

Arousal Control (Stress)

*This is to be used for exercise and daily use (homework).

Introduction

Stress is something everyone experiences on a regular basis. Temporary stress in response to an environmental challenge is adaptive, and spurs us to grow and adapt. During a temporary challenge, our brain instructs our body to shift into action, releasing hormones such as adrenalin that help us step up to that challenge by being more alert and focused. In times past, this stress response helped us fight for food, or run away when a saber-tooth tiger thought we were food. After the environmental challenge subsides, our brain signals to our body that it is time to rest and recuperate. Therefore, it is optimal to be able to shift into decisive action to deal with a problem situation, but it and then to be able to shift into a recuperative mode once that crisis is dealt with. The inability to shift between these modes is usually a problem. (See Table S1 for a list of changes that occur during stress response and during relaxation response).

Healthy changes that occur during stress and relaxation responses:

	Stress Response	Relaxation Response
Mind	More focused, action oriented, and alert to the environment	More receptive to input and internally reflective
Emotions	Strong emotions, such as anger and fear	Subtle emotions, including pleasure, joy, sadness, etc
Physical	Adrenalin Increases Heart Rate Increases Breaths becomes faster and shallow Blood shifts to the extremities Digestion shuts down Immune response is suppressed Sexual response is reduced	Adrenalin Decreases Heart Rate Decreases Breathing slows and becomes deeper Blood shifts to the internal organs Digestion is stimulated Immune response is enhanced Sexual desire and response increases
Behavioral	Strong, crude, action-oriented	More refined, subtle, considered
Benefits	Able to take decisive strong action, and make one's surroundings safe	Able to reflect and consider options, and regain health and enjoy life
Drawbacks	Does not consider all options; can offend others by being inconsiderate	Is not decisive and action-oriented in times when strong action may be called for.

Although a temporary stress response is healthy and helps us to survive, grow, and make life interesting, problems develop when that stress response continues for a long time without sufficient rest and recuperation. Chronic stress can occur either because we are continually confronted by environmental challenges (living in a combat zone, being a single parent with young children, etc), or because we internalize that environmental stressor and respond as if it is still out there. An example of this would be someone who works hard all day, and then comes home and continues to think about work. In terms of stress response, the brain does not distinguish between really being at work or thinking about work when one gets home. Another example is when a veteran continues to think of all the stress of a combat deployment once returning home. When the brain continues to experience stress, “burn out” begins to occur.

If one notices the impact that chronic stress is having on one’s mind and body then one can start to gain control of the stress. But if one does not notice the subtle signs in time, the stress can become so ingrained that it is difficult to gain control over, and one’s mind and body can suffer long-term damage. In his book, *The Stress of Life*, Hans Selye describes how our adrenal glands that supply us with energy begin to wither. Scientists have more recently found that parts of our brain also start to deteriorate due to chronic stress, including the part that is involved in emotion and memory. Our immune system suffers as well, and we are more prone to illness. A list of problems that can occur with chronic stress is provided below.

Problems that occur during chronic stress:

Mental	<p>Thought Processes: Narrow focus, poor concentration, poor memory, rapidly shifting from thought to thought, or activity to activity until one gets too tired to deal with anything, and then becomes numb and avoidant.</p> <p>Thought Content: Over-focus on problems so that one loses perspective, and starts to identify with one’s life as a series of problems. Inability to focus on other, more positive aspects of one’s life.</p>
Emotional	Worried, Depressed, Frustrated, Angry, Sad - then not able to feel much at all
Physical	Discomfort in the stomach, chest, muscles, or head; eyes tired and strained; poor sleep and tired most of the time (or sleeping too much, but never feeling rested); frequently sick; changes in appetite; low sexual interest or responsiveness.
Behavioral	Less motivation in general, and in things that used to be interesting; unable to “get going,”
Social	Less interested in social activity; more withdrawn (or sometimes ‘clingy’); snaps at others, more self-absorbed and less able to be empathic

CBT for Stress Management

What is the major Stressor confronting you? _____

System Affected	Negative Automatic Habit Response	Optimal Healthy Response	Skill Needed to Choose Optimal Response
Mental Reaction -thought process: -thought content:			What skill do you possess that would allow you to choose an optimal response vs the habit response?
Emotional Reaction			What skill would you need to develop in order to choose the healthy response vs the habit response?
Physical Reaction			What barriers will you face trying to use this healthy skill? - Internal barriers (from oneself)?
Behavioral Reaction			-External barriers (from others)?
Consequences: - for oneself: - for others:	Negative consequences of reacting this way:	Positive Consequences of reacting in this way:	What can you do to overcome this barrier?

Optimal Functioning Imagery Exercise

- 1) Sit in a quiet and relaxed setting, with your eyes closed.
- 2) Imagine two screens off in the distance, like large screen TVs or movie screens.
- 3) **Problem Screen:**
 - a. On the screen on the left, imagine the setting where the problem occurs (but without you in it at this time)
 - b. Imagine what things look like, sound like, feel like in that scene
 - c. Now imagine yourself in that scene, and how you would typically react
 - i. What do you look like, sound like, feel like to others watching
 - ii. What is going on inside of you
 1. Mental Reactions
 2. Emotional Reactions
 3. Physical Reactions
 4. How you act
 - d. Imagine the negative consequences of acting this way
 - i. On your own mental and physical health
 - ii. To others
 - iii. Imagine if you continued to act this way in the future. How would this affect your mental and physical health over time
 - e. Run through this sequence several times, so you really understand every aspect of your habit responses in the face of this stressor.
- 4) **Goal Screen:**
 - a. On the screen on the right, again imagine the setting where the problem occurs (but without you in it at this time)
 - b. Imagine what things look like, sound like, feel like in that scene
 - c. Now imagine yourself in that scene, but this time, imagine how you would respond in the most optimal way that would be healthiest for you, and possibly even improve the situation itself (but at least be healthiest for you, in case you can't affect the situation).
 - i. What do you look like, sound like, feel like to others watching
 - ii. What is going on inside of you
 1. Mental Reactions
 2. Emotional Reactions
 3. Physical Reactions
 4. How you act
 - d. Imagine the positive consequences of acting this way
 - i. On your own mental and physical health
 - ii. To others
 - iii. Imagine if you continued to act this way in the future. How would this affect your mental and physical health over time?

