Cognitive Behavioral Therapy for Combat-Related PTSD

A Manual for Service Members

"In war, there are no unwounded soldiers."

– Jose Narosky

Written by:
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Author's Introduction

Dear Service Member:

If you have been diagnosed with Post Traumatic Stress Disorder (PTSD) or if you have PTSD symptoms, this manual is for you. The information and suggestions in this program have been adapted so that it can be used in a clinic setting or by individuals in a self-help fashion. Typically, this information is covered in group settings, and the format is very similar to that of a college class. If you are unable to attend group sessions, your provider may have given you this program manual as a form of self-help in order to help you with gaining skills to overcome PTSD. I hope you find this information useful, and I'm sure that if you learn and apply the skills covered in this book-you will make great gains in putting PTSD behind you.

Best Regards,

Jeff Cook, PhD
Manual Author

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Disclaimer:

The viewpoints expressed in this document are the authors, and do not necessarily reflect the views of the U.S. Navy, the Department of Defense, or the U.S. Government.

About the Author

Lieutenant Commander Jeffrey H. Cook, PhD, USN a 20+year military veteran, who has served as a Marine reservist, an active duty Navy Corpsmen, and a Navy Psychologist. Enlisting in the Marine reserves in 1987, he later converted to Active Duty as a Corpsman. After serving six years as a Corpsman, he was selected into Uniformed Services University of the Health Sciences' Clinical Psychology Ph.D program. He received his Doctoral Degree from USUHS in 2001. During his career as a psychologist, LCDR Cook has held a variety of positions in operational and clinical assignments. He served as the Division Officer for the Mental Health Department in Okinawa, Japan. He subsequently served as the Ships Psychologist for the USS George Washington, ported out of Norfolk, VA. Upon leaving the USS G.W., LCDR Cook served as a Staff Psychologist at the National Naval Medical Center, Bethesda MD. During this tour he deployed to Camp Fallujah, Iraq with CLB-8, serving as a Combat Stress Control psychologist. Upon his return from Iraq, he served as the Department Head for the Psychological Health and Traumatic Brain Injury Program at the National Naval Medical Center Bethesda MD, where he coordinated the PTSD and brain injury treatment for Wounded Warriors.

I'd like to thank Ms. Sara Barrett, whose skills as a copyeditor proved invaluable in the production of this manual. This work benefited greatly from her suggestions on making complex material easier to understand. Ms. Barrett is the Health Educator for the Psychological Health and Traumatic Brain Injury Program at the National Naval Medical Center in Bethesda, Maryland. Ms. Barrett earned a BA in English from the College of Charleston and an MPH in Health Education and Communication from Tulane University School of Public Health and Tropical Medicine, and has experience developing and implementing curricula for adult and young learners.

Suggestions for the manual: Please take the time to write suggestions for improving any future versions of the manual. The author can be reached at cook_manuals@hotmail.com.

Class Agenda

- ☑ Introduction to the program
- ☑ What is Post-traumatic Stress Disorder (PTSD)?
- ☑ How PTSD Develops
- ☑ Fight or Flight: How the body responds to a threat
- ☑ Triggers
- ☑ What Keeps PTSD Around

Introduction

Welcome to **Cognitive Behavioral Therapy for Post-Traumatic Stress Disorder (PTSD)**. This program was designed to help service members understand PTSD and get relief from their symptoms.

This program consists of weekly classroom sessions. Each class will be about 90 minutes in length and is conducted in a group format. In the table below, you can write in the dates and times of the sessions.

	Topic	Date
Class 1:	**Program Introduction & Learning About PTSD**	
Class 2:	**Cognitive Therapy, Part I**	
Class 3:	**Cognitive Therapy, Part II**	
Class 4:	**Exposure Therapy, Part I**	
Class 5:	**Exposure Therapy Part II**	
Class 6:	**Wrap-up and Looking Ahead**	

This program has six core classes and several additional modules that cover other information. The program is designed to give instructors flexibility in how the information is covered. Your instructor may structure the class to be longer than six weeks in order to include information from the additional modules. Modules contain extra information about managing PTSD symptoms and cover topics such as anger management, sleep improvement, and relaxation techniques. If your class lasts longer than six weeks, you can use the table below to write in the class topics and dates:

Alternative schedule:

	Topic	Date
Class 1:		
Class 2:		
Class 3:		
Class 4:		
Class 5:		
Class 6:		
Class 7:		
Class 8:		
Class 9:		
Class 10:		

By deciding to participate in this program, you have taken a very important first step toward your recovery from PTSD. Getting started may seem overwhelming at first, but if you commit to the class and to doing the work, you will notice a marked improvement in the way you feel. The classroom sessions, manual, and the between-class assignments are all important parts of the program. These components complement one another to teach you skills and techniques you can use in everyday life. The goal of this class is to empower you to understand and manage your PTSD symptoms.

The program resembles a college class. No one will ask you to speak at length about your troubles and experiences. You will not be expected to discuss deeply personal issues in front of other people in the class. You will be invited to share your thoughts and thinking patterns, but you get to choose what to talk about.

The techniques you will learn in this class are based on principles of *Cognitive Behavioral Therapy* (CBT) – a type of therapy that shows us why we think and feel they way we do. As you go through the class, you will learn to recognize and modify thinking patterns and behaviors that contribute to your PTSD symptoms.

Cognitive Behavioral Therapy is one of the most popular treatments for PTSD because it has been shown to work very well. A panel of experts from the Department of Defense and Departments of Veterans Affairs has listed Cognitive Behavioral Therapies (cognitive therapy, exposure therapy, etc) as the most effective type of psychotherapy for PTSD.

"Can this program really work for me?"

Yes. This program can work for you and you can recover from PTSD. To see real results, it is necessary to commit to two things:

- Attend every class.
- Complete all between-class assignments.

Each class will include a lecture and discussions. The between-class assignments allow you to practice what you learn in class and track your progress. Worksheets for these assignments are located in Appendix B at the back of this manual.

Remember to bring the manual and all completed worksheets to every class. If you have trouble understanding any assignment, do not hesitate to ask an instructor. They are here to help and support you.

Completing the between-class assignments is crucial to your successful completion of this program. If you skip them, you will miss out on a very important part of the class. Your success relies on your attendance and participation. After completing the assignments and tracking your progress for several weeks, you may be surprised at how far you have come.

"What if I am taking medications?"

The information and exercises in this manual will work very well for you, whether you are on medications for PTSD or not. Both medications and psychotherapy have been shown to work well for PTSD, and there are no problems with using both approaches at the same time. The information in this manual can help you become less reliant on some types of medication, especially tranquilizers like Xanax, because you will learn how to lower your overall anxiety level.

Module # 7 in Appendix A provides detailed information about medications used to treat PTSD, and some general recommendations for taking psychiatric medications.

What is Post-traumatic Stress Disorder?

What exactly *is* Post-traumatic Stress Disorder (PTSD)?

Post-traumatic Stress Disorder, also known as PTSD, is a type of anxiety disorder. PTSD can develop after you are exposed to a traumatic event. An event qualifies as "traumatic" if it is terrifying, shocking, or overwhelmingly stressful for the person who experiences it. Traumatic events that could lead to PTSD include:

- Combat exposure
- Terrorist attacks
- Assault
- Serious accidents, such as a automobile wreck

- Physical or sexual abuse
- Natural disasters, such as a fire, tornado, or flood

What is traumatic for one person may not necessarily be traumatic for someone else, and there are a number of factors that go into whether or not someone experiences an event as traumatic.

An event is ***more likely to be traumatic*** if:

- It was unexpected
- You were not prepared for it
- You felt powerless to prevent it

If you go through a traumatic experience and develop PTSD, you may feel that the world is no longer a safe place. You may have moments where you start to feel anxious all of a sudden, or you may notice that you are more anxious throughout the day. Upsetting thoughts or memories may pop up when you least expect it.

Contrary to what many people in the general public believe, a physical injury is not a requirement for developing PTSD. In fact, many people go through traumatic experiences without ever having been hurt physically, yet still develop PTSD.

The Symptoms of PTSD

PTSD is diagnosed if someone has a certain number of symptoms that started after the trauma. PTSD symptoms fall under three main categories and they can cause significant distress or impairment in an individual's ability to function on a day-to-day basis.

The symptom categories are:

1. **Re-experiencing the event**
2. **Avoidance and/or feeling emotionally numb**
3. **Feeling keyed-up**

Let's take a closer look at each symptom category:

#1: ***Re-experiencing the event.*** *Memories of the traumatic event can come back at any time and without warning. When this happens, you may feel the way you did when the incident occurred. You may experience:*

- Unwanted memories of the traumatic event that keep coming back
- Upsetting dreams
- Flashbacks: acting or feeling like the trauma is happening again
- Strong physical reactions when reminded of the trauma (sweating, pounding heart, feeling like you cannot get enough air)
- Intense emotions when you are reminded of the trauma

#2: ***Avoidance and/or feeling emotionally numb.*** *You may try to stay away from things that remind you of the traumatic event. This can affect your normal daily routines. You might:*

- Avoid people places or things that remind you of the trauma
- Feel distant or emotionally separated from other people
- Feel "numb" or unable to experience certain emotions
- Lose interest in the things you used to enjoy
- Sense that your life is going to be cut short
- Struggle to remember certain parts of the trauma

#3: ***Feeling keyed-up.*** *You may feel like you are always "on guard." This may result in:*

- Having trouble falling asleep or staying asleep
- Irritability or outbursts of anger
- Difficulty concentrating
- Feeling jumpy or easily startled

These symptoms can be annoying, upsetting, or even terrifying. They can also make you feel isolated and alone. When symptoms begin to interfere with your life and impact your relationships, it is time to get help.

Remember these things:

- ✓ **PTSD is treatable.**
- ✓ **Having PTSD does not mean that you are crazy.**
- ✓ **Recovery requires persistent effort and hard work.**

Theories about what causes PTSD

There is no universally accepted explanation for what causes PTSD. Scientists continue to debate over the factors that cause it, although we do have several decades of evidence informing the theories about PTSD. Some of the most well-known theories are listed here:

Cognitive Theory- The cognitive theory of anxiety holds that anxiety disorders like PTSD develop when we get into the habit of viewing events and situations in set ways. We may have thought patterns that over-predict the severity and likelihood of threats. Treatments based on changing thinking patterns have proven effective in treating anxiety disorders in study after study over the past several decades.

Behavioral Theory- Behavioral theories of anxiety usually focus on two types of learning, including how we learn fear: Classical and Operant conditioning:

> **Classical Conditioning**: This is a learning process that all animals have which allows us to pair the occurrence of one event with another. For example, hearing a bell ring before a painful shock happens will trigger fear when we hear the bell again. This type of learning is basic and automatic. It happens outside of our awareness, and we can't choose to have the reaction happen or not.
>
> **Operant Conditioning**: Another basic form of learning is operant conditioning. When we avoid something that is painful or unpleasant (like a painful shock or a panic attack), we are rewarded by not having the pain or anxiety. In learning terms, we are reinforced by the removal of something bad (negative). Behaviors that remove anxiety are likely to be repeated, because they are rewarding.

Chemical imbalance- A popular theory for the cause of anxiety is the "chemical imbalance" theory. The idea here is that disorders like PTSD are caused by an imbalance of chemicals in the brain. Indeed, medications that help normalize chemical levels in the brain can *help manage* PTSD symptoms. But, the imbalance theory does not explain why so many people continue to have anxiety even when they are taking medications.

Genetics- Related to the chemical imbalance theory is the idea that genetics plays a role in anxiety disorders like PTSD. There is strong evidence that anxiety tends to run in families - meaning that if your parent has an anxiety disorder, you are more likely to develop one during your lifetime. You can, however, develop an anxiety disorder even if no one in your family has had an anxiety disorder. Conversely, even if both of a person's biological

parents had a disorder like PTSD, it doesn't mean that their child will develop PTSD. The child is simply at a higher risk of developing it.

How PTSD Develops

None of the above theories completely explains what causes PTSD; however, most modern theories about the cause of PTSD take into account something called **classical conditioning**. In fact, one of the most effective treatments, called **exposure therapy**, is directly based on classical conditioning. In this section, well cover what classical conditioning is, and how it relates to anxiety disorders like PTSD.

Classical Conditioning

Classical conditioning is the scientific term for a very basic type of learning where the brain makes associations, or connections, between things. Humans and most animals learn in this way. **Classical conditioning has a lot to do with the development of PTSD.**

Pavlov's Dogs

A very famous example of classical conditioning is the story of Ivan Pavlov's experiments with dogs in the 1920's:

Dr. Ivan Pavlov was interested in studying how much dogs salivate (drool) when they taste meat. He began conducting experiments to measure salivation, by feeding the dogs meat in powder form. During this process, Pavlov discovered something he had not expected: the dogs actually began to salivate before they tasted or smelled meat – they would start to salivate when they saw the person who was going to feed them.

What happened with Pavlov's dogs was one of the first examples of classical conditioning: Dr. Pavlov expected the dogs to simply respond to the meat (the stimulus that normally evokes salivation). Instead, the dogs' brains learned to connect the sight of the person feeding them (neutral stimulus) with the taste and smell of meat (stimulus that normally evokes the response). By making this connection, the dogs' brains had learned to salivate without the smell or taste of meat. Figure 1.1 (below) shows this process: in the top panel, the dog sees the experimenter several times, and food is then placed in its mouth, which triggers salivation. Eventually, the dog comes to start salivating as soon as it sees the experimenter, even when there isn't any meat placed in its mouth (bottom panel).

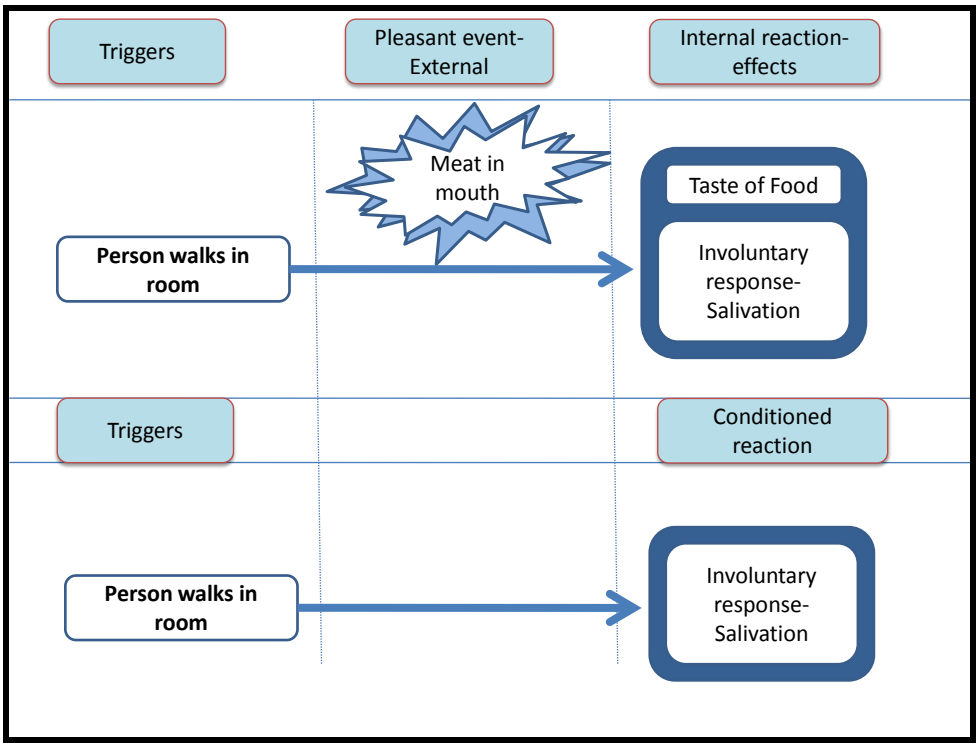


Figure 1.1

Ivan Pavlov discovered that dogs learned to associate the person feeding them with food. Later, the sight of the person who normally feeds them would cause the dogs to salivate.

Fear Conditioning

So, what does classical conditioning have to do with PTSD? It explains how we acquire fears – in this sense classical conditioning is also referred to as **fear conditioning**.

A standard fear-conditioning experiment would look something like this: a researcher places an animal, such as a rat, into a small chamber. The researcher then waits several minutes and switches on a yellow light. After the light comes on, the rat receives painful shocks to its feet from an electrified grid floor in the chamber.

Besides experiencing physical pain, the animal getting shocked will also have certain circuits in its brain fire. These circuits act like an alarm system, raising the animals' heart rate, respiration rate, and causing it to try to escape the shocks. In the Figures used in this manual, we'll refer to this as a "Neural Alarm," the brain's alarm system being tripped.

The rat is aware of all the sights, sounds, and smells in its environment (the chamber, the yellow light coming on and the painful electric shocks). Before the shocks started, the chamber and yellow light did not cause it to react with fear and during the procedure the light and chamber don't actually cause the shocks. Before classical conditioning the light and chamber are neutral, but after being shocked, the rat learns to connect them to the feelings of pain and fear.

The following diagram illustrates the fear conditioning process for the rat. The yellow light and the experience of being in the chamber are two neutral things (meaning they do not cause fear) that happen before the shock. The yellow light turns on right before the shock, and becomes a predictor of future shocks.

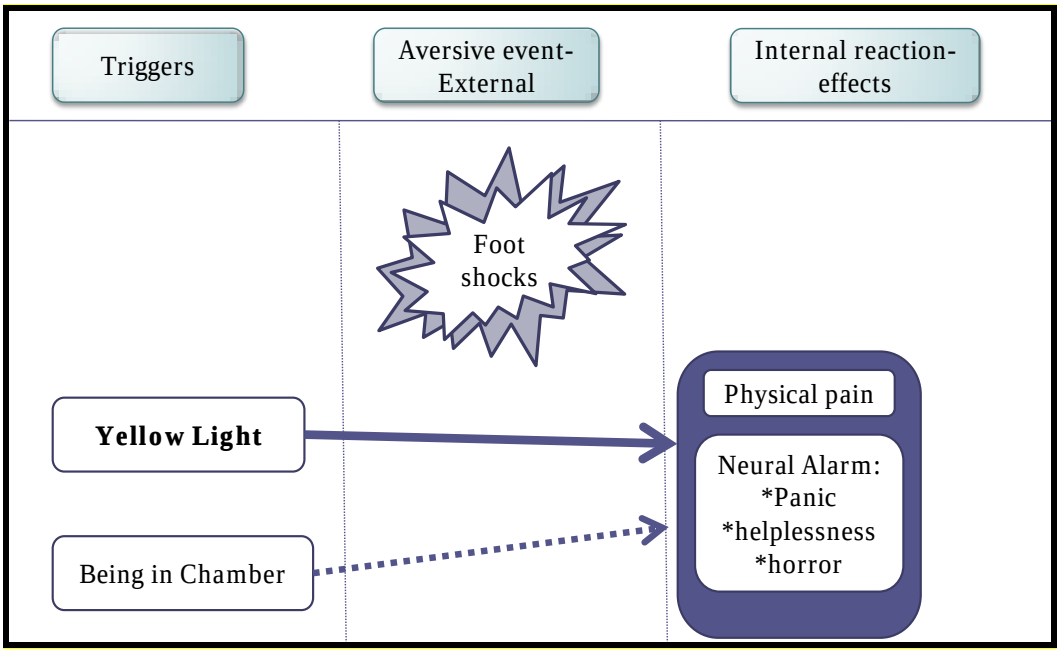


Figure 1.2

In this experiment, a rat is placed in a small chamber. A yellow light is turned on and then the rat receives foot shocks. The rat feels pain, anxiety, etc. It associates the yellow light and to a lesser degree, the chamber with the experience of being shocked.

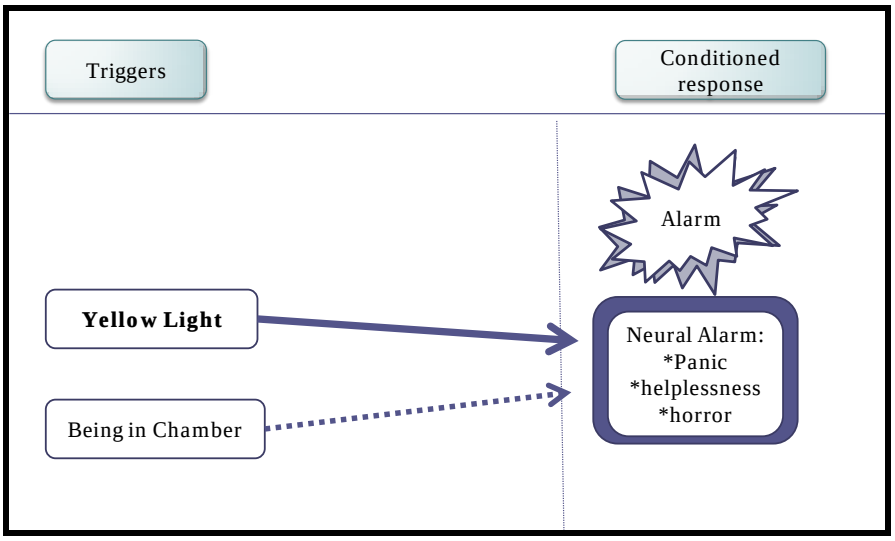
In the diagram above, the yellow light comes on right before the shock, so the light becomes a predictor of the shock. The thicker line shows a strong connection between the light and the pain/alarm.

Animals that have experienced this type of experiment have a very dramatic and predictable reaction later. If this same animal is put back in the chamber and then the light is turned on, the animal will have a marked fear reaction even though the light isn't followed by shocks. See Figure 1.3 below, which illustrates that if the rat is put back in the chamber and the light is turned on, the animal has a fear reaction. The yellow light has become a Trigger for fear.

The reaction is similar to human anxiety: the rat breathes rapidly, its heart rate increases dramatically, its glands release stress hormones, and he frantically tries to escape the chamber. Note that in the figure below the two arrows from the potential triggers to the reaction are different strengths. The line for the yellow light is thicker; because the light has a stronger association with the pain and neural alarm compared to the chamber.

Figure 1.3

After being shocked, the rat may feel anxiety and panic when it sees the yellow light or is placed in the chamber, even though there are no more shocks. The anxiety the rat feels is a conditioned response.



The "Little Albert" Experiment: Fear Conditioning in Humans

There are hundreds of other studies that demonstrate that humans and other animals learn fear through classical conditioning. The most famous study involving a human subject is the one involving Little Albert. In the 1920's, two researchers took a baby named Albert and placed a white rat in front of him. One of the experimenters stood behind the child (where the child could not see him) and struck a metal pipe with a hammer. It made a very loud noise, and Albert was understandably very scared. Later, Albert showed a fearful reaction whenever the rat was put back in front of him – even in the absence of the loud noise.

This type of research is now considered to be unethical, and performing a similar experiment today would be illegal. Nevertheless, the Little Albert study demonstrated that humans can acquire fears by being exposed to a traumatic experience.

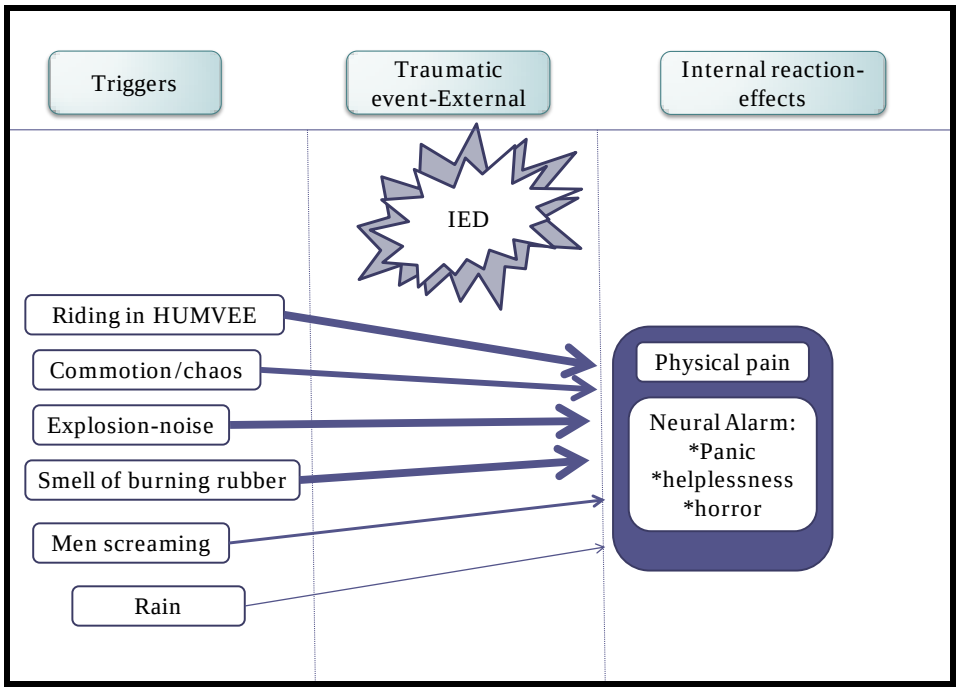
Combat Trauma and Fear Conditioning

PTSD involves being exposed to some terrible event, and feeling a sense of panic and horror at the time of the trauma. Because combat inherently involves witnessing injury, death, or having near-death experiences, it's easy to see how fear conditioning can occur during deployment. Take for example a soldier in a convoy that is hit by an IED. The soldier was riding in a HUMVEE in the rain, when an IED detonated nearby. The soldier felt pain from being slammed around in the HUMVEE and being hit by shrapnel. Following the blast, the soldier remained inside the HUMVEE, heard the rain outside, the

sounds of men screaming, smelled rubber tires burning and witnessed general chaos around him. While this is all going on, he was in physical pain, and felt intense fear. In conditioning terms, the period immediately after the IED blast was when the soldier formed associations to the pain and panic with the things in his immediate environment. See Figure 1.4 below:

Figure 1.4

During a traumatic IED blast, certain images, sounds, and smells may be associated with the experience. Fear conditioning can cause problems after the trauma. Coming into contact with any of these triggers at a later time can cause anxiety.



This is exactly the same process that generates fear in the laboratory; however it's not as simple as a chamber with foot shocks and a light. In examples like this one, there are all kinds of things going on during an IED blast that can be paired with the alarm and pain, explaining why individuals with PTSD can have so many different types of triggers.

After going through a traumatic event like an IED attack, a person's brain may form associations to the sights, sounds and smells that were around at the time. The figure above shows that this soldier formed strong associations to some triggers (connected to thicker lines), but not to others (connected to fine lines).

Long after the trauma, coming into contact with one of these associated sights or sound can cause an automatic fear reaction. This happens even if the new situation is perfectly safe. Figure 1.5 below, shows the same soldier who went through the IED attack in the above Figure. When this soldier encounters one of these sights, sounds or smells later it can set off a learned fear reaction. For example, when this soldier has to ride in a humvee again back in the States, being back in a humvee triggers anxiety. Even if he knows that he is not in a combat situation and is safe, the learned association will still be there. His heart will

speed up, his breathing will become more rapid, and he will start to sweat. This physical reaction is involuntary. It is not something the soldier can choose to turn off or not have happen.

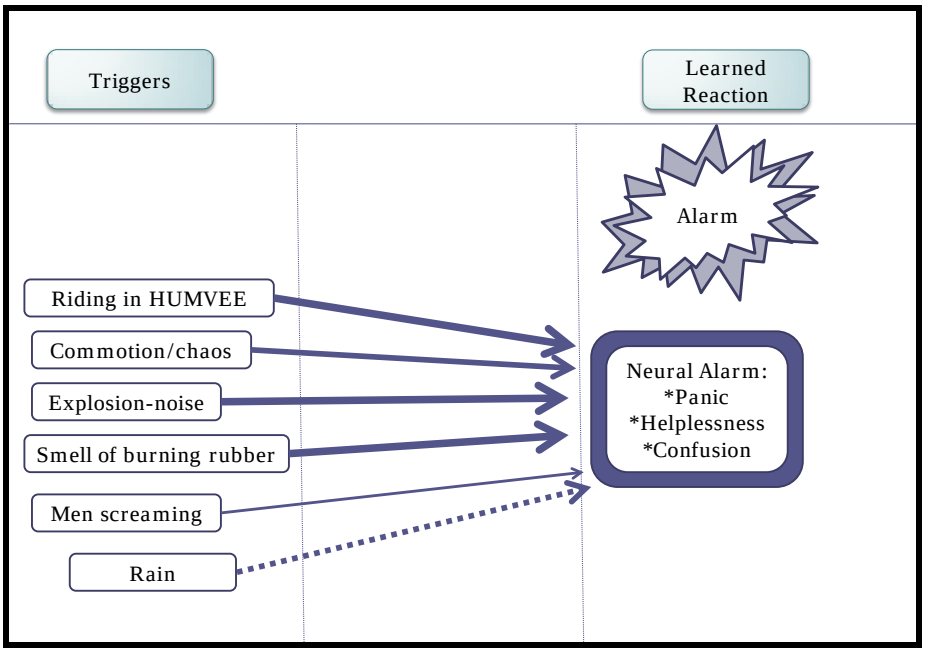


Figure 1.5

Reminders of a trauma are called triggers. Hearing a loud noise, riding in a certain vehicle, smelling burning rubber and other Triggers can cause anxiety reactions following a traumatic experience.

Fight or Flight: How the body responds to a threat

We all have a built in alarm system, which turns on automatically to make sure we survive whatever danger sets it off. This alarm is s lot like a burglar alarm on a house; once it detects something that might be a break in, it automatically sets off several events. If someone were breaking into your house, you would want the alarm system to call the police immediately, you would also likely want to turn on lights and even sound an audible alarm to wake you up and scare off the intruder. The brain's alarm system sets off a series of events as well, commonly called the "fight or flight" reaction.

The "fight or flight" reaction is meant to put us in high alert, so that we can fight off an enemy or escape with our lives. This alarm makes us faster and stronger and more focused than we would normally be. Our ancestors may not have survived if the human body was not hardwired with the fight or flight response. The reaction is automatic – it helps us survive and we do not have to think about it – it just happens. But because it is automatic, we do not get to choose which things will set it off.

What happens during a panic attack?

Sometimes, the fight or flight response can start firing when there isn't any real threat around, especially for someone who has been through a traumatic event. This is known as a panic attack. It's important to know that if this happens, your body isn't out of control and you're not going crazy. Your body is just reacting to a perceived threat, and your brain is getting your body ready to protect itself, even if there isn't any actual danger.

