

Stress

Stress = perceived threat *Stress* = demands that exceed coping resources

Occupational *Stress* = Increased responsibilities with decreased control

Stressful Events = Events which are seen to tax the capabilities of the individual

External Sources of *Stress*: Environmental, interpersonal

Internal Sources of *Stress*: Individual appraisal of an event

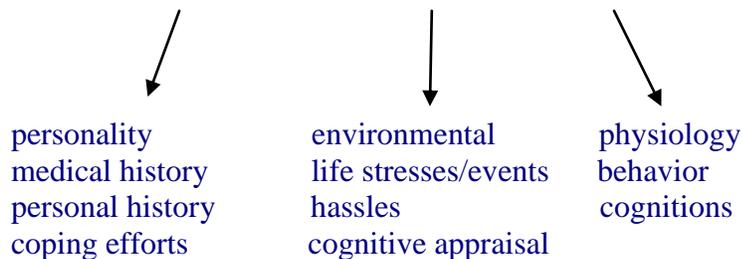
Negative habitual cognition

Type A Behavior Patterns (characterized by a sense of urgency, chronic struggle to achieve more, feeling "driven", impatience, competitive drive, in some cases aggressiveness and hostility; in women - frequent tendency toward perfectionism)

Stress = impact on body/system; *Stressors* = identifiable events

Stress is a cumulative phenomenon in that multiple stressors over time can have cumulative effects.

Individual characteristics and **stressors** = Stress reaction



Understanding the *Stress* Response

When your body is physically tense because of pain or other stressors, it usually reacts with what is termed the stress response. You may also know this response as the "fight or flight" response.

In his popular book, The Relaxation Response, Dr. Herbert Benson suggests that the fight or flight response had important evolutionary significance for human survival. We inherited this response from our ancestors, who put it to good use in the face of extreme physical danger.

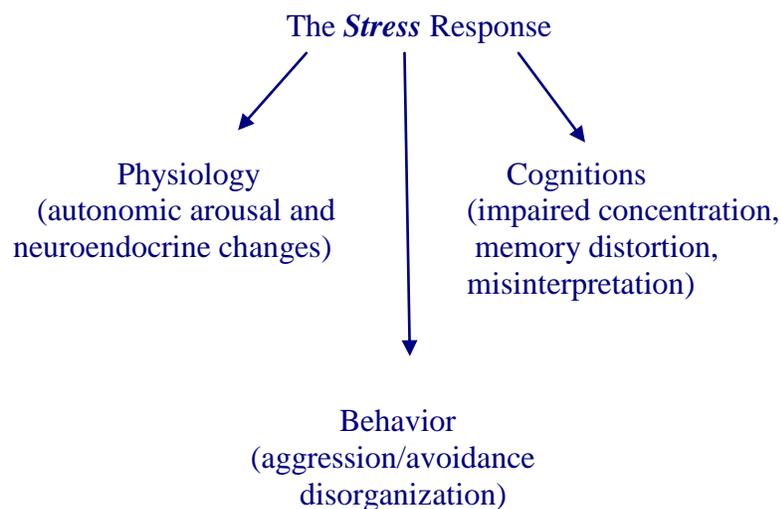
Among other things, their hearts pumped blood faster to their muscles and lungs, enabling them to strike harder or run faster than they normally would. But now, although you have the same physical response, your world seldom requires or even permits you to fight or run. For example,

you cannot run away from or hit your boss when he or she yells at you. The same ancient physical response is turned on, but it doesn't benefit you in the same way. You don't have an appropriate outlet or release valve for the stress.

This doesn't mean that all stress is bad. The natural stress response can help you react quickly to protect yourself or give you a charge so that you think more quickly and clearly. The adrenaline that's suddenly pumped into your blood stream helps you swerve out of the path of an oncoming car. Similarly, a challenging project at work can motivate you to work harder. But when the adrenaline that gave you a quick reaction continues to course through your blood stream for months and years, its effects are not so positive.

