is useful to find out what sensations they are concerned about and get the patient to reconsider their conclusions. Suppose a person panics while shopping because he starts to feel dizzy and then fears he will faint and maybe die. He is constantly watching for signs of dizziness and it never occurs to him to question his conclusion that getting dizzy means he is near death. The therapist may find out that the patient has never actually fainted and then may ask why he thinks that is. The patient may say, "because I hold on to something." Then there is a discussion of fainting being caused by *low* blood pressure, but the patient recognizes he has a *strong* pulse. Soon the patient reasons that he could determine if he is going to faint by checking his pulse. Later that day with the therapist, the patient, checking his pulse frequently, tests the reality of his

belief that feeling dizzy means he will faint or die. He doesn't faint.

2. In addition, the therapist later suggests that the patient expose himself to other situations where he gets upset and dizzy, and see what happens if he does not hold on to something. Trying this several times, the patient again discovered he would not faint. The panic spells went away. About 85% of the patients in this treatment program got over their panic spells with this treatment in two or three months (Clark & Ehlers, 1993). The essence of the treatment involves disproving the patient's basic views and conclusions about dizziness and dying. (But, often exposure is also a basic component of the treatment.)

These examples should make it clear to you why these methods are called cognitive. The ideas that lead to fears and panic are being questioned and tested.

Plan self-improvements --our intentions, goals, plans, selfinstructions, and self-evaluations play a major role in directing our lives. Without rational self-direction, we would be lost, driven only by the dominant instinct or need of the moment. Learning to organize and control our lives is necessary to get where we want to go. Thus, set reasonable goals (chapters 2 & 3), control your behavior (chapters 4 and 11), calm the emotions, find love and friendship, etc.

In terms of controlling stress, learn to give self-instructions (method #2 in chapter 11) for relaxing and for better coping, such as when the experienced parachutist thinks about accomplishing the task of landing safely, rather than about possibly dying in 40 seconds.

We may not always give fantasy the credit it deserves but our mind is almost constantly rehearsing how to handle some difficult situation. We imagine what we could say and do, and how others might respond, and how we could react to that, etc. This use of "covert rehearsal" is very valuable (see chapter 14).

On the other hand, one needs to occasionally stop the "try harder signals" from your brain (shouting out orders and demands like a Marine drill instructor) to your body, i.e. "take a break" from excessively demanding self-instructions.

Rather than just stopping giving self-instructions, it is sometimes helpful to give the wrong instructions, as in paradoxical intention. This is where you tell yourself "increase those fears, make them really terrifying," instead of "I must calm down." (Case cited earlier and see chapter 14.)

It is helpful when we "accentuate the positive" as well as "eliminate the negative." Life is more than just avoiding problems. We must reserve our energy for planning and carrying out positive, meaningful, moral tasks and missions. Healthy attitudes and approaches to problem-solving --(a summary from a variety of sources)

Self-awareness: recognize when there is a problem and see the problem clearly. We can hardly solve a problem if we don't admit we have one. If we minimize or distort the situation (as when we use ego defenses) or get overly emotional, our problem-solving efforts are handicapped. Indeed, some efforts aimed at reducing stress might interfere with finding permanent, complete solutions, e.g. if we used drugs or relaxation to reduce stress, we might be less motivated or inclined to explore the underlying causes of the distress and do something about the true causes.

Take action: make a commitment, when appropriate, to attacking and controlling the problem, to DOING SOMETHING. This actionoriented attitude, like self-efficacy, is comprised of several factors: (1) a belief that the problem is modifiable, (2) that we can personally conquer or control the disturbing situation (self-efficacy), and (3) that there will be worthwhile benefits derived from taking direct action. These positive beliefs are based on what worked for us in the past, on observing or talking to or getting support from others, or on learning new skills and knowledge. Being familiar with a systematic, rational approach to problem-solving, like Mahoney's (1979) "personal science" or this book, might encourage a person to plan carefully and to act cogently.

On the other hand, when the problem is insolvable, the strong, stress-tolerant person recognizes his/her predicament and avoids a lot of pitfalls: He/she stops trying to achieve the impossible. He/she may even provide him/herself with excuses (Snyder, Higgins, & Stucky, 1983). He/she does his/her best, then takes a "wait and see what happens" attitude, avoiding the stressful situations whenever possible. If we are blessed with a sense of humor and if we can see the smallness of ourselves and our problems, it is helpful.



If the problem doesn't seem impossible but is not getting resolved, the good problem-solver avoids giving up prematurely, doesn't burn bridges, avoids "caving in" and making a bad bargain (e.g. always putting others ahead of self), avoids escaping excessively into fantasy, drugs, TV, music, etc., and avoids being a sore loser and all the other negative consequences of stress listed above. If the external situation is bad and unchangeable, still search for the better ways of coping mentally. One study (Felton, Hinrichson, Revenson, & Elron, 1980) compared persons who adjusted well to crippling disease with persons who did poorly. The stress-tolerant people had an optimistic outlook (even if, in this case, it meant denying reality), were able to express feelings, such as anger and complaints, and had a rich fantasy life so they could escape into daydreams. Brutal self-honesty is not always the best policy.

Self-efficacy --learning to realistically believe in yourself as a selfhelper. Indeed, stress "management" implies you are in control of techniques that work. Take a new attitude: feeling anxious doesn't mean we have failed again, it simply signals that there is another problem to be solved, another opportunity to learn more about selfcontrol.



The feeling that "I'm in control" is related to fear, anxiety, courage, and self-direction (Rachman, 1978). Studies of wartime pilots, for instance, show that fear and courage are related to (a) feeling competent, (b) feeling in control, and (c) not wanting to "let down my buddies." Feeling out of control is scary. And it's unchallenging ("What can I do?"). Several leading test pilots refused to become early astronauts because they had little control in Project Mercury--they felt like "spam in a can" (Wolfe, 1980).

Stoyva and Anderson (1982) think biofeedback speeds up the process of believing we have control. Also, many of the self-instructions in stress inoculation involve suggestions that we are in control, e.g. "This will upset me but I can handle it." In 1910 it was Emil Coue's, "I'm getting better and better," now it is Bandura's self-efficacy. Both reduce stress.

By taking a risk, by running some danger, by facing stress, there is a chance to win, to conquer, to triumph--to feel good about ourselves (Siegelman, 1983). 83% of the time we feel positive when we take a chance to better our situation, to "test our mettle." Even when we fail or lose, 50% of the time we feel good about ourselves for trying. Where we consider the outcome as "mixed," 75% of the time we feel positive about ourselves for having tried to do the risky thing. Even failure can be a valuable learning experience. Life isn't a game in which you get only one chance. If you mess it up, you can fix it up. Siegelman urges her readers to nurture their fantasies of taking risks; these wistful thoughts are kernels of hope--perhaps our only hope of change, growth, satisfaction, greatness or goodness. These thoughts of a new career, travel, success, a new life are the basis for shifting from "I wish I could" to "by God, I will...." Don't crush them. The rest of her suggestions for risk-taking are in chapters 13 (decision-making) and 14.

Learning we can cope even though we are afraid is an important self-understanding. Such people say, "I'm tough; I'm a survivor; I can handle it." Neal Miller (1976) found Air Force officers believed they did better under mild fear (49%) or intense fear (34% but 25% said they did worse). In terms of handling fear, there are interesting findings about birth order and pilot effectiveness in combat (later born do better!). So, try some scary activities in everyday life: (1) try selfdisclosing and find that others like you--and are frequently like you. (2) Try expressing your feelings and find out they are controllable. (3) Try exposing yourself to temptations and find you have self-control. (4) Try exploring your unconscious urges and find out you are not awful for having them nor powerless against them. That's how to get tough.

Have a purpose. Hope and purpose enable us to overcome hardships, whether it is concentration or prison camps, serious physical or mental illness, or occupational burnout (Pines & Aronson, 1981; Frank, 1974). As chapter 3 says, a valued purpose for living saves us from meaninglessness and can provide enormous motivation. For example, religious beliefs provide a life-purpose and a refuge from the ultimate fear, eternal death.

Unfortunately, there is little scientific knowledge about how to develop faith and hope. Yet, there is universal interest in these topics and ample evidence for the power of faith. For instance, Marks (1978) compares the ineffectiveness of lengthy (1 year) therapy with transsexuals to the astonishing effectiveness of faith healing. The faith healer, in one case, took only three hours to pray, lay on hands, and "exorcise 22 evil spirits." The client, a life-long transsexual, immediately declared he was a man, discarded his female clothing and got his hair cut. Two years later he was still living as a heterosexual and planning to get married. Suggestion effects can help people have faith.

A distinction must be made between (a) passive faith or idle wishing for something and (b) working hard and wisely to help yourself achieve something. Both may work, but my bets are on (b). They are certainly different processes.



Finding the causes --if traumatic early childhood experiences have great impact on later adjustment and if we tend to forget those connections, it seems reasonable that gaining insight into the original or early sources of our problems might be helpful. Our society is enormously influenced by the idea that childhood has permanent, inevitable impact on all the rest of life. Freud said, "The child is psychological father to the adult...." Building on Freud, Erik Erikson described eight stages of life in which we, ideally, develop lasting traits, such as trust, independence, purpose, feeling of competence, an ability to love, etc. Failing at any stage is thought to cause serious problems. The early years are seen as especially crucial.

Furthermore, a massive amount of clinical experience with disturbed patients has confirmed that early psychological experiences were important causes. These include loss of a parent, intense conflicts within the family, abusive treatment or neglect, overcontrolling or critical parents or siblings, stressful sexual experiences, etc. Research shows correlations between parental adjustment and their children's adjustment, even as married adults. Abusers tend (60%) to have been abused or to have seen abuse as children (NiCarthy, 1982). Sexually abused children have more stress-related symptoms than nonabused children, but 2/3rds recover in 12-18 months (Kendall-Tackett, Williams, & Finkelhor, 1993). Alcoholics tend to have a parent who drank excessively or both parents who were teetotalers (Weil & Rosen, 1993). The children's personality and school adjustment are affected for several years after a divorce (see chapter 10). However, childhood traumas are not in the history of every anxious person.

Why might early stresses decrease our tolerance of stress later in life? First, the trauma may reduce our sense of control--we feel vulnerable, we know human frailty. We may learn to see the world as uncaring or downright hostile. Second, a disruptive event might interfere with our own psychological development (as mentioned in the last paragraph). Third, early hurts and threats may leave us sensitive to later occurrences--a teenager who lost her father at age 5 or 6 by divorce may be especially sensitive to any critical comment by her boyfriend.

Contrary to the common view, however, there is evidence that early traumatic experiences are not prophetic, they certainly don't always result in a ruined life. In fact, Clarke and Clarke (1976) report that severe shocks (loss of both parents, beaten and poorly fed, rejected and hated) can be handled. Humans are pretty tough. Furthermore, the healing effects of care and love after a trauma are remarkable *if* we are young. The effectiveness of love and support (to compensate for trauma) decline if the victim is older, say adolescent or young adult. This research doesn't indicate that early traumatic experiences are unimportant, but rather that they could be handled if we knew and cared enough. Also, it may be beneficial to have practice handling stress (see toughness above). Certainly, being over-protected and pampered can cause problems too.

What are the implications? You should investigate your history; try to understand the source of your personality, attitudes, and problems (see Allen (1995) and chapter 15). That is a characteristic of a mature, aware, insightful, wise person. But don't stop with insight; don't think that is all you have to do. You have to use the understanding to change. That changing may also involve some of the cognitive-behavioral methods mentioned above, e.g. one may need to remind oneself "I'm sensitive about angry yelling because my father..." or "I tend to avoid schoolwork because my sister was so damned smart."



A compelling need to know-- there is a natural curiosity, a need to know. Not just to understand what makes us tick but also to know what really happened in our relationships. Notice what happens when a person has a conflict or breaks up with someone. Often hours are spent "analyzing" the situation: Why did he/she leave me? What did he/she really want or need? Was he/she interested in someone else? Did he/she deceive me? Why did I take him/her for granted? Where did I fail? This questioning and analyzing can be calming if the understanding can become a means for accepting what has happened and even a basis for believing we will handle the situation better next time around. The "retrospective analysis" can be harmful if we become self-critical or develop very negative views of the other person's motives or character. Psychologizing in a harmful way is discussed in chapter 9. Nevertheless, gaining genuine understanding can lessen confusion, reduce a fear of history repeating itself, and bring some self-satisfaction.

Open-mindedness --knowing a few psychological theories and self-help techniques should never lull you (or any therapist for that matter) into believing you know all about how to understand and deal with a certain kind of problem. For example, suppose within someone's mind the urge to kill him/herself gets diverted into a fear of knives. It is obvious that the problem is much greater than avoiding knives. The underlying problem needs to be faced. In a similar situation, Wolpe (1973) reported a case of an 18-year-old male who, after urinating, washed his genitals 45 minutes, his hands 2 hours, and his body in a shower for 4 hours. The compulsive washing was apparently connected with sleeping with his sister until he was 15 (she was 17) and having severe guilt about sexual thoughts and reactions. Wolpe reduced the time the young man spent washing by using desensitization to urine so that eventually he could tolerate touching urine without anxiety. That's fine, but it's a typical behavioral solution to a problem, i.e. superficial. An aversion to urine may only be part of the problem. What about the young man's sexual adjustment, his guilt about sexual thoughts and urges, and his relationship with the sister?

Suppose Little Hans, that Freud wrote about, came to you for help. Besides reducing his fear of white horses with black mouths, what would you want Little Hans to understand and handle better? His guilt for fighting with his little sister? His interest in sexual parts? His belief that women may have been castrated? His jealousy of his father's relationship with his mother and ways of coping with that? His concern about being loved? His transfer of interest away from his mother? His self-acceptance?

It may seem silly for me to encourage you to explore your own unconscious. You might ask, "How can I do that?" I'd like to give you some suggestions. You could read accurate descriptions (not stories by novelists) of the needs, urges, motives, and interactions of others and see if they apply to you or give you any insights. You could ask yourself probing questions and look for the answers. Examples: If you are afraid of serious dating or intimacy, ask yourself: Am I afraid of being hurt (rejected)? Am I afraid of emotional or physical closeness? If yes, emotional closeness, what is the source of that fear? If yes, physical closeness, what about my body or my history causes me to be uncomfortable? Is the Oedipus or Electra Complex involved at all in my case? Am I more interested in keeping my same-sex friends than in having a love relationship? If so, is that an escape from something scary and/or is there no one of the opposite sex available at this time and/or are there some homosexual tendencies involved here? If simple questions like this make you uncomfortable, and you want to rush on to another topic, it sounds like you haven't learned to accept all of yourself yet (see chapter 15). Of course, the secret is learning to ask serious, "on target" questions that demand thoughtful answers. This takes time.

Any person who is serious about understanding him/herself should also try some of these things: keep a journal, record your dreams, use awareness exercises, take psychological tests, use imagery techniques, talk with others about their psychological needs and motives, watch psychologically oriented talk shows, read a lot of clinical psychology, and seek therapy if needed. See chapter 15. Don't get uptight about exploring your psyche. It would be unwise to dwell on your unconscious, but even more foolish to not consider these factors at all. Think of it as an adventure, have fun. Every mind is fascinating. What a shame that many people never explore their unconscious at all.

Summary of How to Handle Stress, Anxiety and Fears

A. The behavioral-environmental part of the problem--

1. Exposure--confront the scary situation over and over.

2. Analyze the situation--log and assess the possible causes.

3. Avoid the stressful situation or person, change your environment.

4. Seek support from friends, counselors, self-help groups, etc.

B. The emotional part--

- 5. Learn to relax--counter the tension directly.
- 6. Desensitization--reduce the fear or anxiety response.