When we are startled or perceive something that could be potentially threatening (even if it is not), chemicals are released into the blood stream to give us a "jump start" and prepare us for quick action. For example, if you are in the woods and see a large bear running towards you, the alarm would kick in. Your heart would beat faster in order to get more blood to your muscles, you would breathe faster to increase your oxygen, and you would start sweating. When this process starts, your entire body is affected. Figure 1.6 outlines some of the physical changes that your body goes through when this reaction is triggered. Each of these changes has some function that helps you survive in dangerous situations.

Figure 1.6

Our bodies are equipped with a well-honed survival mechanism called the "**fight or flight response."** When the brain perceives a dangerous situation, chemicals are released onto the blood stream to "jump start" the body for quick action – so it can fight off the threat, or escape quickly.

Physical Change:	Why this happens:	What the person may feel:
Faster blood flow	*Fuel and oxygen to body increases *Removes waste faster	* Heart races "out of control"
Heart beats stronger and faster to pump blood through body	*Fuel and oxygen to body increases *Removes waste faster	* Palpitations: Heart feels like its jumping in chest / skipping beats
Blood rushes to muscles involved in running and fighting.	* Muscles can function better * Less bleeding if cut while fighting	* Hands go cold * Skin turns pale "white as a ghost" * Numbness and tingling in hands/ extremities
Sweating-can be in armpits, or all over...	* Cools the body * Makes you slippery-so you can escape if grabbed	* Sweating a lot
Fast and shallow breathing-triggering hyperventilation if not actually Fighting or Fleeing	* Increases oxygen to blood/body	* Shortness of breath-urge to breath faster * Dizziness * Numbness/tingling in extremities * Chest pain / tightness in chest * Yawning a lot-even if not tired
Digestion slows or stops	* Organism focuses all energy on surviving threat, (can digest later if it escapes)	* Dry mouth * Nausea/urge to vomit * Constipation (if chronic anxiety)
Pupils widen	* Allows organism to take in more light	* Contributes to Dizziness * Blurred vision
Muscles tense-up	* Organism can move more quickly in response to threat	* Tension
Metabolism increases	* More fuel for muscles released, body prepared for increased work	* Flushed-hot and cold flashes * Tiredness/feeling drained afterwards

All of these physical responses are intended to keep us alive in the face of a threat and are supposed to be happening if your mind is registering a threat. Because these responses are important to our survival, they occur quickly and without thought.

If you have a panic attack and you are not in a situation where you are running for your life, having these reactions can make you feel like you are losing control of your mind and body. This reaction is sometimes made even worse if you begin to hyperventilate.

Hyperventilation

When an individual experiences extreme anxiety, they very often breathe more rapidly, as part of the fight or flight reaction. This allows them to have plenty of oxygen in their blood stream to take quick physical action (escape or fight). When a panic attack happens, however, we are not always in a position to escape or fight. This is especially true if you are standing still - for example, if you are at work or sitting in traffic. You may breathe more rapidly, and not "burn off" the oxygen you are taking in. Very often this rapid breathing leads to people to feel like they are not getting enough air – this is hyperventilation.

When we hyperventilate, our brains are being fooled by a curious physiological effect: the brain tells us we do not have enough oxygen, even though we have plenty. Our bodies naturally maintain a balance between the amount of oxygen and carbon dioxide in the bloodstream. But when a person hyperventilates they quickly exhale a lot of carbon dioxide, shifting the balance.

The pH of our blood helps determine how efficiently oxygen gets off the red blood cells in the blood and into the rest of the body. If we exhale too much carbon dioxide too fast, this almost immediately raises the pH of our blood, making the oxygen more "sticky" and less able to get to the cells of the body. Since the cells of the body aren't getting the regular amount of oxygen, they send signals to the brain indicating a lack of oxygen. The brain naturally sends a signal telling us to breathe faster. The faster we breathe, the faster we exhale carbon dioxide and continue to make the pH higher and higher. This process can help make a panic attack build up rapidly.

It's important to remember that even when someone is hyperventilating, they already have plenty of oxygen in their lungs and bloodstream. The level of oxygen in the blood of someone who is hyperventilating is usually already at 100%. Even if the individual were wearing a medical oxygen mask, they would not be able to increase their oxygen! If you hyperventilate, you may feel like you are suffocating, but you will survive. If you can get yourself to stop hyperventilating, you will feel better right away.

How to stop hyperventilating:

Since this whole process is caused by breathing out too much carbon dioxide and not having the right oxygen – carbon dioxide balance in the body, anything that raises the carbon dioxide level will normalize the pH of the blood. Normal room air has about 0.035% CO2 in it. When a person exhales, the content of CO2 is about 4%, a much higher level. If a person can find a bag and breathe into it for one to two minutes, doing so can rapidly bring the pH of their blood back to normal. Once the pH shifts back to normal, the body will get the oxygen it needs and the person will feel a very rapid wave of relief.

Triggers

People, places, or things associated with a trauma may remind an individual of a traumatic event and the way they felt at that time. Our brains are built to make connections between these things around at the time and the traumatic event. Because they can trigger a reaction, these reminders are known as "triggers." Seeing a trigger can cause a person to feel anxiety, ranging from mild uneasiness to a full blown panic attack. What triggers a person develops will depend on the individual and the traumatic event.

The figure below has some common triggers associated with different kinds of traumatic events. These triggers are only examples. You may have very different triggers based on what was going on during your own trauma exposure/s.

Figure 1.7

These are some examples of triggers associated with different traumatic events.

Traumatic Event	Potential Triggers
Firefight	The sound of gunfire Being out in an open space The sight of blood People yelling/screaming People who look like the enemy
Convoy IED'ed	Riding in MRAP Trash on side of road Wires on ground Seeing blood The smell of burning materials
Mortar attack	GVS alarm Loud noises Not being near cover, etc...
Rape	Men who look like the rapist The smell of the rapist's cologne Being near the place of the attack Seeing the clothes worn on the day of the attack, etc...
Car Crash	Driving in a car Song on the radio during the accident Broken glass The smell of gasoline

How triggers form

Not everything that happens before and during a traumatic event will become a trigger. Two people going through the exact same traumatic event may come out of the event with PTSD, but have different triggers. Why do some things become triggers for us and not other things? There two main factors that play into this:

Factor #1:

The more familiar we are with something that happens during a traumatic event, the less likely it is to become a trigger after the event. The technical term for this is "latent inhibition" meaning that it's harder to form associations to things that are not relatively "new" to us.

> **Example:** Two soldiers are dipping while on a convoy. One has been dipping for 6 years, the other just took up the habit a day or two ago to help stay awake. The convoy gets hit by an IED attack. Which of these individuals is more likely to have the taste of dip become a trigger?
>
> ***Answer:*** *The soldier who just started dipping. It's less likely that the experienced dipper will associate the smell and taste of the dip with the attack, but there's a good chance that the new dipper will stop dipping because he feels nervous when he dips.*

Factor #2:

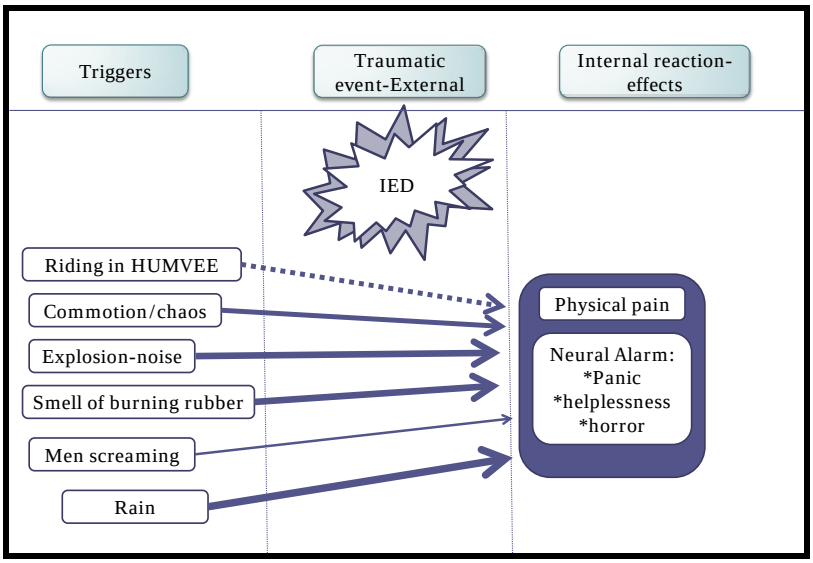
The more noticeable, different or "out-of-the-ordinary" something is at the time of the incident, the more likely it is to become a trigger later on.

> **Example:** Your convoy was hit on a bright sunny day, just like all the other days. Your buddy's convoy was hit during the first rain in 3 months. Is bad weather back in the States more likely to be a trigger for you, or for your buddy?
>
> ***Answer:*** *Weather is more likely to be a trigger for your buddy, since the rainy weather was out of the ordinary. In the next figure (Figure1.8), the strength of triggers is shown by how thick the arrows are. For the person in this example, the triggers shown with a thicker arrow are more likely to create a reaction for this person when they run into them later.*

Figure 1.8

All triggers are not created equal.

In this example, the triggers with bold arrows have maintained the strongest association to the traumatic event, and are more likely to cause anxiety or panic if they are encountered later on.



Trauma and triggers: Some examples

Triggers are usually tied back to the traumatic situation itself - the sights, sounds and smells that were present before and during the trauma may become triggers. Some other traumatic events that are known to cause PTSD are firefights, mortar attacks, rape, or motor vehicle accidents. The following figures show some examples where a service member was exposed to one of these traumas and a list of some potential triggers that were around before or during the traumatic event.

Figure 1.9

In this example, a marine is on a foot patrol through an Iraqi marketplace. His team starts taking small arms fire-some of his friends and several civilians are killed during the firefight.

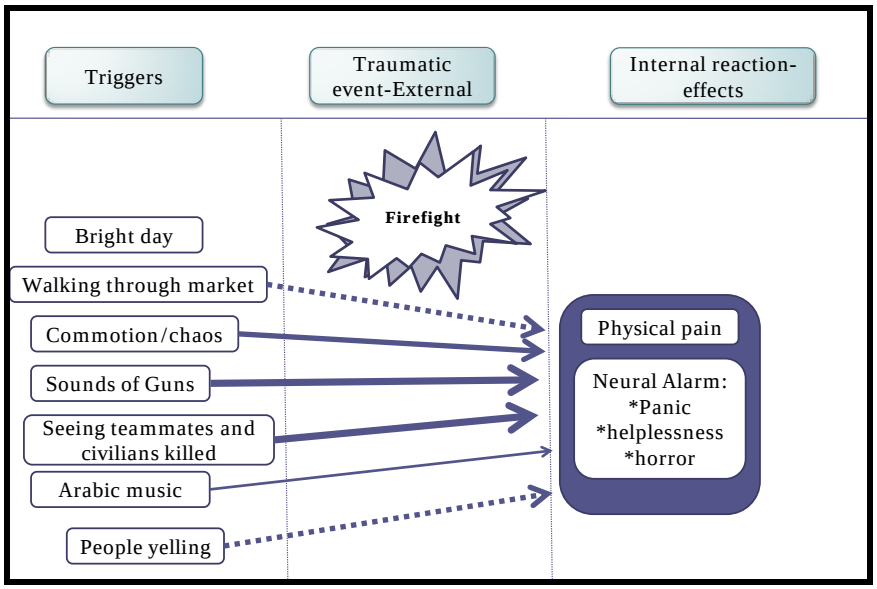


Figure 1.10

In this example, a soldier is headed to dinner at the DFAC, when the base starts receiving indirect fire. There are a variety of things happening around him as he runs for cover, which can become triggers.

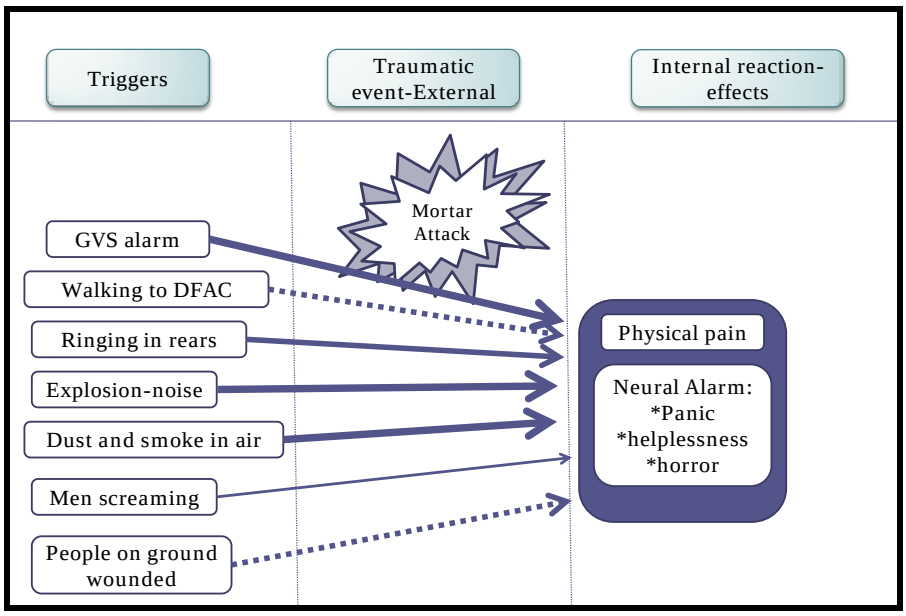


Figure 1.11

A corpsman is on base walking back from the showers at night to her berthing, when someone grabs her from behind. This person puts a knife to her throat while dragging her behind a building.

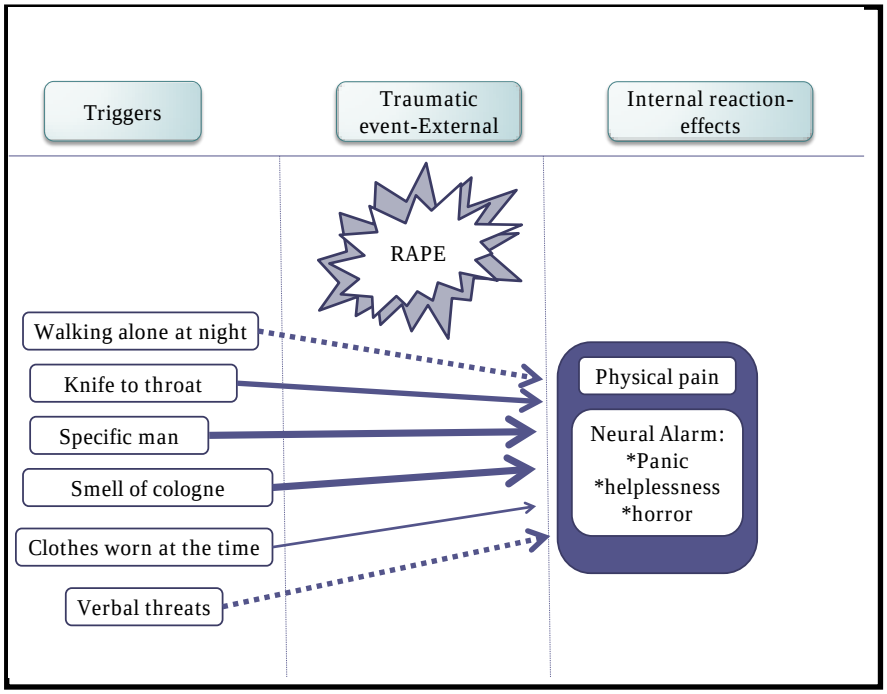
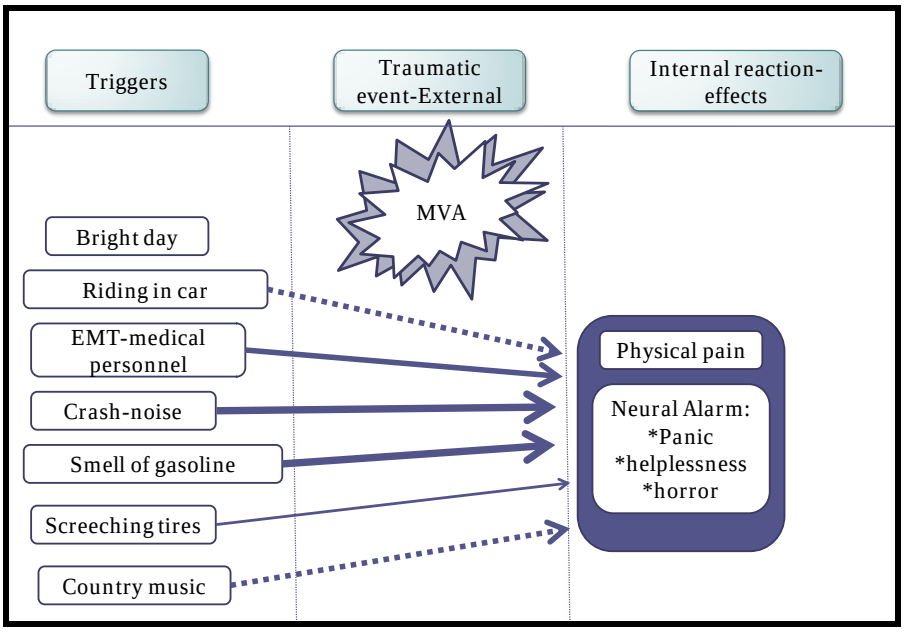


Figure 1.12

A soldier is back home in the States driving his POV when he is hit by another driver. During the accident, his car is totaled, and he sustains multiple physical injuries. During and after the crash-there were several potential triggers-the EMT's, the music playing on the radio, etc...



PTSD Risk Factors

Not everyone who experiences a trauma will develop PTSD. One of the most common questions asked by people with PTSD is "Why did I develop PTSD when others who went through the same or a similar experience not develop PTSD?" This isn't an easy question to answer, but there are several factors that put an individual at a higher risk than the person next to them.

It is thought that an individual's "internal alarm circuit" has to go off during a traumatic event, which causes the fight or flight response we learned about earlier. The criteria for PTSD in the DSM-IV states that in addition to witnessing or experiencing a traumatic event, an individual's response "involved intense fear, helplessness, or horror."

For some service members in combat, the internal alarm will fire, for others, it doesn't. This could happen for a variety of reasons. One soldier could simply have had more coffee or nicotine on the day of an IED attack, and their alarm system was already primed to go off. Stress, like having relationship problems back home or financial worries can also make it more likely that your internal alarm will go off. Sleep deprivation due to long working hours or insomnia will also make the alarm more likely to fire. A soldier may have a stronger fight or flight reflex to begin with (due to genetics), which would mean he is always more "keyed-up" than other people. It's possible that you may have had one or more of these factors before being exposed to a combat experience, priming your alarm circuit.

Besides having to have the internal alarm fire, there are many other factors that increase a person's chances of developing PTSD after a trauma happens. These fall under one of the 3 following categories.

✓ **Factor Category 1: Things in a person's life <u>BEFORE</u> a traumatic event:**

- Having been exposed to other traumatic events in your past (abuse, rape, natural disasters, past combat exposures)
- Earlier depression or anxiety
- Family instability
- Multiple early losses of people, possessions, home
- Genetics: members of some families are more likely to develop PTSD
- Lack of a social support network before the trauma

Case Example: Lt. Johns recently returned from his second deployment. He has been experiencing intense nightmares, feels keyed-up all the time, and is very anxious in social situations. He's been diagnosed with PTSD. He has PTSD risk factors from growing up. When he was only 8 years old, his father abandoned the family. Prior to his father's departure, Lt. Johns has memories of his parents fighting. His mother remarried when he was 10 years old. His stepfather regularly used physical violence on Lt. Johns and routinely punched and kicked his mother in front of him. Lt. Johns experienced family instability, abandonment by his father and was exposed to other traumatic events in his past.

✓ **Factor Category 2: Things that happen <u>DURING</u> the actual traumatic event**

- How close you were to the event
- How long the traumatic event lasts
- The intensity of your exposure to the traumatic event
- What the event means to you
- If the event happens more than once
- Age: being young at the time of the event

Case Example: While deployed to Afghanistan, Sergeant Ortiz was engaged in a firefight that lasted for several hours – he recalls the sounds of gunfire, and experienced extreme exhaustion and dehydration. During the firefight, his vehicle was hit by mortar round which caused a significant explosion. When this happened, one of his buddies was killed instantly. Sergeant Ortiz sustained injuries to his legs, arms and abdomen. He was medically evacuated by helicopter. In the helicopter, his deceased friend was placed in a body bag next to him. Now back at home, Sergeant Ortiz is feeling more irritable, goes out of his way to avoid crowds, and has trouble sleeping. SGT Ortiz was exposed to a prolonged, intense trauma, lost friends and was wounded during this event.

✓ **Factor Category 3: Things that happen <u>FOLLOWING</u> a traumatic event:**

- Lack of a good social support system
- Not being able to do anything about what happened

- Indulging in self-pity while not taking care of oneself
- Letting things happen to you, rather than being active and proactive in your life
- Inability to find meaning in the suffering
- Having a stronger physical reaction at the time of the trauma

Case Example: A corpsman responded to help wounded Marines after a large IED blast that killed and injured several service members. Now back stateside, he is feeling particularly isolated because he has been stationed more than 2000 miles away from his family. He avoids social gatherings for fear of having a panic attack. He prefers to just stay inside and play video games. The corpsman has intrusive thoughts and nightmares about what he saw following that IED blast, but avoids telling anyone about it because he doesn't want to burden family and friends. Since retuning home from deployment, the corpsman is lacking a good social support system because he is living far away from his family and avoids social situations.

What keeps PTSD around?

Between 10 and 20 percent of people who experience a traumatic event will develop PTSD at some point in time.

For some, the symptoms will fade away on their own. But for many, the disorder takes hold and the symptoms persist. There probably are things that you are doing or thinking that will *contribute* to your PTSD symptoms. If this is happening, you are not doing it on purpose, and it is not your fault. People with PTSD try to come up with ways to cope with their symptoms, as anyone would. Unfortunately, some coping behaviors can lead to unhealthy cycles: PTSD symptoms can lead to certain coping behaviors, and the coping behaviors can perpetuate the symptoms.

The good news is that if you can recognize the coping behaviors that are working against you, you can work on changing them. It may be hard to do at first, but changing certain habits can shorten the duration of your PTSD symptoms.

The following behaviors are known to help keep PTSD going over time.

1) Falling into a pattern of avoidance- After a traumatic experience, people naturally want to avoid places or things that remind them of what happened. If you keep avoiding triggers, it is impossible to move past them. Avoidance comes in several forms and can dramatically impact your quality of life:

- Avoiding talking about traumatic events
- Avoiding places or people associated with traumatic events
- Avoiding people in general (secluding self)

2) Using safety aides/behaviors- People may use different behaviors or things to create a sense of safety to feel better when they are forced to be around triggers. Here are some common examples for combat veterans:

- Sitting near an exit in a restaurant
- Only leaving the house with someone else
- Sitting where you can see everyone in public
- Carrying a weapon on their person or in their car
- Driving fast when going through underpasses

3) Having panic attacks and leaving situations - With PTSD, going into certain situations can trigger the fight or flight reaction in the form of a panic attack. When this happens, it can be upsetting enough to become a new mini-traumatic experience. This can make your PTSD symptoms even worse. This has been referred to as "Fear incubation." The concept of fear incubation is so important to understanding PTSD; we will go into even more detail...

Fear Incubation

Fear incubation is the process where a conditioned fear reaction (panic attack) actually strengthens an association with a trigger. Unlike in laboratory experiments with animals, humans will come into contact with triggers, and then leave as soon as they feel too anxious to stay. Doing this repeatedly strengthens the relationship between the situation and panic, making the anxiety worse.

To see an example of this, consider Figure 1.12 below. In this example of fear incubation, a person goes into a crowded mall, and sees their anxiety level rise sharply - up to the point where they have a panic attack and leave. When this happens, the crowd (the trigger) is once again paired with a panic attack (like the shock the rat gets). If this continues happening over time, having panic attacks again and again near triggers, it will worsen the fear of these triggers. The person continues to learn something about crowds – they learn that they are dangerous, because they continue to be paired with panic attacks.

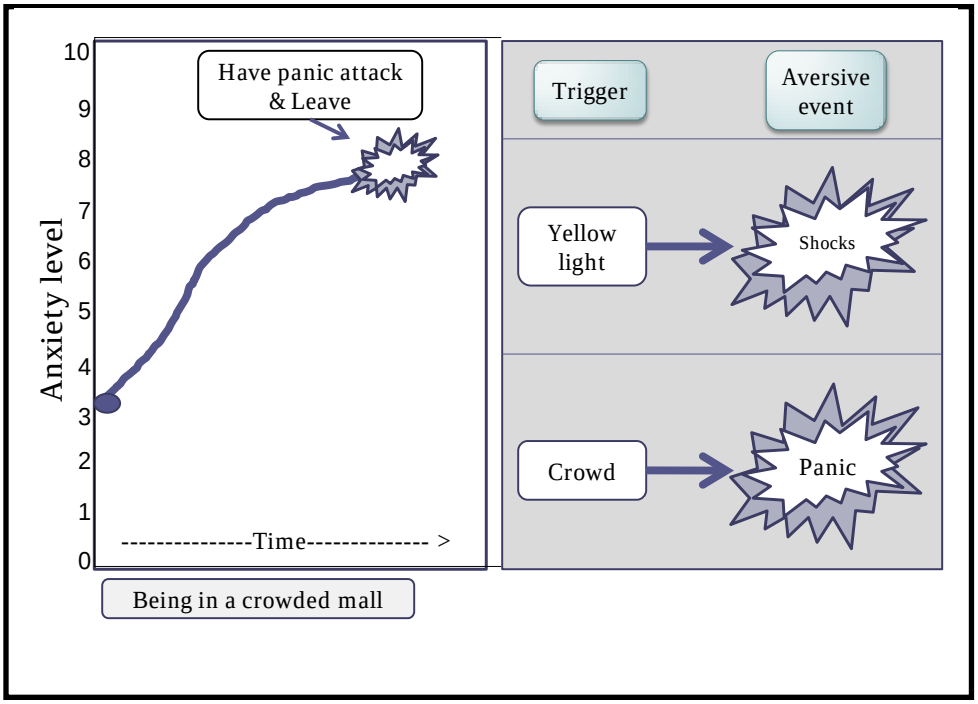


Figure 1.13

A veteran goes into a crowded mall and feels increasingly anxious. When he feels a panic attack coming on, he leaves.

In the lab, a light is followed by a shock, but in the real world, things like being in a crowd are followed by panic attacks.

The concept of fear incubation can help explain things that at first look mysterious regarding PTSD. The first mystery is: Why do some people develop PTSD months after the traumatic experience (called 'late onset PTSD'). The second mystery is: Why is the disorder maintained over time? Why it doesn't it simply fade away? A third mystery is: Why do some people pick up triggers that have nothing to do with the original trauma?

Late-Onset PTSD

Many people have "late-onset PTSD", meaning that at first they don't meet criteria for the disorder (they may have some symptoms such as nightmares and reactions to triggers, but they are not severe or there are not enough symptoms present to make a diagnosis). For these individuals, the symptoms get worse, sometimes starting several weeks or even a few months after the trauma. This is something of a mystery, considering that one should be most afraid immediately after a traumatic event, not six months later. One possible explanation for this is fear incubation.

A person who has been through a traumatic event can have some fear reactions, but not have enough symptoms to have PTSD. As they continue to have panic attacks when encountering their triggers, the underlying fear grows, creating more and more symptoms of PTSD (poor concentration, irritability, etc).

As fear incubation continues to happen, the fear worsens, and the person comes to avoid more and more situations, have more re-experiencing symptoms like nightmares, insomnia, poorer concentration, and feel more keyed up. Eventually, this person's fear will grow to a point that they will have enough symptoms to meet the criteria for a diagnosis of PTSD.

Explaining why PTSD doesn't fade away

Another mystery about PTSD is why it stays around so long for some people. In the laboratory, fear reactions created by pairing a sound and shock will fade away fairly quickly, simply by exposing the animal to the situation where the shock happened, and not having any further shocks. This isn't the case with humans. Anxiety disorders tend to stay around for months or even years. One reason for this is that humans tend to do two things when it comes to unpleasant situations: 1) Avoid them entirely, and 2) Leave them once they are in them.

While these strategies make good sense to us, they may inadvertently make PTSD last longer. Avoiding situations keeps us from getting exposure to the Trigger, leaving its fear-evoking properties intact.

It is of course impossible to avoid fearful situations forever, and we eventually will find ourselves in them. When someone goes into a situation where they are triggered, it is usually very unpleasant, prompting them to leave. Sometimes people will stay in the situation, trying to "tough it out," but leave when they are at or near the point of having a panic attack. This actually helps to pair the Triggers and the panic attack. In the example in Figure 1.7 above, the person has had the Trigger of a crowd once again paired with a panic attack. This ongoing process of continued pairing with panic attacks explains why the fear of the Triggers doesn't fade away. This process helps keep PTSD around.