The danger of a prolonged stress response is its wear and tear on your body. And when stress is coupled with chronic pain, the wear and tear you experience is multiplied. Twenty years of a demanding job or six months of pain will both take a toll on your body. You may end up with circulation problems from decreased blood flow, or chronic secretions in your stomach may eventually contribute to an ulcer. Or the shoulder, neck and head muscles that you tense to brace against the pain may lead to tension headaches or temporal mandibular joint syndrome, a problem of the jaw resulting in part from chronically clenched teeth.

Here is what usually happens to the human body under stress, and what you feel:



Physiological Changes:

Your heart rate increases	You feel your heart pounding in your chest
Your blood pressure increases	(Not detectable unless measured)
Your sweat level increases	Your skin feels cold and clammy
Your respiration rate changes	Your breathing becomes shallow or you breathe in gulps
Adrenalin and other hormones are released into the blood stream causing vasoconstriction in the periphery and increase in muscle tone. Blood flows away from the periphery (hands and feet) to the heart, lungs and muscles.	Your muscles contract; your hands and feet become cold
Certain acids are secreted in the gastro-intestinal tract	You feel "butterflies" in your stomach

Other organs such as liver and spleen are also affected by stress, and some organs shut down altogether, such as the digestive tract and sexual functioning.

Behavioral Changes:

Aggressive behavior or avoidant behavior; "fight or flight"; strike out or be passive

Cognitive Changes:

Stress reaction does not help us think - it serves to mobilize the body for action - consequently cognitions are likely to be impaired;

Depression of intellectual functioning - including cognition distortions and misinterpretations of situations, events, interpersonal exchanges;

Ruminative and unproductive patterns of thinking and indecisiveness;

Worrying and anticipation that "something bad" will happen (e.g. losing control, some danger to others);

Distractibility, problems concentrating;

Impaired memory;

Impatient, easily irritated;

Tending to engage in negative, unrealistic, pessimistic thinking patterns.

Common *Stress*-related emotions:

Frustration	Tension
Anger	Depression
Anxiety	Hopelessness
Fear	Guilt

Resulting in: Impaired self-esteem, Anhedonia, Time Urgency, Perfectionism

What is Burn-Out? A type of stress defined by emotions and emotional stages

Stage 1: Enthusiasm

Stage 2: Disillusion

Stage 3: Frustration/Anger

Stage 4: Depression which results in: (a) exiting the situation or (b) entrapment

Strategies for Stress Management

Effectively managing stress involves multiple aspects. Identifying whether stress is primarily external or internally generated, and then focusing on problem-solving or accurate appraisal can be considered perhaps the first step. As noted in the section on managing anxiety, the actual event is often secondary to how one perceives it. Stated another way, what happens to us is only 20% and attitude about what happens is 80%. Expectations are also important. Are they reasonable or unreasonable? If reasonable, are they actually realistic given the various factors and people involved? Identify needs vs. wants. It is important that needs be met, wants are extra and not necessary for one's well-being. It is also important for women to remember that it is not selfish to seek to have one's needs met, it is self-preserving and diminishes a sense of resentment, which is in itself an indicator of needs not being met effectively. It is also important to remember that no one can read one's mind and magically anticipate and know what one's needs are. Clarify values; know what is really important to you and remember that no one is here to live up to another's expectations. What helps you feel better? Forget 'why' questions; they only lead from one labyrinthine path to another and never to a solution. Ask 'what' questions.

Physical coping strategies, cognitive coping strategies, emotion management, and self-soothing strategies can all be helpful and are discussed below. However, adequate sleep, adequate nutrition, and effective, direct neutral communication strategies are also equally important, as well as having down time. Sleep can be adversely impacted by stress, especially in terms of diminishing the amount of restorative and deep sleep which is essential.

Physical Coping Strategies: These strategies involve physical activity, and include exercise, working in the yard, taking a brisk walk, engaging in woodworking, or other such tasks and activities. These can be quite effective but sometimes are not available due to illness or injury, and may not help in actually solving a particular problem resulting in stress.