7. Flooding or venting feelings--get strong emotions off your chest.

8. Stress inoculation--learn to "stay calm" or to "talk yourself down."

9. Channel "nervous energy" into fruitful activities.

10. Develop psychological toughness--take on stressful challenges.

C. Skills for reducing insecurity--

11. Actually having more skills makes you feel more competent...you are!

D. Cognitive part--

12. Observe and model a person successfully handling the scary situation.

13. Recognize that faulty thinking may be the cause of your stress.

14. Correct misperceptions--consult with others; test out your views.

15. Challenge irrational beliefs and demands of how things "should" be.

16. Right wrong conclusions--check with others, test your reasoning, learn to think logically.

17. Intentional thorough planning of how to cope.

18. Healthy attitudes--face problems squarely, commit yourself to action.

19. Build your faith in your ability to handle stress and other problems.

20. Find an inspiring mission in life and nurture an optimistic attitude.

E. Unconscious factors--

21. Explore your history--for traumas, stressful emotions, and beliefs.

22. Utilize natural curiosity--ask relatives and friends about childhood.

23. Read psychological literature and case studies: Q: "True of me too?"

Now you are prepared to plan your attack on tension and fears that hold you back. Based on what you know, select the best two or three methods and give them an honest try. If they don't work, try something else. Good luck.

Treatment of Specific Anxiety-Based Problems

Anxiety, worry and shyness

Anxiety is the most common symptom of patients seeing a psychiatrist or a psychologist. About 5% to 8% of Americans each year are believed to have an anxiety disorder; about the same percentage have depression which often accompanies anxiety. Indeed, learning to cope with stress reduces the risk of depression. The major anxiety disorders are generalized anxiety, panic disorders, agoraphobia, and other specific phobias. Women are two or three times more likely to be diagnosed as being anxious than men are. We don't know why, perhaps because they admit fears more, see doctors more, get therapy more, have fewer rights and opportunities, are more abused and deserted, have to care for children alone and often work outside the home too, etc. Girls are also more prone to anxiety than boys, Blacks more than Whites, and the poor more than middle class.

You might think it is the busy executive who is most affected by stress. You'd be wrong. More likely to suffer from stress is the ordinary worker who is under heavy pressure to perform and has little control over decisions. Thus, the most influenced by stress is the factory worker, waiter, clerk-typist, data entry type who has fixed hours, limited breaks, rigid procedures, and little to say about conditions, solutions to problems, time off, lay offs, etc. Executives, business owners, managers, professionals may feel stressed but they are less affected by it. They are more motivated, more flexible, more challenged, and they can make decisions and run their own lives; this seems to be related to their being 2 to 4 times *less* likely (than the clerk) to become sick from the stress of their job. Still, in any job there are ways to relax (breaks, exercise at lunch, support from peers, calming fantasies, deep muscle relaxation, having hopeful positive thoughts, keeping a journal of your feelings, etc.).

An anxious person usually also has a history of associating with stress-related disorders, i.e. older relatives have been tense or fearful, poor social adjustment in the past, poor school adjustment (especially refusing to go to school after age 10), and general over-reactions to pressure or threats. Panic attacks are thought of as being different from general anxiety; they respond to medicine differently. When the anxiety or panic is severe both medication and psychotherapy are advisable. I will briefly discuss a few of the anxiety-related psychological problems, such as worry, shyness, insomnia, burnout, phobias, panic attacks, obsessive-compulsive behavior, and psychosomatic disorders. There are others, such as Post-traumatic Stress Disorder, Dissociative States, and Multiple Personality, which usually require psychotherapy and so the details of treatment will not be discussed at length here. However, a considerable amount of general information about Dealing with Trauma has already been provided. If you have been traumatized, read this material and you will realize that several recent writers have provided help in understanding and getting over a traumatic experience.

Worry. Anxiety previews bad happenings; depression reviews bad happenings. Worry is anxiously anticipating that some awful, scary, unpleasant events are going to happen. Worry also involves trying to think of ways to avoid these unpleasant happenings (Borkovec, 1985). Worry is an unpleasant, upsetting activity that we'd like to stop but we can't; sometimes we can hardly think of anything else and can't sleep. Worrisome fretting is an effort to solve problems that results in our imagining more problems than solutions; thus, we never find a good place to stop worrying. The stream of worries goes like this: "I have to get that report done this weekend... what if the boss gets mad about what I said... if I lost my job it would be awful... I saw a homeless family on TV today... we should be saving more money... I wonder if my marriage would survive hard times... Oh, God, what if I couldn't take care of the kids..." Each little worry expands into a three hour, award winning movie or flows into an unending elaboration of other worries.

A chronic worrier estimates that he/she frets unconstructively like this for *several hours a day*! That's about 15% of our population! On the other hand, the non-worriers, about 30% of us, say they worry less than a hour and a half a day *or* benefit from their worries (planning). Borkovec says the chronic worrier thinks so much about possible troubles that he/she doesn't have the time to carefully and completely solve problems. The chronic worrier is more emotional in general (anxious, sad, angry, scared) than the non-worrier. They tend to be particularly afraid of being criticized and, thus, try to foresee every possible mistake. There are so many ways to go wrong--to make a mistake--that the worrying person may have great difficulty finding solutions to his/her very complex problems.

40% of our worries never happen; 30% are about pleasing everybody, an impossibility; 10% are about health, but we aren't doctors; 12% are "water over the dam;" thus, only 8% could be helpful. -Thomas S. Kepler There are several very good self-help books for worry--even Carnegie's book, "How to Stop Worrying and Start Living," with its common sense approach from the 1930's is still given high marks by readers. There is a 1999 audio edition available. I would recommend to the serious worrier three other books, Babior & Goldman (1996), Schiraldi (1996), and Copeland (1998). Copeland's book is a workbook; she has had years of experience with bipolar disorders. McKay, Fanning & Landis (1998) have produced a "Daily Relaxer Audio Cassette" for worriers.

Foa and Wilson (1991) have written an excellent, very thorough self-help book in this area. I've summarized it under "obsessions and compulsions" below. Also, see the next chapter for a discussion of perfectionistic worrying. Reading Goulding and Goulding (1989) and Craske, Barlow, and O'Leary (1992) should also be helpful. Mardus (1995) suggests ways of making worry work for you instead of wearing you down.

One of the more popular books about worry, at the moment, is by Hallowell (1998), a MD who has specialized for years in the ADHD area. Naturally, he brings a medicalized approach to worry and suggests several medications. He does also recognize that worriers have many ideas that lead to dread and insecurity, such as "I'm going to fail," "they may not like me," "I just know I'm going to make a mistake" and so on. For the cognitive aspects of worry, he recommends "techniques for retraining your brain," such as having positive thoughts, correcting wrong ideas, praying, using worry energy constructively, building friendships, following a daily schedule, listening to music, and others. It is easy reading; some reviewers even describe his suggestions as pop-psychology.

How can a worrier stop worrying excessively? Borkovec's approach is to try to get worrying under situational control, i.e. set aside a time (perhaps 1/2 hour each day) and a place to worry, and only worry there. To do this you also have to detect the onset of worrying and tell yourself to put it off until the appointed time and place. Thought stopping (chapter 11) or focusing your attention immediately back on the task at hand might help avoid the continuous worrying. Use the "worry period" to develop at least a crude plan (not the perfect plan) for current concerns. Writing your worries in a journal can help. A chronic worry becomes an obsession, so see the section below on obsessions and compulsions.

A reduction of the worrier's stress level might reduce the pressure to think, so any of the anxiety reduction techniques (relaxation, desensitization, inoculation) mentioned above might help. Clearly, decision-making and self-help planning would help the indecisive worrier cope and move on. Worries are often useless; this awful event that *might* happen, often *doesn't* happen. Thus, the worrier needs to use the cognitive methods cited above to straighten out his/her thinking, making it more realistic and stopping the "awfulizing" or "catastrophizing." Also, the worrier should be reminded that half of the formula for anxiety is self-doubt about being able to handle the expected crisis. Building self-confidence in coping with problems will reduce the unproductive fretting. Finally, one should always wonder if the worries serve some secret purpose, such as proving "I'm a good worried father" or distracting you from some deeper, more basic fear (better to focus on protecting my daughter from boys than to think about my own sexual problems with my wife).

Laboratory studies as well as clinical observations have shown that worriers under stress tend to over-estimate the degree of risk they face. If you think of more risks and threats, then your anxiety and worry levels go up. Worry is not a simple reaction, it is complex, including conditioned emotional reflexes possibly learned even in childhood, ingrained habits of responding, and cognitive processes that exaggerate the dangers ahead, set impossible or unrealistic standards, and reflect low self-confidence. So, a summary of how a worrier could possibly stop worrying excessively might include: directly countering the worrying behavior by relaxing in any one of several ways, by rewarding more confident and happy self-talk, by exercising, using massage, and thought-stopping, or by diverting attention with music, TV, reading, and socializing, and by practicing successfully facing stressful situations over and over again. One could also reduce worrying by changing one's thoughts, such as correcting unwarranted negative expectations, reducing tendencies to falsely view current situations negatively ("awfulizing"), giving up overly demanding perfectionistic standards ("I must always be right") and by correcting the refusal to accept the lawfulness of all behavior ("It's got to be different"). There are a lot more ways of reducing worries: one can learn new skills and problem-solving or decision-making methods, which can change things and strengthen the belief that one can cope with difficulties that might arise. Moreover, one might gain insight into his/her negativity, train oneself to be more optimistic, higher in self-esteem and self-efficacy, or perhaps even happier, and develop an inspiring life plan. Worry can be controlled but often not easily.

Shyness is very common and it can be very handicapping, but it does not gain you much sympathy. People often think you should "just get over it." Getting over it isn't easy. If you try to avoid being embarrassed and nervous by not interacting, you run the risk of being seen as snobbish, bored, unfriendly, or weak. How many of us are shy? Zimbardo, Pilkonis and Norwood (1975) found that 40% of college students considered themselves shy (by 2000 it is up to 48%). Another 40% had been shy in the past, bringing the total to 80%. Among young teenagers, 50-60% were shy. Most researchers agree that half or more of American adults are a little shy. Only 5% of us are not-at-all-shy. So, it is one of the most common human problems. Good discussions of shyness are by Carducci and Zimbardo (1995) or Carducci (2000). We shy people find it hard to start a relationship. Sometimes others do reject us or avoid us because we are quiet and withdrawn...that rejection hurts. Occasionally, if the withdrawal or rejection seems unnecessarily cruel to us, we may get angry and start to feel superior and want revenge. Most of the time we just believe we are not very interesting and stay by ourselves. It is important to note, however, if we can break through the shyness barrier and develop a friendship, becoming close and intimate is usually not a problem (Carducci, 1999). We often long for intimacy and if we gain it with one or two people, we feel and do just fine.

The Diagnostic Manual divides social phobia into two types: generalized or nongeneralized (fear in certain social situations but not all). In addition, psychological tests of socially anxious college students have indicated two different basic kinds of problems with other people: (1) feeling anger, resentment and distrust with others and (2) being unassertive, submissive or overly nurturing with others. If you can identify your more common feelings while interacting, such as anger or submission, then perhaps further work on these problems, as well as social anxiety, would help you make the changes you want (Kachin, K. E., Newman, M. G. & Pincus, A. L., 2001).

There is also an important difference to note between shyness and introversion. Shyness involves a social nervousness, a lack of social skills, a harsh internal critic, and acute self-consciousness. An introvert may have social skills but simply prefers to be alone or with a few friends. It isn't always easy to tell from the outside if a person is shy or introverted. From the inside, there is a big difference.

Another important distinction is that almost all of us are a little "shy" in certain social situations, but that is different from serious *chronic shyness in almost all situations*. The 15%-25% who are chronically shy feel lonely, misunderstood, self-critical, and uncomfortable while interacting. They look nervous. They can't maintain eye contact. They are unassertive, have trouble thinking clearly and expressing themselves, are concerned about their "image," and, in fact, often give others bad impressions. It can, of course, be a serious problem--too bad we don't take it more seriously. One of the barriers to getting help is our shame about social nervousness--on average, it is 8 years before the person suffering shyness can tell a family member or a friend. Maybe because people respond with "get over it." The average delay in seeking treatment for shyness is 14 years! Perhaps we will in the future seek help earlier because of findings by Kagan (1989) discussed below.

First, one more distinction needs to be made. At the high end of the shyness continuum there is a diagnosis of "social anxiety." At times this label may include some of the chronically shy, but the diagnosis is usually reserved for the most distressed 3% or so (that is still 10 million Americans!). These people suffer grave consequences in life. They may find it impossible to go to work or to school. Interacting with others results in panic, racing heart, sweating arm pits, faces, and
hands, "freezing" so that working together seems impossible, and so on, much like panic reactions and agoraphobia. These symptoms demand treatment. A good but somewhat academic discussion of "social anxiety" is by Leary & Kowalski (1995).

Jerome Kagan, researching child development for over 30 years, found only one trait that was fairly *consistent from age 2 to 20*, that was shyness. Other traits--aggression, dependency, competitiveness-change as we develop. But social inhibition remains so constant and is so similar from parent to child or in identical twins that Kagan concluded that shyness was, in part, genetically determined -- a part of our inheritance, a part of our hardware. Shy (15% are "inhibited") children can apparently be identified as early as 2 to 4-months-old-and 50% of shy 2-year-olds are still extremely shy at 7 or 8. Placed in a strange situation, the extremely shy child of 2 or 3 is hyperactive, irritable, nervous, cries a lot, has a fast heart rate, etc. When forced to interact with strangers, he/she is inhibited, unresponsive to strangers, unwilling to take risks, and tense doing motor tasks. These shy children were also more likely to be colicky, allergy-prone infants, and by age 7 or 8 had more fears about speaking in class, going to camp, being in the dark, etc. Even 30 years later, shy children are different: shy boys marry later, are more apt to get divorced, enter careers later and do less well (Caspi, Elder & Bem, 1988). Shy girls are less likely to have careers when they grow up. Non-shy children (15% are "uninhibited") were sociable, fearless, and spontaneous with strangers. Shyness is likely to limit and reduce our joy of living; it may be with us a lifetime. Yet, we are not slaves to our genes.

Two thirds of us, including the shy, continue to think that shyness is caused by family experiences, overprotective or critical parents, abuse by peers, etc., i.e. by experience. Research assigns more blame to innate factors, which can be modified by experience. Hopefully, knowing that genes partly determine shyness will not discourage shy people or parents, teachers, and other helpers of shy kids. Clearly shyness can be changed because it does change over the years. It has been said "genes only set the stage, you get to write your life script." Sensitive, nurturing parents helped 40% of Kagan's inhibited children overcome their handicap by age 5 or 6. He advises parents to face the problem, protect the children from trauma, such as family fights, pushy older siblings, criticism or demands for excellence, etc., help them with social skills, and gently nudge them into social contacts. It is important that children know they are loved unconditionally, not just if they are "good." Seeing painfully shy children and adults as victims of their genes may help us be more sympathetic and spur the schools and helping professions to find better ways to cope with shyness. Shyness doesn't "just go away," explicit efforts are needed.

No one likes to be shy, so in their secret struggle with this problem almost all shy people try to "get over" the condition, often unsuccessfully (remember it is in our genes). To do this, they force themselves to interact, to think positively, and to relax while interacting by using drugs and alcohol. Some of these efforts are on the right track but aren't enough; the drinking/drugging may even harm. What will help?

Some of the mildly shy see the problem of nervousness very differently from the chronically shy (Zimbardo, Pilkonis & Norwood, 1975). Excessively shy people have a hapless view, "I look terrible, I say such dumb things, my nervousness is an obvious, awful, unavoidable problem," whereas the non-shy person, who is actually having similar and equal physiological stress reactions, is more hopeful and apt to say, "Some people or some situations make me uncomfortable, but that's OK, it's normal, I'll start a conversation anyway." That is a better way to look at your nervousness. So, if you get stressed out, stop putting yourself down, stop imagining everyone is scrutinizing just you and deftly finding from 30 feet all your faults. Keep on interacting. To further reduce these negative self-evaluations, some therapists simply provide shy people with successful experiences talking to people, i.e. in vivo desensitization (Haemmerlie & Montgomery, 1986). It works. Likewise, most of us have had the experience of becoming temporarily more outgoing and self-confident during or after certain experiences, such as a love relationship, being an athletic star, or doing very well in school. What we think and feel about ourselves, our self-esteem, influences our shyness and may come from observing our own behavior. In any case, adopting a hopeful, I-can-change-my-social-behavior way of thinking is important, then DO SOMETHING, like smiling and greeting people, making small talk, give a compliment, etc. (Glass & Shea, 1986).