When new triggers form

A third mystery is why some people have triggers that have nothing to do with the original trauma. Fear incubation can also explain how people acquire new triggers. For a man with combat -related PTSD who has a hair trigger on this alarm system, seeing an Arab man in a mall might set off a full blown panic attack. This does two things, 1) again pairs the trigger (sight of an Arab man) with something unpleasant (panic attack)—thereby strengthening the learned association to the existing trigger, and 2) would cause him to associate other

new triggers that are in the situation with the panic attack. This is illustrated in Figure 1.13 below:

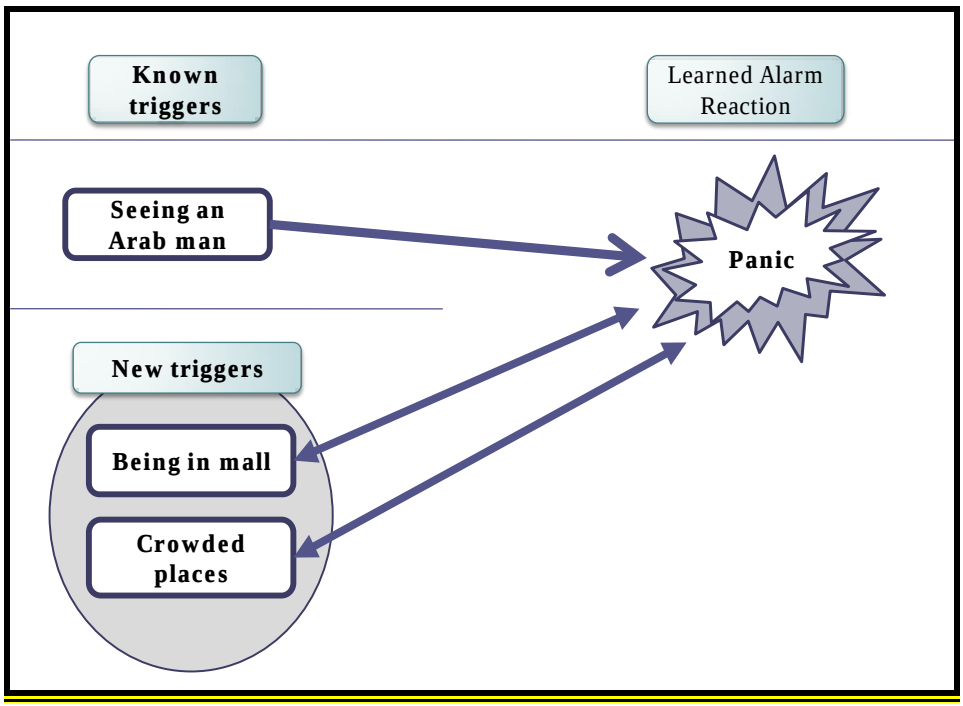


Figure 1.14

It is possible to develop new triggers when a panic attack occurs. In this example, seeing an Arab man in a crowded mall triggers a panic attack. This panic attack is upsetting enough to qualify as an **entirely new traumatic event.** When this happens, the person's brain may form new links to other things around at the time, which can become triggers as well.

We know that many combat veterans have anxiety reactions to crowds, even when crowds weren't originally a trigger, and aren't directly related to the traumatic incident. The fact that these service members are having panic attacks/flashbacks in public places (like in the example above) may help explain why so many of them come to be triggered by crowds.

Daily Anxiety Log

Included in this manual is a pre-made form that makes tracking your anxiety levels every day easy. The **Daily Anxiety Log** form is located in the last section of the manual. It's the first page of the worksheet section. Try to fill out the form once a day using the scale at the top of the form. You simply rate the day on a scale of 0 to 10 for level of anxiety. A zero would be for a day where you didn't feel anxious at all and a ten would be for used for days when your anxiety is at the worst you've ever felt.

The next page has an example Daily Anxiety Log.

At the end of every day, fill in the day's rating, and at the end of the week, add up all the ratings and divide by 7. Note that the bottom half of the form has a graph for charting the weekly averages. You will be able to see the improvements you have week-by-week.

Also note some things about the Example log:

- Daily ratings go up and down quite a bit.
- Their weekly average scores generally went down, but there were some weeks that it went up too.
- The improvements don't necessarily happen in the first couple weeks, but do come.
- They kept using the log long after the 6-week program ended.

(EXAMPLE)

Rate your level of Anxiety for the day, using this scale:

0------1-------2------3------4------5------6------7------8------9------10

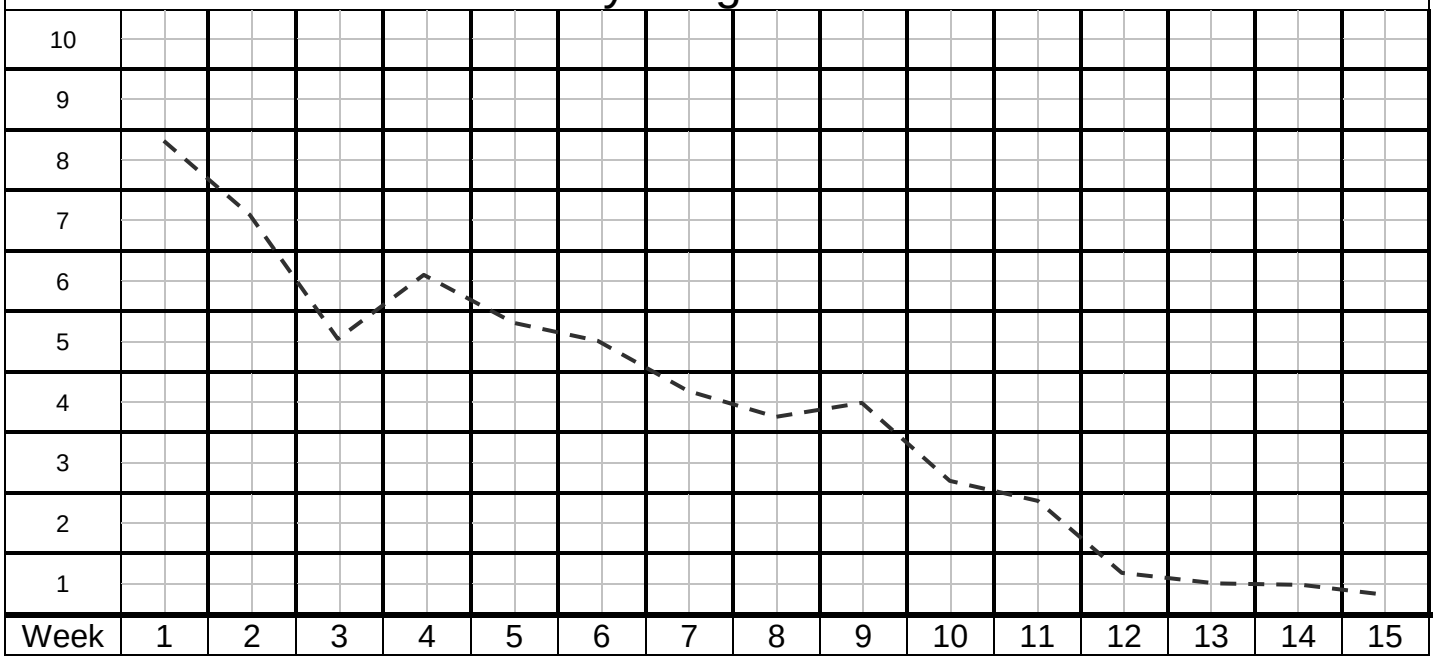
No Anxiety moderate Worst you've felt

At the end of the week, add all your ratings and divide by 7. Plot this average score for each week on the Weekly Progress Chart at the bottom of the page. You should see your ratings go down as you work through the program.

Daily Anxiety Log

Week ↓	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Average (add scores for the week and divide by 7)
1			9	9	8	8	10	8.8
2	8	9	7	5	7	9	5	7.1
3	7	6	6	4	4	7	4	5.4
4	6	3	4	8	5	7	10	6.1
5	6	5	3	5	6	8	4	5.3
6	3	5	4	5	8	5	5	5
7	6	3	8	3	3	5	4	4.5
8	3	3	4	2	6	3	5	3.7
9	6	5	3	3	5	2	4	4
10	4	3	4	4	2	1	5	2.7
11	3	2	1	2	3	4	2	2.4
12	2	3	0	1	1	0	2	1.3
13	2	1	1	0	0	3	1	1.1
14	0	1	2	0	1	2	0	0.9
15	0	1	0	1	2	0	0	0.6

Weekly Progress Chart



Identifying and recording your triggers:

To better understand the situations that cause you to have anxiety reactions, it is a good idea to write down the details of these situations. We use a form specifically designed for this, called a **Triggering Situation Recording Sheet**. The form has columns for the date and time the situation happened, the description of the situation, and the emotions, thoughts and beliefs you had at the time. Think of it as a structured journal. You will not need to write about every minor change in mood, but anytime you notice a significant increase in your anxiety level, please use the form.

Some people are tempted to skip actually filling the form out, and rely on memory for this exercise. **You will not gain as much from the program if you do not write things down!!!** Next week's exercise will build on this form, and we will cover some of your responses. Even if you don't want to talk in group about your experiences, you should use the forms to get the most out of the program.

The next page has an example of a completed anxiety **Triggering Situation Recording Sheet**. Take a moment to look over the form, and ask any questions you may have about what to track.

The worksheet section at the end of the manual has several blank forms to use over the next week. Remember you don't have to write out something for each minor change in anxiety level, but you should be able to write out something for at least a few situations.

Triggering situation recording sheet- EXAMPLE

Date / Time	**Event** or situation just before you felt the emotion	**Emotion** and Level (1-10)	**Thinking**-Beliefs and assumptions
9 Feb 7 am	Going to restaurant with my wife…	Anxiety 8	I hate that she drags me out-she knows I don't like going anywhere… You can never get a good seat-all the seats along the wall are usually taken. If I cant watch the other people-there's no way I can enjoy a meal, Ill have to be looking over my back the whole damned time… I could get jumped-anybody could try to kill me or hurt my wife, you're just not safe…
10 Feb 10 am	Walking into the subway station…noticing its much busier than normal..	Anxiety 6	Maybe there's a problem-something may have happened, why would there be so many people here….? This many people all cluttered together makes an excellent target…. I don't really need to go to this appointment-it's not worth the risk, I can just reschedule…
10 Feb 4 pm	Driving home from work-notice that there is a mid-sized box on the side of the road…	Anxiety 9	Holy Crap… I've got to get as far away from that thing as possible… should stop and pull over…maybe speed past it… That could be an IED, why else would there be a box just sitting on a highway If it's a bomb, it's big enough to take out every car on this road…

Between-class assignments

1. At the end of every day, rate your overall level of anxiety for that day. This is a daily average for the day, and not meant to be just what is felt at the moment you are writing it down. The next class will start by asking you what your ratings have been, and averaging them for the week, so be sure to keep track of them!
    - Forms: **Daily Anxiety Log**

2. Use the **Triggering Situation Recording Sheet** over the next week. Everyone should be able to fill in at least a few situations that caused an increase in their level of anxiety. This will help you practice separating the events, the emotions you feel, and the thoughts and beliefs associated with these situations.
    - Forms: **Triggering Situation Recording Sheet**

3. Read next week's class materials. Write down any questions that come up as you are reading.

Class Agenda

- ☑ Go over questions for self-study
- ☑ Review between-class homework assignments
- ☑ Corrective Thinking
- ☑ Learn how to use the Thought-Challenging Record
- ☑ Generalization of Triggers

Questions for self-study

1) PTSD is entirely caused by a chemical imbalance. *True or False*

2) When a person experiences an increased heart rate, rapid breathing, sweating, vision changes, tingling in extremities and trembling hands it means they are going crazy. *True or False*

3) What are the three clusters of symptoms in PTSD?

4) Why do animals, including humans, have the fight or flight response?

5) The most proven type of psychotherapy for PTSD is Cognitive Behavioral Therapy. *True or False*

6) What is classical conditioning? How does it relate to PTSD and other anxiety disorders?

Review of between-class assignments

Review your **Daily Anxiety Log:**

1. Total your daily scores and calculate an average score for this week.
2. Plot your score on the progress chart.

If you saw your average score increase, don't worry. Your anxiety levels will fluctuate. On certain days, your score will be higher, and on other days it will be a little lower. This is normal.

Review the past week's **Triggering Situation Recording Sheets**.

1. Were you able to identify times when you felt worse?
2. Could you separate the event from the emotion and the thinking? This can be challenging at first, but with practice it gets easier.

Corrective Thinking

We reviewed the **Triggering Situation Recording Sheets**, and saw that some situations caused us to have strong emotions. We also discussed that we may have several different thoughts and beliefs about the situations. An important discovery of modern therapy is that events are not the cause of our emotions. Although it's counterintuitive, emotions are actually products of the beliefs and thoughts we have about an event. Consider that just among the people in this class, you may have different reactions to the following situation, depending on your thinking:

You walk past your Commanding Officer, and say hello to him. He walks by without saying anything.

If this were to happen, what is the first thing you might think?

Why did he walk past you without saying anything? Would this affect you in any way? How would it make you feel?

ANSWER: It depends. Some people might feel offended, anxious, sad, or even angry. The difference lies in ***what you assume and believe about the event-NOT the event itself.*** There are several possible reasons for why the C.O. may have walked past you without saying anything.

What are some possible reasons?

Cognitive Behavioral Therapies for anxiety, anger, panic and depression all emphasize your ability to control your moods through ***corrective thinking.***

The following group exercise is an easy way to get a better understanding of the cause of excessive anxiety:

Situational Anxiety Ranking Exercise

As a group, the class will name ten situations that individual group members associate with high anxiety. After the list is made, fill them in under the first column (labeled SITUATION). In the shaded space to the right of the situation, rate each with a number from 1 through 10. Ten (10) is for the situation you would find the most anxiety producing and 1 for the least anxiety provoking. **Use each number only once. You can cross out the number after using it to ensure you use each number once.** We will complete the third column together as a class.

1 2 3 4 5 6 7 8 9 10

SITUATION	ANXIETY RANKING	RANGE
a)		
b)		
c)		
d)		
e)		
f)		
g)		
h)		
i)		
j)		

Explanation of group exercise: After rating your 10 situations, it will be apparent that people differ greatly in their fears. Two people could have ranked flying in plane as a 10, with everyone else ranking it at a 3 or below. Why people fear different things is based on their individual thoughts. For example, those who rank flying high on the above list may believe that "Planes crash very often" or "Planes are likely to be bombed or hijacked." Such thinking patterns can lead to extreme anxiety if they aren't corrected.

Steps in Corrective Thinking

STEP ONE: Monitor your thinking and moods.

The first step in changing anxious thinking patterns is to learn to recognize when your feelings of anxiety get worse. Many people believe that they are "always anxious", and that there is nothing in particular that triggers their anxiety or panic attacks. If you really pay

attention to yourself, you will find that certain situations and sometimes certain memories can lead to increased anxiety.

STEP TWO: Separate your thoughts from triggers and emotional reactions.
The next key step is to separate out your thinking, the resulting emotion, and the triggering situation. If you hear about a suicide bombing in Basra on the news, you may immediately think, "No one is safe anywhere; you can't stop these people from hurting Americans." You would likely start feeling worse. Here there was an event, then some thinking and processing of the event, and then an emotion.

STEP THREE: Identify thinking errors and distortions in thinking.
A basic rule of thumb is that "extreme beliefs lead to emotional extremes". Whenever we are experiencing emotional extremes, it's usually because there are distinct and predictable ways of thinking at work. These patterns of thinking are referred to as "cognitive errors" or "distorted thinking". These are ways that we view our experience that make us upset.

STEP FOUR: Challenge your thinking and make it more realistic.
After you identify distorted thinking, the next step is to challenge the basis for it. You will basically need to put these thoughts and beliefs to the test. Ask yourself, "If there is good evidence to support these thoughts, what evidence do I have against it? We will cover some exercises in a few moments where we see this in action.

STEP FIVE: Test your underlying beliefs.
You may need to challenge some erroneous beliefs by conducting 'mini experiments' to test for accuracy. For example, if you have the belief that "It's not safe to drive under overpasses because they are all dangerous," you may want to test this. Besides logically arguing with such beliefs, you may have to test them out. Drive under overpasses again and again, and see if anything actually happens.

Know the difference between 'real alarms' and 'false alarms'

Whenever we feel anxious, it's usually because there is a perceived threat. The threat could be communicating a truly dangerous situation, or even something we believe could be dangerous when it is perfectly safe.

For example, if you were in a convoy and there were wires spotted on the road ahead, you would likely view this as a threat and would begin to feel alarmed. You would start thinking about how far away your vehicle is from the potential IED. You might think about scanning the environment for anyone who looks suspicious, or planning for how to react if

there is an attack, etc. This type of thinking helps "rev up" our automatic alarm system. It helps us be more alert and ready to run or fight for our lives.

In the above example, the threat could have been real or false. The wires could have been random trash on the roadside, or wires leading to an IED. If the wires led to an IED, then this would be a **"true alarm."** If the wires were just trash, this would have been a **"false alarm"** as in this case, there was no actual danger, because the wires weren't connected to any explosives. In theater, we are taught to be extremely careful, to evaluate all potential threats the same way, and not be complacent. That kind of thinking sticks with combat veterans, even once out of the military and back in their hometowns. Being able to tell whether something is an actual threat or if our thinking is unreasonable is a key skill set for getting past PTSD.

Patterns of anxious thinking

Whenever our anxiety is too high, chances are we are over-estimating the probability and/or severity of a threat.

For example, consider a person who is afraid of flying. In this case, a plane crash is highly unlikely (almost all flights arrive safely). But if a plane crash were to occur, the outcome could be very severe (most people on the flight would die). Here, the severity of risk is "very high," but the probability of the feared event is extremely "low." Another example is that many combat veterans worry about being attacked in public places. If you think of this like the plane crash, it has a very, very low probability of happening. Since you are better trained than the average person, the severity of risk (how badly you would be hurt) would likely be "low" (because you know how to defend yourself better than the average person). The following table lists some situations in terms of their level of risk for severity and probability.

Figure 2.1

Potential threat	Probability of happening	Severity of risk
Plane crash	Extremely low	Very high
Being attacked in restaurant	Extremely low	Low
Driving past trash on side of road-in the U.S.	Extremely low	Moderate
Driving past trash on side of road-in Iraq	Low-Moderate	Moderate
Driving under overpass-in the U.S.	Extremely low	Moderate
Being attacked while walking through crowded subway	Low	Low

Some of the situations are more risky in theater than they are back in the States. For example, a pile of trash on the side of the road in Fallujah has a reasonable probability of being an IED, because sometimes piles of trash or stacked tires are in fact IEDs. However,

even in Iraq, most piles of trash are just trash. So, the probability of it being an IED is therefore "low" to "moderate." In terms of the severity of risk, (if it were an IED, how harmful would it be), it would be "moderate" to "high." But back in the US, piles of trash are just that: piles of trash. There is a very, very low probability that they are concealing an IED. There have not been any roadside bombings in the States. Therefore, the probability of one happening tomorrow is extremely low. The likelihood of you being the first victim is astronomically low.

After combat, your mind may react to many different situations as if they are very high in severity and also have a high likelihood of happening. One of the best ways you can get control of your reactions is to control your thinking. Controlling your thinking gives you a "reality check" and helps you determine the actual level of threat in a given situation.

Thought-Challenging Record and class exercise:

Changing thinking to be more realistic and less anxiety-provoking is easiest to do with the right tools. A proven means of helping people change their thinking patterns quickly is the use of a structured journal. For this program, we use a 5-section form. You should use this form over the next few weeks to track situations that you find are triggering changes in your mood, and write in the types of thinking that are increasing your level of anxiety. A space is also provided to write corrective, rational thinking, where you look at the evidence for the anxious thinking and assumptions, and challenge them.

The next few pages are example forms. The first page is an example of a completed form which your instructor will review with you. The pages that follow are for an in-class exercise, and they are already partially filled out. Try challenging the thoughts. As a group, we will discuss the ways in which this person can challenge their thinking.

Thought-Challenging Record –EXAMPLE #1

Date / Time	**Event** or situation just before you felt the emotion	**Distorted thinking**-Beliefs and assumptions	**Emotion** and #	**Corrective thinking-**change the thinking to be realistic and helpful, take a different perspective, look for alternative explanations….
11 Jan 4pm	Over at friend's house, and walked out for a smoke on their deck. Saw propane tank sitting on bench…	Hell-that's the last thing I need to see…I can't stay here with that F'ning thing-there no way of knowing if it's safe… I've got to come up with an excuse-tell 'em I'm just feeling sick-and get out of here.. Don't they know not to leave things like that out-it's like nobody cares,… like people are trying to mess with my head….	Anxious "6" Angry "7"	I am as safe as my friends out here on the deck with me. If they aren't panicking-I don't need to either. We are in a suburban American neighborhood-were not in TQ, there is no reason to suspect the tanks been rigged. That's just my mind spinning up-its not really a threat.. People don't know what you don't tell them…how could they know Propane tanks are a Trigger for my PTSD? Just because they have a tank out-it doesn't mean that they don't care about me, and it certainly doesn't mean that NOBODY cares….
12 Jan 3pm	Going to restaurant with my wife…	Hate that she drags me out-she knows I don't like going anywhere… You can never get a good seat-all the seats along the wall are usually taken. If I cant watch the other people-there's no way I can enjoy a meal, Ill have to be looking over my back the whole damned time… I could get jumped-anybody could try to kill me or hurt my wife, you're just not safe…	Anxious "8"	There are a few dozen people in here with us, and no-one looks scared. I'm only on edge because of the crowd-triggering an alarm reaction…. Before I was injured, I ate in restaurants and chowhalls without needing to look behind me, and never gave it a second thought. Wasn't I safe then? I used to sit anywhere I wanted, didn't feel like I had to be near walls-I was just as safe at Olive Garden then as I am now…. People could attack me-but I can't actually say I've ever been attacked in an Olive garden, or even ever heard of anyone being attacked in an Olive garden…its just not likely

Thought-Challenging Record EXAMPLE #2 and In Class Exercise

Date / Time	**Event** or situation just before you felt the emotion	**Distorted thinking**-Beliefs and assumptions	**Emotion** and #	**Corrective thinking-**change the thinking to be realistic and helpful, take a different perspective, look for alternative explanations….
14 Jan 8 pm	Driving along a highway in hometown…see some tires on side of the road	Holy Sh*t… I've got to get out of the blast range-can I get over…I should stop and pull over…maybe speed past it… That could be an IED, why else would there be tires piled up…that's big enough to hold 2 155 shells That could be enough to take out every car on this road…and leave a huge crater	Anxious "5"	
16 Jan 6 am	Riding on crowded subway, with many minorities around	This isn't safe…there's no way I can watch all these people.. If I'm not keeping track of people, someone will attack me…I have to keep everyone in view Thank God I have my knife on me-if one of these bastards tries anything, Ill kill them… Any one of these Arabs could be targeting Americans…and I'm a marked man because I look military…I should get the hell out of here	Anxious "10"	

Thought-Challenging Record EXAMPLE # 3 and In Class Exercise

Date / Time	**Event** or situation just before you felt the emotion	**Distorted thinking**-Beliefs and assumptions	**Emotion** and #	**Corrective thinking-**change the thinking to be realistic and helpful, take a different perspective, look for alternative explanations….
11 Jan 4pm	Walking into a crowded store at the Mall	I've got to get in and out fast..I can't stand being around all these people... As long as I stay near an exit, I'll be fine... Any one of these people could be armed, any one could attack me...if I keep an eye out, I'll be safe.. You can't trust Arab people, any one of them could be a terrorist,.. you have to be extra careful around them...	Anxiety "5"	
12 Jan 230 am	Lying awake at night, after having a nightmare...	I can't keep dealing with this...why in the hell cant I have just one night's rest?!?! If I don't get some sleep, this will drive me over the edge... These dreams are going to be the death of me..	Anxiety "6"	

Generalization of Triggers

In Class #1, we learned that through classical conditioning, an animal can learn to fear a sound or light when it is associated with a traumatic experience (like a painful shock). In addition to fearing the sound or light, an animal will also fear things that resemble the sound or light. **Generalization** refers to this tendency to also have conditioned reactions to things that are similar to the triggers that we have learned to fear. In generalization, things that are most similar to the original trigger will generate a stronger fear reaction than things that are less similar. This is illustrated in Figure 2.1 below:

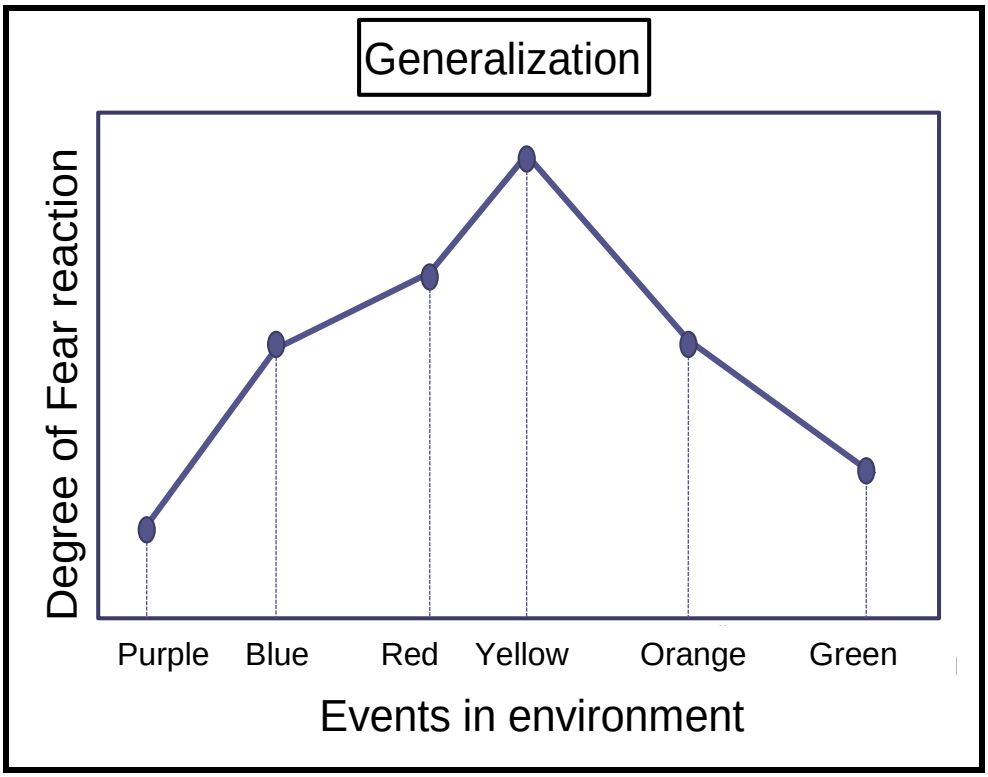


Figure 2.2

Things that are similar to our triggers can also generate a fear reaction. In this example, the yellow light was paired with shocks and is the trigger for a strong fear reaction. If other lights are turned on, they will also trigger fear; to the degree they look similar to the yellow light.

Now, what does this have to do with PTSD, you ask? The same process happens in people who have PTSD; they come to fear a wider range of triggers than those to which they had been exposed during the initial trauma. Their triggers start to "generalize out" to similar situations. Figure 2.2 (below) is a graph showing some of the common sounds to which someone with conditioned fear reaction to gunshots might react:

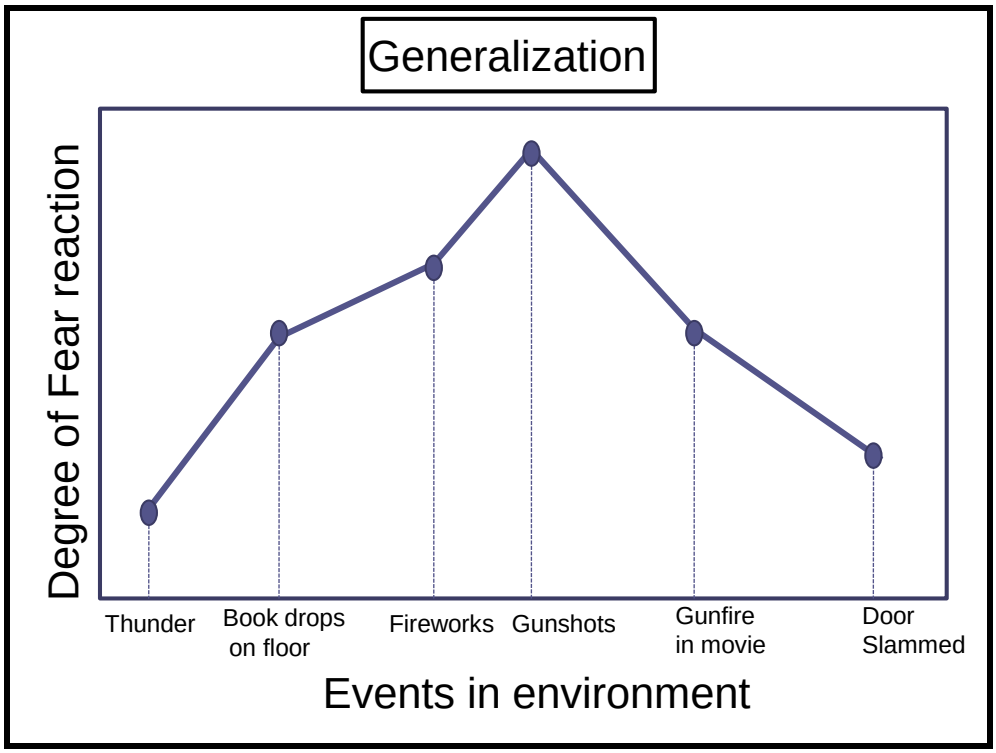


Figure 2.3

For a service member involved in a traumatic firefight, the sound of gunshots can become a trigger. It is common for someone with PTSD to "generalize out" – having fear reactions to other sounds that resemble the sound of gunshots (such as fireworks or the sound of a book hitting the

This process is actually expected. Triggers tend to "generalize out" and this does not mean that the disorder is getting worse. The triggers presented earlier could easily generalize to other situations (as shown in the next Figure):

Figure 2.4

Common triggers after different types of traumas, and what these triggers may "generalize out" to.

Trauma Event	Triggers	Generalize to:
Firefight	▪ Sound of gunfire ▪ Being out in open market ▪ Sight of blood ▪ People yelling/screaming, people who look like the enemy	▪ All loud noises (e.g. thunderstorms) ▪ Being out in open in general/crowds ▪ Hearing about blood ▪ Babies crying/people arguing ▪ All people who are middle eastern
Convoy IED'ed	▪ Riding in MRAP ▪ Tires on side of road ▪ Wires on ground ▪ Seeing blood ▪ Smell of burning materials	▪ Riding in any car ▪ Any trash on side of road ▪ Being near a BBQ
Mortar attack	▪ GVS alarm ▪ Loud explosions ▪ Not being near shelter	▪ Any siren (ambulances, police) ▪ Fireworks ▪ Thunderstorms ▪ All loud noises ▪ Being away from buildings
Rape	▪ Men who look like the rapist ▪ Smell of the rapist's cologne ▪ Being near the place of the attack ▪ Seeing the clothes worn on the day of the attack	▪ All men ▪ Cologne in general/perfume ▪ Being in ANY dark place or place that resembles the place of the attack
Car Crash	▪ Driving in car ▪ Song playing during accident ▪ Broken glass ▪ Smell of gas	▪ Riding in cars ▪ Any song like the one playing ▪ Strong chemical smells

Between-class assignments

1) At the end of every day, continue rating the level of anxiety you felt for the day. Remember that this is an average for the day, and not meant to be just what is felt at the moment you are writing it down.
   - Forms: **Daily Anxiety Log**

2) Use the **Thought Challenging Records** covered in class today over the next week. Doing this on a regular basis is a key factor in improving you mood. Everyone should be able to fill in at least a few situations that caused an increase in their level of anxiety. Remember that it's much better to write your thinking in these forms, and not just "do the exercise in your head."
   - Forms: **Thought Challenging Records**

3) Read next week's class materials. Jot down any questions that come up as you are reading.