Cognitive Strategies: As discussed in the section on anxiety, cognitive coping strategies involves accurate thinking and appraisal and learning reality or fact-based thinking. This requires identifying those negative and inaccurate judgments that are being made about the stressor(s) or events and then disputing these with actual facts without unnecessary value-laden judgments.

This is illustrated by an ABCD Model:

A	B	C	D
Activating Event	Belief/Thoughts (Judgments)	Consequences/Feelings	Disputing (Facts)
Phone call from daughter in college	She only calls when she wants money	Anger, frustration, annoyance	Let me hear her out. She sometimes calls to talk.

These are probably the most effective in the long run, once the physical and sometimes emotional sensations are addressed as discussed. It is important to learn how to assess the situation accurately, not on emotion-based and inaccurate judgments. There is a tendency to believe that emotions are elicited directly by an event. However, this is simply not true the majority of the time. Rather, only about 25% of the time is this likely, such as when a loved one dies after a long illness. One can accurately tell oneself that it is better that the person is no longer suffering, but one will still grieve and feel sad. In about 75% of the time, it is the judgments one makes about the event, or what one tells oneself about the event that actually leads to the emotion that is experienced. Granted, there are times, that even accurately appraising the situation will still evoke some anger or anxiety, but if one's appraisal is indeed accurate, most

of the time one's emotional reaction, such as anger or anxiety, will be noticeably moderated or diminished, leading one to feel more in control of oneself and one's emotions. There are also some predictable ways that cognitions or thoughts can be inaccurate and distorted. Some of these are outlined below:

- 1) All or Nothing Thinking: The tendency to see things as either black or white, without acknowledging intermediate ground or the 'shades of gray'.
- 2) Overgeneralization: Interpreting a single incident as being indicative of a never-ending pattern.
- 3) Mental Filter: Picking out a negative detail from an event and focusing on, excluding any positive or neutral aspects.
- 4) Jumping to Conclusions: Making a negative interpretation of an event, even when there are no negative facts to support the conclusion.
- 5) Disqualifying the Positive: Rejecting positive aspects of a situation, and thus holding on only to negative interpretations despite little or no evidence.
- 6) Magnifying/Catastrophizing: Exaggerating the negative and assuming the worse case outcome of a situation, again without adequate evidence for doing so.
- 7) Emotional Reasoning: Thinking negatively, based on negative feelings. For example, "I feel worthless and therefore I am worthless" or "I feel depressed, so my life is stinks".
- 8) Personalization: Taking things personally when no slight or criticism is intended.
- 9) Should and Ought Statements: Attempting to motivate oneself through the use of 'shoulds', 'shouldn't's', 'oughts', etc. which don't actually serve to motivate, only demotivate through feeling guilty and 'not good enough'.
- 10) Mislabeled: An extreme form of overgeneralization in which labels are applied inaccurately and globally either to oneself or others: 'I am a loser'; 'People from Appalachia are all ignorant'.

Corresponding to these distorted ways of thinking are common irrational or inaccurate attitudes held by people in general. These include such erroneous beliefs as:

- 1) It is necessary that I be liked and approved of by everyone; If I am not, this means that I am not good enough.

- 2) It is awful and unbearable when things do not turn out well after working hard for them to do so.
- 3) Human unhappiness is externally caused and people have little or no ability to control their sorrows and disturbances.
- 4) One is entitled to a pain-free existence.
- 5) It is easier to avoid than to face most life difficulties and responsibilities.
- 6) There is always someone else to blame for one's failings.
- 7) One's past history is an all-important determiner of one's present behavior and one's future.
- 8) One should become overly upset over someone else's problems and to take them on as one's own, especially if family.
- 9) There is always a right solution or decision and it is a terrible failing if this precise and right solution or decision is not found.
- 10) Perfection is possible.
- 11) One has no control over his/her emotions.
- 12) Life is fair and one is entitled to justice.
- 13) Worry will help one deal with life's problems and come to an inevitable solution. Therefore, over-thinking and over-analyzing will eventually yield a good result.
- 14) One has to be totally competent or one is 'not good enough'.
- 15) Failure is to be avoided at all costs, is a terrible thing, no good can ever come from it and is proof that one is worthless and a 'loser'.