What are some other things you can do about shyness? Learn social interaction skills, especially self-disclosure, assertiveness, and empathy responses. Gerald Phillips (1981) advocates teaching shy students practical speech communication skills, like in speech class, and forget about "therapy" for anxiety. Many other psychologists would do the opposite, namely, focus on relaxation and desensitizing the nervousness, and forget speech skills. Others would use cognitive methods (correcting negative thoughts, giving self-instructions, planning) and improve their self-concept by building self-confidence and self-esteem (all in chapter 14). Stop thinking how stupid you sound; stop wanting to be humorous, brilliant, and perfect. Stop focusing on how nervous you feel and focus on the other person, making them comfortable, helping them tell their story and share their feelings with you.

Almost all therapists would recommend lots of practice interacting by first *imagining* successful conversations with different people. Maybe you can role play with a friend. Then try out your new skills, talking to people at work, on the Internet, going out with friends, etc. Prepare things to say and ask in advance. Learn and think about current social/political issues, listen to the news, see movies, polish your opinions. Improve your listening skills. There are several good self-help books for shyness (Miller, 1996; McCullough, 1992; Marshall, 1994; Zimbardo & Radl, 1979; Zimbardo & Radl, 1981 and 1999; Powell, 1981; Gelinas, 1987; Cheek, 1989), but *the best are Butler* (2001), Zimbardo (1987), Aron (1996 & 2000), Markway & Markway (2001), Burns (1985), and Carducci (1999). Also see the Conquering Shyness bibliography. It is better to DO SOMETHING, than to read lots of books.

Some studies have suggested that shyness is increasing in America. A few psychologists, including Zimbardo, have speculated that our increasing affluence and the increasing popularity of the Internet are responsible for the growth in shyness. What is the basis for these beliefs? Well, some think more wealth enables us to become self-sufficient and live alone with well furnished entertainment centers and expensive computers, i.e. live in isolation from others. But the same wealth enables us to have the time for friends and the means of going places and doing things with friends. Some with money choose to be alone, others want to be with their favorite people.

Zimbardo (an article, Shyness Breaks the Human Connection, on www.here2listen.com/public/topics/ on 2/19/2000) showed his biases when he wrote: "Technology further isolates within an illusion of interpersonal communication. We make acquaintances and lose friends by spending so many hours on email and in chat rooms, substituting emotional face-to-face contacts with information-based virtual contacts." A couple of the early studies supported this opinion that going online increases social distance or isolation and replaces deep, meaningful friendships with (what is assumed to be) shallow, fleeting, cyberspace interactions. However, about 55% of Internet users report that being online *increases* interpersonal connections and actually improves interactions with friends and family (a survey done by Pew Internet and reported by Aimee Balsey of the Badger Herald, U. Wisconsin, 6/30/2000). Certainly being online makes it easier and cheaper to stay in touch with old friends who are now far away. Good relationships can develop online; note the support groups and the marriages that start online.

It is obvious that humans have very different social needs--and some of us meet those needs within a close family or group of friends, perhaps face-to-face, perhaps by using new technology, perhaps by phone, perhaps for a few by writing each other. There are others of us who are content, even happy being alone (even though that is hard for the gregarious to realize, there is nothing wrong with that). What concerns me is the painfully shy who silently long for close relationships. For some of these people, the online chats, forums, lists, threaded discussions, etc. are an ideal way to start interacting more comfortably and, hopefully, learn to converse more easily with people face-to-face too. Indeed, King & Poulos (1998) have recommended that the seriously shy (Social Phobia and Avoidant Personality Disorder) consider joining one of the thousands of virtual communities as well as perhaps seeking online therapy by a professional.

There are a few Web sites that specialize in shyness: Yahoo! Shyness (http://dir.yahoo.com/Health/Diseases_and_Conditions/Shyness/), Center for Shyness (http://www.social-anxiety.com/), Cheek: How

Shy? (http://www.wellesley.edu/Psychology/Cheek/howshy.html), Craig's Shyness Resource Page

(http://www.csbruce.com/~csbruce/shyness/), Psych Central (http://psychcentral.com/resources/Self_Esteem_and_Shyness/), and Zimbardo is associated with several sites Shyness Resources (http://www.shyness.com/), Shyness Clinic

(http://www.shyness.com/shyness-clinic.html), and a bibliography at the Shyness Institute (http://www.shyness.com/shynessinstitute.html). Zimbardo, of course, also has a huge Positive Psychology Program which I discuss in the beginning of the next chapter (http://www.authentichappiness.org/). A crude test of Social Anxiety

(http://www.queendom.com/tests/health/social_anxiety_r_access.htm l) is offered by Queendom. You can also find places to socialize online by looking earlier in this chapter at support groups. There are many newsgroups to consider, such as alt.support.shyness.

Zimbardo sees shyness, extreme or mild, as an enormous social problem. Some countries, such as China, do not raise nearly as many shy children as we do in the US. We must remember that in addition to genes, shyness is partly a result of societal pressure to be successful, to be beautiful, to be competitive and to impress others. These pressures don't have to be there. Our shyness or passivity may also be subtly encouraged by parents, schools, and society to insure that children are "manageable," obedient, submissive--kept in "their place." As a result, however, we--as children and adults--come to feel unimportant, powerless, ineffective, passive-dependent, and even defective, which increases our isolation from family, friends, neighbors, and perhaps from all humanity. Shyness reduces our sharing, caring, and loving one another. It increases our loneliness, being picked on, losses due to hesitation, and other social problems. That's serious. Let's help shy children (Zimbardo & Radl, 1981 and 1999).

Fortunately, exposure in vivo, social skills training, and cognitive techniques have all been shown to help social phobias. Actually a combination of cognitive group therapy followed by exposure in vivo seems to work best (Scholing & Emmelkamp, 1993). Why aren't these approaches used in school?

Insomnia and burnout

If we are stressed, sleep is frequently disturbed. About 35% of Americans have had sleep difficulties during the last year. Perhaps 10% (women twice as much as men) suffer prevalent insomnia, i.e. at least 14 difficult nights in the last 6 months. It is estimated that 3% oversleep. The situation is complicated by the fact that 45% of under and over-sleepers also have an emotional disorder, especially anxiety or depressive disorders. About 8% of us each year use drugs to sleep, taking 600 tons of sleeping pills annually. That is enough to put all of us to sleep for 8 days! As mentioned in chapter 4, good sleep is very important for a good mood, efficient work, clear thinking, and good health. Avoid stimulants, even coffee and cigarettes. The old advice of warm milk is still good. Get exercise during the day, not right before bedtime. Follow a routine, going to bed at the same time and in the same place. Slow down before bedtime. Don't try hard to "will" yourself to sleep, but do use your cognition to avoid thoughts that work up your emotions (reading a book may be a good way to control your thoughts). You can also mentally focus on a mundane task--counting sheep or remembering a song or a dull book--which will reduce upsetting thoughts. Take drugs if you have to, but only in small quantities and for a short time. See the much more extensive description of treatment for poor sleep at the end of chapter 4, as well as Hauri, Linde, & Westbrook (1996), Catalano (1990), or Graber (1995).

Burnout. Work occupies an enormous amount of our lives. If we work for 40 years, that is at least 80,000 hours and perhaps as much as 120,000 hours or more. Mind-boggling isn't it? Sometimes those hours are among the most rewarding, proud, and fun parts of our life. Unfortunately, for many of us work is often the source of much stress, unhappiness, resentment, shame, boredom, neglect or even abuse, harassment, discrimination, and dehumanizing conditions. In the US, 55% are stressed or angry about something at work. Since it is such a big part of our lives, it is important to make it as good as we can. Many people are simply in life-situations that require them to work at jobs that are hard, dirty, uninteresting, unpleasant, repetitive, and isolate the worker from others with common interests. Therefore, I don't want to imply that everyone can make or find an exciting, enjoyable job. But there may be ways to make the job better--more tolerable and more interesting, if not exciting.

Among the several good books I reviewed in this area, I found it interesting and probably fortunate that they suggest very different approaches to bad job situations. I say fortunate because you should consider all the approaches and see which ones seem to fit your job situation the best. The different solutions might be classified into three rough groups: change-the-system, change yourself, and get out of there.

Maslach & Leiter (1997) are in the change-the-system group. They are academics in social and organizational psychology with lots of applied experience. Burnout, as they see it, is usually the result of a bad job situation, not something fixable by self-improvement or by developing superhuman motivation. First, they say burnout may involve several feelings or conditions, e.g. feeling tired or overextended, doing as little as possible, feeling ineffective or inadequate, having too much work to do, feeling stuck and stagnant, believing your work is meaningless, and having work relationships that are strained or distant. For each condition, the authors give specific suggestions in the form of case illustrations.

Examples: An overloaded worker forms a group of overloaded coworkers, consults with experts, surveys the workload of people doing similar jobs, and then talks to the management. A person working under poor management--micromanaging or incompetence--goes to a higher level of management and asks for more decision-making authority to speed things up (and to make the job more challenging and interesting). In low paying companies employees can come together and ask for higher pay, a system of bonuses, and/or less required over-time. When relations are strained and distant, the authors recommend that worker get together to discuss ways to make it better and build team spirit. If some are over-paid and some underpaid, workers can suggest establishing a representative task force to devise a merit-based reward system. If unethical behavior, such as lying or undue pressure to make a sale, is company-policy or if the financial records are dishonest, a significant group of unhappy employees can make a difference. Workers who are trying together to improve conditions are less likely to burnout than workers who just quietly grumble. Not all problems can be solved, so getting more training and moving out may become options.

Another well-written book by Reinhold (1997) takes a similar approach, namely, making the work environment less toxic via a rather self-therapeutic approach she calls VITAL (Vision/values, Intelligence, Touch/training, Attitude, and Love). Some reviewers felt the descriptions of the problems were superior to the prescriptions of solutions. Wyatt & Hare (1997) define "work abuse" as the flagrant mistreatment or silent neglect of people. They deal with dehumanizing interactions at work that destroy self-esteem--discrimination, harassment, scapegoating, denial of fair treatment and just simply neglecting people and treating them as if they were unimportant. Wyatt & Hare think many of these situations can perhaps only be dealt with by governmental/court solutions. Some have described this book as a tool kit for union leaders.

There are books that take a change-yourself approach to problems at work--actually there are hundreds of them if you include the stacks and stacks of motivational/inspirational stuff in bookstores everywhere. A book by Greene (2002) is motivational especially for people who lack confidence or have their confidence easily shaken. He focuses on helping you acquire the master skill of how to develop various skills. In doing this, he encourages creativity and looking for the resources each person has. Another book by Berglas (2001), a clinical psychologist, concentrates on a special population, mostly welleducated, well-paid, successful professionals hitting middle-age. He speaks of success-induced burnout; some cut back on their workload, some change careers, some change life-style (e.g. using drugs), some are just unhappy and don't know what to do. Berglas seems to do a better job analyzing the low motivation and self-handicapping behaviors of these people than he does recommending sound solutions to their situations. Lastly, Ravicz (1998) advocates another approach primarily for women. She provides exercises, often making the work situation more challenging, to convert "bad stress" into "good stress." As mentioned in the section below on anxiety, women may

instinctively have a different reaction to stress than men have, so different solutions for different genders make sense.

Anxiety, fears, and phobias (books and sites)

Early in this chapter we had a lengthy discussion of the basic learning, conditioning and cognitive processes involved in fears and stress. See New Research and Explaining Anxiety.

Everyone knows from their own experience what anxiety is. It is the most common complaint to psychotherapists, although only a fraction of anxious people see a therapist. More people visit regular MDs for anxiety than for colds. Where does the stress come from? The causes change as we age: for children 6 to 10, it is often social difficulties in school or getting low grades. For 10 to 16, it is conflicts with parents and social pressures involving dating, drinking, and drugs. Teenagers troubled with a lot of anxiety are more likely to suffer mental health and addiction problems as adults. For 16 to 22, it is adjusting to school and the world of work. For adults, it is coping with children, marital strains, job stresses, and family conflicts. For the elderly, it is dealing with death, loneliness, and money problems. As you can see, relationships are at the center of much of our anxiety.

Humans suffer a lot of anxiety and general anxiety levels have steadily increased from 1950 to 2000. Apparently having lots of "things" (material goods) doesn't make us less stressed and emotionally more comfortable. About 7% of Americans have experienced a fairly serious level of anxiety during the last month. It isn't unusual for someone's emotional distress to become quite severe. Remember, the Generalized Anxiety Disorder (GAD) is a chronic, debilitating condition that may involve excessive--sometimes 40 hours a week--and unrealistic worry and tension for at least 6 months, serious aches and pains, stomach trouble, insomnia, dizziness, irritability, unhappiness, poor concentration or other symptoms. The "worry" of people with GAD is more extensive and devastating than ordinary worries, e.g. 50% have trouble sleeping, 90% say it interferes with daily life and 60% with relationships, and 70% have always been an out-of-control worrier. This is serious stuff (see the worry section above).

About 5% to 6% of us--more women than men--will have GAD sometime in their life. Less than 20% will get proper treatment. About 25% of all American adults believe they have "come close to a nervous breakdown." And, in reality, about that percent will have some kind of mental disorder, not necessarily GAD, sometime in their life. About 8% of all primary care patients are thought to have GAD, many are not diagnosed. Even when anxiety is recognized, most physicians will just prescribe pills (what else could they do? they are not psychologically trained). As high as 30% to 40% of us believe we have "excessive anxiety." No wonder over 30 million new prescriptions for tranquilizers are written every year.

Anxiety is not only a serious problem but it is complex with many facets--just look in this chapter at all the different forms it takes. Furthermore, besides having to cope with a fear itself, the sufferer often has a stressful reaction because he/she had the fear. This is called a "second-order feeling." Just as there is a panic reaction to being told "you have cancer" or "you have heart disease," there is usually a strong negative reaction to having an intense fear or panic reaction or physical problems that interfere with work or cause disabling depression. The second-order feelings might be regrets, dread, self-criticism and/or hopelessness, something like "What is wrong with me? What did I do wrong? Why can't I stop this feeling? There must be something wrong with me, I don't like me. I seem so helpless and worthless." That is, a second-order of stressful problems (self-doubts and self-criticism) develops that could overwhelm or sabotage the mending of the original problem (the performance anxiety).

For example, consider a singer or speaker who experiences some anxiety while performing (clearly a treatable or maybe even a tolerable problem). But, if this person begins to self-blame, awfulize, and worry endlessly that the stage fright might get worse or ruin the next performance, these second-order stage fright worries can soon become more of a problem than the mild-to-moderate anxiety feelings while performing. Some therapists would put aside the second-order concerns for a while and go straight to reducing the stress reaction while performing. (If the performance anxiety is reduced to an acceptable level, then the worry and self-criticism about failing on stage will fade away.) On the other hand, other therapists would assume that the negative expectations and self-talk needs to be reduced first by (a) taking a Rational-Emotional approach to test the validity and rationality of the awfulizing about stage fright and/or (b) by encouraging the client to see that some stress during a performance is not only normal but can even be used to advantage as motivation to practice more. Once the self-concept is more positive, then the performance anxiety can be reduced with desensitization (imagining performing while very relaxed) or reduced by actual exposure, practicing singing or speaking over and over many times.

When an unreasonable fear becomes serious enough to interfere with our work or social lives, it is called a phobia or a panic reaction (see next section). About 13% of us have had a phobia. There are three types of phobias: simple phobias (fear of death, cancer, insanity, the devil, the dark, enclosed places, heights, flying, storms, bugs, germs, spiders, mice, snakes, dogs, shallow water, etc.), social phobias (fears of public speaking, meeting people, having to introduce people, being judged, getting embarrassed, becoming confused, forgetting what you wanted to say, and the fear of being afraid), and panic disorders (unpredictable attacks of terror, sweating, weakness, pounding heart, dizziness, and a belief that he/she will lose control, go crazy, or die). Many therapists believe that panic attacks that truly terrify us are physiologically and chemically different from our ordinary fears and anxiety. Panic disorders and agoraphobia, which is the most debilitating anxiety disorder and frequently associated with panic states, are discussed in the next section.