Class Agenda

- ☑ Go over questions about material covered in last week's class
- ☑ Review between-class assignments
- ☑ Discuss corrective thinking
- ☑ Go over corrective thinking for some common thinking patterns
- ☑ Cover the role of thinking in conditioned anxiety reactions

Questions for self-study

1) Just thinking about something can make a person anxious. *True or False*

2) All anxiety is due to thinking. *True or False*

3) People with PTSD all think about threats the same way. *True or False*

4) When were overly anxious, were likely over predicting the _____ and _____ of some possible threat.

5) What is cognitive therapy?

6) In PTSD, people only get triggered by things that are exactly like the things around when the trauma happened? *True or False*

Review of between-class assignments

Review your **Daily Anxiety Log:**

1. Total your daily scores and calculate an average score for this week.
2. Plot your score on the progress chart. If you saw your average score increase, don't worry. Your anxiety levels will fluctuate. On certain days, your score will be higher, and on other days it will be a little lower. This is normal.

Review the past week's **Thought Challenging Records**.

1. Were you able to identify times when you felt worse?
2. Could you separate the event from the emotion and the thinking?

3. How well were you able to challenge your distorted thinking?

Challenging your thinking-Part II

Today we will continue to review how to modify the thinking patterns and underlying beliefs that can generate feelings of anxiety.

We will also run through another example for the **Thought Challenging Record** in class, and cover some of your own **Thought Challenging Records**. Even if you don't get to discuss your own records, or prefer to not talk about your thinking patterns, hearing about other group members' thinking patterns and how they are challenging these beliefs and thoughts will be helpful for you.

We will also cover some examples of the most common distorted thinking associated with combat-related PTSD, and some examples of corrective thinking.

Thought Challenging Record –EXAMPLE #1

Date / Time	**Event** or situation just before you felt the emotion	**Distorted thinking**-Beliefs and assumptions	**Emotion** and #	**Corrective thinking-**change the thinking to be realistic and helpful, take a different perspective, look for alternative explanations….
11 Jan 4pm	Family sitting watching the news…dad asks me to sit down	There is now way I'm doing that…they will show something about the war, another God-dammed bombing. I'll be set off for the whole day if that happens, I just can't afford to put up with that today… Don't they get it?!?! He's GOT to know how bad this can make me feel…nobody understands what I have to go through with this, it's like people don't care…	Anxious "4" Angry "4"	There is actually a pretty low chance of them announcing something about the war-it just doesn't make the news anymore unless it's big. They almost never show any footage of an IED anymore, at most, they give some number of guys killed by an IED. Even if they show something about the war-I have skills now for calming down—it won't ruin my **whole** day My dad isn't living with this, I am. Most likely, he doesn't remember that I get panicked if I hear about this stuff. Maybe he does know-and thinks it will be helpful for me to get over it. I know he cares because of all the things he's done for me…
12 Jan 3pm	Parking at a Wal-Mart, looking at the ground before getting out of the car	I have to check for wires and plates, if I don't, then Ill wind up getting hit… Complacency kills- once you stop checking for things, that's when you get screwed over… Even if it's unlikely, I should do it anyways, just to keep in the "Habit"	Anxious "5"	I'm at a Wal-Mart…. in Virginia! There haven't been any roadside bombs in the USA, its really, really improbable I'd be the guy to get hit with one. There are 370 million Americans-I'd have a better chance of winning the lottery two times in a row. Checking makes me feel better, but its unnecessary-and keeps this fear around. I've gotten out of a car a lot and forgotten to check-nothing happened then, so checking really doesn't do anything. Once I head back over to theater-all my training will kick back in, I'll check everything I'm supposed to. I don't need the checking in Virginia parking lots…it's just illogical..

Thought Challenging Record - EXAMPLE #2 and In Class Exercise

Date / Time	**Event** or situation just before you felt the emotion	**Distorted thinking**-Beliefs and assumptions	**Emotion** and #	**Corrective thinking-**change the thinking to be realistic and helpful, take a different perspective, look for alternative explanations….
14 Jan 8 pm	About to go to bed---Having a drink …wife telling me not to drink alcohol	These nightmares are just too much; yesterdays really messed with me… I can't stand to keep having these-Ill lose my damned mind if this keeps up… Having a jack and coke helps me sleep-what the hell does she know about what's best for me, she is just being a Nag. She should be minding her business, or better yet-she should be more understanding….	Anxious "4" Angry "5"	
16 Jan 6 am	Even though you keep window curtains closed at all times when at home, your spouse leaves one open	What the hell!?!?! This is irresponsible-anyone can see in the house. We have the rule of curtains being shut for a reason… I am a target because I'm military-there's a lot of people out there targeting military people, and leaving the curtains open is basically asking to get shot by a sniper..	Anxious "5"	

Suggested Corrective Thinking for some common thinking patterns…

Figure 3.1

Alarming Unrealistic thinking	Countering Probability	Countering Severity
Crowds aren't safe-you can get attacked anytime (in a mall or subway for example)	I've ridden the subway hundreds of time before, and never thought twice about it. I was never attacked and never saw anyone attacked. It's really unlikely to happen… Thousands of people ride the subway (or go to this mall) every day and no one gets attacked. If someone was to get mugged or attacked in the subway, it wouldn't likely be a large Marine/Soldier. It would be someone trying steal an old lady's purse.	I'm a combat trained Marine, and I'm larger than most people in the subway/mall. If anyone tries to hurt me I'm better able to defend myself than most people around me.
Wires on the ground by a road mean an IED's been placed here	Even in Mosul or Fallujah, wires on the roadside aren't always IEDs, sometimes it's just more trash. In the USA wires on the road side are just trash. We haven't had an IED in the USA; it's just not likely at all. A person has a better chance of being struck by lightning than getting hit by an IED in the states. I'm not worried about lightning. Why waste time worrying about IED's stateside?	Most people in convoys hit by IED's in theater live. If an IED were set off in the states, it's likely it would be by someone who doesn't have experience; therefore, it wouldn't be a strong one.
Driving under overpasses is dangerous…I have to drive fast under them	The likelihood of a random overpass in the states being a terrorist target is minimal. It's very unlikely it would even be a choice. We haven't had any IED's in the states. Hundreds or thousands of people under this overpass a day without thinking twice about it. None of them are getting hurt. People in the middle lane aren't any safer because nothing is going to happen anyways….	The chance of my hit by a bomb on an overpass in the states is incredibly small. The chance of my being close enough to actually die or be seriously hurt is even smaller.
Arab people can't be trusted. Any one of them could be out to hurt you…	There are a lot of people who are Arabic in the US military, serving side by side with their fellow Americans. Not all Arabs are insurgents. In fact, the vast majority of people in Iraq or Afghanistan wouldn't hurt you. Most people in America are peaceful, even if they are Arabic, and even if they are Muslim.	If anyone were to try hurting me, whatever their nationality, as a trained military member I'm better able to defend myself than the average guy. So why be more worried than the average guy?
Propane tanks could be rigged	Propane tanks in the states aren't dangerous unless you mishandle them. Nobody in the states has been killed due to a propane tank turned into an IED. A tank at a friend's place or in front of a gas station will have been around many people, and they haven't had any problems…	If it is rigged it could go off, and that would realistically be very bad. But the chances of it actually being rigged are so low, … I really don't need to worry about the severity….

I can't watch TV. They will put in some news report about the war and I'll be set off for the whole day	If I'm just watching TV shows and not news shows, the only thing to worry about is "breaking news" reports which are almost never about the war anymore. The news shows less and less coverage of the wars. It's something a lot of guys complain about. People just don't seem to care. It's actually very unlikely I'll catch any news footage of the war.	If the war is mentioned, they rarely show any graphic footage. So it won't be that bad. Even if I hear about the war, it won't hurt me. I get anxious because of a lot of things. I can't let this thing keep me from enjoying life.
A box or tire on the roadside could be a bomb. You have to steer clear of it.	We haven't had any IED's in the states. There are 300 million Americans; my chances of being "The guy" hit by an IED stateside are lower than playing the lottery. My friends and family are driving along the same roads and nothing happens to them...	The chance of my hit by a roadside bomb in the states is incredibly small. The chance of my being close enough to actually die or be seriously hurt is even smaller.
I can't _____. It will give me a flashback /panic attack...	I've done _____ many times, and only have a flashback sometimes....so it's not a guarantee. It is actually less than half the times when I _____ that it triggers me. So really, it's 50/50. In the past, when I did _____, I got overwhelmed. But now, I control my thinking, use the relaxation exercises, and have other skills. So it's less likely that Ill have a bad flashback or panic attack.	Having a flashback or panic attacks is bad, but not the end of the world. In fact, it's not even terrible. I've had so many of them, I can't even count them- none have killed me, and none have driven me crazy.
People don't realize just how dangerous the world is, I have to stay on edge....	The world is as dangerous as its always been. Its no more dangerous after this war, the reason I feel so anxious is being set off by triggers all the time. Staying keyed up doesn't actually make me safer. It's an illusion. I'm as safe as the next guy walking down the street, sitting at a restaurant, or driving to work.	Very bad things do happen to people. It's true now and was true before I developed PTSD. Being on edge won't make a bad event less severe. In fact, my being keyed up all the time makes me less likely to react well and makes even routine arguments dangerous, because my anger is hair-triggered.

Corrective thinking and Conditioned Reactions

In session one, we learned about how classical conditioning can cause us to acquire fears. Over the past couple of weeks, we have been discussing the ways in which our thinking can also cause fears. When we encounter a trigger and it causes a fear reaction, our anxiety level is often affected by two powerful forces: ***the conditioned fear reaction,*** *and* ***our own thinking.***

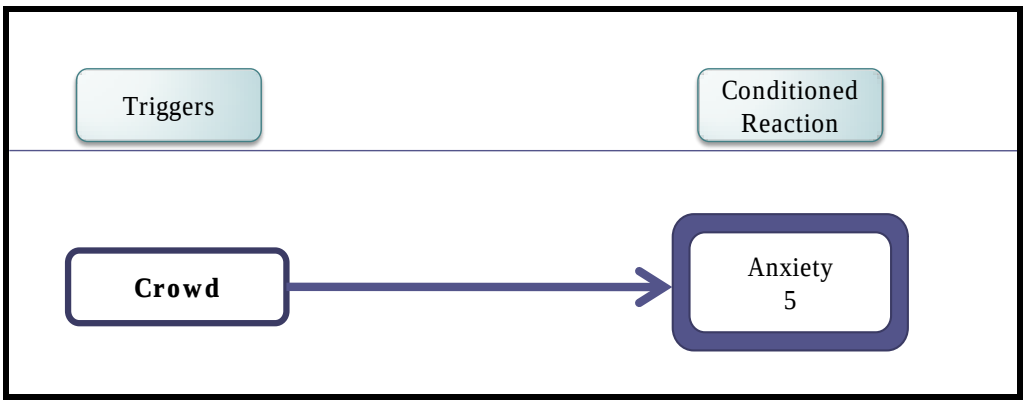
The Bad News: We cannot directly control the fight or flight reaction.

The Good News: We **CAN** control our thinking patterns, with some practice. And doing so can actually prevent a panic attack from happening.

For example, if you run into one of your triggers and it causes a moderate conditioned fear reaction (say, a "5"), you would be likely to experience physical symptoms and might have the urge to escape. This is an automatic response due to classical conditioning. See Figure 3.2:

Figure 3.2

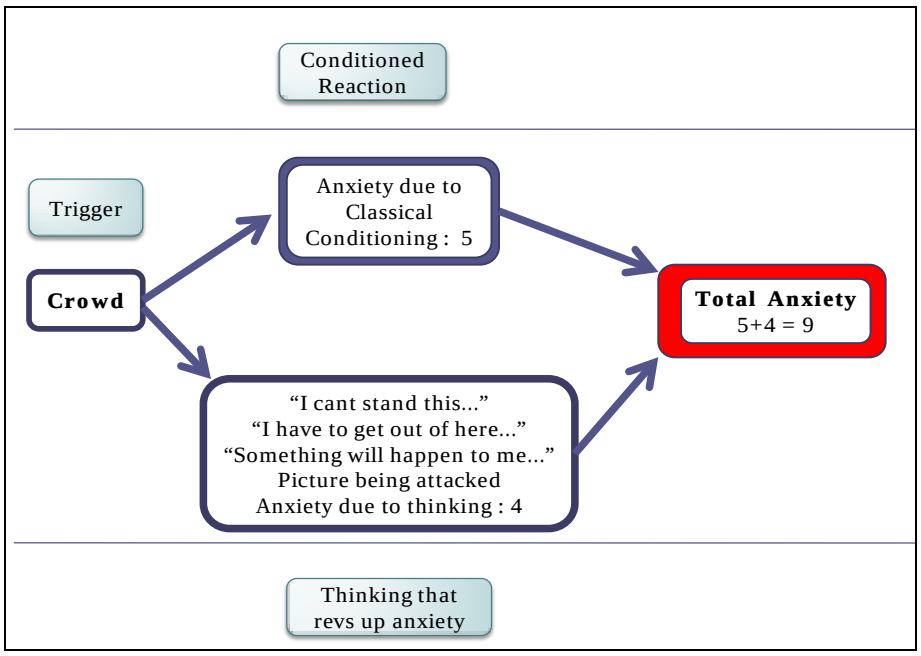
Your conditioned reaction to a trigger will vary. On a scale of 1 to 10, some triggers will cause a strong reaction (maybe a "5").



If you were to slip back into anxious thinking, the anxiety gets even worse. If being in a crowd triggers anxiety and you start thinking "I can't stand this," and "I have to get out of here," you **will have a higher total anxiety if you don't control your thinking**. In this case, going from a moderate level of 5 to a higher level of 9, brings the person to or near a panic attack. This is illustrated in the following figure:

Figure 3.3

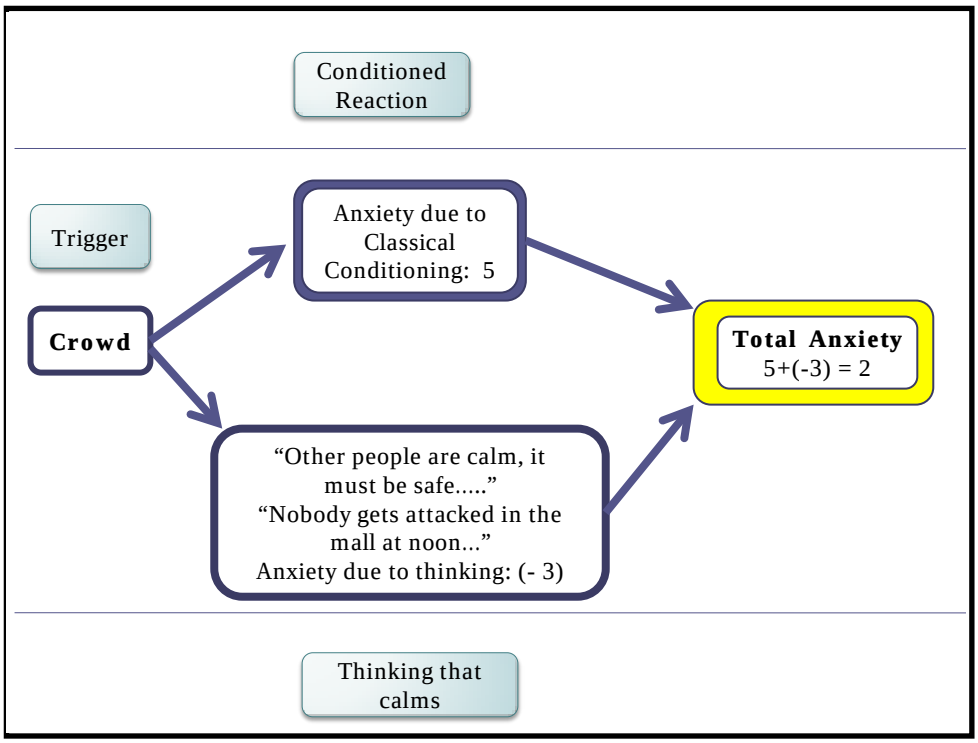
Anxious thinking can increase a person's total anxiety level. An individual may not be able to control the fact that they have a reaction – however, anxious thinking or calm thinking can dramatically increase or decrease the intensity of the reaction.



Consider what would happen if you were able to control your thinking, and focused on realistic and calming thoughts. **If you did this, *your anxiety level would go down.*** By thinking realistically in the face of triggers, you will make it easier to cope with being in these situations. In the figure below, the person substitutes the automatic thinking that was making their anxiety worse with realistic thoughts, which can result in a less anxious feeling. Even though they still have the conditioned response, they can keep their anxiety at a manageable level with corrective thinking.

Figure 3.4

Corrective, calm thinking can decrease your overall anxiety level.



By learning to control your thinking, you are better prepared to handle this type of situation. Calm thinking can actually prevent a panic attack from occurring.

Between-class assignments

1. At the end of every day, continue rating the level of anxiety you felt for the day. Remember that this is an average for the day, and not meant to be just what is felt at the moment you are writing it down.

    - Forms: **Daily Anxiety Log**

2. Use the **Thought Challenging Record** covered in class today over the next week. Doing this on a regular basis is a key factor in improving you mood. Everyone should be able to fill in at least a few situations that caused an increase in their level of anxiety. Remember that it's much better to write your thinking in these forms, and not just "do the exercise in your head".

    - Forms: **Thought Challenging Record**

3. Read next week's class materials. Jot down any questions that come up as you are reading.

Class Agenda

- ☑ Go over questions about material covered in last week's class
- ☑ Review between-session homework assignments
- ☑ Discuss basic concepts in exposure therapy
  - Explanation of exposure therapy
  - Why is exposure therapy works for individuals with PTSD
  - How exposure therapy is done

Questions for self-study

1) Thinking can amplify our conditioned anxiety reactions to triggers. *True or False*

2) Challenging anxious thinking patterns "in your head" will work just as well as writing out the thoughts and beliefs using the Thought-Challenging Record. *True or False*

3) When we are unrealistically anxious, we are likely to be over-estimating a potential threat. *True or False*

4) Most extreme moods are caused by distorted thinking? *True or False*

Review of between-class assignments

A). Review your **Daily Anxiety Log:** 1) Total and calculate an average for this week. 2) Plot your score on the progress chart. Most people should have noticed a decline or that their anxiety has remained steady from the previous week.

B). Review the past week's **Thought-Challenging Record**. The purpose of these worksheets is to identify the situations and thinking patterns that lead to your feeling more anxious and give you control over how anxious you become.

Exposure Therapy Explained

As you know, the process of classical conditioning explains how we learn fear, and how reminders of a traumatic event – triggers – can cause an uncontrollable fear reaction. Scientists have been studying this type of learning for almost a hundred years. A very effective type of therapy, called exposure therapy, has been developed based on this process. Exposure therapy involves being exposed to a feared thing or situation over and over again. In order to understand how exposure therapy works, we will need to briefly review how fear conditioning works.

The figure below shows the triggers from our example of laboratory fear conditioning. In this procedure, being put into a chamber and having a yellow light turn on is followed by foot shocks. The light and chamber are paired with pain and the internal fear alarm.

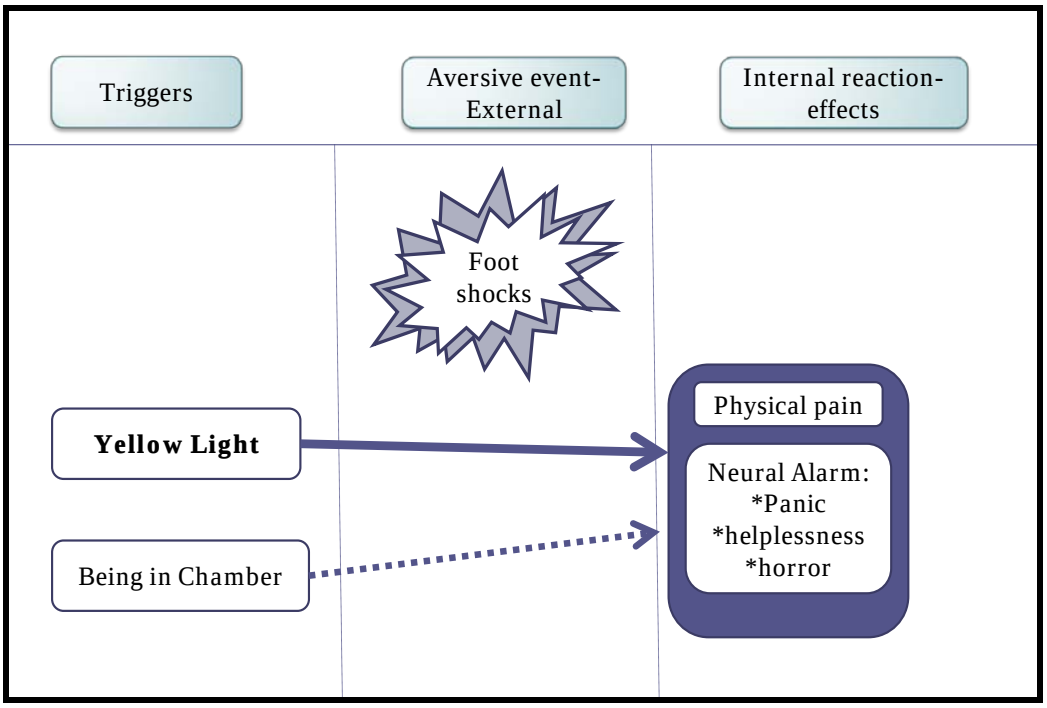


Figure 4.1

A standard fear conditioning experimental setup.

To test whether the fear conditioning has worked, the rat is put back in the chamber and the light turned is on, but no shocks are given. Once the light comes on the rat will experience what looks like a panic attack. Its heart rate goes up, it will breathe rapidly, releases stress hormones, and try to escape. If given the chance, it will leave the chamber as soon as possible. This demonstrates that the conditioning did in fact work; the animal acquired a fear of the light. This is also what happens with people who have been through a trauma: they have fear reactions when they come into contact with their triggers.

But... there is an interesting twist to this if exposure to a trigger is extended: **if the rat isn't allowed to leave the chamber, *it will actually get over its fear***. In the laboratory, experimenters can eliminate a learned fear by putting the rat back in the chamber with the light coming on and off again and again, without turning the shocks on. After doing this over and over again, the rat will learn that the light no longer signals the coming of shock; this breaks the association or link between the light and the shock.

As this association dies off, the light no longer triggers a fear reaction, as illustrated by Figure 4.2. The animal shows less intense fear behaviors as they get more and more exposure to the trigger (light). Eventually, it will just ignore the light as if it never had anything to do with shock. This process is called **extinction**, because we are extinguishing the association between the light and the shocks.

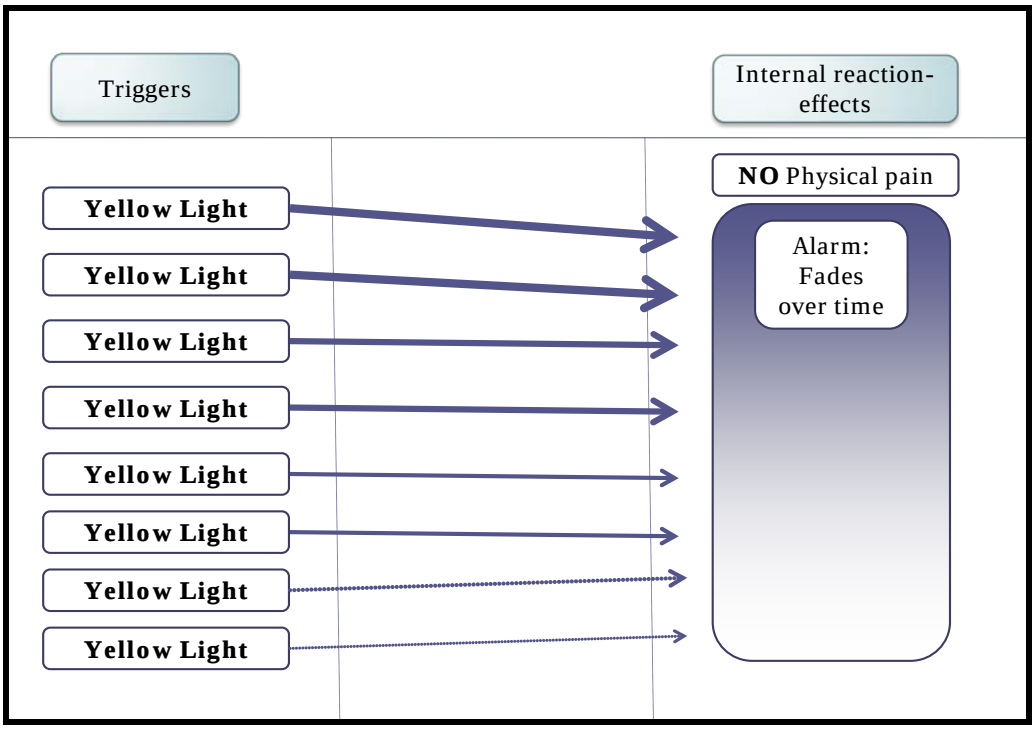


Figure 4.2

After repeated exposures to a trigger over time, a fear reaction (and panic attacks) will lessen in intensity and begin to fade away. This is why exposure therapy works for so many people to reduce PTSD symptoms.

The process of exposure is very predictable and reliable. All animals that go through this process eventually get over the fear.

Exposure therapy for PTSD: How and why it works

The years of laboratory research on fear conditioning explains why exposure therapy is arguably the most effective form of therapy for PTSD. In exposure therapy an individual has an opportunity to face the situations and triggers that cause them to feel anxiety or fear. This is done in a controlled, therapeutic environment, often with the support of a therapist. The goal of exposure therapy is to reduce the levels of anxiety and fear associated with triggers.

Besides the very basic un-learning of a conditioned association, exposure therapy also helps people adjust their thinking and beliefs. By going through exposure exercises, people come to realize some of the thoughts and beliefs they may hold about their triggers are not reasonable or true.

Earlier, we discussed how someone who experiences a traumatic event might have some things around at the time of the traumatic event that later trigger fear reactions. In the following figure, the person has strong associations between explosions (loud noises) and the smell of burning rubber. When they come into contact with these cues they begin to feel anxious:

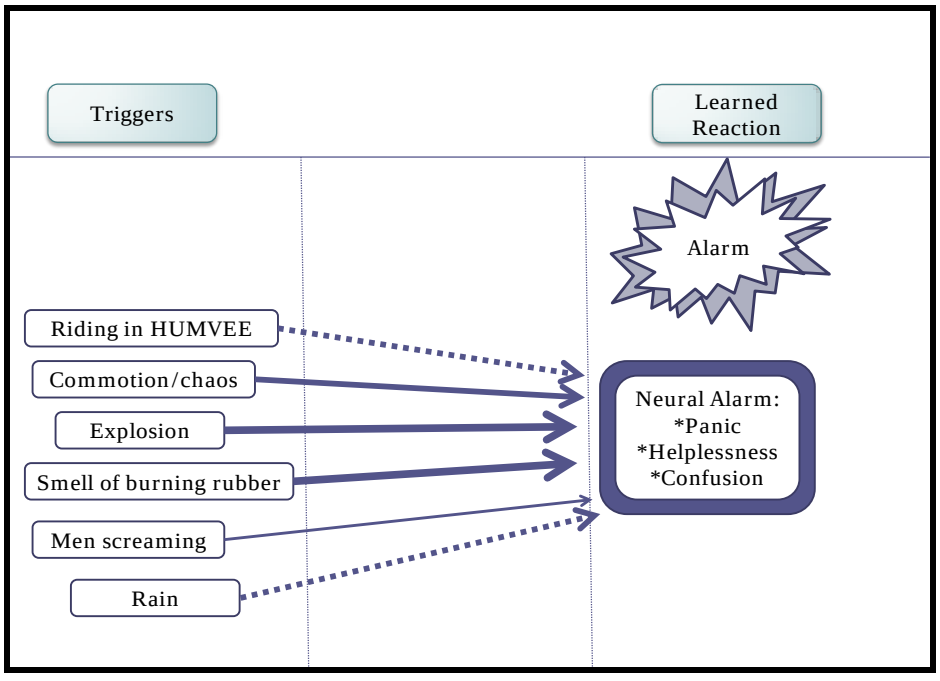


Figure 4.3

In this example, the service member has several triggers from his experience in an IED attack. Some are stronger than others.

This person would benefit from getting some exposure to his triggers. By repeatedly being near triggers, he will see his reactions fade away. Let's look at an example of how this can happen with a case study example.

Case Study: Petty Officer Richards

P.O. Richards was attacked by a German shepherd last year. This was a terrifying, traumatic event for him. Since the attack, he notices that there are certain things that remind him of his experience – and he tries to avoid those things. P.O. Richards prefers not to talk about the attack. When he hears dogs barking or growling – even on TV or in movies, he gets really anxious. About 8 months ago, P.O. Richards came across a German shepherd in his neighborhood, and almost instantly felt like he was having a panic attack. His heart rate went up, he got sweaty, and he felt short of breath. Since then, he avoids German shepherds and all other large dogs. If he sees a large dog down the street, he starts getting nervous, so he does whatever he needs to do to get away from it, and then he calms back down.

Avoiding large dogs makes him feel better, so it has become a reinforced behavior. But P.O. Richards knows that avoiding them isn't helping him move forward. In fact, his symptoms seem to be getting worse as time goes by.

Logically, P.O. Richards knows that the German shepherd in his neighborhood and the other large dogs he avoids probably will never attack him. But he can't seem to control the reaction he experiences when he sees them. The best way for him to get over his symptoms is to re-learn how to be around German shepherds and large dogs through exposure therapy.

To get over his fear, P.O. Richards practiced being around his triggers in a gradual way. He started with triggers that cause a mild to moderate reaction but not ones that cause him to panic and want to leave the situation. By gradually being near these mild triggers, they will stop causing a reaction. He can then slowly work up to more challenging triggers.