Remember, these beliefs or statements are not true and it is important to identify such beliefs which are usually emotion-based, not fact-based. However, emotion-based beliefs have their genesis prior to adolescence at which time the frontal lobes of the brain begin to become operational providing the ability to think abstractly. Consequently, regardless of accuracy, emotion-based beliefs 'feel right' and form a 'cognitive map' that serves to help explain the world and ourselves. But if they are inaccurate, these beliefs can lead to anxiety, and other emotional places that are not comfortable. Since we are all human and fallible and raised by other fallible human beings, all of us usually have some such inaccuracies. Also, it can be difficult at times to

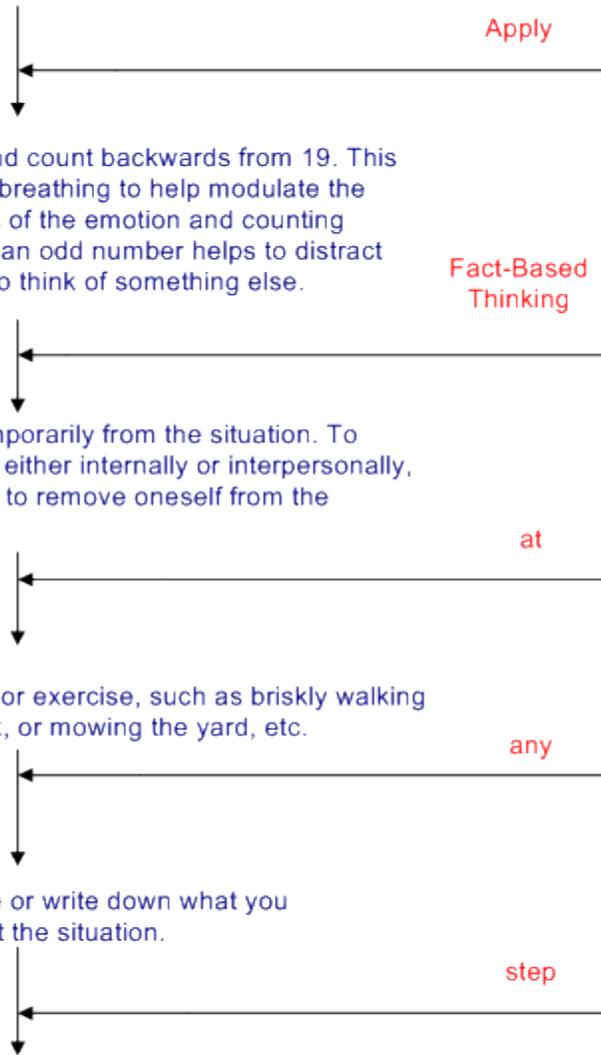
identify these since they often become automatic and function as a kind of cognitive wall-paper. However, they can only be rectified by identification followed by accurately challenging these beliefs with more accurate fact-based ideas.

Emotion Management: It is difficult to engage inaccurate, fact-based thinking when one's emotions are running rampant. Although emotions are necessary, normal and important in providing the connecting bridge to other humans, when out of control, they can lead to damage to relationships, inability to cope effectively, inability to effectively problem-solve, and so must be addressed. There are 2 approaches: an action-oriented approach and a self-soothing approach.

An action-oriented approach is not for everyone. There are some findings that suggest that this approach can sometimes serve to exacerbate some emotions, especially anger. However, this is more effective if joined with a cognitive approach as soon as the emotion is mitigated such that effective thinking can then occur. A flow-chart may serve to illustrate this approach:

Recognize and label the emotion one is experiencing. This brings into awareness that one is experiencing an emotion, and starts the process of management. "I'm really p-----!" is sufficient.