Humans may be biologically "destined" (or should I say inclined?) to have certain social fears, e.g. of strangers at 18 months or so. Some overcome this "shyness" within a few months and others never do. Most of us also become afraid of the dark at age 3 or 4, and gradually overcome it to varying degrees. Animals too seem to have inborn tendencies to fear certain things. Many humans fear snakes, rats, speaking, making mistakes, and other things. It is interesting that strong human phobias tend to be directed towards relatively harmless objects or vague, general situations--strangers, darkness, heights, insects, mice, meeting people, etc.--and not towards specific objects or situations that have actually hurt us or are serious physical dangers--electrical outlets, cars, mowers, bicycles, broken glass, rough walks, tools, such as saws, knives, or hammers, etc. Perhaps vague situations, like being in the dark, make solutions more difficult to see, make us feel less able to be in control, and also make it easier to imagine awful things happening.

Recently, some interesting physiological findings about gender differences (both in animals and humans) in response to stress have been reported (Taylor, Klein, Gruenwald, Gurung & Updrgraff, 2001). It seems that under stress females produce, along with many other stress-related reactions, a lot more of a hormone called oxytocin than men who, of course, produce more testosterone. The significance of this is that oxytocin has also been associated with relaxation and social interaction. Many studies of anxiety and many clinical observations report that women often respond to stress by "tending" to others, such as children or family, and by "befriending," such as getting together and talking with friends. Both of these responses would not only divert attention from the threat but also usually place her in a safer situation.

Thus, in men, on whom most of the research has been done, stress has been described for decades by authorities and science as definitely leading to "fight or flight" responses (a tendency which is, one would suppose, augmented by testosterone). Observations also suggest that men prefer to handle stress by themselves. In women, we are lucky to have a new theory about stress possibly leading to "tend and befriend" responses, both because those are the roles prescribed by our culture for women and because women's bodies may have learned or grown to respond to stresses with different juices than men. Debates about these gender differences will hopefully lead to gathering more data and better understanding. At least, we are now free to consider optional additional reactions to stress beyond just fight and flight.

Surely it would be wise to develop a repertoire of responses to stress, depending on the circumstances. Choices would certainly include attacking the threat in assorted ways, fleeing in a variety of ways, diverting attention via TV, reading, journaling, distracting one's attention by socializing, engaging in tending chores, such as child care, hobbies, To-Do-Lists, doing extra work or getting a second job, throwing one's self into solving the problems causing the stress, and so on. Yet, it is good to keep in mind that the neglected "tending instinct" is a major natural part of our human nature (Taylor, 2002). It helps us cope with stress and it bolsters our mood, our health, and our basic goodness.

It would certainly be a mistake to assume that biology is always in control--that little squirts of hormones will dictate what you do under stress. Regardless of oxytocin, some women respond to stress sometimes with aggression and with flight, and regardless of testosterone, men can respond with tending and befriending responses to stress. An angry response is sometimes appropriate and needed. However, an angry response to every stress would be very maladaptive. Anthropologists, like Social Psychologists, have documented that interacting with friends is relaxing and improves one's mood. Sociologists (Waite & Gallagher, 2000) have long observed that married couples are happier and live longer, maybe because they have someone to "tend and befriend." You want to learn and use many ways to reduce stress. Remain flexible in spite of general "laws" of behavior and specific hormones.

For unknown reasons, social phobias and panic attacks often start between 15 and 25 years of age. As with anxiety, women are three or four times more likely than men to have a specific phobia. Phobias occasionally start in childhood and gradually build (most children out grow their fears) or suddenly occur during a routine activity, e.g. one flight attendant panicked on her 500th flight. Obviously, science does not understand everything about fears--the chapter has reviewed many theories, however. That's the best we can do.

The treatment of fears and anxiety usually consists of a few of the 23 methods summarized above, especially exposure and frequent relaxation. Remember, stress may come (according to current theories) from (a) genes, (b) conditioning--classical, operant, or observational, (c) cognitive processes -- faulty perceptions, irrational ideas, or faulty conclusions, and (d) childhood experiences, conflicts, or traumas. The best cure probably depends on the assumed cause, but we don't understand stress that well yet. In general, the *treatment* of choice for a simple phobia is usually exposure in some form to the situation. However, the correction of anxiety-causing false beliefs also helps reduce fears and may be all that is needed. For social phobias and other situations requiring skills, the learning of useful skills is critical before or soon after reducing the fear response in the situation. Examples: the young boy or girl who is afraid of a pitched ball needs to learn how to avoid being hit and how to hit the ball; the shy person must learn how to start conversations, how to self-disclose, and how to listen empathically; the test phobic student needs to learn how to study, how to write, how to spend hours memorizing the material, etc. The task of the self-helper is not just unlearning the fear, it is learning a lot of new skills.

Al-Kubaisy, Marks, Logsdail, & Marks (1992) compared selfexposure with therapist-assisted exposure for reducing phobias. They found both procedures worked about equally well, so the therapist added very little. These researchers believe exposure is all that is needed to treat a specific phobia. One area yielding good results involves computer-assisted treatment programs in which travelers with flight phobia are gradually exposed to scary video scenes, such as boarding, taking off, having turbulence, landing, etc. until the fears are reduced (Bornas, Tortella-Feliu, Llabrs & Fullana, 2001). There are several "Virtual Reality" treatment centers in this country and Europe. They usually teach methods for managing anxiety--deep breathing, muscle relaxation, calming thoughts, etc. Then the patient practices in the lab coping with technically recreated scary situations. Between 70% and 90% of flight phobic people become able to fly without significant anxiety after 8-10 sessions (\$115 to \$150 per session). The technology is available for treating several fears, besides flying, including fear of heights, public speaking, and storms. Virtual reality programs for other fears will soon be available. For information, call Behavioral Medicine at West Virginia University--304-341-1500).

The *cognitive* theory says that illogical thoughts create anxiety. Even before facing the scary situation, there are self-defeating thoughts: "I will fail," "they will laugh," etc. Once in the situation, we tell ourselves we are doing poorly or looking silly. Afterwards, we think about all the awful consequences of what we have done. All these thoughts snowball and make us anxious. By correcting the thoughts and reasoning, we lower the anxiety, and the vicious circle can hopefully be broken. That is what cognitive therapies try to do: faulty perceptions (misperceptions, being obsessed with or exaggerating the seriousness of a problem, seeing things as black and white or only seeing the negative) are corrected, irrational ideas (unrealistic expectations of self, others, or the world) are challenged, and faulty conclusions ("they won't like me" or "I can't do that") are reassessed. Barlow, Rapee & Brown (1992) found that relaxation and cognitive therapy were better than no treatment at all for anxiety, but the drop out rate was high and the patients continued to be unduly tense. Obviously, treatment methods for general anxiety haven't been perfected, but progress is being made (for more promising treatment for Type A personalities, see the personality and health section below).

Sometimes we can learn to see the problem differently, "reframe" it, e.g. fear of approaching someone becomes "excitement;" stress before an exam becomes a "challenge;" anxiety about a job interview becomes "eagerness." The anxious person must learn to see the situation and think about it accurately; he/she must try to master it.

Books and Web sites

There are a number of good self-help books for anxiety and fears which usually take either the conditioning or the cognitive approach: Bourne, 2000 and 1995 (the anxiety reduction book most often recommended); Ellis, 2000; Kennerley, 1997; Peurifoy, 1995 and 1997; Barlow & Craske, 1994; Bourne, 1992 (with audio tapes); Wolpe, 1988 (the original developer of desensitization); Davis, Eshelman, & McKay, paperback, 2000; Weekes, 1991; Griest, Jefferson & Marks, 1986; Neuman, 1985; Wilson, 1985; Emery & Campbell, 1986; Witkin-Lanoil, 1988. Burns (1989) reduces your fears by improving your relationships and self-esteem. A few books deal with very specialized anxieties, such as shyness (see above), flying (Brown, 1996), stage fright (Desberg & Marsh, 1990), math anxiety (Tobias, 1994), and various social anxieties (Freudenberger & North, 1989; Markway, Carmin, Pollard & Flynn, 1992). Catherall (1993) has written for families recovering from a physical disaster, crime, job loss, etc. An especially good book for teenagers experiencing stress is Hipp (1995).

As mentioned in the last section, good general information about several specific kinds of anxiety problems is available at National Institute of Mental Health

(http://www.nimh.nih.gov/healthinformation/anxietymenu.cfm). A major Web site is Anxiety/Panic Resource

(http://www.algy.com/anxiety/), which offers links to many self-help sites and to support groups and services. A part of this site The Causes of Anxiety and Panic Attacks

(http://www.algy.com/anxiety/files/barlow.html) is an article written to help patients understand the physical and mental aspects of anxiety and panic reactions. Other sites give instructions for Breathing Exercises

(http://www.selfhelpmagazine.com/articles/stress/breath.html), which is important in panic attacks where part of the problem is fast and shallow breathing. There are some straight-forward sites about fears. Look up several specific self-help methods for different kinds of anxieties at Anxieties.com (http://www.anxieties.com/) and, for a fee (120 euros), you can get methods to reduce the fear of flying and other problems Stress Manager

(http://www.umich.edu/~fasap/stresstips/contents.html). Another site is Wiki Stress Management

(http://en.wikipedia.org/wiki/Stress_Management). A good British site is One Step Forward

(http://www.ahealthportal.com/anxiety/index.html). Mental Help Net also has a center about Anxiety

(http://mentalhelp.net/poc/center_index.php/id/1). A popular place which has articles, a few links, and brief self-tests but a lot of ads is QueenDom Self-help Corner

(http://www.queendom.com/portals/advice.html/index.html). When there, find the menu and click on anxiety or stress. A long listing of books and some self-tests about anxiety are available from the

Anxiety Disorders Association of America (http://www.adaa.org/). To find the books follow this path: home>consumer resources>bookstore catalog>B&N Bookstore.

A site about Stress (http://stress.about.com/) provides a self-test and tips for reducing stress using cognitive methods. Stress Management (http://www.mindtools.com/smpage.html) and Stress Reduction (http://www.coping.org/growth/stress.htm) give more selfhelp tips. Another site focuses on the causes and treatment of Headaches (http://www.excedrin.com/headache_center/index.shtml). Focusing on Panic Disorder (http://lexington-online.com/naf.panic2.html#anchor333635), this medical-oriented site explains the development of panic and its treatment using medications. Offering a slightly different approach, Treatment for Panic (http://www.nimh.nih.gov/healthinformation/panicmenu.cfm) is based on Cognitive-Behavioral Therapy methods and suggests medication, as needed.

Two more good sites offer practical help: Panic Disorders (http://mentalhelp.net/poc/view_doc.php?type=doc&id=616&cn=1), and Psych Central: Panic (http://psychcentral.com/library/anxiety_tx.htm).

There are national organizations for Phobics Anonymous (619-322cope), Emotions Anonymous (612-647-9712), and Agoraphobics (804-353-3964).

If the cause of the anxiety is assumed to be repressed traumatic childhood experiences, normally some kind of *insight* approach would be used, such as psychodynamic or psychoanalytic therapy or the insight approaches in chapter 15. There is evidence that overprotective parents do not let their children have the experience of entering the scary situation and learning (with the parents' help) how to cope; thus, sheltered children are prone to be anxious. But, persons who were neglected as children are prone to develop phobias and panic attacks.

Professional treatment is, thus far, only moderately successful with general anxiety and post-traumatic stress. Psychiatrists claim one third of phobics improve with 6 months of drug treatment; the other patients require extensive therapy (and a cure is not guaranteed). Without drugs, the cure rate of cognitive-behavioral therapies is about 75%, which sounds good. But, up to half of phobic patients drop out of therapy, and many who stay in treatment only get partial relief. Therefore, only about 25% *fully* recover from their phobias (Prochaska, 1991). Therapy needs to be improved but there is ample evidence that cognitive-behavioral (Chambless & Gillis, 1993), exposure (Foa, et al, 1991), group (Heimberg, et al, 1990), applied relaxation (Ost & Westling, 1991), and desensitization are effective to some extent with anxiety, fears, phobias, and post-traumatic stress. Matsakis (1992) and Allen (1995) provide self-help for getting over a trauma. Wolin & Wolin (1994) help with overcoming a troubled family.

Perhaps some of us were born with nervous systems that can't be totally quieted; we may just have to "live with it." Don't expect instant magic from your self-help efforts. There is evidence that early, immediate treatment of fears can avoid truly debilitating conditions. See Garber, Garber & Spizman (1993) for dealing with children's fears. If you attack the problem of agoraphobia, for instance, the first or second time you avoid leaving your house because you feel uneasy going out to the store, the mild fears are not difficult to deal with. But, if you wait until you haven't left the house for 3 years, the intense phobia has become a very difficult problem. Be mindful of that.



Panic attacks and agoraphobia

As many as 10%--25 million Americans--will at some time experience panic attacks, i.e. re-occurring, unpredictable, sudden, intense, almost unbearable spells of terror (described above). Most of these people will have only a few, widely scattered episodes, but about 1% to 2% of us will have frequent attacks and/or such intense fear of panicking that it seriously disrupts our lives. This is called a panic disorder. In serious cases (four or more attacks per month), it is very disabling: associated 70% of the time with another psychiatric disorder, often depression, suicide (20% attempt it!), alcohol abuse, poor health, and great difficulties socially, maritally, and at work. The risk of suicide is especially high among women who drink and started panicking in their teens or early twenties. Yet, less than 25% seek treatment--and it is fairly treatable. Many victims avoid treatment, like they do other scary situations. Other victims, fearing some serious physical disease, see an average of 10 doctors before the disorder is correctly diagnosed.

But because of the seriousness of a panic *disorder* (not just one or two attacks) and the suicide risks (even higher than depression), it is crucial that *competent* professional treatment be sought immediately. Unfortunately, many professionals give ineffective drugs and don't use

the best therapy methods. Panic attack victims are given 50% of all angiograms, which are unnecessary and quite expensive. So *seek a panic disorder specialist*, if possible, by calling your Mental Health Center or the Phobia Society of America. The therapist should insure that there is no physical problem, possibly prescribe anti-depressive drugs (not minor tranquilizers), and provide psychotherapy involving relaxation, exposure to the frightening situation, and cognitive restructuring.

The causes of panic attacks are not known. Some psychiatrists think the body is simply malfunctioning--sending a false message that it is suffocating (being unable to breathe is terrifying); thus, these theorists see it as purely a physical problem (actually, the onset of panic disorders are often associated with major stressful life events). Other theorists believe panic sufferers were born shy, nervous children with over-demanding, suffocating parents. Later, as over-dependent, eager-to-please but resentful-of-authority young people, they frequently have an intense confrontation with an authority. Their anger leads to the first panic attack, according to this theory. More recently, three major theories about panic have evolved:

- Catastrophic thinking: heightened anxiety in a stressful situation may cause bodily sensations which lead the person to falsely conclude he/she is having a heart attack, going to faint, about to die, going to lose control, going crazy, etc. These thoughts lead to panic. So, the thoughts need to be corrected.
- Hyperventilation: anxiety causes some people to hyperventilate, which, in turn, leads perhaps to too much carbon dioxide, dizziness and panic. So, better breathing habits must be developed (this is the approach taken by How to Treat Your Panic Disorder Over the Internet http://www.fearfighter.com/index.htm). Unfortunately, only the first week is online; it costs \$98 for the rest of the program).
- 3. A conditioned panic: a scary experience (or hyperventilation) may cause certain feelings, such as rapid heart beat, sweating, shaking knees, etc., that are paired with the first panic attack. Thus, conditioning occurs and, subsequently, noticing a rapid heart beat and sweating while under stress may arouse a strong fear--a panic attack. So, in this case, the person may need, for example, to experience a rapidly pounding heart several times in a safe place in order to find out that nothing awful is going to happen.