How P.O. Richards went about exposure therapy:

Figure 4.4

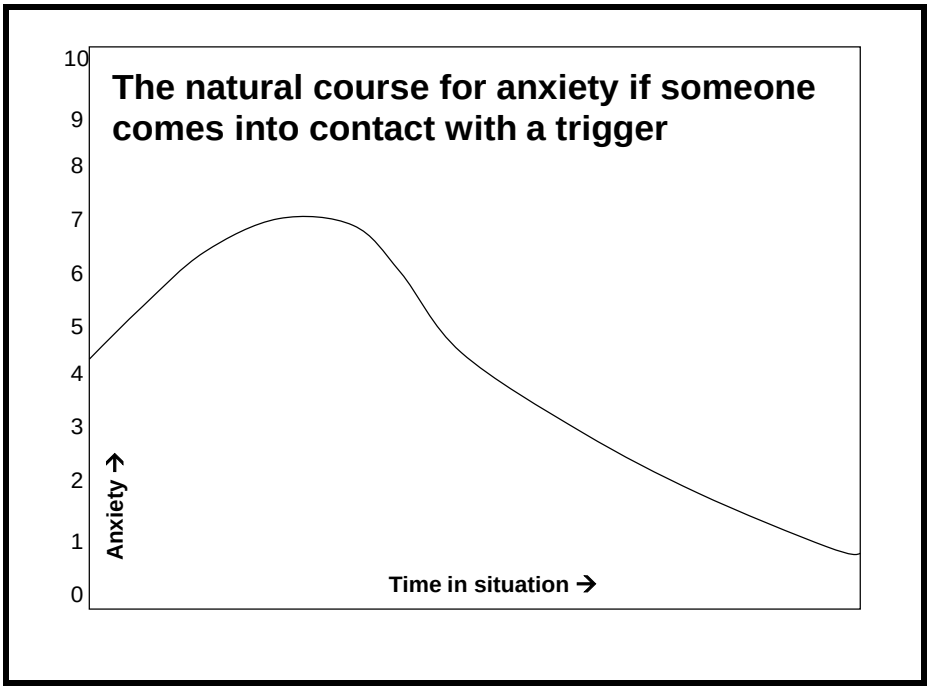
Step	Exposure Therapy Exercise
1	Look at pictures of large dogs
2	Look at pictures of German shepherds
3	Watch a video of a German shepherd running and barking
4	Go to the park and watch large dogs with their owners
5	Accompany girlfriend to the ASPCA and view large breed dogs from a distance
6	Go back to the ASPCA and stand near the cages
7	Approach a German shepherd and pet it

Each of these small steps gradually weakens the connection between the dog (the trigger) and the attack (the traumatic experience). Watching a video of a German shepherd may

cause his heart to beat fast at first, but if he is able to watch the whole video, his anxiety level will go down. The following figure shows what happened when P.O. Richards watched the video.

Figure 4.5

Anxiety levels will naturally increase when a person with PTSD comes into contact with a trigger. But an interesting thing happens if they don't escape from the situation: if they stay in contact with the trigger, *anxiety levels actually go down.*

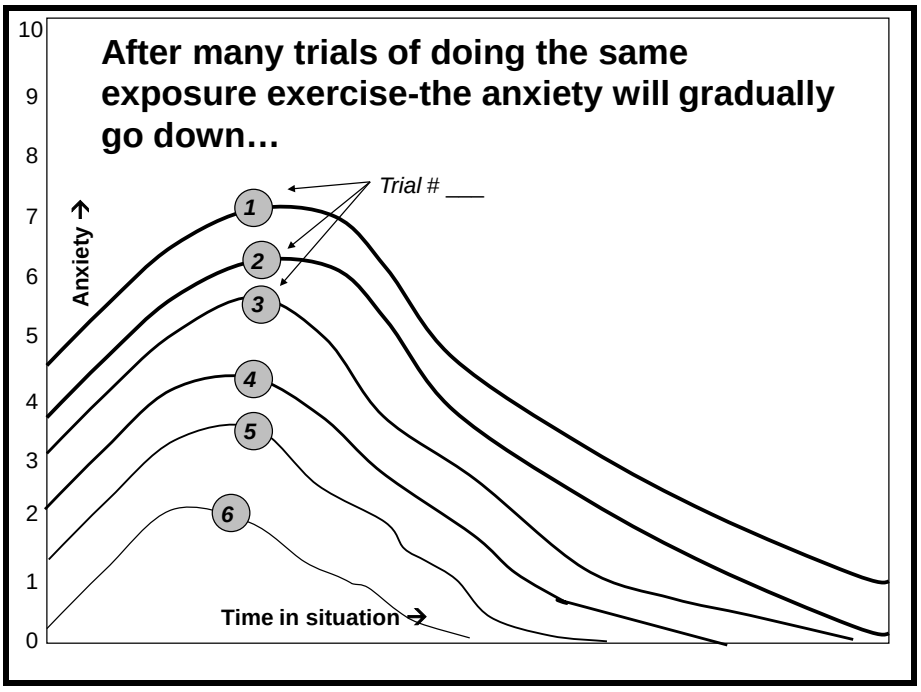


Once the video started, the Petty Officer's anxiety level went up briefly, but instead of escaping and turning the video off, he kept watching and saw that his anxiety level went down significantly.

If P.O. Richards repeats the same exposure exercise, the reaction will be a little weaker each time. For example, watching the same 30 minute video over and over again should become easier to watch with each viewing. His anxiety level will be less on trial 2, and lower still on trial 3, and so on, until he is actually bored watching the video. In the following figure, we see P.O. Richard's anxiety level steadily decline after viewing the same video again and again over several days.

Figure 4.6

With repeated exposure to a trigger, anxiety levels go down. The time it takes to calm down usually shortens as a person goes through the exercise.



Towards the end of a week of watching this video, he is having almost no anxiety. At this point, he should move on to the next step on his list.

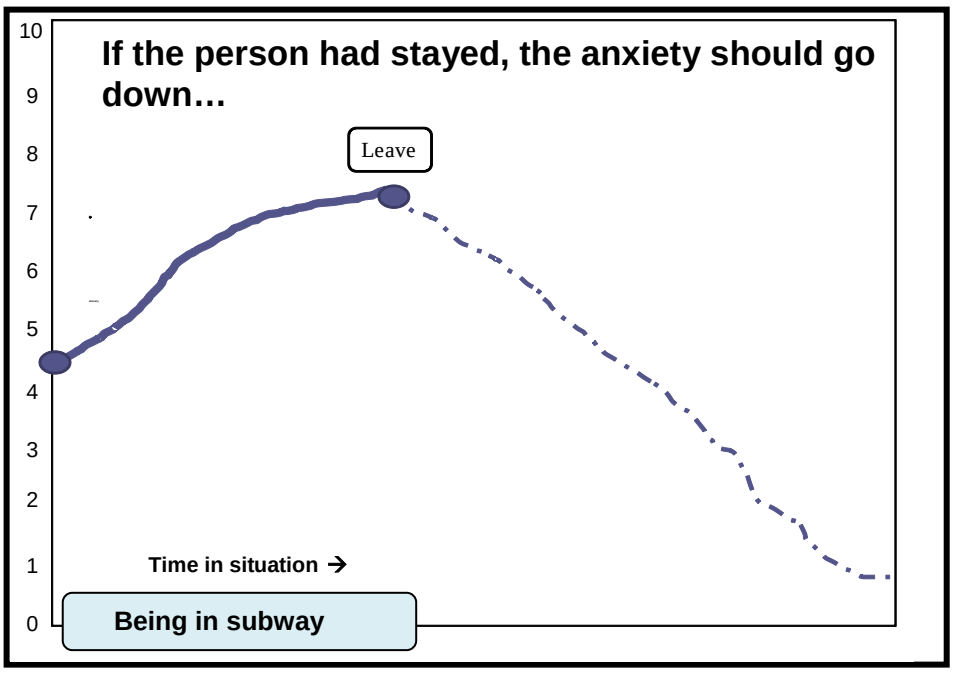
Generally speaking, after a person has completed the first few steps in this list, the next steps are much easier to go through. That's because even though the person isn't actually near a German shepherd in Step 1, 2 or 3, looking at pictures or videos of large dogs, and especially German shepherds will start to break the association between the dog and the fear reaction. Each of these steps chips away at the association.

The right way – and a *wrong way* – to do exposure therapy.

While exposure therapy is the most proven way to get better, it can be done incorrectly. If it is done incorrectly, it can actually cause a person's fear to worsen. If an individual tries to do exposure therapy by going into situations that trigger anxiety, but does not remain in the situation long enough— it can have a negative effect. In the figure below a service member who hates crowds enters a crowded subway station and leaves at the point where his anxiety has reached its peak. Because he left when it was high, he never got to see his anxiety level go down in the situation.

Figure 4.7

Leaving a situation that triggers anxiety or panic before you have a chance to calm down is counterproductive. Staying in the situation long enough is critical to resolving PTSD.

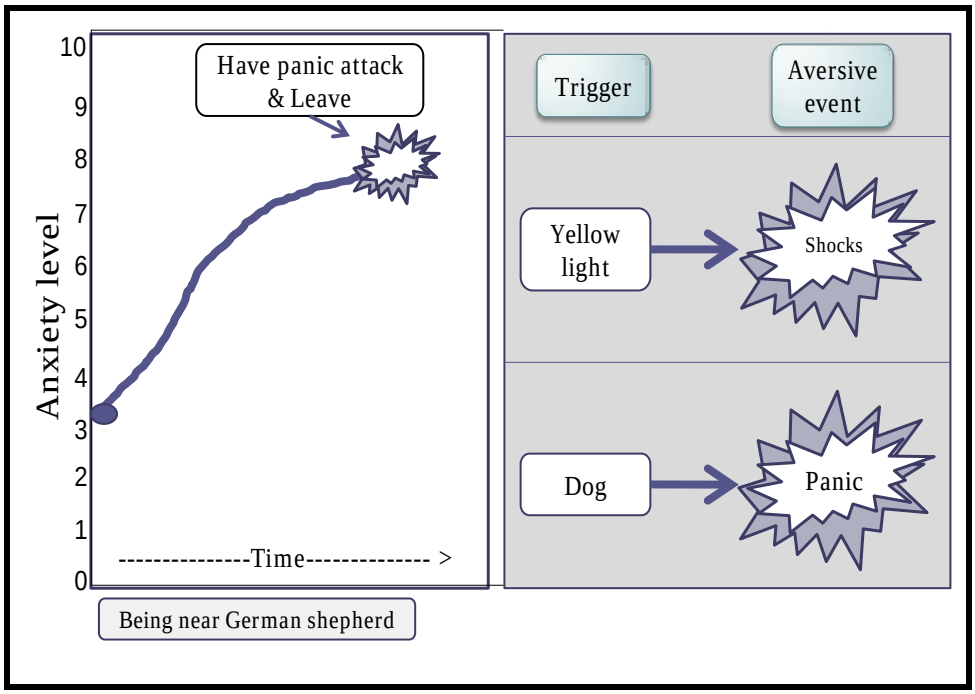


This is a common situation with people who aren't in treatment and try to force themselves to "get over" the fear. They try to brave the situation, stay up to the point they can't take it anymore, and then remove themselves from the situation as quickly as possible. Essentially, the service member stays in the situation with their trigger(s) just long enough to feel at a near panic state, then leaves. The more a person does this, the more they reinforce being very uncomfortable with the trigger. Even if it's not a full panic attack, they are still pairing the trigger with something moderately unpleasant. This is the wrong way to do exposure therapy.

In the case study example, imagine P.O. Richards tried to "get over" his fear by walking up to a German shepherd. The dog growls and snaps at him because it didn't know him or sensed he was feeling uneasy. If the Petty Officer has a strong panic attack while standing close to the barking German shepherd, it's yet another pairing of the trigger with the alarm. P.O. Richards would fear the dog more, not less. This is the same process that we learned about in Class #1, called fear incubation. The following figure (Figure 4.8) shows how having a panic attacks near the dog can worsen the fear.

Figure 4.8

An example of fear incubation with a German shepherd. Being near a dog after the trauma triggered a full panic attack.



How long is long enough for exposure?

There is no set amount of time that goes with any given exposure exercise. A basic rule of thumb is that the person should be able to stay in the situation until their anxiety level goes down by about half of its highest level. For example, if SGT B. has an intense fear of being near propane tanks, one of his steps would likely be to stand within about 20 feet of a tank. If his anxiety level went up to a 6 soon after he started but he noticed it going back down as he stood there, he should stay there at least until it's about a 3. Of course, it's better to stay in a situation until the anxiety dies down even more, ideally down to a 0-1.

Beware of "rewarding effects"

The other part of this pattern that worsens the fear is that leaving a situation that feels bad is rewarding – when we do it, we are rewarded with feeling better. In the example with the German shepherd, walking away from the dog brings an almost immediate sense of relief to P.O. Richards. This sense of relief reinforces or rewards the escape behavior. The person is much more likely to get out of similar situations in the future, as the escape behavior has been rewarded.

When it comes to fear, like all other things, people tend to do what is going to make them feel better. If leaving makes the anxiety go away, they will have a strong urge to leave the next time they get anxious. If they continue doing this for months or years, it gets to be a very hard habit to break and the person's automatic action when they get anxious is to leave, or escape.

Types of Exposure Therapy

There are different ways to approach exposure therapy. Your therapist can work with you to determine which type – or combination of types – you should try. Here is a list of different types of exposure, followed by a detailed description of each type:

- Imaginal exposure
- Pictures/video clip exposure
- Virtual reality exposure
- Interoceptive exposure
- In Vivo exposure

Imaginal Exposure involves having a person imagine certain aspects of a feared object or situation. The person might be asked to remember a traumatic incident as vividly as possible, saying out loud what is happening as they are remembering it. The person starts off with something related to the traumatic event that they are able tolerate, and with the guidance of a therapist, they work up to images that cause a more intense fear reaction.

Imaginal exposure allows us to mentally recreate situations to which we cannot and/or do not wish to return. For instance, it would not be practical to have a combat veteran return to a combat situation. Even if they did go back to a combat zone, it would not be possible to recreate the situations they were in.

Examples of imaginal exposure:

- Talking about what happened before, during and after a convoy was hit by an IED, mentioning as much as you can remember.
- Picturing yourself walking into a crowded subway, imagining people standing close to you, and occasionally bumping into you.

Using imaginal exposure allows a person to make progress on facing and lessening a fear even if they aren't ready to re-enter the actual situation. For example, if someone fears crowds and doesn't feel ready to actually go into a real crowd, just picturing being in a crowded subway may make them anxious. If simply picturing being in a crowd triggers anxiety, they can start with imaginal exposure and then move on to the real situation.

Pictures/video clip exposure uses pictures, videos or sound clips that remind an individual of their triggers and allows them to work through their reaction. For example, watching a video clip of a person having to walk through a crowded subway, with images, sounds of the crowd and trains coming in and out could be used to get over a fear of

crowds. Another example could be watching a documentary about the war. Repeated exposure to these sounds or images should allow the person to practice experiencing their fear reaction while working through it.

Virtual reality allows a person to come into contact with triggers in a computer-generated virtual environment, either through the use of a head-mounted display device or computer monitors. This is more interactive than looking at pictures or watching video clips, and it can feel a lot like playing a video game. The virtual reality environment can be programmed to help the person confront situations that trigger their fear response. It also makes it possible for someone to repeatedly face a situation that may not be safe to encounter in real life – like a combat situation.

Interoceptive exposure involves doing one or more specific physical exercises such as breathing fast, running in place, or spinning in order to generate physical symptoms of anxiety. Some people will have very strong reactions to one of these symptoms-for example dizziness. Whenever the person feels dizziness, the sensation alone might cause, or at least help accelerate a fear reaction. Doing these exercises has been shown to be helpful in different anxiety disorders, including PTSD. This type of exposure therapy is often recommended to people who are having frequent panic attacks.

In vivo exposure therapy allows a person to learn and practice managing their symptoms in real-life situations. For instance, a person with PTSD may react strongly to being in places where they feel crowded or trapped. A therapist may have this person practice going into different settings that are gradually more and more crowded. Another possible trigger could be driving under overpasses. In this case, a therapist would have the person practice driving under the same overpass several times, until their fear reaction fades away. As with other forms of exposure therapy, these exercises help the person break the link between the trigger and the fear reaction.

How to do exposure therapy:

Regardless of whether you start with imaginal, interoceptive or in vivo exposure, there are some basic steps for starting exposure.

1. The first step is to identity situations where you have fear reactions.

2. Second, you will need to generate a hierarchy for each situation. A hierarchy is list of gradual steps that relate to the situation. The example case of P.O. Richards had a hierarchy, starting with looking at pictures of dogs, then videos, then standing at a distance to dogs, etc.

3. The next step is to start going through each of the hierarchies step by step, putting yourself in or near the feared thing or situation again and again. Once you no longer have a strong reaction at a given step, you simply move down to the next step in your hierarchy.

You and your instructor will come up with a list of situations that relate to the feared situation, which become steps in the hierarchy. You may want to have some steps where you have someone with you, for example, going to the mall with a friend at first, then alone for the next step. You should rate how distressing each step would make you, from 0-100, with "0" being no distress at all, and "100" being as distressed as you could possibly be.

Example case- The following case demonstrates how one service member identified his triggers, and what two of his hierarchies look like.

Corporal Z is a 24 year old Marine who was on his second deployment to the Middle East when he was involved in a firefight with insurgents. During the incident, his patrol was fired at and returned fire. He saw two teammates die, and he shot several enemy personnel. Some civilians died during the firefight including women and two children. He is unsure whether he shot any of the civilians by accident. The events took place too fast to know. After returning home, CPL Z has several triggers-

Associated things CPL Z avoids or has reactions to when he encounters them:

- People who look Arabic.
- Sound of gunfire.
- Sight of blood.
- Being around children.
- Movies involving similar incidents.
- Being in crowds.

Like most people with PTSD, Corporal Z had several triggering situations. During his time in treatment, he made up several hierarchies for exposure. Some hierarchies involved several steps; other hierarchies only took a few steps. The next two pages show two of his hierarchies, 1) for being around Arabic people and 2) for being in crowds. In each of these hierarchies, he starts with steps that trigger a mild to moderate reaction and then works his way up to situations that cause stronger reactions.

Look over his sheets and see how he arranged his steps based on how distressing he would find each situation.

Hierarchy for: Seeing people who look Arabic

Step Number	Situations	Estimated distress in situation…
1	Look at pictures of Arab men dressed in Western style clothes	10
2	Look at pictures of Arab men dressed in traditional Iraq clothes	15
3	Watch a video documentary showing Arab men –with the sound off	20
4	Watch a video documentary showing Arab men –with the sound on	25
5	Rent a DVD on learning an Arabic sounding language-watch the men and women speaking Arabic	30
6	Walk through a place with a moderate amount of Ethnic minorities –with buddy	55
7	Walk through a place with a moderate amount of Ethnic minorities –alone	70
8	Eat at an Arabic restaurant with your spouse or buddy	75
9	Eat at an Arabic restaurant alone	80
10	Strike up conversations with Arabic men/women in public places-Malls, shops, restaurants, public transportation, etc..	90

Hierarchy for: Being in Crowds

(Specify core fear)

Step Number	Situations	Estimated distress in situation…
1	Going to mall after it opens at 10 on Saturday and Sunday-walking around less crowded areas-with buddy	20
2	Going to mall after it opens at 10 on Saturday and Sunday-walking around crowded areas-with buddy	30
3	Going to mall after it opens at 10 on Saturday and Sunday-walking around less crowded areas-alone	35
4	Going to mall after it opens at 10 on Saturday and Sunday-walking around crowded areas-with buddy	40
5	Going to Subway (Metro) at moderately busy time-getting on and off trains-with buddy	50
6	Going to Subway (Metro) at moderately busy time-getting on and off trains-without buddy	60
7	Going to Subway (Metro) at moderately busy time-getting on and off trains-without buddy	75
8	Going to local Bar at moderately busy time-with buddy	80
9	Going to local Bar at very busy time-with buddy	90
10	Going to local Bar at busy time-without buddy	100

Class exercise- Have a volunteer talk about one for their feared situations, and as a group, go through what steps could go into a hierarchy.

Hierarchy for: _____

Step Number	Situations	Estimated distress in situation…
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Creating your own hierarchy.

The worksheet section at the back of the manual has many blank hierarchy sheets. Thinking of one of your triggering situations, make up a hierarchy that you could start on this week. Your instructor will go over people's hierarchies if there is time.

Monitoring Exposure Exercises

As you begin to go through your own exposure hierarchies, you will find that your anxiety levels go down as you continue getting exposure to your triggers. Every time you go through a particular step, say, watching a video clip of "Saving Private Ryan", you will notice that it gets a little easier each time, especially if you watch the same clip over and over, until it doesn't really bother you.

We recommend that you keep track of your progress on paper using the **Exposure Exercise Record** sheets in the Worksheet section of the manual. These sheets have places for the date, the Hierarchy step, the amount of time you spent in the situation and finally, what your highest level of distress was during the exercise. Keeping track of how your anxiety / distress level goes down over time is very helpful for keeping up the motivation to keep going through treatment.

The next two pages have two **Example Exposure Records**, each are tied back to Corporal Z's example hierarchy for "Being around Arabic men." The first page shows his initial steps in this hierarchy, and the second sheet shows his progress on more advanced hierarchy steps.

Exposure Exercise Record-EXAMPLE

Date	Situations-(steps from hierarchy)	Step #	Time in situation	Highest distress in situation (0-100)
22 Jul	Look at pictures of Arab men dressed in Western style clothes	1	10 minutes	8
22 Jul	Same	1	10 minutes	2
23 Jul	Look at pictures of Arab men dressed in traditional Iraq clothes	2	10 minutes	18
23 Jul	Same	2	10 minutes	9
23 Jul	Same	2	10 minutes	4
26 Jul	Watch a video documentary showing Arab men –with the sound off	3	60 minutes	35
26 Jul	Same	3	60 minutes	35
27 Jul	Same	3	60 minutes	25
28 Jul	Same	3	60 minutes	20
29 Jul	Same	3	60 minutes	12
30 Jul	Same	3	60 minutes	10
30 Jul	Same	3	60 minutes	3

Take Home Points from this example:

1. Some of the steps will be easier than others, the anxiety will fade quickly.
2. Corporal Z kept pretty consistent with the Hierarchy steps, keeping the same times for the same step, over and over again.
3. He kept going with each step until it basically didn't bother him anymore.
4. For shorter exercises, he was able to do more than one a day.
5. Sometimes the distress level didn't drop after a session, but he kept going.

Exposure Exercise Record-EXAMPLE

Date	Situations-(steps from hierarchy)	Step #	Time in situation	Highest distress in situation (0-100)
15 Aug	Walk through a place with a moderate amount of Ethnic minorities –with buddy	6	30 minutes	60
15 Aug	Same	6	30 minutes	50
16 Aug	Same	6	30 minutes	35
16 Aug	Same	6	30 minutes	25
17 Aug	Same	6	30 minutes	15
18 Aug	Same	6	30 minutes	5
19 Aug	Walk through a place with a moderate amount of Ethnic minorities –alone	7	30 minutes	45
20 Aug	Same	7	30 minutes	40
21 Aug	Same	7	30 minutes	40
21 Aug	Same	7	30 minutes	30
22 Aug	Same	7	30 minutes	20
22 Aug	Same	7	30 minutes	10

Take Home Points from this example:

1. Steps that provoke more distress /anxiety will likely take more time chipping away at, and he had to do them over and over.
2. For shorter exercises, he was able to do more than one a day.
3. Sometimes the distress level didn't drop, but he kept going.

Between-class assignments

1. At the end of every day, continue rating the level of anxiety you felt for the day. Remember that this is an average for the day, and not meant to be just what is felt at the moment you are writing it down.
    - Forms: **Daily Anxiety Log**

2. Use the **Thought Challenging Record** over the next week, focusing on the thoughts you had during exposure sessions. Remember that it's much better to write your thinking in these forms, and not just "do the exercise in your head".
    - Forms: **Thought Challenging Record**

3. Start on one of your hierarchies that you developed in class today. Use the **Exposure Exercise Record** to keep track of the anxiety and how it went down over time.
    - Forms: **Exposure Exercise Record**

4. Read next week's class materials. Jot down any questions that come up as you are reading.

Class Agenda

- ☑ Go over questions about material covered in last week's class
- ☑ Review between-session homework assignments
- ☑ Learn about safety aids and dangers associated with using them
- ☑ Interoceptive Exposure

Review questions for self-study

1) Everyone who is in a similar trauma (IED, Firefight) will have the same triggers. *True or False*

2) Exposure therapy is based upon what scientific evidence?

3) What are three types of exposure therapy?

4) Leaving a situation when you're at or near a panic attack can worsen the fear of that situation? *True or False*

5) What is the process of leaving a situation when you feel a panic attack coming on called?

6) In doing exposure exercises, you should stay in the situation until your anxiety goes down by _____ of the highest level.

Review of between-class assignments

A). Review your **Daily Anxiety Log:** 1) total and calculate an average for this week. 2) plot your score on the Progress chart. Most people should have noticed a decline or their score staying steady.

B). Briefly review the past weeks **Thought Challenging Record**. We will focus on those sheets associated with your exposure homework.

C). Review the past weeks **Exposure Exercise Records**. We will look at what went right and what could be improved from your first week of exposure exercises.

Safety Aides

Safety aides are things or behaviors that make a person feel safe, even though they weren't in any real danger in the situation in the first place. People with anxiety disorders tend to start using safety aides in order to feel less anxiety and gain a sense of control. The safety aides usually tie back to the fears one holds. For example, a person who fears choking might carry a water bottle wherever they go; be very careful about how large a bite they take when eating, and even eliminate several kinds of foods. Some examples of safety aides seen in combat-related PTSD include:

- **Carrying a weapon in public places**
  This may include a knife, pepper spray, or even a gun.
- **Only going out of the house / off base with someone else**
  Other people can be like a "safety" signal, they help keep us from thinking too much about the threats, as well as make us feel safer from attack.
- **Carrying a pill bottle around (Xanax, Klonopin, etc)**
  Even if you don't use the pills, just having the bottle nearby makes you feel safe. Patients sometimes even keep empty bottles with them.
- **Drinking alcohol to stay calm**
  Alcohol acts like a sedative, it calms down the mind and body. This is why so many PTSD patients also develop alcohol problems. They are using alcohol to calm down rather that get rid of the things causing the anxiety.
- **Taking sedatives before going out**
  Just like alcohol, sedatives can calm you down but they are just as addictive, and should be faded out over time if you are using them.
- **Having to sit near exits or with your back to walls when in public**
  Keeping your back to the wall and sitting near an exist usually makes people with PTSD feel safe because they can see everybody, and can get out of the situation if anything starts to happen.
- **Giving people a menacing look if they look at you**
  Most of the time, people with PTSD do this without noticing it, but other people get the hint: stay away from this guy. It serves to keep others from invading our personal space. It can also lead to some hostile reactions from other people who think you are staring at them in a menacing way.

- **Checking the perimeter of your house before going to bed**

  This one is obvious. For someone who fears for their safety and that of their family, they may want to walk around the house, check doors and windows, etc to feel safer. They may also do things like look over into the neighbor's yard to make sure there isn't any suspicious activity going on.

- **Speeding up when going under overpasses/driving past trash on the road**

  If you fear that overpasses may be rigged with IED's, it makes sense to drive very fast as you go under them and avoid the sides, driving down the middle of the open space. The same goes for trash (tires/boxes) along the side of the highway. You may feel safer getting far away from it and going past it fast.

- **Watching everyone around you**

  Being on edge and watching everyone around you is a symptom of PTSD. We often feel safer if we are keeping an eye on the situation. Much like standing guard duty, we are vigilant for anyone or anything that might happen. While this makes us feel safer in the moment, it's exhausting to keep up that kind of vigilance.

- **Never standing in lines/avoiding crowds**

  If you are uncomfortable with people being behind you because you can't monitor them, you may just avoid them altogether. Some service members will make several trips past an ATM until the line is short or there is nobody there, so that they feel safer.

The Dangers of Using Safety Aides

Behaviors like these make you feel better as you do them, but actually cause the PTSD to stay around a lot longer than if you never started using them. They serve to keep fear around longer in a couple of ways:

- **The person using a safety aide usually feels like the safety aide/behavior was the thing that made it possible to get through a situation.** Someone who is sitting having dinner with his wife at a restaurant may insist on waiting for a table where he can sit with his back to the wall and watch everyone. During the meal, he keeps track of people walking by, and is able to see what people are doing. He may feel safer, but in reality; he would have been just as safe if he had had the meal facing the wall. After the meal, he may think "Thank God we waited for a good table. Otherwise, who knows what could have happened."

- **Using safety aides presents a constant reminder of the "danger."** The same person in the example above was constantly reminding himself about the possible harm of being attacked and this was the thing that dominated the entire evening. Whatever his wife had to say, or even enjoying his food had to be put on the backburner due to his focus on being safe. The irony here is that dining with his wife, this man is as safe as he was before he went off to war, but now feels that he must stay on alert. His being alert and barely paying attention to how good his steak tasted didn't actually make him safer. He was just as safe as his wife and the other people in the restaurant.

- **Using safety aides often puts a person at more risk, rather than less.** A person who fears being attacked at a mall will scan the crowd, watching other people closely, trying to see if anyone looks suspicious. Sometimes the service member will even follow a "suspicious" person around just to keep an eye on them. If the person you are staring at and following around notices you, they may confront you to see what you are following them for, or call security to arrest you! Someone who fears being blown up under an overpass might go slower and slower as they approach the overpass, then speed up rapidly to get past the threat. This puts the driver and anyone with them at risk for a wreck. The same thing applies to swerving 2-3 lanes of traffic as soon as you see a tire on the side of a highway...you are trying to feel safer, but may actually cause a fatal accident.

- **Some safety aides keep you from actually experiencing anxiety during exposure exercises.** For example, drinking alcohol or taking an anti-anxiety pill will block most anxiety during an exposure exercise, limiting how much you will get out of the exercise. The same goes for distracting yourself while in the situation. You avoid the anxiety by focusing on something else. A person who is triggered by crowds might take a PSP to the mall for his exposure exercises, and play this while sitting on a bench as people walk by. In this case, he is focusing on the game, and "tuning out" the trigger making the session less effective. Of course, some people may need to distract themselves when first starting exposure sessions, but this should be faded out. In this case, sit in the same spot without the PSP.