Fact-Based Thinking



Deep breathe and count backwards from 19. This restores normal breathing to help modulate the physical aspects of the emotion and counting backwards from an odd number helps to distract cognitively and to think of something else.

Remove self temporarily from the situation. To avoid escalation either internally or interpersonally, it is often helpful to remove oneself from the eliciting cues.

Physical activity or exercise, such as briskly walking around the block, or mowing the yard, etc.

Talk to someone or write down what you are feeling about the situation.

Constructive Displacement Strategies. Taking out your anger, frustration, fear, etc. onto something or into an activity in which no one (including oneself) is harmed in any way. This is only limited by one's imagination and can include playing a musical instrument, including a punching bag, play a computer game, etc.

To be effective, as soon as the emotion is mitigated, and thinking is clearer, introduce fact-based thinking to address the underlying cognitions that are serving to elicit the emotions to begin with.

Self-Soothing Strategies: Whatever serves to soothe and calm can be used. Soothing, quiet *music* such as new age, sounds of nature, Celtic and classical music are helpful. Hard rock, rap, and country, are not known for their effectiveness in calming emotion! It has also been found that the use of music is most effective using a walkman or earphones.

The use of *water* sounds and experiences such as listening to a fountain, the noise of ocean waves or a mountain brook, gazing at a lake or beach, or even soaking in a hot tub of water. This can be combined with music.

When a baby needs soothing, he/she is *rocked*. The brain still responds to this movement and the use of a rocking chair, porch swing, glider, swing all serve well. Some have found that *aromatherapy* to be of some utility and smells are not only powerful in eliciting memories, but can be calming on their own.

Imagery can be useful. (When children do this, it is often called "daydreaming"). To be effective, all senses need to be used. So, if one is going to imagine lying on a beach and feeling relaxed, it is important to imagine sights (seagulls, bright sun, beach houses, sand, water and colors) sounds (cries of gulls, sounds of the waves and wind) smells (saltiness) touch (feel of the grit of sand on skin, feeling of breeze, warmth of the sun) and even taste (saltiness).

Mindfulness is the art of staying in the present and paying attention only to what is going on right now; thinking about or worrying about tomorrow or yesterday or 3 days from now only worsens a feeling of stress and anxiety. There are many mindfulness exercises available. The following is a basic one:

Notice your breathing; how it feels when you inhale and how it feels when you exhale. Don't alter your breathing. Just notice it.

Now focus only on what you can see. Notice colors, shapes, objects, in your immediate environment (whether inside or outside). Now, pay attention only to what you can hear. Notice white noises (such as a fan), sounds of traffic, birds, voices, etc. Notice tactile and kinesthetic (where your body is in space) senses. If you are sitting, allow your body to sink into the chair. If you are standing, notice how it feels to stand straight; how your feet, knees, hips feel while

supporting your body's weight. Notice textures in the chair; contrast that to the feel of the material in your shirt, or pants; notice your toes inside your shoes. Notice how your rings, watch, glasses or other jewelry feel on your skin. Notice temperature: whether you are warm, cool or just right. Notice if there is a breeze or sunshine on your skin. Notice smells, fragrances, odors.

Return to your breathing. You may notice that your breathing is a bit slower and deeper. You may notice that the "noise" in your head is calmed.

By focusing on the immediate sensory experience in a non-threatening environment, your fight or flight (sympathetic nervous) system slows down, allowing your relaxation (parasympathetic nervous) system to kick in.

Mindfulness can be done in the shower, noticing sensations of water and warmth and the flow of water on your skin. Also, eating can be done in a mindful manner, by noticing the different taste sensations, texture of the food, the smells of the food, how it looks, etc. Walking, exercise, almost anything can be done in a mindful manner which serves not only to enhance the experience of what you are doing, but also to manage stress and feel more relaxed while engaging in the activity.