An astonishing 10 million (about half of all people with Panic Disorder) Americans are afraid to leave home (agoraphobia), sometimes because they fear panicking and losing control away from home. About half the time agoraphobia is preceded by a panic attack. As a child, 42% of adults with agoraphobia experienced separation anxiety from a parent (home), suggesting a long history for this fear. Panic attacks are more likely to first occur during a stressful period involving a loss, like a divorce, a conflict or a death (Pollard, Pollard & Corn, 1989). But, many occur without any obvious precipitating

stresses. The mid-twenties are when many panic disorders start. Biological factors may also play a role in causing panics, it runs in families.

Further confusing the situation, several chemicals or conditions occasionally produce attacks in panic prone people: sodium lactate, caffeine, mitral valve prolapse, thyroid gland malfunctioning, and hyperventilation. Likewise, since anxiety produces or contributes to many physical disorders, and, conversely, many physical, biochemical, and hormonal problems produce anxiety or anxiety-like symptoms, it is always a good idea to have a good physical exam to diagnose or rule out physical-hormonal factors, including hypoglycemia and PMS. (But remember 50% of angiograms are given to panic disorder patients.)

Anti-depressive drugs or Xanax "greatly improves" only about 30% of clients with panic attacks and/or with agoraphobia (but a placebo reportedly improves 25%). The drug treatment approach is simple and takes six months to one year. However, there are several possible problems: some of these drugs are highly addictive (especially if one has a tendency towards alcoholism) and may have side effects; drugs have high refusal-drop out rates (50%) and high relapse rates (from 35 to 85%); drugs do not solve underlying problems, if there are any.

For the 70% of panic disorders and agoraphobics who do not respond to drugs, according to Michelson & Marchione (1991), Craske & Barlow (1990), and Hoffart (1993), the treatment of choice involves cognitive therapy (reducing negative thinking, irrational ideas, false conclusions about dying, going crazy, etc.) *combined with gradual* exposure to stressful situations (with support, relaxation, useful skills, and more confidence). Misinterpretations of bodily sensations are challenged, e.g. a therapist helps you test your belief that feeling faint will actually lead to fainting. This kind of therapy is supposedly effective 75%-85% of the time (with tentative indications that the relapse rate is low). Some specialists dealing with panic disorders claim that "guided mastery" is more effective than simple "exposure" to the scary situation. This might be because more attention is given to developing helpful self-instructions and self-confidence in mastering the situation. For instance, in guided mastery, the helper (therapist or friend) of a person afraid of heights would observe the phobic's behavior and do such things as offer encouragement when approaching the top railing of a high building, ask the phobic to look in all directions and down, to let go of the railing, to approach the railing over and over, and to do so more rapidly, and so on. Cognitivebehavioral treatment may have fewer relapses than drug treatment but its placebo effect is probably at least as high (25%?).

As we saw in the last section, research has produced many interesting findings about exposure to the fear in vivo (in the real situation). This is the best simple approach for dealing with most fears. Direct exposure is more effective than imagining being in the situation; prolonged exposure (4+ hours) is better than briefer exposure; the benefits from exposure are long lasting; exposure in a group is as good as individual therapy; self-help guidance to self-exposure can be given via simple instructions or a book or computer or a phone, all are effective (Emmelkamp, 1994).

Mental health professionals rated a self-help book by Wilson (1986) as the best for reducing panic attacks (Santrock, Minnett & Campbell, 1994). But other more recent self-help books have been published: Zuercher-White (1995), Rachman & de Silva (1996), Beckfield (1994), Babior & Goldman (1990), Greist & Jefferson (1992), and Ross (1994). Serious panic disorders should not rely on self-help alone. NIMH has made a special effort to publicize Panic Disorders and free literature is available by calling 1-800-64-PANIC.

Several Web sites are offered for Anxiety, Fear, and Panic Attacks. Good general information about several specific kinds of anxiety problems is available at National Institute of Mental Health (http://www.nimh.nih.gov/healthinformation/anxietymenu.cfm). Just enter your concern into the search engine--anxiety, panic, fear, obsessive-compulsive, stress, trauma, etc. Another major Web site is Anxiety/Panic Resource (http://www.algy.com/anxiety/), which offers links to many self-help sites and to support groups and services. A part of this site The Causes of Anxiety and Panic Attacks (http://www.algy.com/anxiety/files/barlow.html) is an article written to help patients understand the physical and mental aspects of anxiety and panic reactions. A popular place which has articles, a few links, and brief self-tests but a lot of ads is QueenDom Self-help Corner (http://www.queendom.com/portals/advice.html/index.html). When there, find the menu and click on anxiety or stress. Focusing on Panic Disorder (http://lexington-on-line.com/anchor333635), is a medicaloriented site which explains the development of panic and its treatment using medications. Offering a slightly different approach, Treatment for Panic

(http://www.nimh.nih.gov/healthinformation/panicmenu.cfm) is based on Cognitive-Behavioral Therapy methods and suggests medication, as needed.

Extensive research is being done; better treatment is coming which will supplement the old "face your fear" homily. Actually, using two or three different treatment approaches, say cognitive therapy or breathing instructions, along with cue exposure, on the same person is proving to be most effective (Acierno, Hersen, & Van Hasselt, 1993). Drugs are important in some cases. And, in my opinion, if cognitive techniques, exposure, and drugs don't work, insight therapy probing the childhood history should be tried. In general, persons with serious panic and phobic symptoms, especially those with suicidal thoughts and a reluctance to see a shrink, should immediately seek an experienced cognitive-behavioral (exposure) therapist who works closely with a MD who can prescribe medication.

Obsessions and compulsions (books and sites)

About 2.4 million Americans are compelled to repeat useless and distressing rituals, like hand washing, counting or lock checking, or thoughts, like "I am going to die soon." The excessive, senseless, uncontrollable behaviors are compulsions; the excessive, useless, invasive thoughts are obsessions (worries, focus on your looks, attraction to pornography, etc.). If the person tries hard to block these acts or thoughts from happening, he/she will become very anxious, often feeling as though something awful will happen. Compulsions and obsessions seem to be both a result of anxiety and a means of briefly reducing anxiety. These acts appear to start with magical thinking, namely, the wishful idea that an action or thought by them will reduce some risk or some unpleasant feeling. For instance, Howard Hughes, the famous billionaire aircraft designer and movie producer, became afraid of touching things because of possible contamination. So, being afraid of germs, he became compulsively clean. Eventually, he avoided almost everything, staying locked in his apartment for many years. Even his eating utensils were eventually sterilized, the handles wrapped in tissue, then wrapped with tape, and finally wrapped with tissue paper again before he would touch them. What is truly amazing is that he--with all his smarts and money--didn't get treatment. Shame and hiding the problem are parts of the illness.

If I believe the initial-but-wrong ideas, e.g. that a little dirt is dangerous and that washing my hands can save me from some dreaded disease, then washing my hands reduces my fear. Even though the compulsive person knows, when he/she thinks about it, that it is a foolish idea, he/she keeps on washing his/her hands (or checking the locks) because he/she temporarily feels better. Due to this negative reinforcement, the behavior grows stronger and stronger. One compulsive hand washer, reported by Hodgson and Miller (1982), was originally afraid of catching her brother's schizophrenia. She started washing her hands after being near the brother, but the compulsion spread (generalized) to many objects around the house so that years later she was washing her hands several hours a day. She knew the washing was irrational but *felt* relief and couldn't stop. First, there is a repeated scary thought--an obsession--and, then, a ritual--a compulsion--is used over and over to reduce the fear; thus, it is different from a bad habit, like nail biting, which is not motivated by great fear.

Freudians see these symptoms differently; they believe compulsions and obsessions have an underlying driving force which is unconscious. Example: if a highly moral person were in a very unhappy marriage, a primitive, angry part of him/her (the id or the "child") may want to do away with the partner. Of course, being a good person overall, the person is not about to kill the spouse. Instead, the aggression is turned inward, with the unconscious logic going like this: "My spouse is in danger of being killed. I am the murderer; therefore, I must die." The result of this internal struggle is a frightening, uncontrollable obsession--a conscious inner voice--that says over and over "I am going to die soon." But the tormented person doesn't know anything about the internal struggle between good and evil. Yet, he/she might be able to reason it out or guess at the cause (or go for therapy). If the troubled person could grasp some of the moral war inside, he/she might be motivated and able, using the adult's rational mind, to resolve some of the child-like anger and, thus, stop the obsession.

The word "compulsive" is also used to describe normal-but-unusual behavior, such as keeping your desk or drawers very clean and orderly, dressing meticulously, doing extremely precise work, etc. Many of these traits are valuable and contribute to success and selfesteem; they are not a disorder, although some become unpleasantly compelling and a waste of time. On the other hand, obsessivecompulsive *disorders* are very disruptive of living, and people are ashamed of these habits. The most common compulsive rituals are hand washing (2+ hours per day), counting things repeatedly, checking (that the lights are out or the doors locked several times), and touching (e.g. pulling one's hair or rubbing one's mouth). Any excessive, time-consuming activity can become a serious compulsion, such as taking an hour to brush your teeth, three hours to groom yourself, three hours every day to clean a small apartment, or suffer intense anxiety if everything is not kept in order. Excessive, timeconsuming obsessions may raise anxiety (thinking "a serious accident will happen") or may reduce anxiety (praying for hours every day or reading labels on every box and can in the house every day) by distracting the mind from disturbing thoughts. Thus far, science doesn't understand this disorder well, but the treatment is becoming clearer.

Women are more inclined to be compulsive cleaners (starting age=29 vs. men at 22). Checkers start earlier (men at 14 and women at 21). Men are more obsessional than women. Obsessions start later (men at 26 and women at 30). Like so many other anxiety disorders, there seems to be a genetic factor involved. The PET scans of these patients are different. Even more of a concern is that 35% of obsessive-compulsive disorders are also diagnosed schizotypal personality disorder, and when a person has both diagnoses, the treatment success rate is rather low.

Treatment for obsessive-compulsives (and worriers): *refer to Foa and Wilson* (1991) for a simple, detailed, research based, thorough self-help plan. I'll summarize their suggestions: (1) Consider carefully (measure!) how serious your worries, obsessive fears, and compulsions are. (2) Use your rational thinking (and the research findings available) to realize that your fears and rituals are totally unrealistic, that there are better ways to handle the fears, and that you, like thousands of other people, can overcome this problem. You need to *become determined* to conquer your false beliefs; it won't be easy; however, paradoxically, as we have already seen with certain fears, accepting reality and not constantly "fighting against" the obsessions and rituals are big steps.

(3) The idea is to get your worries and obsessive fears under your *control* by: (a) just delaying your worrying for a short while, (b) responding to the obsession differently (e.g. say it's OK and record every detail of the obsession, or make up a song about the obsession and sing it, rather than imagining you are dying, or think of your doctor saying you are perfectly healthy). (4) *Practice stopping the* obsessional worries or fears and getting back to your regular activities: (a) use self-instruction, self-praise, and relaxation to shift your attention back to a constructive task, (b) postpone your worries until two 15-minute "worry sessions" every day (don't resist worrying during the designated times, in fact insist on filling the 15 minutes with very disturbing worries, try to get upset, but stop exactly on time), (c) record your common worries on a 3-minute loop audiotape and listen to them over and over for 45 minutes a day, try to get distressed, (d) record on audiotape a 45 minute horror story describing all the terrible things you fear might happen (if you fear death, imagine dying a horrible death), listen to it every day and become upset (eventually it looses its punch), and/or (e) face the frightening situation directly (hand washers get their hands dirty and don't wash, cleaners refuse to clean anything for a day, hoarders can let someone else throw the junk away, worriers try out some solution, etc.). In short, you take charge, rather than the fear running your life. "Imaginal flooding" and cue exposure are being used on fears here, i.e. imagining all the awful consequences that the person thinks (wronaly) might occur if the rituals were not performed (see Exposure, Venting, and Toughness).

(5) Rituals may provide the only relief a compulsive person ever gets from his/her terror. Thus, a powerful need to ritualize can develop in serious cases. Actually, the ritual becomes the person's "proof" that he/she *must* avoid the feared situation and that the ritual saves him/her from the feared disaster and/or from going crazy. Example: "My house didn't burn today *because* I checked everything seven times this morning." You can weaken your compulsion by breaking up the habit: (a) when the urge strikes, postpone performing the ritual as long as you can (maybe a minute or hours, the longer the better), (b) perform the ritual in slow motion, (c) repeatedly change the way you do the ritual, (d) add some activity to the ritual, e.g. add a 30 minute jog every time you perform the ritual. All this practice at control may make you confident and determined to "tough it out" and just decide not to do the ritual. If so, go for it! Other researchers have found that some compulsions can be brought under control by "negative practice," i.e. consciously "willing" the compulsion, say checking all the doors and windows, to be repeated again and again, so that it is not always occurring against your will.

(6) Eventually, you have to *repeatedly expose yourself to the frightening situation* (public toilet seats, dirt on the floor, leaving the house uncleaned, etc.). *And, you must prevent yourself from using any ritual for "protection*," such as checking the locks more than once. You are extinguishing both the fear and the ritual behavior (Hodgson & Miller, 1982; Millman, Huber, & Diggins, 1982). Exposure may at first be easiest by using fantasy, as in 4 (d), i.e. imagining being in the

situation that scares you. Do this for an hour or two every day until the fear diminishes. Then, expose yourself to the actual frightening situation (it may be wise to have a friend or therapist with you when you do this). This exposure (e.g. to dirt or urine) will result in a strong urge to perform the ritual (e.g. wash hands), but the ritual (e.g. washing for 30 minutes) must be prevented so you can learn that the ritual is unneeded. Finally, after several hours of exposure and response prevention each day for several days, the unreasonable fears are extinguished and the compulsive rituals are no longer needed. The compulsion is, of course, replaced with a more reasonable and useful response, e.g. washing off the urine in a minute or two perhaps (be sure the total washing time doesn't increase to two or three minutes).

These behavioral "exposure and response prevention" methods work about 75-80% of the time. Both exposure and response prevention are necessary. Exposure reduces the fears; response prevention stops the compulsions. Gradual exposure works as well as flooding (creating intense fear), so why traumatize yourself? Selftreatment, if you are able to do it, in the natural environment works well, sometimes better than with a therapist present. Exposures for longer times (without the compulsion) works better than short exposures. Exposures do not have to be frequent, two or three times a week may work. The effects seem to last best if "relapse prevention" procedures (see method #4 in chapter 11) are used following the "exposure" procedures (Hiss, Foa & Kozak, 1994).

Since thinking is so obviously involved in compulsions and especially obsessions, the cognitive therapists have sought to treat these disorders by correcting the thinking directly (instead of indirectly by simple exposure). Oppen and Arntz (1993) point out that obsessions are often about awful future events for which you feel responsible. Thus, they are like depressive thoughts, except in the future. Therefore, cognitive therapists attack the obsessivecompulsive's overestimation of the danger and of their responsibility for the awful consequences. Suppose a fire-phobic person repeatedly snuffs out his/her cigarettes and checks the ash trays, but still obsesses about the danger of burning down the house with a cigarette. A cognitive therapist would have this person calculate the probability of each step necessary for the catastrophic fire to happen: 1 chance in 100 that the cigarette will not be snuffed out, 1 chance in 100 that ashes will be knocked on the floor, 1 chance in 10 that the carpet would burn (this could be tested out with a scrap of carpeting), 1 change in 100 that neither I nor the smoke alarm nor anyone else will notice the fire, and 1 chance in 100 that no one will be able to put out the fire. *Multiplying* all these probabilities together shows that there is 1 chance in 1,000,000,000 cigarettes that the house will burn. So, the person's thinking and feeling that every cigarette is a big fire threat can be challenged.

The awful part of many things that obsess or worry us is the feeling that some terrible outcome will be our fault. Oppen and Arntz recommend using the "pie-technique." Example: like many drivers, I

have often thought how terrible it would be if I hit a child darting out from between cars (and, Oh, God, it would truly be horrible). But a concern is--it would be even worse if I overestimated *my* responsibility for the accident. The pie-technique has you assign a portion of the pie to each cause, starting with the person responsible for watching the child (40%), the people who had not taught the child about the dangers (20%), the child him/herself (0-20% depending on age), the weather and lighting conditions (10%), the decision-makers and drivers who permitted and parked there (5%), chance or bad luck (20%), etc. At the end, I have to decide how much of the remaining percentage I would be responsible for. Thus, we can see that we may not be "responsible" at all and certainly aren't totally responsible (of course, if we were speeding, distracted, drunk, or carelessly jumped the curb, that is a different matter).