Interoceptive Exposure

In the last class, we learned about several types of exposure therapy, most of which involved some external trigger like crowds, driving under overpasses, etc. We also

introduced Interoceptive exposure, where people gain exposure to *internal* triggers. We will spend some of today's class learning more interoceptive exposure. This type of exposure therapy is very useful to anyone who is having frequent episodes of uncontrolled anxiety, as well as anger outbursts. The internal triggers we have people get exposure to include things like having a high heart rate, feeling short of breath, dizziness, and other bodily sensations that are part of a panic attack.

Getting exposure to these bodily sensations works to decrease panic attacks, by helping slow down or even stop the cycle that starts after the first symptom starts. For example, going into a crowd one may notice that your heart rate is very high. This is usually followed by breathing faster, sweating, and other symptoms of the fight or flight reaction. Getting exposure to a high heart rate helps lower the "Hair trigger" on the alarm system, getting us back to normal. If you have PTSD, you may have noticed that a lot of things can get your heart rate up very fast, even things like minor disagreements with your wife or boss. Most people just write this off to "being irritable", but for many people, its due in part to this hair trigger on the alarm system. This means that something that wouldn't make you angry at all before now makes you go from 0-60 in 5 seconds when it comes to anger.

We know that physical exercise is very good for people with anxiety disorders, partially because it gives them exposure to having periods of high heart rate, breathing fast, sweating, etc. There's good reason to believe that the physical exercise is actually acting as a form of exposure therapy (to these internal sensations).

Interoceptive Exposure Assessment

The list on the next page contains several exercises that are designed to generate physical symptoms in everyone. For example, running in place makes everyone's heart rate go up. For a large percentage of people with anxiety disorders, having a higher heart rate will also make their Alarm system fire, generating a panic-like reaction. The same thing can occur with feelings of dizziness or shortness of breath. We have people do several of the exercises below in order to determine whether they have this additional anxiety along with the physical sensations. As a class, you will go through the list noting the degree you had the sensations, the degree (if any) additional anxiety and how similar it is to the anxiety you feel day to day.

Please note that you should take into consideration any medical conditions you may have before doing these exercises. If in doubt about any of them, consult your physician before trying them.

INTEROCEPTIVE EXPOSURE ASSESSMENT

Rating scale (0-10) 0=None ←----------→ 10= Extreme

Exercise	Sensations	Intensity of sensations 0-10	Intensity of anxiety 0-10
Shake head from side to side [30 seconds]			
Place head between legs [30 seconds], then lift back up rapidly			
Run in place [1 minute]			
Hold breath [30 seconds]			
Place a tongue depressor at back of tongue [30 seconds]			
Spin in place (sitting in chair) [1 minute]			
Pushups [1 minute]			
Hyperventilate-breath in and out rapidly [1 minute]			
Breath through a narrow straw [1 minute] (nose pinched)			
Stare at a spot on a blank wall [3 minutes]			
Stare at yourself in the mirror [3 minutes]			

Steps for overcoming anxiety reactions to these exercises

If you have a lot of anxiety after one or more of these exercises, you may benefit from doing some interoceptive exposure exercises. For example, if you had a strong anxiety reaction to the hyperventilation exercise, you could set up a hierarchy for this and run through several trials a day. This would look like this:

1. Hyperventilate for 1 minute with wife in the house
2. Hyperventilate for 1.5 minutes with wife in the house
3. Hyperventilate for 2 minutes with wife in the house
4. Hyperventilate for 1 minute while alone in the house
5. Hyperventilate for 1.5 minutes while alone in the house
6. Hyperventilate for 2 minutes while alone in the house

The person would run through step one over and over again until it doesn't make him anxious anymore. They then move down the list. Note that some of the sensations will not die off (you should continue to feel a little lightheaded and maybe have dry mouth). After doing this series of exposure exercises, this person would notice that whenever they run into a trigger during the day they will be less likely to have a full reaction. Doing this kind of exercise over and over again helps take the edge off all of the reactions they have.

Troubleshooting Exposure Exercises

A number of things can make your exposure exercises less effective, or even not work at all. It's important to review these things and make sure that as you are going through your hierarchies, you look out for these patterns.

Anxiety not going down during the session

Sometimes, people go out and try exposure exercises, but find that their anxiety doesn't go down. The person stays for their planned amount of time but the anxiety level stays constant or goes up. See the figure below:

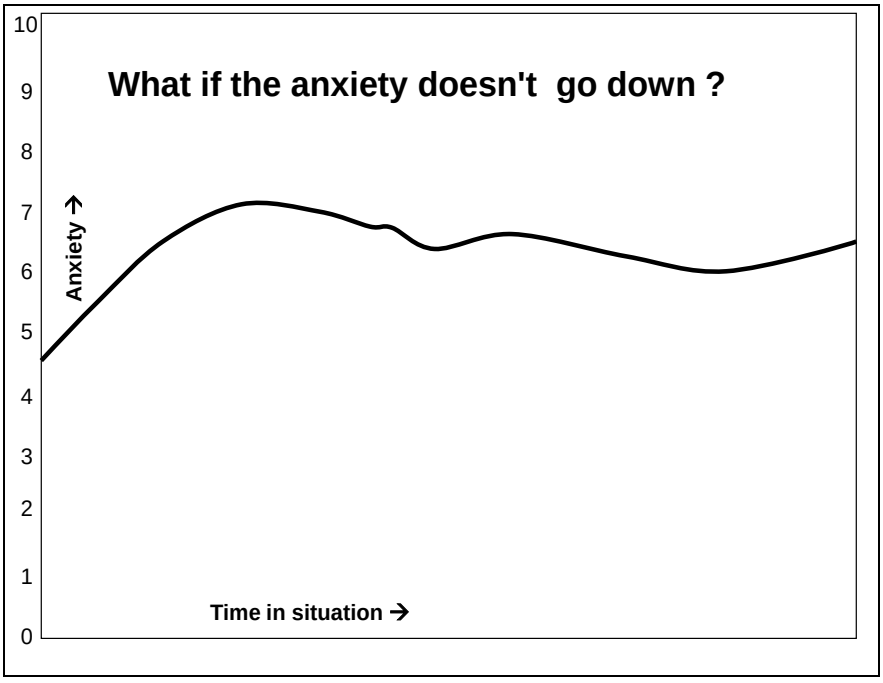


Figure 5.1

If you are in an exposure exercise (at the mall, for example) and your anxiety does not go down after being in the situation for some time, a couple of things could be happening. See the text below for more details.

For most people trying exposure therapy, the anxiety will gradually lessen and then go away if they stay in the situation. If the anxiety isn't going down, this may be due to the following:

a) The person isn't keeping their thinking in check, and the thinking is driving their anxiety up. If the person was sitting in a mall, watching people walk by, he or she might be imagining how they would fight every person who walks by, sizing them up. They might also be thinking about what weapon each person could be concealing, etc. This line of thinking would keep them anxious and has to be countered.

b) A style of thinking related to a) is the person who is watching the clock on the

exposure exercise as if their life depended on it. The person that tells themselves that "I'm getting close,...its only 20 more minutes of this hell" and "I can make it, this is absolute torture, but I can make it, please, please make this hurry up and be over..!!!" is keeping the supposed danger at the top of their mind. Bargaining with yourself during the exposure session about whether or not to stay the whole time also keeps your mind on how dangerous the exercise is and away from the realistic thinking that will calm you down.

c) The last reason is that the person simply isn't staying in the situation long enough for the anxiety to go down. We often have to guess as to what's the best amount of time to stay in a situation. Sometimes we underestimate, and need to stay longer.

Drawing incorrect conclusions after the sessions

Most people who go through something unpleasant go through a mental review of the situation, like an after-action debriefing. They try to draw conclusions about what happened, what made things better, and what made them worse.

A person's thinking may go something like this "I would have gone crazy if I had spent one more second in that place" and "Thank God I got out when I did" after an exposure exercise. This is a dangerously incorrect conclusion. These incorrect conclusions fuel the underlying belief system that is making them anxious. Their beliefs about the dangerousness of the situation are stronger, not weaker after the exercise. They may believe they were safe because they finally left the exposure situation, as if leaving made the danger go away. In reality they were as safe as the other people driving on the same highway, or walking through a crowd, or standing in the same line at the ATM, etc.

After an exposure exercise ends, we suggest that you realistically review the threat, and what got you through it. It was probably not luck, not being hypervigilant, not even carrying a knife "just in case." You likely got through the exercise safely because being in a crowded place like a mall is actually safe.

Having panic attacks during the exercises

If a person has a panic attack while doing exposure exercises, it can worsen their anxiety because it's another pairing of the trigger with something aversive. We covered this in an earlier class, and related how this is something to be avoided if possible.

Many times this happens because the person is trying something that's too anxiety provoking, and they need to add a step into their hierarchy. For example, if the person tried watching a 20 minute clip of a war scene and had a panic attack, watching the same clip without the sound may be a better alternative. If you have to add steps to your hierarchy, try not to get discouraged – this is part of the process, and most people getting over PTSD will have to do this.

Sometimes the exposure exercise itself isn't the problem, but the person has something unplanned happen during the exercise. For example, suppose a person's exposure exercise is to drive under an overpass near their house again and again, and one day they have a near miss with another car because some other driver was talking on a cell phone and swerves into their lane. This might trigger a panic attack but isn't due to the exercise being too difficult.

You should be careful and not drink too much coffee or have too many energy drinks like *Red Bull* or *Monster* before doing your exposure exercises. The caffeine in these drinks can make it more likely you will have a panic attack when doing exposure exercises, as they rev up your autonomic nervous system.

Between-class assignments

1. At the end of every day, continue rating the level of anxiety you felt for the day. .
    - Forms: **Daily Anxiety Log**

2. Use the **Thought-Challenging Record** over the next week, focusing on the thinking you have during exposure exercises.
    - Forms: **Thought Challenging Record**

3. Use the **Exposure Exercise Record** to keep track of the exposure exercises you are completing. Work your way down the list of situations in your Hierarchies.
    - Forms: **Exposure Exercise Record**

4. Read next week's class materials. Jot down any questions that come up as you are reading.

Class Agenda

- ☑ Review questions about last week's class
- ☑ Review between session homework assignments
- ☑ Discuss how to main your gains and prevent a relapse

Questions for self-study

1) What are Safety Behaviors?

2) What are some common Safety Behaviors in combat veterans?

3) Safety Behaviors can make PTSD stay around longer. *True or False*

4) What is Interoceptive exposure?

5) If your anxiety level doesn't go down during your exposure exercises, you probably need to stay longer and control your _____.

6) In doing your exposure exercises, you should focus on the time, and continue reassuring yourself you only have "X" minutes left? *True or False*

Review of between-class assignments

A). Review your **Daily Anxiety Log:**

1) Total and calculate an average for this week.

2) Plot your score on the progress chart.

B). Briefly review the past week's **Thought Challenging Record**. We will focus on those sheets associated with your exposure homework.

C). Review the past week's **Exposure Record Forms**.

Maintain your gains

In the final week of the program, you have likely noticed a decline in your symptom levels, especially if you have been monitoring your thinking and have worked on changing some of the thoughts and beliefs that lead to anxiety. You will likely still have many symptoms of PTSD. If you still have nightmares, insomnia, or other symptoms, do not get discouraged! This program helps you learn the skills you need to defeat PTSD but the actual practice of these skills takes longer than 6 weeks.

After this class has ended, it is important to continue practicing the skills over the next few months and track your progress. Every week, you should:

- Monitor and track your thoughts and beliefs.
- Work through your exposure therapy hierarchies.

Working with a therapist who understands cognitive behavioral therapy can make a big difference. If you do not have access to a therapist, you can try to continue this work on your own. Regardless, it is vital that you keep practicing the skills and tracking your progress.

What if my anxiety gets worse?

As you continue with your recovery, expect that your anxiety levels will increase from time to time. Becoming aware of the thoughts and beliefs that contribute to PTSD symptoms, and then taking action to modify those thoughts and beliefs requires consistent effort and patience. As you go through this process, there may be days that you feel frustrated because you do not feel you are making progress. Additional stressors in your life (difficulties at home, issues at work, car troubles) may also raise your levels of anxiety, particularly if you are trying to balance them with the work you do in therapy.

Keep in mind that the skills you've learned in this program are backed by decades of evidence showing they help people get over PTSD. If you feel they are not working, chances are you need to give yourself some more time to practice the skills. There is no set timeline for achieving your goals.

When symptoms return: Preventing relapse

What if my symptoms come back?

Even after successfully completing treatment for PTSD, there will be moments when PTSD symptoms temporarily resurface. Expect that this will happen, and understand that this is

normal. Many people will have an unexpected fear reaction when confronted with a trigger that hasn't affected them for months or even years. This is called a ***lapse*** in symptoms. Because lapses often come as a surprise, they can be unnerving, and may make you wonder if something is really wrong.

Lapses will occur because the learned associations that cause PTSD symptoms are never completely erased. Through cognitive behavioral therapy and this class, you learn new thoughts and behaviors to prevent and manage symptoms, but it's possible that the old behaviors and symptoms will emerge from time to time. This is normal and part of recovery. It is important that you are able to recognize these occurrences as temporary lapses. Be assured that having a lapse does not mean that you have PTSD again.

What causes a lapse in recovery?

Lapses are often unexpected, but certain things can increase an individual's risk. These are:

1) **Exposure to the context of the first trauma**
2) **Spontaneous recovery**
3) **Exposure to another trauma (Reinstatement)**

Exposure to the context of the first trauma

When we go through a traumatic experience, certain aspects of the experience can become triggers. Sometimes, the *place* a trauma occurred can become a trigger. That place, or a place that reminds us of it is the "context" of trauma. For the lab rat, the context of a trauma would be the chamber where it received painful shocks. For a rape victim, returning to the scene of the rape could trigger a fear reaction. For a combat veteran, going back to the place where an IED or mortar attack happened may bring back some degree of reactions, even after being symptom free for some time. Sometimes, being in a situation that resembles the original situation may cause a reaction.

Spontaneous recovery

Spontaneous recovery is the sudden reappearance of an old fear reaction, after you have gotten over it. After completing treatment for PTSD, you may have an unexpected fear reaction if you come into contact with a trigger. This happens because our learned associations are never completely erased. The old fear reaction can just "pop up" one day. Spontaneous recovery is normal and the reactions are usually milder than the original reaction. The fear reactions that crop back up almost always go away quickly, providing the person doesn't fall back into avoidance and start worrying too much about the disorder coming back.

An example of spontaneous recovery would be a Service member who had previously had an intense fear reaction when he saw propane tanks and smelled meat cooking on a grill. This Soldier could experience spontaneous recovery years after treatment when he attends a neighborhood barbecue. Even if he has attended dozens of barbecues over the years with no problems following treatment for PTSD, it is possible he could have a moderate fear reaction to these triggers.

Exposure to another trauma (Reinstatement)

After getting over PTSD, having another traumatic event happen can cause a relapse. For example, a Marine who had combat-related PTSD may be symptom-free for several months, but experience a bad car wreck. Following the wreck, the Marine could start having combat-related nightmares, intrusive thoughts about combat, insomnia, etc. He may or may not have nightmares about the car wreck, but will usually have intrusive thoughts or dreams about the earlier, more significant trauma. The technical term for this is "Reinstatement"-based on the idea that the new trauma reinstates the previous fear reactions. With reinstatement, the second trauma can bring older associations back to the surface. The good news is that similar to spontaneous recovery; this reaction is usually milder and tends to fade away quickly.

Knowing that some situations can cause some symptoms to resurface does not mean that you will have PTSD forever. But understanding that relapse is normal and that it may happen from time to time should make it easier to manage.

What to do if your symptoms come back:

First and foremost, keep a realistic picture of what having symptoms return means. Here are some facts to keep in mind about lapses:

1) Many people experience them, but they are able to move past them because they are temporary.
2) Relapse reactions tend to be much milder that the original ones. Since they are milder, they are usually easier to manage, especially if you're able to keep yourself from falling back into old habits.
3) The best way to get past a lapse is to use the same skills you already have. Get exposure to the triggers and practicing corrective thinking. By not falling into a pattern of avoidance, PTSD symptoms will not have a chance to settle back in.

Lifestyle changes

When veterans return from combat, they sometimes behave more recklessly and impulsively than they did prior to deployment. Many service members have reported that everyday life seems boring after having gone through combat. Taking risks offers a sense of excitement. Common risky behaviors among combat veterans include driving fast, getting into fights or using stimulants like cocaine. This kind of "sensation seeking" is particularly problematic for veterans because it increases the risk for having another traumatic experience, such as a severe motor vehicle accident.

It's common for life after combat to seem boring, be aware that the boredom will naturally fade away with time. Seek out less-risky alternatives that can still give you a "rush." It is best to avoid activities that may lead to another traumatic experience or cause more stress in your life. Risky behaviors can come with a very high price, including delayed recovery from PTSD symptoms, legal problems, or the end of your military career.

Something else a service member can do to reduce the chances of a relapse is to lower the level of stress in their life. Uncontrolled stress serves to prime the person's alarm system for firing again. As a result, having financial stress, workplace and relationship stress can make having a panic attack during traffic or an argument more likely to happen. By trying to lower your level of everyday stress, you reduce your chances of having a lapse or full relapse.

Set realistic expectations for yourself

It is important to have realistic expectations about what recovery from PTSD means. Some people unrealistically expect that they will NEVER have any of the symptoms again. This simply can't happen. Remember that even before you developed PTSD, you were like everyone else. You had occasional insomnia, sometimes got irritable, had trouble concentrating and probably even had an occasional nightmare. Your aim should be to return to a normal level of these things.

You should also note that besides the symptoms like insomnia and irritability that everyone has, having memories about significant life events is common. You will always remember where you were when the planes hit the WTC towers, your first kiss, graduating from boot camp, the birth of a child, etc. After treatment, you will notice that memories about the traumatic events you've lived through happen less often, and don't cause strong emotional reactions. Even though the memories occur less and don't bother you as much, treatment won't erase these memories and it's natural that you will occasionally think about these

events. Just like symptoms of insomnia and irritability, if you have a string of memories about the trauma, it does not necessarily mean you're having a relapse.

Get support when you need it

Having a minor return in symptoms (lapse) is normal at times after you recover. If you are having more and more insomnia, find that you're less able to control your temper, having intrusive thoughts very often, and other such symptoms of PTSD have returned, you may be having a relapse. If a lapse in symptoms begins to seem more like a full relapse, you should consider coming back in for a few sessions with your provider.

Closing statement:

This is the end of the manual. I sincerely hope that the tools you have learned for controlling thinking patterns, setting up and going through exposure hierarchies are already helping. Please stick with the treatment-I've seen it work for many Veterans, who have won the struggle of getting their lives back from PTSD. If you haven't already read through the modules in Appendix A, I recommend that you do so, as this information can help give you additional tools for your struggle with PTSD.

I'd like to say thank you for your service and your sacrifices. It's been a great honor to serve alongside men and women like you.

Semper Fi.

Additional Class Modules

Section outline:

This section of the handbook contains additional materials about PTSD. These modules can be worked into the group treatment format, or used as additional readings. The following topics are covered:

1. Relaxation Techniques
2. Improving Sleep
3. Managing Anger
4. Managing Dissociation & Re-experiencing Symptoms
5. Managing Guilt
6. Alcohol and PTSD
7. Medications for PTSD
8. Other types of treatments

Relaxation and PTSD

Managing your level of stress, especially as it applies to lowering your autonomic arousal level (that feeling of being physically keyed up all the time) is essential to recovery from PTSD. Indeed, relaxation techniques are one of the three core components in proven therapies, along with cognitive therapy and exposure therapy. Getting your autonomic arousal level under control will make the other components of care more effective. If you're trying to go through an exposure therapy exercise but your heart feels like it's pounding out of your chest and you are breathing rapidly, it is likely that you will not be able to complete the exercise.

One of the signature symptoms of PTSD is feeling keyed up, because your body is constantly in a state of alert. This can take a significant toll on your body and mind, as our bodies aren't built to stay in this state. Medical research has shown that the human body reacts to stress with biochemical changes. When a situation is perceived as stressful or threatening in any way, our bodies are involuntarily flooded with chemicals that trigger the fight or flight response. If you are constantly or frequently stressed, experiencing this flood of chemicals on a regular basis can be exhausting.

Under stress, your adrenal glands secrete stress hormones (adrenaline, epinephrine, norepinephrine), which disrupts with the way your body functions. These hormones disturb digestion, reproduction, growth and tissue repair as well as the responses of our immune systems and inflammatory systems. Over time, frequent or chronic stress reactions can lead to diseases such as high blood pressure, heart problems, ulcers, and nervous conditions.

To better understand what this can mean for you, think of your body as a base that is placed on high alert with everyone "at the ready" for an attack. After the first few hours, the operations on base will start to break down because everyone is away from their usual activities, standing posts and waiting for the enemy. This means no food services, mail, rest, or other essential functions are happening. A base can't sustain such a state of high alert level for very long. Your body is the same way. It can't stay on high alert forever.

Individuals with PTSD cannot control the fact that they have this disorder. But there are some tried and true relaxation techniques that can help you manage your symptoms. Practicing relaxation requires some effort, but doing so on a daily basis can prevent your body from wearing down due to stress. In addition to helping you manage stress, it can also make it easier to do exposure therapy and practice corrective thinking. Best of all, these techniques are simple and usually take 10-15 minutes to do. You do not need any supplies or equipment, just a little time and patience to learn how to do them.

Make practicing relaxation a part of your daily routine. If you can find a way to work relaxation into small parts of your day, it becomes less of an effort and more of a habit.

These simple techniques can help you to:

- clear and calm your mind
- slow and deepen your breathing
- reduce the stress hormones released into your body
- reduce your heart rate
- lower your blood pressure
- relax your muscles

Preparing to relax

Especially when you are first learning to use a relaxation technique, you should do your best to minimize distractions that can cause you to lose your focus. The following are things you should do in order to get the most out of the time you devote to your daily relaxation techniques.

- Practice in a room that is quiet and at a comfortable temperature.
- Turn off the television, stereo, and put your cell phone on silent.
- Wear comfortable and loose clothes.
- Wait about two hours after eating before practicing.
- Don't practice these exercises when driving or in other situations when you need to stay awake.
- Let your family know not to disturb you unless it is an emergency.

Relaxation techniques

Below are several simple techniques for relaxation. These are tried and true methods, which have been proven to work for everything from anxiety disorders to illnesses such as migraines and hypertension. You should try a few of these, look for the one that works best for you, and practice that one technique daily. You only need to spend 10-15 minutes a day practicing one of these exercises to start seeing results.

Meditation

Meditation is one of the simplest ways to relax, but takes a few weeks of practice to get the full effect. It involves focusing your mind on something, and purposefully letting go of stress. Meditation helps relieve stress in two ways. When your mind is focused on something like counting your breaths or watching a candle burn, you're not thinking about anxiety-producing situations. Focusing your mind on some process or thing will help you gain control over the thoughts that pop into your mind. You will learn to let the thoughts come into awareness and simply fade away. Having a passive attitude is very important for meditation. You are sitting and focusing your mind, not trying to force yourself to relax. By sitting and focusing your mind on some repetitive process, your body and mind will naturally start to relax.

You only need to spend 10-15 minutes at a time on this technique to get the positive effects. Of course if you enjoy meditation, you can stay at it longer, but 10-15 minutes is all that's really needed.

Here is how to do it:

- Find a comfortable position and focus your mind on something repetitive. One of the easiest things to focus on is to simply count your breaths. You count only exhalations. For example: Inhale,....exhale,....1; Inhale,....exhale,....2; Inhale,....exhale,....3; and so on. Try to make it to 10 and then start over again.
- You will notice things like whether your breathing is shallow or deep, fast or slow, and other things like whether or not you take a long pause in between breaths. When using breath counting meditation, it's important to try not to change how deep or fast you're breathing, but to simply count the exhalations.
- If your mind wanders and you lose count, try not to get frustrated. This is supposed to happen, especially at first. When you notice that your mind has wandered to the grocery list, or to the last argument with your spouse, simply start counting over again. Drifting off and refocusing are part of learning to meditate. With a few weeks of practice under your belt, this will happen much less often.

- If you are unable to focus on breathing, you can try gazing at a candle or another object, preferably one that moves in a repetitive fashion (like a screen saver on your computer).

Mindfulness meditation:

Mindfulness is a type of meditation that is very easy to practice because you can do it while performing many daily tasks. Mindfulness is exactly what it sounds like, to be mindful of what you're doing in the present. We spend a significant portion of our days on "autopilot," going through the motions of cleaning a room or driving while our minds are somewhere else. Take for example someone washing dishes in their home: they often find themselves going over some mental to-do list, or re-hashing some situation that happened earlier that day. The dishes still get washed, rinsed and dried, but the person barely pays attention to the process. This is an easy way to fit relaxation techniques into your daily routine.

Here is how to do it:

- Decide on an activity to be more mindful during. Some recommended activities are listed below.
- Try to take note of the experience at hand, allowing yourself to be fully immersed in it. When you're washing dishes, if you're fully immersed in the experience, you will be paying attention to the warmth of the dishwater, whether there's enough soap in the water, how dishes are stacked after rinsing. When doing any activity, you can focus on the activity, or have your mind wander to something else. Mindfulness is simply refocusing your mind on the task at hand and trying to be fully aware of the experience.
- Thoughts about other things will crop up, just like any form of meditation. You should calmly notice these thoughts or images and then bring your mind back to the experience at hand.

Some daily activities where you can practice mindfulness:

- Cleaning your house/room. Pay attention to things like how much effort is required on each push of the broom, what direction the dust flies once it's brushed off a shelf, etc.
- Making lunch. For example, if you're making a sandwich, pay attention to how soft the bread is as you're handling it, how you spread the mayonnaise, etc.
- Eating meals. When sitting down to eat, actually take note of the amount of food that you pick up with each lift of the fork, the texture of your food as you chew, how salty a soup tastes, etc.
- Walking around the block/base. As you walk take note of things like the breeze against your skin, the warm feel of the sunlight, the smell of fresh cut grass, the sounds of passing cars, etc.

Diaphragmatic Breathing (Deep Breathing)

When you take deep breaths from the abdomen, rather than shallow breaths from your upper chest, you inhale more oxygen. The more oxygen you get, the less tense, short of breath, and anxious you feel. If you can make it a habit to be aware of your breathing, you can drastically reduce your stress levels. Here is how to do it:

- Find a comfortable position. Sit with your back straight, or leaning slightly back in a chair, or lie flat on the floor. Put one hand on the center of your chest and the other on your stomach just over your belly button.
- Breathe in slowly through your nose. The hand on your stomach should rise. The hand on your chest should move very little. Its best to have someone else watch you do this when you're first starting-as it's harder than it seems to not breathe with your chest muscles.
- As you inhale-mentally count the number of seconds you are bringing air in- "One, two, three, four, five...." Aim for 4-6 seconds for inhaling, with your lower hand moving up as you inhale.
- Exhale through your mouth, allowing the air to naturally flow out while slowly contracting your abdominal muscles. The hand on your stomach should move down as you exhale, but your other hand should move very little.
- As you exhale mentally say 3-4 calming words to yourself. These words should be said in a relaxed, slow tone. Try combinations like "Warm,..... Heavy,..... Relaxed,...." or "Relaxed, ...Calm,.....Safe....." Aim for 4-6 seconds for exhaling.
- If you have a hard time breathing from your abdomen while sitting up, try lying on the floor.

If you practice this exercise for about 10-15 minutes a day, you will find that you will be able to get into a deep state of relaxation faster and faster with practice.

Progressive Muscle Relaxation (PMR)

Progressive muscle relaxation may sound very technical and complex, but it is actually very easy to do and can lead to an immediate sense of relaxation. Progressive muscle relaxation (PMR) takes advantage of the fact that after a muscle is tensed and then relaxed, the muscle is more relaxed than it was before tensing. By tensing groups of muscles, you can basically "force" your body to feel more relaxed. In progressive muscle relaxation, you start with a set of muscles, and progressively move up the body, until you have created a whole-body sense of relaxation. Muscles are tensed for about 10 seconds, and then released for about 20 seconds before moving on to the next muscle group. The muscles in these areas of your body will become more relaxed than when you started.

PMR isn't for everyone. Service members with multiple physical injuries should practice one of the other techniques like meditation or deep breathing. If you have an injury to an extremity, you can try PMR but do not tense the injured area.

When you tense the muscle groups you should hold a large amount of tension, but not enough to feel pain. When you release the tension, do it all at once, like letting go of a heavy weight. Once you release the tension pay attention to the feeling of relaxation, how it seems to rush in and build over the 20 seconds. Note how that part of your body is now warmer, and feels heavier than before.

Below is a simple PMR exercise that should take no longer than ten minutes to do. Each step focuses on a specific muscle group. Find a chair where you can sit comfortably before you begin:

Lower legs: Tighten all the muscles in your lower legs by pointing your toes upward, and driving your heels into the floor. Tense the muscles in your toes, calves, feet; hold onto the tension. Notice the tension in your legs, squeezing the muscles harder, holding this tension. After 10 seconds, let all of the tension go, as if you are dropping a heavy load. Your muscles should feel loose, warm and relaxed. Notice the relaxed feeling. Pay attention to the difference between tension and relaxation. Take about 20 seconds to let the relaxed feeling set in.

Upper legs: Tighten all the muscles in your upper legs by pushing your knees together, and holding your legs off of the floor. Tense the muscles in your thighs; hold onto the tension. Notice the tension in your legs, squeezing the muscles harder, holding this tension. After 10 seconds, let all of the tension go, as if you are dropping a heavy load. Your muscles should feel loose, warm and relaxed. Notice the relaxed feeling. Pay attention to the difference between tension and relaxation. Take about 20 seconds to let the relaxed feeling set in.

Buttocks: Tighten all the muscles in your buttocks by tensing the muscles as if trying to lift yourself up an inch in your chair. Tense the muscles in your buttocks; hold onto the tension. Notice the tension in your buttocks, squeezing the muscles harder, holding this tension. After 10 seconds, let all of the tension go, as if you are dropping a heavy weight. Your muscles should feel loose, warm and relaxed. Notice the relaxed feeling. Pay attention to the difference between tension and relaxation. Take about 20 seconds to let the relaxed feeling set in.

Chest and stomach: Tighten all the muscles in your chest and stomach by hunching forward slightly and pulling your abdominal muscles in as tight as you can as if trying to hold a long abdominal crunch. Tense the chest & stomach muscles-holding onto the tension. Notice the tension in your chest and abdomen, squeezing the muscles harder, holding this tension. After 10 seconds, let all of the tension go, as if you are dropping a heavy load. Your muscles should feel loose, warm and relaxed. Notice the relaxed feeling. Pay attention to the difference between tension and relaxation. Take about 20 seconds to let the relaxed feeling set in.