- e. Run through this sequence several times, so you really understand every aspect of what it would be like to respond in an optimal way in the face of this stressor.

5) Transition:

- a. Now look at those two screens side by side.
- b. Notice the difference between the negative habit way you have reacted in the past, and the optimal healthy way you would like to respond in the future
- c. Imagine what skill you possess or would need to possess in order to act the way you are on the right screen.

6) Practice:

- a. Now imagine that you are confronted with the stressor, and you have that skill and are able to use it to act the optimal way on the right.
- b. Go through that situation several times. You are confronted with the stressor, you start to react in the old habit way, but you can use the skill you've identified to act in the healthy, optimal way.

Remember, if you can imagine this optimal way, then your brain and body can start helping you implement it!

MEDITATION FOR STRESS MANAGEMENT

The following is a standard meditation/relaxation that is simple to learn yet highly effective:

Squeeze your hands, raise your shoulders, squeeze your eyes shut, and take a deep breath in, as deep as you can . . . And then release, let go of all your tension, your breath flows all the way out, and you can sink down into your chair.

Feel gravity helping your body to relax down into your chair:

- Feel the weight of your legs, letting gravity pull the weight of your bones toward the floor. . . And then let the muscles relax, as if they are melting down along your bones.

- Feel the weight of your pelvis, sinking into the chair . . . Your muscles "melting" and your pelvic organs sinking down into the chair.

- Feel the weight of your abdomen settling into your pelvis.

- Feel the weight of your spine resting into the pelvis, and all the muscles of your back "melting" like honey.

- Feel gravity taking your shoulders, lungs and heart down to rest in your abdomen.

- Feel your head, face and even your brain to relax down into shoulders.

As your body continues to relax and rest and feel comfortable, focus on your breath.

1) Notice the air flowing into and out of your nose . . .

Notice the change in temperature as the air flows in compared to when the air flows out. . .

Notice of the change in texture as the air flows and compared to when the air flows out . . .

Notice the place that the air touches in your nose and throat as the air flows in vs out . . .

- If your thoughts or feelings distract you, notice that distraction, let it go, and come back to feeling the breath flowing into and out of your nose.

<Feel this calm soothing flow of air for about 10 breaths>

2) Place your hands on your chest. . .

Notice how your hands rock forward as your chest expands with each inhale, and returns back to your center with each exhale . . .

Notice how your elbows are gently expanded out to the sides released back toward the center . .

And you may even be able to notice how your back gently expands into the chair behind you and slightly releases the pressure on that chair with each breath. . .

- There's no need to make any effort to breathe. Rather allow the breath to happen effortlessly, as if the breath is breathing you. In fact, to help you release your excess effort to breathe, at the bottom of each exhale let the breath out just a little bit more, relaxing it out as much as possible, before the inhale begins anew.

<Feel this gentle massage from the inside, as if a balloon is expanding and releasing effortlessly, for about 10 breaths>

3) Place your hands over your lower abdomen . . .

Feel the warmth of your hands merging in with the warmth of your belly. . .

Allow that warmth to float forward and back, effortlessly, soothing and comfort. . .

Allow that warmth to soothe and comfort your body. . .

- Imagine the breath to be centered in your pelvis, expanding down and out (like a balloon effortlessly filling and expanding in all directions equally, and then easily releasing, letting go of any tension, any effort, any pain. Each inhale is as fresh as the first breath you've ever taken, and every exhale is as precious as the last breath you'll ever take.

<Feel this soothing rocking of the warmth, back and forth, for about 10 breaths>

Finally, simply sit, feeling your body expanding and releasing effortlessly, silently, soothingly.

If your attention is drawn away by a thought or feelings or sounds, simply notice that your attention is being pulled away, let go of that distraction, and absorb yourself as fully as possible in the body expanding with every inhale and releasing with every exhale.

It's nice to know that you can return to this state of relaxation any time you need to or want to, simply by doing this exercise. And you can bring this comfortable feeling back with you now, as you feel your chest raising during the inhale . . . and with the next inhale or the one after, you can . . . raise your eyes and eyelids up toward the ceiling, and then focus back in the group feeling clear and calm and alert.

This simple breath-meditation takes only about five or six minutes. It is useful to practice when the first waking up. When you drive to work, you can sit in your car for five minutes doing this breathing exercise before you go in to face the day. It's useful to practice this for five minutes before lunch. And when you drive home it's helpful to sit in the car for five minutes doing this exercise before you go in to begin your evening routine. Finally, it's valuable to do this practice just before going to bed.

Alternatively, you can practice this for about 20 minutes morning and evening. Count 30 breaths at each part, and then simply sit and "be" with the body expanding and releasing, comfortably and effortlessly for the rest of the time. Whenever distraction arises (thoughts, sounds, discomfort), notice it, and then redirect your attention to the feeling of your body breathing.