Another approach to questioning the overestimation of responsibility is the "double standard" technique. You simply ask yourself if you would hold another person responsible if the same thing happened to them as happened to you. Examples: if your son got cancer, would you blame another mother/father whose son got cancer? If your daughter became schizophrenic, would you blame the parents of another girl who became schizophrenic? If not, by what logic are you more responsible than others? As you can see, these techniques are simple methods for straightening out our own thinking. See chapter 14. You can often test out the reality or validity of your beliefs.

Helpful material

See chapter 4's discussion of unwanted behaviors and method #8 in chapter 11. The best, most complete, most detailed self-help quide to various Obsessive-Compulsive Disorders is by Penzel (2000). It is helpful to patients, their families and even professionals. Mental Health professionals rated Levenkron's (1991) self-help book highly, but, being an insight therapist, his approach assumes that obsessions or compulsions stem from a painful childhood or poor genes. One selfhelp book focuses only on compulsive shopping (Catalano & Sonenberg, 1993). Other self-help references are Lakin (1993), Rapaport (1989), and Steketee & White (1990). A cognitive self-help approach is provided by Schwartz (1996), who urges the patient to view his/her obsessive-compulsive symptoms as being a medical condition in which the brain is sending a false message ("something terrible will happen if you don't wash your hands again"), then the patient is urged to do and think about other things (not the O-C actions), and to take pride in gaining self-control. An excellent professional reference is Beck & Emery (1985) but it is not self-help. Also, write to The OCD Foundation, P. O. Box 9573, New Haven, CT 06535 for information and for self-help groups.

The Obsessive-Compulsive Foundation

(http://www.ocfoundation.org/) provides research, newsletters, book reviews, and chat. A good service, OCD Web site

(http://www.mentalhealth.com/dis/p20-pe10.html), cites many books and offers links to a lot of information, bulletin boards, and therapists. Another OCD Resource Center (http://www.ocdhope.com/index.html) site gives some advice to both the patient and the family. Also advertises The OCD Workbook. An outstanding summary of symptoms and treatment, both psychological and medical, is given by Expert Consensus Treatment Guidelines (http://psychguides.com/). Several good articles are available at Mental Help Net: OCD (http://mentalhelp.net/poc/center_index.php/id/6) and Psych Central (http://psychcentral.com/ocdquiz.htm) provides a questionnaire for self-assessment.

If obsessive thoughts are triggered by specific emotions, e.g. getting mad at your ex-lover sets off 2 or 3 hours of thinking about the past, what he/she is doing now, and how to mess up his/her life, you might reduce the emotional response (via desensitization) and, thereby, reduce the obsessions. Or, you might use thought-stopping, which is a mental form of response prevention. Ironically, the research shows that trying hard to suppress forbidden thoughts sometimes results in thinking the thought even more often (Wegner, 1989). How to best handle bad thoughts? Baer (2001) specializes with inappropriate, embarrassing, crude, violent thoughts. He reviews a long history of such thoughts and deals with the dilemma of "conscious thought suppression" producing more thoughts, not less. Using the example of a priest who leers at women's breasts and bottoms, while thinking about sex with them, Baer recommends dealing with such guilt-producing thoughts much like one would deal with a fear, namely, let yourself freely have those thoughts (expose yourself to them) until they no longer seem so awful or evil that they must be stopped.

Other advisors would recommend disclosing your bad thoughts to a safe, understanding person, like a therapist. Coming to see the obsessive thoughts as "no big deal" in this way also seems to reduce the drive to have them so frequently. Not surprisingly, general psychotherapy--talking about bad thoughts--has been helpful in gaining insight into the "forbidden wishes" and unconscious dynamics that seem to be frequently involved in obsessions and compulsions. On the other hand, drugs, including Anafranil and Prozac, have also helped some obsessive-compulsive cases, causing some doctors to think it is an organic disorder. The latest twist in this organic vs. psychological argument is the finding by Schwartz (1995) that cognitive-behavioral treatment results in similar changes in the brain as drugs produce.

Self-help can be helpful if started soon enough, but in difficult to treat, long-term, serious obsessive-compulsive cases with multiple diagnoses, professional treatment and medication are frequently needed.

Personality, emotions, and health

Psychological factors are involved in causing and in healing many ailments of the body. We are just discovering these connections scientifically, although Chinese medicine was based on this idea 3000 years ago. A public television series and a book by Bill Moyers (1992), *Healing and The Mind*, document in an interesting way the new mind/body methods of treating pain, stress, cancer (at least the emotional aspects of having cancer), etc. The impact of our emotions on our physical health is called Mind-Body medicine (Siegel, 1989). We are just beginning to learn about emotions influencing our body, e.g. sexually abused women develop a smaller hippocampus (which is involved in memory). Psychotherapy and self-help, if effective, produce physical changes... we may not know where the changes are but there are no ghosts in the body.

What does "no ghosts in the body" mean? It means that real, physical events carry out or mediate these mind-body connections. Most scientists believe that no thought, no feeling, and no mental change ever occurs without something physical changing in the body. For example, when long-term stress weakens an organ in the body, like the heart, the stress is physically present for months in some form in the brain, in the general nervous system, and in the weakened organ. Likewise, when a discussion in therapy or use of a self-help method improves some physical condition, the change mechanism between talk (or method) and the illness takes place physically somewhere in the body--nerves associated with thoughts change in the brain, messages are sent in the nervous system, conditions of the muscles change, hormones flow, the immune system activates or shuts down, etc. There is no mystical magic here. It may seem like magic to you when you are able to influence your thoughts, i.e. neuronal action, which in turn may affect our feelings, then your physical health, then your psychological health, etc. But every action has a physical component (no ghosts) and is lawful and potentially understandable.

In case you are thinking that psychological factors are a minor part of "medicine" or health care as we currently know it, consider this: the seven top health risks are behavioral--smoking, over-eating, drinking & drugging, injuries, suicide, violence and sexually transmitted diseases. Seven of the nine leading causes of death, such as auto accidents, have important behavioral components. Health is a complex matter and the current professionals on both sides are ill prepared to understand both mental and physical health. Changes are needed! Perhaps we need a new profession that understands both psychological/relationship problems and physical illnesses. Perhaps we need to automate the initial psychological/medical diagnostic evaluation, so that everyone can easily get an annual check up. Perhaps everyone also needs to educate themselves so that selfdiagnosis and self-care is much more thorough and effective. A fascinating 1995 finding from the 1921 Terman study of 1,528 bright California children: going through your parents' divorce as a child (before 21) and/or going through a divorce yourself as an adult may shorten your life by perhaps as much as four years! In addition, certain personality traits, such as conscientiousness vs. irresponsibility, are also powerfully related to longevity (Friedman, et al, 1995). Stress and personality factors influence how long we live as much as blood pressure, cholesterol level, or exercise-diet factors. These are not minor factors in your life.

Likewise, a survey of 6,307 HMO patients found that 10% had anxiety that had not been treated (15% had been treated for anxiety). These untreated anxiety patients (80% also had untreated depression) had suffered marked reductions in general functioning, health, and well-being, resulting in their utilizing a high level of primary medical care (Fifer, et al., 1994). Science can't yet calculate how much the millions of untreated psychological disorders are costing us.

Current thinking is: if we can express our emotions, talking openly or acting out our feelings, we can sometimes improve our health. If we can relax, meditate, let ourselves be touched by others, or establish warm, caring relationships with others, sometimes we get better or get worse more slowly. Heart disease has been reversed by diet, exercise, meditation, and a support group. Women with breast cancer meeting with a support group lived twice as long as similar women who were not in such a group. We need human contact, with it we live longer, e.g. married cancer patients survive longer than unmarried ones. NB: Don't get the idea that relaxation and supportive human contact can cure cancer or clean out a blocked artery.

Between 10% and 30% of patients diagnosed as having psychological disorders are later found to have a physical or neurological problem (Bondi, 1992). This highlights the need for referrals by psychotherapists to medical specialists. Likewise, physicians should refer many of their patients to psychologicalpsychiatric specialists. For decades family physicians have estimated that 2/3rds of all the illnesses they treat are psychogenic, i.e. caused by psychological factors or stress. A 1995 report said 75% of complaints brought to MD's were psychological. It has been found that stress contributes to heart disease, strokes, cancer, breathing problems, accidents, cirrhosis of the liver, suicide, and many other leading causes of death. So, why is the treatment of most illness, physical and mental, still in the hands of very expensive MD's who have little training in dealing with psychological factors? Because our old laws and health insurance companies have enabled doctors to continue to monopolize health care and because science, until recently, has shown relatively little interest in treating psychogenic disorders. But anyone can see the importance of learning more: our annual medical bill totals \$400+ billion, and 25% of the U.S. work force misses 16 days per year due to stress, costing \$8,000 per worker. There is clear evidence that psychological treatment is the best treatment for many stress-related disorders--and, of course, for

prevention--and should save billions and billions once we start using psychology.

Physical complaints can be, of course, clues to physical disorders, but pain and fatigue can be clues to psychological problems too. In this section, we are dealing with stress and other psychologically caused disorders in the body. The pain is just as severe, regardless of whether the cause is physical or psychological. In the sections above about sources and effects of stress, we observed the stress-health connection. It works both ways: stress causes physical problems and physical factors cause emotions, e.g. the hormones in PMS cause tension, irritability, sadness, etc. PMS can be reduced by psychological self-help (Lark, 1995) and chemicals. In chapter 6 we will likewise see that depression is related to physical tiredness and sleep disorders.

Hippocrates, 400 years before Christ, thought certain personalemotional traits were related to specific diseases. We are getting more and more scientific evidence for this. Dependable and conscientious young people live as much as four years longer than impulsive, undependable, self-centered people (Friedman, et al., 1995). People *more prone to cancer* tend to be depressed and/or worriers; they suppress their anxiety and hostile feelings, avoid conflict, act unassertively (overly patient) and feel hopeless; they long for closeness but feel abandoned in important relationships or at work. and just don't handle stress well (Temoshok, 1992). People prone to get heart disease tend to be angry, impatient, and aggressive but sometimes avoid expressing their anger openly; they have repeatedly been annoyed and upset with people opposing them or getting in their way, and they resent not having the power to remove such people; they are suspicious and cynically distrustful, feeling no one cares; they are often trying to get away from someone who has hurt or disappointed them (Eysenck, 1988). Both the cancer-prone and the heart disease-prone persons feel tense and fearful. Many bad, unhappy things have happened in their lives which they think they were unable to prevent.

A few simple questions about these traits can supposedly identify the cancer or the heart disease prone person. Moreover, Eysenck says that psychotherapy--and I'd add perhaps self-help--can change a person's personality enough that serious disease can be prevented! Wonderful! What are we waiting for? Evsenck (1988) and Ronald Grossarth-Maticek provided "treatment" designed to help these patients (1) express their feelings, (2) learn to relax and handle stress, (3) overcome their passive-dependent nature, and (4) gain greater self-control. Both kinds of "at risk" patients were taught to relax and overcome their fears (via desensitization), to be more confidently assertive but less angry and aggressive, to see themselves as able and actually be more in control (less passive-dependent or helpless), to express and release pent up feelings, and to know how to handle difficulties in their lives. The individual therapy involved 30 hours, but groups and shortened therapy lasting only 6-8 hours were also tried. The results of this therapy were impressive--the death rates 13 years later in the untreated groups are twice as high as in the treated groups. *If* 6 to 30 hours spent learning psychotherapy or self-help methods can reduce stress and increase the happiness and length of life, then we had better develop world-wide training programs for everyone soon.

There is accumulating evidence that optimistic-pessimistic thinking (attitude) is also related to health. Pessimists explain a bad event, such as breast cancer, in different ways than optimists do, e.g. pessimists say the cancer is "probably incurable," "a sign of terrible future health, ruining all of my life," and "caused by my genes...smoking habit...hopeless attitude...." Optimists would say, the cancer "can be removed," "won't influence my future very much," and is "caused by X-rays at work...air pollution...a virus...." The pessimist's thinking is "the outcome will be bad," "everything else is going to hell too," and "I am at fault." The optimist's thinking is the opposite: "I can become healthy and strong" and "I can handle the pain." Positive thinking, especially a belief in your ability to control an illness, is associated with good health and good performance in school and at work (Peterson, Seligman, & Vaillant, 1988; Seligman, 1991). Pessimists can learn to change their thinking (McGinnis, 1990); some will need professional help.

For decades, the psychoanalysts have thought that complaining and psychological sickness were due to an excessive need for love and attention, stemming from feelings of neglect or criticism as a sensitive, needy child. Most psychodynamic therapists would try to uncover these old, still unsatisfied needs for love and bring them to the light of day, then they will go away (or can be handled better rationally).

Psychosomatic and physical disorders

It has been known for centuries that psychological/emotional factors are related to many physical illnesses--some emotional reactions cause problems and some psychological circumstances or techniques help us feel better. Emotional trauma can cause physical problems. A recent study reported that women who experience trauma--domestic violence--have 50% to 70% more neurological, gynecological and stress-based physical problems than women who have never been abused (Johns Hopkins School of Nursing, 2002, Archives of Internal Medicine). Of course, the reverse is true too: having a physical problem may cause us distress and sadness while good health contributes to happiness. Usually there is a two-way relationship between the psychological and physical aspects. An entire issue of the Journal of Consulting and Clinical Psychology (July, 2002) documents well the role of psychology in the management of many specific physical problems and diseases. Negative emotions influence our hormones and lower our immunity to several diseases. Depression, anger, and social isolation contribute to heart disease; psychology can and should be part of the treatment (see heart section below).

Different behaviors contribute to healthy and to unhealthy aging. Stress affects asthma, digestive track disorders and many other physical ailments; psychological techniques can help one relax. Behavioral control methods are, of course, related to maintaining the all important healthy diet and exercise program. Behavioral selfregulation is at the crux of weight control...diabetes management...of pain and headache management...of somatoform disorders...and of many other problems that are commonly seen as "physical."

Hundreds of magazines and books (Borysenko, 1988; Barsky, 1988) tell us over and over that stress causes or worsens illness. But, do we listen? Specific experimental psychological treatments have been developed for a variety of ailments: heart disease, tension headaches, migraine headaches, pain, hypertension, ulcers, insomnia, asthma, skin conditions, hives, tics, and many others (Knapp & Peterson, 1976). Yet, as sufferers, we still look for physical causes and physical-drug cures. The truth is, however, that we should also be looking for psychological causes, i.e. sources of frustration, helpless feelings, and, most importantly, interpersonal conflicts and disappointments. Relationships are where a therapist will look first for stress. You should, too (of course, you need a careful "physical" as well). Look for ways to reduce these tensions (Benson, 1975 or 1984; Domar, 1996).

Heart disease. In 1628, William Harvey described the heart and noted it was affected by emotions. Nearly 200 years later, William Osler, the father of internal medicine, observed that the heart attack patient was frequently an ambitious man going full speed through life. In the 1950's, cardiologists Friedman and Rosenman researched the connection between heart disease and the Type A personality, i.e. one who is prone to do two things at the same time, anxious, impatient, and bubbling hostility. So there has long been an awareness that psychology and emotions are intimately related to diseases of the heart.