Lower arms and hands: Tighten all the muscles in lower arms and hands by making fists with both hands. Tense the muscles in your hands and forearms; hold onto the tension. Notice the tension in your arms building, squeezing the muscles harder, and holding this tension. After 10 seconds, let all of the tension go, as if you are dropping a heavy load. Your muscles should feel loose, warm and relaxed. Notice the relaxed feeling. Pay attention to the difference between tension and relaxation. Take about 20 seconds to let the relaxed feeling set in.

Upper arms: Tighten all the muscles in upper arms by bending your elbows and squeezing your arms tightly against your chest, as if cradling something between your arms. Tense the muscles in your arms, holding onto the tension. Notice the tension in your arms building, squeezing the muscles harder, and holding this tension. After 10 seconds, let all of the tension go, as if you are dropping a heavy load. Your muscles should feel loose, warm and relaxed. Notice the relaxed feeling. Pay attention to the difference between tension and relaxation. Take about 20 seconds to let the relaxed feeling set in.

Shoulders: Tighten all the muscles in your shoulders by pulling your shoulders upwards, as if you are trying to touch your shoulders to your ears. Tense the muscles in your shoulders and upper back; hold onto the tension. Notice the tension in your shoulders and back, squeezing the muscles harder, holding this tension. After 10 seconds, let all of the tension go, as if you are dropping a heavy load. Your muscles should feel loose, warm and relaxed. Notice the relaxed feeling. Pay attention to the difference between tension and relaxation. Take about 20 seconds to let the relaxed feeling set in.

Exercise your way to less stress

Regular exercise has a number of benefits for those with PTSD. Exercise has been shown to decrease stress levels, lowering your autonomic arousal level. As stated at the beginning of this module, lowering your arousal level will make you less prone to panic attacks and other symptoms of PTSD like insomnia and anger. Since most military members are used to exercising regularly, this can be one of the easiest things

for them to do to help their recovery. An added reason to exercise regularly is that many of the medications used to treat PTSD can cause weight gain and you may find it harder to maintain your usual weight.

Which types of exercise work best? The answer to this is that all exercise is good but aerobically challenging exercises burn off stress better than anaerobic exercises. Therefore running for 30 minutes is better that lifting weights. Swimming and calisthenics are better than yoga or other exercises that don't keep your heart rate up high for long periods.

If you can, line up a friend or relative to exercise with. People in general are much more likely to stick with an exercise routine if they have someone else doing it with them. Having another person there will also help distract you from memories or worries, and thus give you a break from difficult emotions.

It's important to work your way back up to previous exercise levels gradually if you've been inactive for a while. Remember it's not a race to get back to running 6 minute miles, but just to get out and burn off some stress and therefore make sure you have fewer symptoms.

A WORD TO THE WISE: Some techniques will work better for you than others. Try to be open to all of the above exercises, even if they seem strange at first. You may be surprised to discover what really works for you.

When you begin practicing relaxation techniques, you may experience tension at first instead of relaxation. This is normal. Re-teaching your body to relax takes time and patience. Rest assured that if you put in the time and make an effort to practice relaxation on a daily basis, you will feel better overall and speed your relief from PTSD symptoms.

Why is insomnia common for people with PTSD?

Insomnia is one of the most problematic symptoms of PTSD. In fact, many patients report that insomnia is the symptom that affects their quality of life the most, because it directly impacts their ability to function during the day. This can have a negative impact on relationships, employment, and feelings of personal well-being. PTSD causes the body's autonomic nervous system to be hyperactive, which means that your body and mind are constantly keyed up. When this happens, it is understandably hard to fall asleep. When you have PTSD, your autonomic nervous system is on high alert like a sentry who knows that his base is about to be overrun. No matter how tired he is, he will stay awake. Even when you are exhausted from a lack of sleep, a hyperactive autonomic nervous system makes it more difficult to fall asleep. It also makes you more vulnerable to being awakened during the night by small noises.

In addition to feeling constantly keyed up, PTSD can also cause disturbing nightmares. Disturbing nightmares may cause you to awaken in the middle of the night, and can make it very hard to fall back asleep. Between the high autonomic arousal and nightmares, it is easy to see how insomnia can become a major problem for someone with PTSD.

How to improve your sleep:

Having PTSD and suffering through bouts of insomnia can make you feel that you have no control over a very important aspect of your health. But believe it or not, there are simple changes you can make today that will make it much easier to get a good night's sleep. Here are some things you can do:

DO NOT TAKE NAPS. Naps throw off your body's natural sleep/wake cycle. If you have PTSD, and your sleep is being disturbed by nightmares and a sense of being "keyed up" it is important to resist the urge to take naps during the day. This may be difficult to do if you are used to taking a nap around the same time everyday because your body will automatically want to sleep. To make it easier, do something that makes it impossible to fall asleep, such as taking a walk, visiting a friend, or going grocery shopping – anything that keeps you away from your bed.

GET IN BED ONLY WHEN YOU ARE SLEEPY. This may seem like simple advice, but many people wind up lying awake in bed for hours because they went to bed at 9 o'clock, even though they did not feel sleepy. As a result, they end up lying in bed feeling frustrated and anxious about their inability to fall asleep. This gives people plenty of time to think about the trauma, worry about having another nightmare, or think about problems with their significant other. Going over your stressors and feeling frustrated / anxious only makes it more difficult to fall asleep.

TURN THE ALARM CLOCK AROUND. When you wake up in the middle of the night, you may be tempted to do what many people do: look at the clock to see what time it is. If you are sleep-deprived and feeling stressed about not getting enough sleep, this usually triggers anxiety, dumping adrenaline into your blood stream and making your mind more alert. If you look at the clock and see that it is only 2AM, you might say to yourself, "Holy crap-here we go again, I'll never fall back asleep...I'll be dead on my feet tomorrow"....or " 2AM!! That's only 3 hours of sleep; there's no way I will fall back to sleep in time before the alarm goes off..." If you don't know what time it is, you can allow your mind to focus on other things and relax.

CHANGE YOUR FRAME OF MIND. Take the mental stance that even if you don't sleep at all, your body is still resting, even if your mind is not. Many people will find that if they "let go" of the idea of falling asleep and accept that they may be awake all night, their mind will relax and they actually do fall asleep. Reassure yourself that that you may be mentally tired the next day, but at least your body will be rested from lying down. Obsessing about not being able to get to sleep will only dump more stress hormones in your system making it harder to nod off.

USE YOUR BED FOR SEX AND SLEEP ONLY. Don't use your bedroom for anything other than sleeping or sexual activity. Reading, watching TV, video games, talking on the phone, eating, and other activities should happen someplace other than your bed. If you live in a barracks room, sit in a chair to play video games or watch TV.

BE CONSISTENT ABOUT WHEN YOU GET UP. Set a time when you will get out of bed every morning and stick to it. Whether you get 6 hours of sleep or 2, get up at the same time and avoid napping. Avoid sleeping in on weekends or holidays in an effort to catch up on your rest, as this will throw off your sleep/wake cycle. Sleeping in until noon sets you back as far as teaching your body a routine. If you feel you have to sleep in on weekends, allow yourself no more than an extra hour.

KEEP YOUR BEDROOM DARK, QUIET AND COOL. If you are already feeling keyed up due to PTSD, it may be a challenge to stay asleep. Keep your bedroom quiet. Use light-blocking shades on the windows or wear a sleep mask. Cheap earplugs can make a big difference in the quality of your sleep if you can't keep out the sounds of the world. Many combat veterans play a "Nature sounds" type CD, with ocean waves or rainforest sounds to help them sleep. These calming sounds help drown out the sounds that might wake you up during the night.

PRACTICE SLEEP RESTRICTION. When you go to bed, do so with the intention of going to sleep. If you aren't asleep in about 15 minutes, get out of the bed. Sit in a quiet place and do something boring like read an encyclopedia or dictionary. You should NOT play video games, watch TV, or use your computer because this will stimulate your brain and make it even more difficult to fall asleep. When you start to feel sleepy, go back to bed. If you don't fall asleep within about 15 minutes, get up and go through this cycle again.

PRACTICE RELAXATION TECHNIQUES. When you go to bed, practicing simple relaxation techniques can help you drift off to sleep faster. Meditation, diaphragmatic breathing, and progressive muscle relaxation encourage your body to relax and allow you to focus your mind on something other than falling asleep. The same exercises from Module #1 will help you drift off by relaxing your mind and body once you lay down.

AVOID STIMLUANTS. When they have insomnia at night, service members often turn to caffeine and nicotine to keep themselves going during the day. While both caffeine and nicotine will make you feel more awake, they can also cause problems. Both substances are stimulants which increases your autonomic arousal level. When this happens you are at a greater risk of having panic attacks/flashbacks and feeling "on edge" throughout the day. If you dip, smoke or drink an energy drink in the afternoon or evening your body will need hours to process the stimulant. Limit yourself to one or two caffeinated beverages a day, and none after 1400. Smoking and dipping should be limited as well, with the bare minimum to keep you out of withdrawal after 1600.

GET OUT AND EXERCISE! One of the easiest and most effective ways to improve your sleep is to get regular physical exercise. Many service members think of lifting weights at the gym as good exercise, but that's not what has been shown to work for decreasing stress. Aerobic exercise, such as running, swimming, and cycling decreases stress much more than weight training. Regular aerobic exercise helps tire you out by

the end of the day, and many patients say it helps "burn off stress." Be sure not to do intense physical exercise close to bedtime. You can't "tire yourself out" by knocking out pushups until you're exhausted. In fact, exercising close to bedtime will keep you awake.

AVOID ALCOHOL. Individuals who have PTSD often fall into a pattern of drinking alcohol in order to fall asleep. Why does this happen? To put it simply, alcohol works to help you fall asleep. Taken in large enough quantities, it will make even the most anxious person fall asleep. Drinking alcohol before bed may be seen as a way to get relief from nightmares and get some rest. But there are problems with using alcohol to fall asleep. When your body finishes processing the alcohol, it can cause you to wake up hours later. Also, the longer you continue to drink heavily, the less effective it will be at helping you fall asleep, because your body builds up a tolerance to the alcohol. If you've been drinking to manage anxiety and insomnia, you should talk to a physician about how to taper off alcohol gradually to avoid potentially deadly withdrawal symptoms.

Dealing with Nightmares:

Nightmares can be a daily problem for someone suffering from PTSD, and having them can significantly impact the quality of your sleep. Please refer to Module # 4, "Dissociation & Re-Experiencing Symptoms" for information about decreasing nightmares.

Medications for sleep:

There are several medications available that have been proven to help people with PTSD. Medications for sleep are covered in Module # 7.

Tracking your sleep habits:

Sleep logs: Keeping track of your sleeping habits is very important in helping fight insomnia. A simple method for tracking your sleep is to use a Sleep Log, which is a structured record of when you are awake and asleep. We use a very simple log for this

program. This log only asks you to mark in the times you are asleep and rate the overall quality of your sleep when you wake up. The next page has an example Weekly Sleep Log filled in.

Sleep log: Example Week beginning: ___ 10/16____

Date:	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5
10/16																								
Sleep quality (fill in after waking in morning) 1 (poor)-10 (excellent) #__7__																								

Date:	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5
10/17																								
Sleep quality (fill in after waking in morning) 1 (poor)-10 (excellent) #__4__																								

Date:	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5
10/18																								
Sleep quality (fill in after waking in morning) 1 (poor)-10 (excellent) #__3__																								

Date:	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5
10/19																								
Sleep quality (fill in after waking in morning) 1 (poor)-10 (excellent) #__7__																								

Date:	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5
10/20																								
Sleep quality (fill in after waking in morning) 1 (poor)-10 (excellent) #__6__																								

Date:	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5
10/21																								
Sleep quality (fill in after waking in morning) 1 (poor)-10 (excellent) #__7__																								

Date:	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5
10/22																								
Sleep quality (fill in after waking in morning) 1 (poor)-10 (excellent) #__9__																								

You can see that the person in the example takes naps in the afternoons on some days, which are usually followed by poor sleep the next night. He is having trouble with falling asleep (initial insomnia) and wa0king up during the night (middle insomnia). Filling in sleep logs may help you identify your own patterns with sleep and help you and your provider find ways to intervene. You can use the sleep logs included in Appendix B of the handbook to track your sleeping habits.

Why is anger a problem for PTSD patients?

Irritability and outbursts of anger are common symptom of PTSD, and are some of the symptoms that cause the most problems for the families of patients. Many times a service member's friends and family will say that the war has changed their loved one because he or she seems more aggressive and defensive than before their combat experiences.

So why do people with PTSD have so much anger? There are actually a number of factors related to PTSD that lead to being more irritable in your day to day life.

One key reason is that in PTSD a person's autonomic arousal level is chronically elevated. This is the biological system that keeps you keyed up, and on guard to respond to a threat. This kind of physiological arousal leads to having a hair trigger on anger. The "fight or flight response" gets a lot of press in anxiety disorders, but most of the focus is on flight--escaping a threat. The other half of the expression is "fight." When we feel threatened, especially when we can't flee, we will turn to aggression. Being keyed up physiologically can lead to a free-floating sense of hostility towards people and situations. This is true even if you haven't been traumatized, but is especially probable after combat experiences, where you're on guard all the time, suspecting that people may be about to attack you.

PTSD also causes insomnia. When people don't get regular sleep they usually get much more irritable than normal. This is the origin of the phrase "Look who woke up on the wrong side of the bed," meaning that if you don't sleep well you will be cranky. When we're sleep deprived from not getting enough rest, we are less able to cope with stressors, and therefore feel overwhelmed with day-to-day hassles.

One way people try to adapt to poor sleep quality is to increase their intake of caffeine and nicotine. While drinking several Red Bulls and dipping will help you stay awake after a night of only getting 2 hours sleep, it also sets you up to be more irritable and more prone to having panic attacks and flashbacks. Both caffeine and nicotine lower the threshold for panic attacks and can even directly trigger them if you consume too much of either.

Another reason for anger being so prevalent in PTSD is that anger is effective at getting what we want in the short run. When we get angry in social or public situations, like in a restaurant or with our family, people often will give in to what we are demanding, even if they don't agree. Combat veterans find that getting angry and yelling can end unpleasant conversations, get people to leave you alone about doing things you don't want to do, etc. While it often works short term, other people quickly get tired of dealing with someone who flies off the handle every day. This can be especially true for your wife or husband, who may feel like they have to walk on eggshells around you.

How can you manage your anger?

First and foremost, you have to identify the things that often make you angry. Identifying anger triggers is relatively easy. Just think about the last several times you've lost your temper, either in public or when alone. Below is a space for you to write out situations where you typically get angry. Divide these situations into those that almost always make you mad, and those where it only happens sometimes.

Situations where I always get mad:

- _____
- _____
- _____
- _____
- _____
- _____

Situations where I sometimes get mad:

- _____
- _____
- _____
- _____
- _____
- _____

Knowing the situations that trigger anger is the first step and will help you plan ahead and avoid these situations at first. At the early stages of treatment, you can avoid the situations that always trigger anger. Since you can't avoid anger triggers forever, you will need to learn what it is about these situations that make you so angry and find a way to get control of your anger.

It will come as no surprise after reading through the section on cognitive therapy for anxiety that the most important thing you can do to control your anger is learning to control the thinking that leads to getting angry.

A key insight into human emotions is that it isn't the events that happen to us that determine our emotions, but instead it's the thoughts and beliefs we have about the events. This is counterintuitive, but widely regarded as true by most mental health professionals. You can see the role of beliefs and thinking by looking at an example. Let's look at the thinking of two servicemen who just found out something that's potentially upsetting. Their platoon commander Sergeant Berrios cancelled their leave. Each man gets angry to some degree and we'll see how thinking played a role in their reactions by looking at the following figure.

Name	Thinking	Anger level
LCPL Denner	SGT Berrios is such an f@#%ing a@@hole. He knows I'm looking forward to this leave to see my girlfriend; he's just messing with me again. He is such a hypocrite-always going on and on about taking care of his troops-and he never misses a chance to screw one of us over. He should be helping me, not screwing with me. Nobody here has the balls to stand up to this guy….I can't stand this shit! Somebody should kick the sh*t out of this a@@hole….he deserves to know how bad other people feel…	9
CPL Hernandez	He probably has a good reason for this, Ill drop by and find out what's going on. Maybe someone else had emergency leave or something. If he doesn't have a good reason-I'll go over his head and ask the 1st Sergeant to help me out-I've already bought the tickets-so I've got to try something.	2

Just like we observed with anxiety-producing thinking, there are common thinking patterns that lead to anger. Whenever you're getting angry, you can probably find at least one, but usually several of these patterns. Here are some of the common patterns.

Using "Shoulds" and "Musts": When people get angry, it is often because they feel that what is happening *shouldn't* be happening. People ***shouldn't*** treat other people poorly, people ***shouldn't*** lie, we ***shouldn't*** have to put up with unfair situations, etc. Whenever someone or something does something that they or it *shouldn't*, this leads to anger-because someone violated our own rules about the world, our beliefs about what "should" be. The stronger the belief that gets violated, the stronger the degree of anger (you should NEVER lie to your spouse!! –Vs. – You generally shouldn't lie except to protect someone's feelings). When people use the word must, they are following the

same general trend. "I *must* have complete trust in my friends" can lead to anger if you find out a friend lied to you -- even if it's a small lie.

Using Labels: Labeling a person or situation makes it easier to get and stay mad at them. It also makes it easier to get aggressive. If you think about it, isn't it easier to be mad at your boss if he/she is a "complete hypocrite"? Who would blame you for raising your voice to someone like that? Labels de-personalize other people-making us lose sight of who they really are and make it harder for us to pull punches. Thinking about your wife as a "Selfish b**ch" leads to you being more likely to say and do things you will regret. Another example of how labels help de-personalize others is the tendency to have negative nicknames for enemy troops. In every war humans have fought, we seem to naturally come to use some negative label for the enemy. In WWII, we fought the "Krauts" and "Japs"; in Vietnam, the enemy was called "Gooks". Negative names for Iraqis' and Afghanis' include "Raghead", "Hadji", and "Camel-jockeys." These terms are of course offensive to Arabs and other Americans who find them politically incorrect. Servicemen use these terms for an unconscious psychological purpose. Like all other enemy nicknames, these terms help replace killing a "person" (who may be someone's father or husband) with killing another "Hadji".

Catastrophizing: This pattern of thinking blows things out of proportion, imagining the worst possible scenario. If your boss wants to see you in his office and you immediately think "I'm getting canned, I'll wind up losing my house and I'll be out on the street" then you are using this thinking pattern. It's easy to see how thinking like this can lead to someone getting more and more upset, even about minor stressors.

Jumping to conclusions: We all jump to conclusions sometimes. Doing this as a habit, especially when you're faced with some stressor, can lead to intense anger. Let's look at the thoughts of a CPL whose wife called to say she had to work late. "She is seeing someone else. I'll bet it's that guy who was texting her last week. " His wife was actually working late, but after an hour or so of thinking along these lines, he got himself so spun up that he drove to her workplace and created a scene, embarrassing her in front of her co-workers.

Personalizing: Personalizing a situation is just what it sounds like. This refers to looking at situations where there isn't necessarily any harm meant to you as a direct attack. Examples of this are- "The LT is just trying to mess with me, trying to piss me off....", "She is deliberately trying to screw with me, trying to ruin my career..." Of course there will be times in all of our lives when others are directly insulting or baiting

us, but this shouldn't be the first assumption you make. Most times if someone is trying to bait you in order to get you angry, it's actually better NOT to take the bait, to remain calm and handle the situation rationally.

Challenging irrational thinking: The same Thought Challenging Records you have been using for managing your anxious thinking can be used for getting control of your anger. The following two pages have some Thought Challenging Records, one with the corrective/rational thoughts inserted. The second is one to practice coming up with your own rational/corrective thoughts to challenge the anger producing thoughts. Try to identify when the person is using one of the anger producing thinking patterns ("Shoulds" / Labeling, etc.) in these example Thought Challenging Records:

Thought challenging record –EXAMPLE #1

Date / Time	**Event** or situation just before you felt the emotion	**Distorted thinking**-Beliefs and assumptions	**Emotion** and #	**Corrective thinking-**change the thinking to be realistic and helpful, take a different perspective, look for alternative explanations….
11 Jan 4pm	Wife asking again and again for me to "Share my feelings"	She is a freaking Nag! She should get it already, I'm not going to talk about shit I don't want to… This shit isn't ever going to stop, she will never get it, I'll have to keep having this same argument forever…. She is driving me crazy!!	Angry "6"	I'm **labeling**-I nag her sometimes too. She is only concerned because she is worried-and is trying to help. She may get I don't want to talk about it, but doesn't agree. She doesn't have to agree with me. Not everybody will agree with me-and its illogical to feel that they should have too Nothing goes on forever-its likely I can explain it a different way, or she will get tired of asking, but it won't go on forever. I can't go crazy from someone asking to talk to me--that's silly
12 Jan 3pm	At a bar and overhear someone criticize the war	This SOB doesn't know what the hell he's talking about… This sh*thead has never served a day in his life-he doesn't have a right to criticize people who defend his freedom.. He should shut the hell up….	Angry "8"	Just because I disagree with his point doesn't make him a SOB. People don't have to serve in the military to have an opinion-my sister isn't in, but she's entitled to think what she wants…so is this guy. He wasn't even talking to me-why do I need to set him straight? Who cares what some guy in a bar thinks about this war, or any war for that matter….

Thought challenging record EXAMPLE #2 and In Class Exercise

Date / Time	**Event** or situation just before you felt the emotion	**Distorted thinking**-Beliefs and assumptions	**Emotion** and #	**Corrective thinking-**change the thinking to be realistic and helpful, take a different perspective, look for alternative explanations….
14 Jan 8 pm	Friends ask me to tell them what I did over there, asking if I killed people…	These freaking people always ask this crap…if they are so dammed curious, why didn't they sign up and go themselves… Everyone thinks its like Hollywood over there, like some movie….if I actually tell them about having shot people, and what's that's like-they would never look at me the same…	Anger "5"	
16 Jan 6 am	Staff Sergeant Jones smirks at me and asks if I'm going to see the "Wizard" today…	What an a@@hole! He's enjoying the sh*t out of this. I'd like to smack that smirk right off his face.. NCO's shouldn't screw with people for going to see someone for stress-that's complete bullsh*t. He shouldn't say things like that in front of other people in the platoon----and nobody will do anything about it if I complain…	Anger "5"	

Challenging thinking that produces anger: As you are filling out your own Thought Challenging Records, you may have problems coming up with rational responses. Below is a table that has some examples of thinking errors and a few pointers on making your thinking and beliefs more reasonable. Try to use these when completing your worksheets and monitor your day-to-day thinking when you are using these, taking the time to re-work your thinking in the moment.

Anger-producing thinking		Corrective thinking
Should statements: She **should** leave me the hell alone…		*Change the **Should** to a **Want**.* I **want** her to leave me alone when I'm feeling keyed up-I've asked her before, I have to keep telling her I need some space, and even start going for a walk around the block if she won't.
Labels: CPL Ski is a hypocritical **a@@hole**.		*Label the behavior, and keep it factual.* CPL Ski is making us do something he skated out of last week, and acting like we don't know about it. Lecturing people about not doing things you do yourself is hypocritical-but doesn't make you an a@@hole. I've done that myself before, everyone does at times….
Castrophizing: Having PTSD is terrible-I'll wind up on the streets like those vets from Vietnam!		*Take a realistic look at the situation.* Most veterans with PTSD recover, many without any treatment at all. Most Vietnam Vets recovered too. I'm doing the things in the manual to get better-so it's very unlikely I'll be suffering from this in a few years, and REALLY unlikely I'll ever be homeless!
Mind reading: That Arab guy is staring at me-he's probably up to something..		*Don't Jump to conclusions about <u>people</u>.* Well, I've been watching him and his family ever since coming into the store-it's probably freaking him out, so he's trying to see what I'm looking at him for.

Fortune telling: What does the C.O. want to see me for? I'll probably get taken to mast for coming in late…this is going to be bad…		*Don't Jump to conclusions about events.* It's not necessarily about me being late…It could be some other reason. Even if it is, most likely he'll just chew me out a little, and I have a good reason for being late-not being able to sleep.

More quick tips for managing your anger:

1) **Get some distance-** Separate yourself from the situation or person if you can. If you feel yourself getting angry, go for a walk around the block, step away from your work center and call a friend or relative, go to the bathroom, or ask whoever is triggering your anger to talk later.
2) **Take a "Timeout"**-Count to 10 or 20 before you respond to a situation. This isn't just a cliché! It is actually works.
3) **Keep perspective**- Before responding with the first thing that comes to mind, force yourself to think of 2 good things about the person. For example, even if your wife is triggering your anger, remind yourself that "She's the mother of my children, and whenever I'm feeling sick or overwhelmed, she is there for me."
4) **Don't re-tell the story**- One thing people with anger problems have in common is that they will frequently tell and re-tell a story about something bothers them, working themselves up as they go. This can be to one friend after another, people who frequently egg the person on by agreeing with their cognitive distortions, (e.g., "The SGT is a complete a@@hole.")
5) **Stop replaying insults in your head**-If your boss says something negative to you on Friday afternoon and you think about it all weekend, you are likely to build up your anger. You might start thinking about what you should have said at the time or what you plan to say on Monday, or even how unfair it is that you have to put up with this. You might even

start picturing him/her saying even more insulting things, and you telling him/her to go to hell. By the time Monday rolls around, an offhand comment from your boss on Friday now has you ready to yell at him/her as soon as you see them!

6) **Get plenty of physical exercise**-Regular aerobic exercise has been repeatedly shown to decrease stress and levels of anger. This is something that is easy to do, and pays a lot of dividends. Exercising daily lowers the body's level of autonomic arousal, making you less prone to irritability, anger and insomnia.
7) **Limit caffeine and nicotine**-Both caffeine and nicotine raise your level of autonomic arousal, making your fight or flight response more likely to be triggered. A lot of service members use coffee/energy drinks and smoking or smokeless tobacco in order to stay awake after sleepless nights. This works to keep them more alert, but also revs up the areas of the brain responsible for flashbacks and irritability.
8) **Practice relaxation techniques daily**-Several easy-to-learn techniques will lower your overall stress level if you can practice them 1-2 times a day. Regularly using one or more of these techniques will make it less likely you will get angry when you see a trigger. These techniques can also be used while you're trying to calm yourself down. Module # 1 covers some of the most popular techniques.
9) **Don't drink while angry**-Drinking alcohol tends to make whatever emotion you're already experiencing stronger. If you're out with your friends and have a few beers, you are likely to feel happier. If you're at home drinking after an argument with your spouse, it's likely to make you angrier. Many times when someone winds up punching a wall, it's because they were sitting alone drinking, going over a situation again and again in their head.
10) **Do everything you can to get good sleep**-Sleep deprivation can make you more irritable and decrease your ability to cope with everyday hassles, making it more likely you will overreact to a stressor.
11) **Taking an active problem-solving approach**- Active coping means directly doing something about problems, such as solving being low on money by taking a part-time job on weekends. If you're lonely and socially isolated, an active problem solving approach would be to join some social organization like a church or volunteering for a charity

organization. Passive approaches to problems include anything that makes you feel better but doesn't actually solve the problem. Drinking alcohol, avoiding situations, distracting yourself to not have to think about a problem are all passive ways of coping.

What is Dissociation?

Do you ever feel like you are "in a fog?"

Have family members or friends ever told you that "spaced out," or seem to have been in a trance?

Do you ever get lost in thought or have daydreams?

Do you ever feel "taken over" by a feeling that doesn't seem to make sense at the time?

If you have answered "yes" to any of these questions, then you have probably dissociated. **Dissociation** is an experience where a person's normal thought processes are interrupted. Dissociation can cause someone to feel disconnected from themselves or the world around them. Most people experience mild dissociation on a daily basis and this is normal. We are more likely to dissociate if we are tired, feeling anxious, or intoxicated.

We've all been there: An everyday example of dissociation
While you are driving to work, you get lost in thought about a situation that made you mad: what was said, what you wish you had said, what the repercussions could be, etc. After parking the car, you realize that you don't remember anything along your route, or even finding a parking space. This is because you dissociated -- your mind was preoccupied.

Dissociation can also happen during highly stressful or traumatic situations. In intense situations, dissociation protects us when there is too much for the brain to process at one time. Dissociation during these stressful situations is a protective physical response and it is not something we can control.

We may do or feel different things when we dissociate. While dissociating during a traumatic event you might do things like:

- lie very still
- be slow to respond to others
- feel like you are moving in slow motion

- have flat or dull emotions
- not feel pain
- stare off into space
- "tune out" of a conversation or experience
- feel as if you are observing a situation but not actively participating
- have lapses in your memory
- feel like you are observing your actions from outside your own body
- feel as if you are in fog

During a traumatic experience, dissociation can occur in the following ways:

1. Depersonalization – One feels as if they are having an "out-of-body" experience. They may also be unable to recognize themselves in the mirror or feel completely disconnected from their own bodies.
2. De-realization – The person feels as if they are in a fog or detached from the world around them. One may feel they are watching things happen around them without feeling personally connected (like watching what is happening on TV).
3. Dissociative Amnesia – forgetting all of a trauma or the most upsetting parts of a trauma. Amnesia is more than routine forgetfulness. Entire events or parts of conversations may be forgotten.

Combat-related traumas can cause people to dissociate. Here are some real-life examples:

- Service members have reported "jumping out of their bodies" a split second before an IED blast, and recall watching the scene of the blast with the sensation that they were floating above it.
- Marines say they were emotionally "numb" during firefights when in combat. Some reported feeling as if they were "standing next to themselves" and observed themselves firing their weapon at an enemy combatant from just a few feet away.
- Upon returning home, a service member who had engaged in a long, intense firefight and watched his buddy die was unable to recall several months of his deployment.

Dissociation and PTSD

Dissociation can occur during a trauma and following a trauma. A person with PTSD is more likely to dissociate in everyday situations if they dissociated during a traumatic experience. In fact, dissociation during a traumatic experience is a risk factor for developing PTSD. Having dissociative episodes is also a common symptom of PTSD.

When stressful situations occur, or when something unexpectedly reminds you of a traumatic event you experienced, it is normal to mentally "tune out"– to dissociate. Others may experience dissociative flashbacks, having unexpected and intense memories of the trauma.