This is a serious topic. Heart disease, the #1 killer in the US, begins in the mind! To have healthy hearts, Americans have to change their diets and their cynical, mistrusting thoughts, and hostile emotions. These aren't comments by psychologists; they are statements by a heart specialist (Williams, 1989). We want and expect a pill or a diet to prevent a heart attack. But now Williams, an internist, says we must and can change our thoughts, our attitudes, and our emotions in 12 steps: (1) keep a journal of the things that make you mad (record events, note your thoughts and attitudes that produce anger and mistrust), (2) reveal to others your hopes of changing your temper and negative attitudes, (3) use thought stopping (chapter 11) against cynical, anger-producing thoughts, (4) challenge irrational thoughts (chapter 14) that lead to feeling suspicious ("they are trying to screw me over"), angry ("they are really stupid"), and punitive ("they should be severely punished--I'd like to do it myself"), (5) practice empathy frequently and develop understanding (chapter 13), (6) lighten up, the universe doesn't

revolve around you, laugh at your self-centeredness, (7) relax frequently (chapter 12) and use a cue-word, like "relax," to reduce your irritation and anger, (8) practice trusting and being tolerant of others, (9) and (10) learn active listening, "I" statements, and assertiveness skills (chapter 13), (11) tell yourself that getting riled up and criticizing others can kill you, so it is better to replace your anger with optimistic, tolerant understanding before the heart attack occurs rather than after it, and (12) forgive those (method #4 in chapter 14) who have angered you and, thereby, free yourself from resentment and wanting to get even--and from heart disease. What a smorgasbord of self-help techniques! Undertaking these be-kind-toyour-heart treatment efforts would surely bring more happiness to you and more kindness to others and, therefore, lighten your mood as well.

Williams (1989) and Williams & Williams (1993), who believe hostility is the villain, aren't the only ones to treat heart disease successfully using psychology. Volumes of research over 20 years have studied the relationship between Type A personality and heart disease. Type A's are not just angry, they are tense, hurried, pressured, impatient, competitive, and irritable. They are twice as likely to get heart disease as less anxious persons. Several recent studies have clearly shown that extensive (40+ hours spread over 1 to 3 years) treatment can cut Type A's risk of a second heart attack nearly in half (Blanchard, 1994). That's impressive. What treatment works? Stress management skills to change the core personality: relaxation training, self-observation to help recognize and reduce emotional overreactions, communication skills training, cognitive therapy (see the several methods above), and training in problem-solving, including determining values and goals. In short, the Type A's were taught selfhelp skills and, thus, changed. Why isn't the medical establishment encouraging this treatment?

Recent research has continued to confirm the role of psychological factors in heart disease. John Hopkins University(Archives of Internal *Medicine*, April, 2002) has confirmed that medical students who (a) expressed or concealed their anger, (b) were irritable, and (3) griped a lot were 3 times more likely to develop early heart disease and 5 times more likely to have a heart attack than their calmer class mates. Likewise, another study at University of North Carolina (Williams, 2001) found that people with high anger scores (quick tempered with frequent, intense rages and urges to hit people, etc.) were three times more likely to have a heart attack or cardiac death. Early measures of hostility (mistrust, aggression, cynicism) are good predictors years later of heart disease so early intervention is possible. High stress reactions have been shown to trigger a heart attack. Depression increases the likelihood of death from heart disease. It seems likely that heart patients might benefit from anger, depression, and/or stress management. Several publications have already suggested that more complete psycho-educational programs would be beneficial and a couple of major studies of extensive psychological treatment are now underway (Research to the Heart of the Matter

(http://www.apa.org/monitor/jan01/coverheart.html). It seems likely

that self-help efforts to reduce the major emotions of Anxiety (chapter 5), Depression (chapter 6), and Anger(chapter 7) could have significant impact on your future health. And don't forget exercise, a healthy diet, no smoking, and a good social life.

A psychologist, David Abrams, testified before Congress (May 16, 2002) that good stress management and lifestyle changes, such as healthy dieting and smoking cessation, can reduce the deaths from heart disease by 34%! One must think in terms of life-long heart-healthy programs, not just dieting after blockage of an artery has been found by an angiogram. Psychologists have shown that working long hours (over 40 or 50 hours a week), working weekends, getting little sleep (less than 6 hours a night) doubles or triples the risk of heart attacks. Anger combined with exhaustion is quite dangerous. Apparently, psychological stress increases the risk of death during a heart attack in complex ways, including actually interfering with the flow of blood to the heart just as plaque, cholesterol, and arteriosclerosis might do.

The amount of fatigue you feel at work is a complex matter. For men and women, fatigue is greater when you are not able to organize your own work and when colleagues are not supportive. For many men, high emotional and physical demands, plus demanding bosses, lead to feeling tired on the job within one year. For women, demanding work and interpersonal conflicts are the more likely causes of fatigue. As you might guess, men who have professional jobs run less risk of heart disease and death compared to men with less authority, less education and lower income. Yet, women in demanding positions with high authority were 3 times more likely to develop heart disease than women in less demanding jobs (this tendency was not related, according to these researchers, to having "two jobs--one at work and one at home" or to higher levels of emotions, like anger, depression, or tension.) Men in non-traditional roles, such as being househusbands or living alone, had greater risk of death. You pay a price for being different.

For a timely and detailed review of the many mechanisms (specific physiological pathways) by which environmental stress, emotions, and personality characteristics affect various aspects of Coronary disease, see Smith & Ruiz (2002). Understanding the specific heart disease processes is complex, involving medicine, physiology, psychology and other disciplines. The quality and precision of this research has increased greatly in the last decade or two. Anyone realistically dealing with the psychology-heart connections must learn about these relationships. I can only summarize for you a few basic psychological findings: several emotions are repeatedly shown to be related to chronic heart disease--anger (open expression) and hostility (cynicism and distrust), social dominance (controlling behaviors), negative emotions (depression, anxiety, lack of energy), interpersonal isolation and conflict (including marital strain), and job stress (high demand, low control). Much more study is needed but this area of research is

and will likely be at the cutting edge of mind-body research for a while.

Perhaps the most important area of study is "Psychologically what can be done to prevent or reduce heart disease?" These findings have not become clear-cut yet. But, several interventions have been repeatedly shown to be helpful: relaxation training, self-monitoring of Type A behavior, stress management, hostility management, cognitive restructuring, supportive counseling by nurses and counselors, reduction in risky behaviors (smoking, poor diet, over-weight), meditation, exercise, and others. In fact, several researchers have concluded that psychosocial treatments were *more* effective than the usual medical and surgical interventions, including beta-adrenergic blocking medications, anticoagulants, stents, etc. However, standard medical treatment has recently improved with better beta-blockers, lipid lowering meds, better stents, etc. More research of the psychological treatment is needed but the promise is there.

I will not try to link you to all the heart relevant self-help methods in this book but there are many self-change techniques that can help you prevent and cope with heart disease. Remember, just stopping smoking reduces the heart patient's mortality risk by 40%. What if you never smoked? Starting an exercise program and losing weight also have known benefits. We know a lot about how to reduce anxiety, depression, anger, loneliness, conflicts, and so on. You have a pretty good idea of what you need to do...so get to it.

In light of all this data strongly connecting emotions with heart disease, it may surprise you to learn that many cardiologists pay little attention to the role of emotions in causing or in treating lethal heart disease. Even when the heart patient's wife says to the doctor that her husband got enraged and put his fist through the door the other day, the doctor may just shrug his shoulder. Many, perhaps most, cardiologists do not refer their patients to psychologists if they need to gain better emotional control. However, even if referrals were made, many patients wouldn't go because of the stigma of seeing a shrink. Much better prevention and treatment could be provided than it is now, but the professions will have to cooperate and use all the knowledge available to us.

There are apparently myths in all areas. That includes notions of how to avoid heart trouble. Have you been told that you should express your feelings..."get it out of your system"...that anger will consume you if you don't "let it out?" A lot of people, including counselors, give this advice... sometimes it may be good advice, sometimes bad. Several studies report that having intense anger and venting it is unhealthy. .

Have you heard over and over that drinking red wine moderately is heart-healthy? A recent study questions whether wine is healthy for you or if healthier people drink wine (July, 2002, *American Journal of Clinical Nutrition*). These new findings illustrate the fallacy of the single cause (see Rational Thinking in chapter 14). For example, wine drinkers have better diets, exercise more, smoke less, and eat more veggies than non-drinkers. Moreover, wine drinkers smoke less, eat more fiber, less fat and cholesterol than drinkers of other kinds of alcohol. So, maybe good advice is far more complex than "drink red wine for a healthy heart." The body and all life is complex. We need good science to understand the complexities.

Have you heard of the hoax that circulated through the Internet called "cough self-CPR"--coughing repeatedly and vigorously--if you think you are starting to have a heart attack when alone? Well, according to the American Heart Association (http://americanheart.org/presenter.jhtml?identifier=1200000), this vigorous coughing every two seconds self-treatment is useless or dangerous advice. AHA says if you are in this tense situation (a) attend to the warning signs (chest or upper body discomfort, shortness of breath, and possibly a cold sweat, nausea...), (b) call 911 immediately, (c) have someone begin CPR (if needed), and, hopefully, (d) have an Automated External Defibrillator nearby.

Cancer is a serious, scary, not clearly understood disorder where cells grow out of control. Half a million Americans die from cancer each year. One out of every three Americans will have some form of cancer sometime during their life. Lung cancer is the most common cancer and often related to smoking. The risk of malignant melanoma is increased by sun burns. But not much is known about the causes of other common cancers, such as breast, prostate, and colorectal. Cancer strikes many parts of the body. The type of cancer is determined by the organ it started in, the type of cell in that organ it started in, and the general appearance of the cancerous cells. So, different kinds of cancer can start in the same organ, such as your kidney, and each would need a different kind of treatment. Thus far, family history--the genes?--appears to play a moderate role in causing certain cancers but our knowledge about the causes of cancer is limited. We know about 10% of all American women will eventually have breast cancer, the risk increases with age.

Should you study your own type of cancer? The medical literature can be confusing and disturbing reading. If you are thinking about researching your own cancer, read the pros and cons of doing so on the CancerGuide (http://www.cancerguide.org/) by Steve Dunn. The medical aspects of cancer are very complex and technical, plus the terminology is difficult for a layman to understand. But, if you have a rare cancer, you might be able to help your physician find helpful information or experts to consult with. Note: Always consult carefully with your physician, don't try to treat cancer on your own. There is a lot of garbage out there. The psychological aspects of coping with cancer are also complex and may also be difficult to understand. However, a few points need to be made.

As we discussed above, stress and certain emotions can contribute to the development of certain physical problems, like heart problems, but in other disorders stress is not a cause but a result of having certain physical problems. Breast and prostate cancers are cases in point. Being told you have breast cancer or prostate cancer would set off a near panic reaction in most of us. Many people still believe they will die when they are told they have cancer. That is probably a misunderstanding of the diagnosis. During the course of cancer, patients report having continuing emotional distress, fatigue, lack of energy, fears, depression, and interpersonal difficulties, in addition to added financial, health insurance, and employment problems. Can psychology help allay these high stress or depressive reactions? Often, yes.

Will psychology pro-long your life? Probably not by directly slowing the growth of cancer cells. In the late 1980's, a couple of well publicized studies involved life-threatening cancer and appeared to result in a higher survival rate several years later for those patients who attended a support group than for those who did not get such a treatment. Such a finding gets attention. Unfortunately, the treatment and control groups may not have been well matched. The latest research findings are a bit mixed but generally most scientists would conclude that psychological treatment and/or positive thinking do NOT prolong life (based, in part, on several cancer studies analyzed in 2002 by Dr. Edward Ernst at the University of Exeter). The earlier studies may have created an exaggerated illusion of control over death. On the other hand, there is clear evidence that psychological intervention, education, and professionally run support groups can "improve the quality of life for many cancer patients," not *prolong* their lives. Psychologist-led groups can help with anxiety, depression, pessimistic or suicidal thoughts, and family relationships. Behavioral interventions can improve diets, exercising, compliance with doctor's orders, and general health. Oncologists understand the need for these changes and relief from emotional problems but as a profession they tend to think it is someone else's job. In fact, about 20% of oncologists are reportedly uncomfortable treating advanced cancer patients who are dying. Other professionals, hospice workers, nurses, and mostly family members will have to provide the needed support.

Massive cancer research done during the 1990's produced wonderful improvements in the physical treatment of cancer and generally confirmed that psychological interventions can generally (but not always) increase the quality of life in cancer victims. Much more research is needed, however. Some peer support groups are helpful but some may be harmful. I'd suggest you choose a support group led by a professional--a psychologist or a social worker--experienced with cancer. Several Web sites provide information about cancer: WebMDHealth

(http://my.webmd.com/webmd_today/home/404?ourl=404; http://my .webmd.com/condition_center/&referer=) and American Cancer Society (http://www.cancer.org/docroot/home/index.asp) and Cancer.gov (http://www.nci.nih.gov/). It may also be helpful to read on those sites people's descriptions of their battles with cancer. Taylor & Thompson (2002) share the moving but informative stories of 30 cancer patients.

If you have cancer, there are two things you should do to understand the psychological aspects better: (1) read a scholarly and detailed review--not just a newspaper article--of the recent psychological research with cancer patients (such as, Anderson, 2002; Email: anderson.1@osu.edu). This gives you a realistic notion of what to expect from psychological treatment. Several types of psychological interventions have been researched--relaxation training, individual therapy, group therapy, cognitive-behavioral therapy, educational classes, training physicians to be warmer and more supportive, peer groups, and peer counseling. In general, these interventions reduce distress in cancer patients. As you know (and as this book tells you over and over) most self-help methods are adaptations of therapy techniques, so you could select self-help methods that would fit you and your situation. Examples: in general, relaxation techniques (see chapter 12) and challenging your upsetting, irrational thoughts (see chapter 14) might help you calm down. In a more specific instance, the radiation treatment of cervical cancer often results in several kinds of significant sexual dysfunctions. Therapists have found that a device, called Eros, is very helpful in gradually restoring sexual functions and pleasures. It consists of a gentle vacuum that is applied to the clitoris. With a prescription and a little advice about how to use the device (costing \$395), it could become a self-treatment procedure.

(2) The second thing I would do is read Holland & Lewis's (2001) book, The Human Side of Cancer. Holland is a physician, a female, who has concentrated for years on the psychological/emotional experiences associated with having cancer. She is a leader in this field. One of her salient points is that the popular self-help literature sometimes does harm to cancer victims by preaching "positive thinking." Some pop psych writers blindly believe and will tell you that having unwavering hope, being positive and inspired, being an aggressive fighter of disease, etc. will help you overcome cancer, almost implying positive thoughts are a cure. Positive thinking can improve the lives of some people in several ways but it can also actually cause harm to others. Holland points out that many people have never had a positive, optimistic, rosy, everything-will-bewonderful outlook and they aren't going to adopt such an attitude while being diagnosed with cancer, facing sickness and possible death, and enduring painful, draining cancer treatment. Some people cope by being realistic and quietly stoic.

Dr. Holland describes cancer cases in which the patient feels especially hopeless because they just can't get optimistic, even though their cancer treatment is going well or has been successful. Because the self-help books say you must be positive, they feel afraid and worried because they don't have the "right" attitude. Sadness and fear do not make tumors grow. No one is going to die because they can't keep a positive attitude. Self-help book writers should realize their positive message, while helpful in some cases, can also encourage blaming the victim. Some people are so into the positive thinking thing that they actually blame people for having a brain tumor or cancer of some internal organ. That is stupid and cruel. But humans, always hoping they have a solution, are prone to think this way, e.g. before bacterial infections were found to be responsible for tuberculosis and for ulcers, it was thought that personality traits and high stress were the causes. Cancer can't be caused or controlled by your positive or negative thoughts, but optimism can perhaps help you cope with the growing cells.

Back in the late 1970's a popular treatment for cancer, advanced by medical doctors, involved having the patient visualize their healthy cells attacking and killing the cancer cells. Well, that treatment has been discarded, but we still have the self-help books saying "you have to be positive," "you need to imagine being cured of cancer," "you have to eat specific foods," and so on to get well. We must separate the nonsense from the truth. Of course, being cooperative and conscientious about carrying out your treatment and maintaining your general health are important.

General health, according to popular and interesting but spiritual books by Siegel (1989), is related to peace (acceptance of ourselves and the world), love, hope, taking responsibility for oneself, self-body talk, openness to joy, reaching out to others, relaxing, selfacceptance, expression of feelings, visualization of healing, having a fighting spirit, spiritual faith, and other factors. For health we certainly need to talk to and listen to our feelings--our inner selves.

And for health we may need a protective, nurturing system of care, something far warmer, more available, and more personal than our current medical/psychological services. Shelley Taylor (2002) has pulled together the evidence for "tending and befriending" tendencies (see Anxiety section above) and for the critical importance of having a caring social environment throughout life, but particularly from loving parents in childhood. In her book, The Tending Instinct, she also reminds us that the radical collapse of economic/social/political/health care systems, such as when the Communist block crumbled, resulted in "the system" and people being less able to help each other. The death rates in these countries during the 1990's increased (life expectancy went from the 70's to the early 60's, especially for men), the marriage and birth rates decreased, heart disease, cancer, and accidents increased as the caring/tending aspects of the culture and within the families declined. Apparently, having social support by relatives, close friends, coworkers, by social and church groups...and by the health care system, plays a major role in keeping us healthy.

Does Prayer Improve Health? This is not an easy question to answer. Most people are told "yes" in church. Many people pray for sick relatives and friends. There are also many studies that say "yes, prayer helps." One such article was reported recently by a respected Ob-Gyn specialist at Columbia University (Lobo, 2001, in *Journal of Reproductive Medicine*). Half of 200 Korean women wanting to get pregnant were secretly prayed for by North American and Australian prayer groups. Those prayed for reportedly got pregnant twice as often. Similarly, a group of physicians at Duke (Krucoff, 2001, in *American Heart Journal*) studied the effects on angioplasty of both

relaxation techniques and prayer groups located around the world...the results: patients prayed for had "fewer complications." This is strange stuff and it gets even more spooky in other studies where prayer reportedly affects bacteria, enzyme cells, animals, and plants. No one knows the mechanisms, if any, behind this power of prayer. It is mind-boggling. Here is my current belief--just like a caring Mom and Dad keep an infant or child safe and healthy, just like mature teenagers look out for each other and help each other be reasonable and safe, so an openly concerned, nurturing, warmly "tending and befriending" church or support group or family would give good advice and support one another to be healthy. On the other hand, I have serious doubts about the effectiveness of any totally secret (unknown to the sick person and his/her doctor), mystical, scientifically inexplicable prayer curing human disease, improving the results of any physical treatment, helping sperm enter an egg, or helping plants grow better. However, a friend, minister, or loved one sitting down with you and holding your hands as they lovingly express concern and affection (or pray) may be psychologically very comforting and, thus, physically helpful..

So how do the results I just called spooky happen? Well, if there are lots of these studies (and there are), 5% or 10% will show "statistically significant" effects just by chance. Studies finding "Prayer Heals" would get the attention of the press, but not the studies that suggest prayer is powerless or even harmful (i.e. the 5% to 10% of results that are significantly negative by chance). There are other possibilities: mistakes made while gathering data, having employees handling the data who have biases that unconsciously distort the data, and just plain intentional fraud. Chance results are the most likely explanations of spooky results, mistakes and biased but innocent distortion of the data are next, and very rarely is it intentional distortion, but it occurs..

If your religious beliefs and practices relieve stress and calm you down, they almost certainly contribute to your health. But what is at work here, religious beliefs or stress reduction? Is religion any better at reducing stress than many, many other ways? That answer surely differs from person to person. It needs to be studied. Reading the literature, thus far, doesn't help much to answer these questions. As I have indicated many "studies" have been interpreted by the authors to mean that being religious yields health benefits. Yet, scientists (Sloan & Bagiella, 2002), carefully reviewing all the religion-health studies published in 2000, conclude there are virtually no scientific grounds for believing religious beliefs alone improve health. They actually found that 83% of the published 266 medical articles in 2000 were irrelevant to the question or had serious methodological flaws. Many other scientists have come over the years to the same skeptical general conclusion. One has to wonder why so many poor research designs were published by highly scientific medical journals. There is intense emotional investment in this issue, much like the 150 year controversy over evolution. Strong needs distort our thinking...

When thinking about the supposed power of prayer, keep in mind that it is obvious that being religious and praying are not all-powerful cure-alls; these actions don't deliver health to all good people; indeed, if religion has any influence at all, overall it is weak. Why would an all powerful God choose to be weak? As in other areas, I believe it would not be wise to put much faith in the results of researchers who are "believers" of the religion being studied, just as one can't totally believe scientists (or lawyers) employed by the company making the drug being evaluated, or a therapist evaluating a type of psychotherapy or a self-help method he/she has developed. Expect to see a lot more "religion improves your health" articles because religion is impossibly confounded with stress reduction, positive expectations, wishful thinking, self-acceptance, a sense of mastery, and so on. Human warmth heals people but undisclosed spiritual prayer probably doesn't. However, face to face praying is human warmth.

Hypochondriacs seek help from physicians four times as often as the ordinary person, costing them distress and costing all of us millions of dollars. The continuous fear of having a serious illness can be overcome by exposure therapy or by a cognitive-behavioral course which explains our expectation of a serious illness (Avia, et al, 1996). Shouldn't psychological causes be investigated more? Yes. Don't we need to know why we assume a health problem is physical much more often than we think it is a psychological problem? Yes. And we need to learn how to prevent feeling "sick and tired" all the time (Donoghue & Siegel, 1996) but, as Swedo & Leonard (1996) point out, "it's not always all in your head." We cannot forget biology; cancer is not a psychological disorder, although it's influenced by psychological factors. Tiredness will also be discussed in the Depression chapter.

Allergies have many causes, some psychological but many in food, in pollen, cleaning products, fabrics, medications, cosmetics, dust and other aspects of the work and home environment (Faelten, 1987). Stress often makes the reaction to irritants worse.

Pain afflicts close to 30% of all Americans! It is the most common medical symptom and the second most common psychological symptom. It interferes with work, with relationships, with enjoying life, and it costs a lot of money. Headaches (15% of men; 25% of women) and backaches are the most common and debilitating pains; both are frequently associated with stress, but the physical mechanisms are not well understood. Over the last ten or 15 years, the picture of how headaches are caused has become more and more complex--not clearer. This is because science is finding some of the pieces of the pain puzzle. It seems that genes, neurotransmitters, hormones, muscle tension (even botox helps some), various parts of the brain, blood vessels, and other parts sometimes play a role in a headache. It is an amazing process. Several new drugs, such as sumatriptan for migraine, have been developed that are effective on certain types of headaches but some are very expensive, others loose their strength, some have damaging side effects. We still have a long way to go. However, if I had frequent serious headaches, I'd seek help from a medical specialist, even though there are many psychological aspects, which we will discuss below.

For many individuals, stress seems to exacerbate pain in specific parts of the body. So, it isn't surprising that there is a connection between headaches and mental/emotional disorders. For instance, Migraine sufferers have poorer coping strategies (wishful thinking and excessive self-criticism) and have more panic attacks than people without headaches. Likewise, fibromyalgia patients (88%) have more psychological disorders than other sufferers with equal pain, like arthritic patients (30%). Fibromyalgia patients, who's pain pathways in the brain respond strongly to just moderate pressure, are also more likely to have been abused as children and physically assaulted as adults than arthritis sufferers. Thousands of factual tidbits are coming together, such as the frequency of migraine headaches has almost doubled between 1981 and 1989 (a diagnostic fad?) and women have more migraines than men (for women consider the time of the month). Given enough information, the scientific understanding of pain will become clear. That doesn't mean we will be able to stop all pain.

Pain patients who also have certain kinds of psychological problems respond to pain treatment differently. For instance, psychologists (e.g. Turk & Gatchel, 2002) specializing in treating chronic pain patients suggest there may be three subgroups: (1) the "dysfunctional" have severe pain, tend to be depressed and inactive, and feel they have little control over their pain. (2) The "interpersonally unhappy" are in serious pain and feel they are discounted and unsupported by people around them. (3) The "more optimistic copers" have pain but handle life's problems and continue to have hope of controlling their pain. Dr. Turk found that fibromyalgia patients in group (2) did *not* benefit from standard pain treatment (education, exercise, stress management training), but patients in groups (1) and (3) did benefit. Maybe group (2) needs more help with their interpersonal problems. Indeed, other therapists have found that including others (family or spouse) in the treatment of pain helps the patient...and the relatives (Siri Carpenter, APA Monitor, April, 2002). Pain treatment needs to be individualized, one approach doesn't fit all.

Perhaps 50 million Americans suffer chronic or frequent pain. Yet, there are great barriers to getting treatment (in addition to our ignorance). (1) Some patients are afraid of being seen as wimps; others worry they may have a serious disorder, like cancer, and don't want to know; some unrealistically fear taking pain-killers, like morphine; others fear the pain is mental or feel their doctor thinks it is. (2) Physicians are not trained in Medical School to handle pain; thus, this isn't their specialty and they are often uncomfortable, especially if the patient doesn't get better. They can get in legal trouble if they over- or under-prescribe. (3) Many managed care and health insurance programs try to avoid paying for expensive pain treatments. Patients may feel better on pain-killers but they often don't go back to work. Thus, there are many reasons people in pain don't get adequate treatment, especially children, the elderly,

minorities, and rural groups (Rebecca Clay, APA Monitor, April, 2002). Try to sidestep these barriers if you can.

Research confirms that psychological treatment--biofeedback, relaxation, and cognitive therapy--can effectively reduce headaches without side effects (Blanchard, 1992). Of course, aspirin, drugs, ice, heat, massage, and hypnosis can reduce pain too. Acupuncture helps some people; even sex relieves a migraine for 15-20% of sufferers. Drugs are effective for many sufferers but they may be depended upon excessively. Hypnosis is surely under used (see chapter 14). There is no magic solution but several techniques may make pain more tolerable: (1) have a hopeful attitude, "I want to...I can...do something about this pain," (2) focus attention away from the pain, perhaps to pleasant memories, exciting plans, socializing, games, TV or music, (3) use relaxation (chapter 12), (4) try self-instructions and stress inoculation (chapters 11 & 12), and (5) if you have a sense of humor, use it now. (6) Much like self-hypnosis, mental imagery can help: (a) imagine that the hurt leaves your body, e.g. "flows out your toes," or is no longer a part of your body, e.g. "the dentist is drilling out the pain," (b) imagine being a popular athlete or war hero who is very tough and has done something great, (c) imagine Novocain being injected into the hurt and the area becoming more and more numb, or (d) imagine studying the pain in great detail, e.g. notice how the pain is sending an important message, it is demanding attention to get me well, the muscle or artery is saying "I'm healthy and trying to help but I need more oxygen," the hurting part is getting what it needs to heal, etc. You have to create your own fantasies; only you can discover how to use fantasy to reduce pain (Kleinke, 1991).

Clearly, painful disorders, such as low back pain, frequently involve psychological factors; they often have a long history of various physical complaints besides pain, even more alcohol dependency and impaired daily functioning (Bacon, et al., 1994). The best predictor of a bad back at work is job dissatisfaction and stress, not physical strain. Sarno (1994) says back pain is a natural (painful but harmless) reaction to emotions, especially perfectionistic tendencies. The pain distracts us from life's troubles. He suggests that the sufferer concentrate on dealing with his/her life stresses and not on the body pain. The treatment often involves changes in your attitudes and thinking about your emotional problems which result in well planned self-help efforts. The difficult part is convincing yourself to assume the responsibility for your own improvement (not drugs or surgery) and then figuring out what needs to be straightened out in your life. Telling yourself how awful and unbearable the pain is or how weak and helpless you are is harmful, not helpful. By the way, the success of spine surgery is influenced in large part by your psychological health; so, if emotions caused the pain in the first place, don't expect surgery to help.

Chronic pain victims are frequently depressed; they tend to be passive and unexpressive of emotions but, in general, pessimistic "awfulizers." If they blame themselves for the pain, they experience less pain. Stressful interactions with others seem to exacerbate the effects of pain (Schwartz, Slater & Birchler, 1994). If their pain is a mystery or someone else's fault, they experience more pain. Interestingly, if they have a good, close system of social support, they also report having *more* pain. If they can come to understand the causes of their pain and, where appropriate, see their physical pain as a substitute for psychological pain, then they can learn to directly express other feelings and emotions... and learn to relax... and feel better (Miller, 1993; Marcus, 1994).

Besides dealing with the pain, chronic sufferers must also deal with getting on with life, avoiding searching endlessly for a non-existent total cure, coping with the real disappointments and losses they face, deciding on a middle ground between "silent suffering" and "constant complaining," and working out new and satisfying relationships with the people they love. These are hard problems to solve. Don't wait long to get expert help. There are over 1000 Pain Clinics, some concentrate on medications, some on psychological methods, some on a variety of hands-on techniques to ease pain, such as massage or chiropractic, some more spiritual, and so on. Ask your doctor for a referral or call your local hospital for a referral to a specialized pain center. The problem is that almost anyone can establish a Pain Clinic, so choose one carefully--only physicians (MDs) can prescribe all the available medications but they don't ordinarily do psychological treatment. So, the ideal doctor is hard to find. Therefore, I'd suggest seeing an MD who specializes with your specific kind of pain and who also works closely with a Physical Therapist (more common) or with a psychologist. In most cases, doctors in general practice, psychologists, chiropractors, massage therapists, exercise trainers, health educators/counselors and others are not well trained in the full range of pain control. Even though I believe a skilled hypnotist may have something to offer, I would not see one without first consulting expensively with a pain specialist with a MD and then confirming the credentials of the hypnotist. Finally, knowledge in this area is changing so rapidly and treatments so unreliable (and some are so expensive and long-term), I would strongly urge everyone in pain to do extensive reading in recent publications about his/her specific kind of pain. This is far from an exact science.

Among the more popular books for back pain are McKenzie (2001) and Sarno (1999), both MDs. Amir (1999) wrote a self-help back pain book based on Sarno. Jemmett (2001), being a Physical Therapist, takes a somewhat different approach called spinal stabilization. Three recent headache books are by MDs: Paulino & Griffith (2001), Buchholz & Reich (2002), and Diamond & Franklin (2001). They all give practical advice to the layman. Also, if you suffer from headaches, write the National Headache Foundation, 428 W. St. James Place, 2nd floor, Chicago, IL 60614 or call 800-843-2256. Other how-to workbooks for pain are by Catalano & Hardin (1996), Caudill (1995), and Chaitow (1993). Several good self-help references are Martin, 1993; Anciano, 1987; Hanson & Gerber, 1989; Catalano, 1987; Melzack & Perry, 1980; Low, 1987; Chaitow, 1990. There are a lot of Web sites dealing with various kinds of pain. The directories of major search engines list many of the better ones. See Yahoo! Chronic Pain

(http://dir.yahoo.com/Health/Diseases_and_Conditions/Chronic_Pain), and Google Neurological Disorders

(http://directory.google.com/Top/Health/Conditions_and_Diseases/Ne urological_Disorders/). Many good references about pain in many parts of the body are available at Ask Noah about Pain (http://www.noahhealth.org/en/bns/disorders/pain/). Other centers specialize in pain at just one location in the body: Yahoo Back Pain Center (http://health.yahoo.com/topic/back_pain/) and Dr Koop Stomach Pain Center (http://drkoop.com/template.asp?page=gi&ap=93). Healthopedia.com (http://www.healthopedia.com/headache/) coves headaches extensively. Also see p. 146 above. The Mental Help Net has a section about pain

(http://mentalhelp.net/poc/center_index.php/id/81) .

For learning more about professional treatment for a wide variety of physical disorders, see the June, 2002 issue of the *Journal of Consulting and Clinical Psychology* and Duckro, Richardson & Marshall (1995). As mentioned above, therapy reviews have shown that behavior therapy and cognitive-behavioral therapy work with headaches and irritable bowels (Blanchard, et al., 1980, 1987; Keefe, 1992). Finally, if you have been treated by a MD or a therapist without satisfactory relief from pain, ask for a consultation with a MD or Ph.D. specializing in your kind of pain. If seeing a psychiatrist/psychologist is recommended to you, please don't be offended and go.

Bibliography

References cited in this chapter are listed in the Bibliography (see link on the book title page). Please note that references are on pages according to the first letter of the senior author's last name (see alphabetical links at the bottom of the main Bibliography page).