Everyone dissociates from time to time. But it can become a cause for concern if it happens at inappropriate times, happens too often, makes you feel out of control, or if it is causing you to feel anxious. If any of these things are happening there are things you can do to manage dissociative episodes.

Preventing and controlling dissociative episodes:

Preventing Dissociation

- **Stress reduction**: Believe it or not, episodes of dissociation can often be triggered by stress. Think about the times that you have dissociated. Most likely, your dissociative episodes occurred after feeling stressed. Examples of stressors could include arguments or being unexpectedly reminded of a trauma. Reducing the stressors in your life (if possible) or practicing simple stress reduction techniques can help prevent dissociative episodes.
- **Eliminate the fear reactions associated with PTSD**: Dissociative episodes can occur when a fear response is triggered. By committing to treatment and engaging in cognitive behavioral therapy, you can address your triggers and fear reactions. With treatment, you should notice a marked reduction in fear reactions and, in turn, see a reduction in dissociative episodes.

Controlling Dissociation

- **Educate your family and friends:** Tell your family and friends about dissociation. Tell them what you need them to do - and not do - when it happens. It is important for people around you to understand dissociation and support you. When someone has a dissociative episode, family or friends may try to "snap them out of it," or "wake them up." This is not a good idea: the person who is dissociating may react by trying to defend themselves, possibly causing unintentional physical harm to the other person. We recommend that you tell your family to treat dissociative episodes the way they would sleepwalking. It is generally best to not try to wake a sleepwalking person suddenly. People shouldn't shake or startle you.

  If your family member has to bring you out of a dissociative episode, ask them to repeat your name calmly, while reminding you of where you are.

  Sometimes family or friends may feel that an individual is dissociating "on purpose." If the people close to you are educated about dissociation and the fact that dissociation is an involuntary response, they can better support you.

Grounding exercises:

Even though dissociating is not something you can control, you may learn to recognize warning signals that an episode is coming on. If you are able to tell when you are starting to dissociate, there are things you can do to ground yourself, bringing yourself back to the reality of the moment.

The following are methods you can use to help keep you from dissociating:

1) Take note of your surroundings. For example, if SGT. G. begins to feel like he is "spacing out again", he might look around his barracks room and tell himself, "This is my bed, I just changed these sheets,

over by the door is the umbrella I used earlier tonight, the sun is starting to come through the curtains". Describe what you are seeing, hearing, smelling, and feeling. By noting these things to yourself, you stay connected to the present and to your immediate surroundings.

2) Tell yourself, calmly and slowly, what the day and time is, and what your immediate situation is: For example- "It is Tuesday afternoon, about 3 o'clock, and I just woke up from a nap."
3) Do a quick body scan. Go over the sensations in your body just like you did the room. Here you want to pay attention to sensations like how your watch feels on your wrist, whether your scalp is itching, whether or not you feel comfortable in your chair, the feel of your socks on the skin of your feet. Try not to focus on your breathing or heart beat if you are already feeling anxious, as focusing on these can make some people more anxious.
4) Other ideas for keeping yourself centered on the present moment:
    - Wash your face with cold water.
    - Take an ice cube from the freezer and hold it in your hand.
    - Blink your eyes hard.
    - Practice juggling or playing jacks.
    - Clap your hands.
    - Sit and write down everyone you can remember from your high school senior class or boot camp platoon.
    - Sit and write down every animal you can think of that starts with the letter "A" (Antelope, Ant, Aardvark, Armadillo, etc..), then move to "B", and so on.
    - Eat something that will get you focused on the flavor - like a sour or hot candy.

Re-experiencing Symptoms:

What are "Re-experiencing" Symptoms?

Just like the name implies, re-experiencing symptoms involve a service member experiencing the traumatic situation again in some way. This can be in the form of images or thoughts that come into one's mind even though you don't want to have them, or nightmares. Flashbacks, where you feel as if you

are actually back in the traumatic situation, are also a re-experiencing symptom.

Dealing with Flashbacks-

Flashbacks are defined as an intense feeling that one is actually back in the traumatic situation, where the veteran may also act as if they are back in combat. Individuals may have hallucinations (seeing something that isn't actually there), and illusions (where they misinterpret an actual thing as something else). Flashbacks feel very real for the person experiencing them and they can be very upsetting.

Many episodes of dissociation present in the form of flashbacks. When this happens, the person may not remember re-living the situation. Most flashbacks happen when a service member comes into contact with a strong trigger, or when they are under a lot of stress.

Flashbacks are one of the symptoms of PTSD that most of the general public has heard about and associate with the disorder. While a lot of people know about flashbacks, they are fortunately not a common symptom for patients.

The same general advice that people use for dissociation (see above) also applies to dealing with flashbacks:

- Try to reduce or eliminate the things that cause you stress.
- Use grounding exercises to stay in the present.
- Distract yourself from the content of the flashback when you feel it coming on.
- In the early stages of therapy for PTSD, avoid things that trigger flashbacks.

Intrusive thoughts/images:

A symptom that's far more common than flashbacks is intrusive thoughts or images. These are memories or images related to a trauma that "pop into your head" even if you weren't thinking about combat. These tend to be unwelcome and most service members find them disturbing. Sometimes a string of thoughts and images come flooding in after encountering a trigger. For example, a service member who sees a small child playing in the mall

back in their hometown may experience intrusive and intense images of a dead Iraqi child they saw in a town that had been mortared. Other intrusive images can be triggered by someone mentioning a lost friend or seeing a person who looks like the friend.

Our first reaction to such disturbing images and thoughts is to try to avoid them. Avoidance of conversations, places and activities that spark up thoughts and images of traumatic experience like combat is actually a symptom of PTSD.

While it's natural to try to avoid thinking about and having memories of combat experiences, trying to suppress these thoughts can make them worse. Research shows that the more upsetting we find something and try to suppress thinking about it, the harder it can be to keep it out of our minds. If you structure your whole day around keeping your mind busy so you don't have memories, you are still thinking about the memories in the back of your mind. In fact, you're thinking about memories all day, dreading them and trying to avoid having them, which is actually counter-productive. There's an old adage that if you try not to think about a pink elephant, you'll spend all of your time thinking about the pink elephant. Trying to suppress thinking about something can make you more likely to think about it.

So-what do I do about them? Understand that you cannot prevent intrusive thoughts. When they come, let the intrusive thoughts and images happen without trying to fight them. As much as you can, you should try to detach yourself from the images. Detaching may take some practice. It requires that you acknowledge the intrusive thought or image and then allow it to pass out of your mind. Also, if you can stop spending your energy suppressing the thoughts, you will find you are better able to deal with them and they will happen less often.

It's easier to just let the images and thoughts occur if you can separate the thought/image from your reaction to the thought/image. This is an absolutely essential skill. The image popping into your mind is just an image even if it's something gruesome. It's just a picture. You can manage your emotional reaction to this image by reassuring yourself that the feeling will

pass and that the image cannot harm you or make you lose your mind. The reaction people have to such images or thoughts is often made worse because they think things like "Having these images all day will make me go crazy," or "I can't stand having these happen again and again!" This type of thinking puts more and more focus on the memories, and drives us to be more stressed. Being more stressed and thinking about memories makes you more likely to have even more intrusive thoughts.

It's an illusion to think we can control what comes up in our minds. We aren't able to do it at times when we're not stressed out, and we are even less able to control our thinking when we're emotionally distressed. If you can accept that combat-related thoughts and images are going to be a part of your day-to-day life while you're in treatment, you can spend less time trying to fight them and you will actually find that you have them less often.

Some things to keep in mind as you are trying to deal with intrusive memories:

- They are just images. It's not happening again.
- No one ever went crazy from having intrusive thoughts.
- Pushing them away entirely isn't an option. In fact, doing so paradoxically can make them worse.

Dealing with Nightmares-

Nightmares can be a very frustrating symptom of PTSD. Early on, an individual usually has nightmares directly related to their traumatic experience. Over time, the nightmares will become more generic and start to include new material: instead of seeing teammates killed, they may have nightmares about family members dying. This is a natural progression and doesn't mean things are getting worse or that you're going crazy. Our minds will insert whatever material we think about during the day into our dreams, and if our dreams are about people being harmed, this can lead to having dreams about people we know being killed. It is a normal part of the process and is not something to necessarily be concerned about.

Because nightmares can be very intense, triggering strong memories, it's easy to see why veterans want to avoid them. Some veterans will deliberately keep

themselves up for 36 hours just so they will lapse into a deep sleep in order to avoid nightmares. People will play video games, call relatives, watch TV, browse the Web, work out, nearly anything to keep themselves awake until they are too exhausted to have nightmares. Another strategy is to drink alcohol to "sleep through" nightmares. Alcohol will put you to sleep-but comes with its own set of problems and will slow down your recovery (see module #6).

ADVICE ON HANDLING NIGHTMARES

- As much as you can, you need to de-catastrophize having nightmares. Like intrusive thoughts and other re-experiencing symptoms, the more emotional energy you devote to dreading and suppressing nightmares, the harder it is to deal with them. Combat veterans sometimes go over the last few terrible nightmares in their heads for hours before going to bed-wondering why they keep happening, if they have some special meaning, or similar lines of thinking. This is counter-productive, because we generally tend to dream about the things we've been thinking about during the day. So, even if you've been thinking about what you can do to avoid those recurring nightmares, and dreading having them, you're still thinking about the nightmares. At some point you have to accept they are a part of the disorder and will fade once your other symptoms fade.
- Before going to bed practice good sleep hygiene and relaxation techniques (these are covered in Modules #1 and #2). As much as possible, have a bedtime routine, something you consistently do every night in the hour or two before going to bed. This routine should include avoiding anything that sparks memories likely to lead to nightmares, such as watching a documentary on the war, talking on the phone to a buddy who mentions combat experiences, or doing exposure exercises.
- Have a plan for what to do if you have a nightmare, and stick to that plan every time it happens. Stay calm, use grounding techniques, distract yourself, don't re-hash the content of the dream, and do something that doesn't involve getting your heart rate up.
- If nightmares are a significant problem for you even after following the advice covered so far, there are two specific types of treatment for this symptom you can discuss with your provider.

1) The medication Prazosin® has shown some promise in blocking nightmares in people with PTSD (see Module #6), and may help you as well.
2) A psychotherapy technique called "Imagery Rehearsal Therapy" (IRT) involves having people with chronic nightmares re-write their usual nightmares without the disturbing portions. This new story line is then mentally rehearsed (visualized) several times during the day. Using the IRT technique has been shown to reduce nightmares in a few studies.

Advice for spouses and other family members:

- Do not, under any circumstances, awaken a person who is having a nightmare by shaking them! Combat-related nightmares are often about being harmed, seeing other people dying, and trying to fight back, triggering the service member's defensive alarm (fight or flight reaction). If you lean over a person and shake them trying to wake them up you could be hit or even choked by the veteran as they come out of the nightmare. If their fight or flight reaction is in full swing and someone is hovering over them, they may automatically try to defend themselves. If you want to wake the veteran, walk to the foot of the bed and shake the person's foot gently, staying out of range of being kicked. Say their name in a calm, non-urgent manner-and help re-orient them as they wake up. For example "John, you're having another nightmare. You're here in bed, and everything is ok....it's just a nightmare."
- If a service member is having nightmares and thrashes a lot in their sleep or is violent (wakes up grabbing you), you should sleep separately for a short time until this symptom is under control. Some spouses feel that this is "abandoning" their husband or wife by leaving them to face these alone. If you are in the house, you are not actually abandoning them. You are making sure that you and they are safe. If they awaken from a nightmare they can come see you in the other room. It's already hard enough to deal with the stresses associated with having a spouse with PTSD; the added resentment that would result from them accidentally hitting you will only make things more difficult.

Guilt: A common emotion in combat-related PTSD

No matter how much training or preparation a person has prior to entering a combat situation, there is bound to be a psychological impact to situations where people are injured and lives are lost. One of the major psychological impacts of war is guilt.

Service men and women are put into situations where they may have to pull a trigger, release a bomb, mortar a target, or perform other duties that have the potential cause harm to other people. They often witness or are aware of intense human suffering and death. Combat situations may require a service member to kill others.

Guilt can sometimes be a hard emotion to shake. After combat experiences, guilt usually comes in a few forms:

Survivor's guilt- "Why did my buddies have to die while I survived?" This is one of the most publicized forms of combat-related guilt. Many service members die in wars; however, many more survive---and these members naturally find themselves wondering why they survived when their friends did not. Suppose you were driving your humvee but then had a friend take over when you got tired. If this friend then died when an IED exploded near the vehicle while you and the other person in the back seat survived, this could lead to intense survivor's guilt. Arriving home and seeing a buddy's wife and kids coping with the loss of their husband/father can also heighten survivor's guilt. While it is normal to wonder "Why them and not me?" dwelling on it can lead to intense feelings. You could even start to think that you should not have been allowed to survive.

Guilt about killing enemy combatants- Many people assume that service members don't think much about killing enemy combatants (as opposed to losing buddies or accidentally killing civilians). But the truth is that many service members do struggle with issues related to the morality of war. After killing an enemy combatant, a service member may feel intense guilt about the person they shot: Was he someone's father or husband? This can be especially hard in situations where the enemy combatants involved are very young.

Decisions resulting in death of friends/teammates-In war, very fallible people are sent to fight and make the best decisions they can. In combat, decisions have to be made that we know will cost the lives of people with whom we have engaged in combat, even some civilians. Guilt can result from:

- *Friendly fire*-accidently shooting a team member who runs in front of your line of fire; strafing a convoy at night that turns out to be fellow Americans, mortaring a position after getting bad intel and finding out there were allied troops there, etc.
- *Losing subordinates*- Ordering your men into a situation you knew would cost many of them their lives ("We have orders to take this section of the city-no matter what"), making a call in the heat of the moment, like not falling back and people are killed ("I made a decision that cost peoples' lives"), sending people into a trap/ambush, etc.

Other decisions or actions that are combat related-There's a range of other things people do in order to survive or cope in war zones that they regret. Some examples are:

- *Freezing during battle*-This is something that occurs more than soldiers like to admit, with estimates from Vietnam as high as 1 in 4 soldiers in combat freezing up for at least a part of the firefight. Very often the person blames themselves for not acting or feels like they acted cowardly. This reaction, however, is not something that we can control. Many times in traumatic situations, humans and other animals will have an involuntary mechanism activated-and they will lose the ability to move. This state is called **tonic immobility**, and

is present in nearly all mammals. This type of freezing response is pre-programmed into people; if it is triggered, it's completely involuntary.

- *Collateral damage*- In WWII, both axis and allied planes regularly bombed major cities, causing widespread civilian deaths. In modern warfare however, there is a strong emphasis on minimizing civilian deaths. While we try to minimize civilian deaths, war is associated with accidental deaths of non-combatants. Accidentally killing civilians, including women and children, is an unfortunate part of warfare, especially in battling an insurgency that is known to use "human shields."
- *Aggression towards non-combatants*- This is another part of combat that people don't like to talk about, but it's a part of every war. After losing a friend or several members of your unit to an IED or mortar blast, it's natural to want some revenge, to see justice served. The next time you are around civilians, it is possible that you would act more harshly towards them. Battling an insurgency makes this type of reaction more likely. It is also easier to be hostile towards non-combatants in an insurgency situation, where anyone in a town who appears friendly could in fact be a hostile.

Managing guilt

While combat-related guilt is normal, it can become a major problem for some service members. This usually happens when a person gets stuck in a pattern of thinking that is unrealistic and unhelpful. Dwelling on what your lost friends would be doing now, and how you weren't able to save them can make you miserable. Changing some of the dysfunctional beliefs and patterns of thinking that lead to severe guilt has been shown to help servicemen cope with and get past combat-related guilt.

Using the Thought Monitoring Sheets, practice changing your guilt-producing thoughts to more rational and practical thinking. Examples of this type of corrective thinking are listed in this table:

Dysfunctional Thinking		Corrective Thinking
If people knew what really happened-they would never speak to me..		People know by now that bad things happen in combat-and that soldiers are put into situations where they have to make hard choices. Your family doesn't have to know everything that happened-but even if they did, it's very likely they would be sympathetic to what you had to live through, and not stop speaking to you.
I'm a changed person-I'm damaged, and I'll never be the same person I was…		I'm not "damaged", most of the things that make me think that (feeling overwhelmed, nightmares, quick temper) are symptoms of PTSD-and will go away, so I will be back to who I used to be soon…. I survived something bad-and I have PTSD, which is a change. It's also something that goes away, just going through this program is going to help bring my life back to normal.
I got people killed-I can't ever be trusted..		1. People make mistakes-there has never been a perfect person. Countries send people into combat-therefore; we know there must be mistakes in combat. It's been this way since the dawn of time-and will be this way as long as mankind fights wars, because people inherently make mistakes. 2. Making (one) mistake doesn't mean you can't be trusted. Everyone makes mistakes-and if you can't trust someone because of a mistake, nobody could be trusted. Many leaders that you followed had also made mistakes in combat-but they learned from them, and moved on-if they did it, so can you.
Why did I live and others die? I don't deserve to live…		In war, people die randomly. In IED attacks, where you sit in a vehicle can be the thing that determines whether you live through an attack. The fact you made it and someone else didn't doesn't have any cosmic answer-its usually just being in the wrong place when a mortar comes in, or being on the side of the vehicle near the IED. Just because someone else didn't make it-it doesn't at all mean you don't deserve to live. Your buddies would want the people who made it out to go on living great lives.
I have to live a perfect life-since I made it out, I owe it to them…		This is a great sentiment-but it's too much pressure to put on yourself. Surviving a war is an ordeal-you've earned the right to have more problems than the average Joe on the street. You shouldn't feel like you have to be problem free. The friends you lost wouldn't look down on you for having marital problems when they were alive-why would they do that after they are gone? Another way to look at it is that what you actually owe fallen comrades is your keeping them in your heart and mind, remembering them and their families….. and you don't need to be perfect to do that.

Additional ways to manage guilt:

TAKE THINGS AT YOUR OWN PACE. After making it through combat and experiencing horrific things, some of your friends and family will assume you need to talk about things, and bring it up often in order to get you to talk it over. While it's a good idea to eventually be able to talk about experiences, you have to listen to your gut and let people know when you are ready to talk about things. If someone is pushing you to talk, or just mentioning things over and over again, let them know that they have to give you space. There will likely be some things that happened that you never discuss with your family.

FIND PEACE IN SPIRITUALITY. Many combat veterans have found that becoming more connected with their religion helps them cope with combat-related guilt. By attending religious services, talking with their clergyman and through prayer, they find some meaning in what they have lived through.

ALLOW TIME TO HEAL YOUR WOUNDS. Many think it's a cliché to say that time heals all wounds, but there is truth in the idea that guilt and sorrow related to combat tend to get better as time goes by. While you will always remember lost friends, these memories will come to feel less like they are haunting you and become more like other memories you've experienced.

HONOR THE DEAD. Another way that combat veterans have used to cope with guilt is by finding some way to honor the people they knew that died. Many veterans honor their fallen friends and others that were killed by doing such things as:

- Staying connected with a lost friend's family, visiting or calling on holidays and the anniversary of their loss.
- Writing a letter to a lost buddy that you put away or destroy. Putting your thoughts and feelings about the person on paper isn't just symbolic, it's very often a good way of getting some measure of closure.
- Going to your place of worship or some place that reminds you of your friend and saying a prayer for them.

- Saying a prayer and asking for forgiveness for having to take lives and other things that happened in the war.

How is alcohol use related to PTSD?

Did you know that PTSD increases your risk for being diagnosed with an alcohol use disorder? Having PTSD does not automatically mean that you will have problems with alcohol. However, alcohol misuse, abuse, and dependence are very often issues for people with PTSD.

Misuse (self-medicating) - Clinicians often recognize a pattern where patients with PTSD misuse alcohol. Here, the person is using alcohol to manage their anxiety symptoms associated with PTSD. They may drink heavily before bedtime in order to help them fall asleep. They may also drink during the day to make it easier to handle situations where they could encounter triggers (for instance, before going to a crowded mall).

Abuse-Alcohol abuse refers to a pattern of alcohol use that interferes with the person's ability to fulfill their social and occupational roles. When someone is abusing alcohol, they run the risk of getting in trouble with the law, or drinking in situations where it's potentially harmful (while driving or operating machinery).

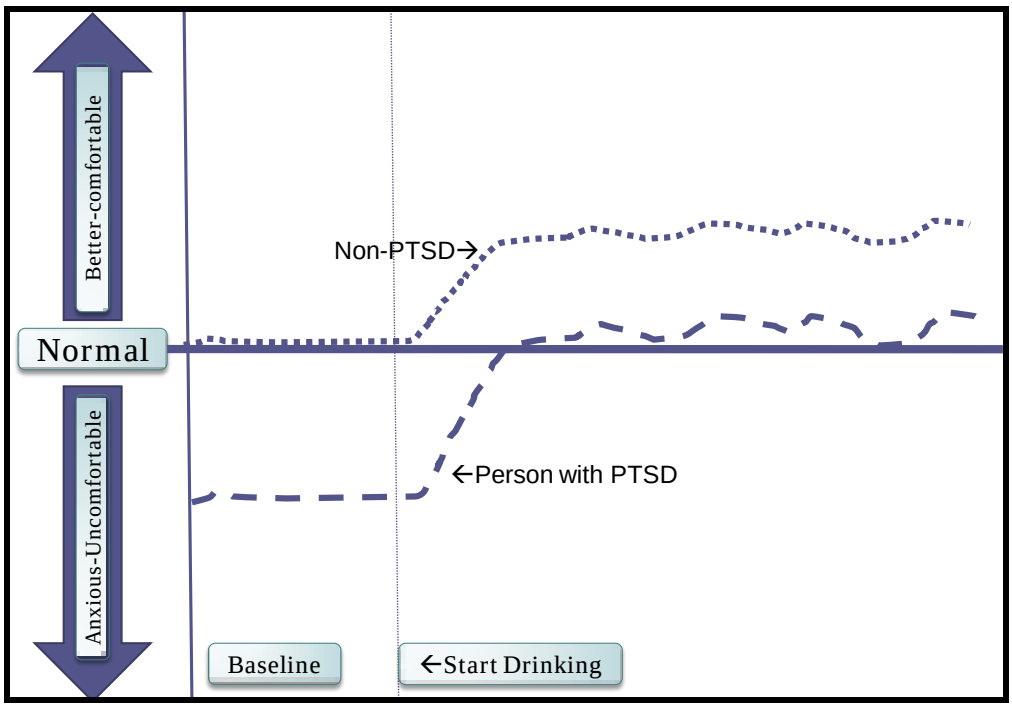
Dependence- Dependence on alcohol is a more serious condition than misuse or abuse. This condition is characterized by developing tolerance to alcohol: having to drink more in order to get the same effect and having withdrawal symptoms when you go for a period without drinking. Other symptoms include an inability to cut down on the amount of alcohol you are drinking, giving up social roles and obligations due to drinking, and continuing to drink even when you know it is harming your health.

Why do so many PTSD patients drink?

The reason that PTSD patients drink alcohol is often different from why most people drink. Most people drink alcohol because it makes them feel good. It can create a sense of warmth and comfort, helps people feel more relaxed, and can be a temporary escape. For someone with PTSD, however, the reason for drinking is often self-medication, to get relief from their symptoms. Alcohol can be a potent drug for a trauma survivor. It is effective at temporarily decreasing anxiety, because it has the same chemical effect in the brain as tranquilizers such as Xanax ® or Valium ®. It can be an appealing "remedy" because it can provide quick relief from anxiety.

A person with PTSD is typically in a state of higher anxiety than most people. Drinking alcohol can reduce the anxiety quickly, temporarily making them feel "normal," the way they felt before developing PTSD.

The figure below illustrates the way in which PTSD patients are actually functioning at a different "baseline" or "starting point" than people who do not have PTSD. Someone with PTSD feels anxious and uncomfortable most of the time and drinking brings their mood **back up to normal**. For those who don't have PTSD, drinking elevates their mood **above normal**.



Among Vietnam veterans with PTSD getting care at the VA, an estimated 60-80% have problems with alcohol. The figure above can help explain why so many PTSD patients develop problematic drinking and dependence on alcohol. Humans and other animals tend to repeat things that are reinforcing. Simply put, things that make us feel better are reinforcing, and the better they work, the more reinforcing they are. Alcohol makes everyday people feel a little better than normal. With PTSD, alcohol doesn't simply make a person feel better. It actually removes a state of being miserable and thus is much more "reinforcing". Since it feels much, much better it's more likely to be abused and lead to a person becoming dependent on it.

We know many patients with PTSD drink too much, largely because it relieves anxiety. This may seem OK, since alcohol is a legal drug, and "works" to keep you calm. There are however, a lot of negatives that suggest you shouldn't use alcohol to manage moods. Drinking can make you less inhibited, making you more likely to do impulsive things like drive recklessly, start a fight, etc. Alcohol also "takes the brakes off emotions." Usually if you're happy hanging out with friends and have a few drinks, drinking makes you even happier. The same thing however happens when you're angry or depressed. It makes your feelings of anger or depression even stronger. A person sitting home alone drinking who is thinking about how his girlfriend betrayed him gets more angry and may make poor choices as a result, like punching the wall or confronting her while intoxicated.

Having PTSD can lead to problems in your job and relationships, and some people also start drinking to help cope with these problems. Drinking may make you feel better in the short term, like right after a fight with your wife, but it usually will add to your problems. How does problem alcohol use harm your job or social life? Here are some common examples:

- Drinking to fall asleep makes you more likely to oversleep and be late for work, and can cause legal problems (UA).
- Anger problems in PTSD can be made worse with drinking because it makes you more impulsive and more likely to get into arguments and physical fights, even with your family.

- Drinking and driving is often a career-ending event, but people who start drinking heavily often drink and drive, risking their military careers and even death.
- When you're intoxicated, you're more likely to say hurtful things you don't mean to your family/friends.
- Friends and family will start to avoid you if you get angry when drinking adding to social isolation and putting you more at risk for depression.
- Over time, it takes more and more alcohol to get the same effect, becoming more and more expensive, and taking more time to out of your day to drink.
- You start to damage your liver with regular drinking.

Even if you only started drinking heavily to self-medicate or get through stressful situations, you are at risk for becoming dependent on alcohol. Alcohol dependence is a serious condition that increases the chances you won't have a fast recovery from PTSD, and puts you at risk for other stressors and problems. Even after recovering from PTSD, the dependence on alcohol could remain, potentially affecting the rest of your life.

While there may be a temporary relief from symptoms, alcohol use often worsens PTSD symptoms. Alcohol use:

- Can disrupt your sleep patterns and make it difficult to sleep restfully.
- Impair your ability to cope with the trauma and stress.
- Make you feel even more emotionally numb, socially isolated, angry, and irritable.
- Worsen your depression.
- Decrease the effectiveness of your PTSD treatment.
- Prolong the period of time you experience PTSD symptoms.

How much is too much?

Do I have a drinking problem?

Many people reading this manual know that they are drinking more than they used to, but they may also wonder if it is really a problem. Not knowing

whether your drinking is problematic can make it difficult to ask for help. If you are unsure of whether alcohol has become a problem for you, it is a good idea to take a self-test. There is a standardized screening self-test called the AUDIT, and it is a great way to measure problematic alcohol use. Take the questionnaire on the following page. Answer the questions honestly, and then total the answers according to the scoring instructions at the end of the questionnaire. The sole purpose of this questionnaire is to give you a better sense of the impact alcohol may be having on your life.

Alcohol Use Disorders Identification Test				
(Please check the box for the answer that best describes you)				
1. How often do you have a drink containing alcohol?				
□ Never	□ Monthly or less	□ 2 to 4 times a month	□ 2 to 3 times a week	□ 4 or more times a week
2. How many drinks containing alcohol do you have on a typical day when you are drinking?				
□ 1 or 2	□ 3 or 4	□ 5 or 6	□ 7, 8, or 9	□ 10 or more
3. How often do you have six or more drinks on one occasion?				
□ Never	□ Less than monthly	□ Monthly	□ Weekly	□ Daily or almost daily
4. How often during the last year have you found that you were not able to stop drinking once you had started?				
□ Never	□ Less than monthly	□ Monthly	□ Weekly	□ Daily or almost daily
5. How often during the last year have you failed to do what was normally expected from you because of drinking?				
□ Never	□ Less than monthly	□ Monthly	□ Weekly	□ Daily or almost daily
6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?				
□ Never	□ Less than monthly	□ Monthly	□ Weekly	□ Daily or almost daily
7. How often during the last year have you had a feeling of guilt or remorse after drinking?				
□ Never	□ Less than monthly	□ Monthly	□ Weekly	□ Daily or almost daily
8. How often during the last year have you been unable to remember what happened the night before because you had been drinking?				
□ Never	□ Less than monthly	□ Monthly	□ Weekly	□ Daily or almost daily
9. Have you or someone else been injured as a result of your drinking?				
□ No		□ Yes, but not in the last year		□ Yes, during the last year
10. Has a relative or friend or a doctor or another health worker been concerned about your drinking or suggested you cut down?				
□ No		□ Yes, but not in the last year		□ Yes, during the last year
0	**1**	**2**	**3**	**4**
Totals for column				
			Total score =	

Scoring instructions: The AUDIT is scored by counting the number of responses in each column and multiplying it by the value of the column, then adding each column total together for a total score. If a person checked the answer in the first column for each question, they would have a score of (10*0) 0. If a person checked the answer in the last column for each question-he would have a total score of (10*4) 40. If your total score on the questionnaire falls between 8-19, you may be drinking too much. If your score is greater than 20 you should seriously consider asking for a referral for substance abuse treatment.

Making a change: Cutting back or quitting

If you have decided that you are drinking too much, you have a choice to make if you want to improve your state of being: You can cut down or completely quit drinking. This choice should be made in conjunction with your doctor, especially if you have been drinking heavily. The main reason for this is that if you are a heavy drinker, quitting drinking abruptly (sometimes called "going cold turkey") can cause seizures. Seizures are disruptions in the electrical activity of the brain; depending on the severity, they can be serious and can cause permanent brain damage.

Decreasing your use of alcohol can be a difficult task, but just going through the therapies in this workbook will help decrease your level of anxiety-eliminating some of the pressure to drink. Here is some basic advice about cutting down or quitting drinking:

1) Set a firm date to stop drinking or cut down.
    a. If you plan on cutting down, set a daily alcohol limit (like 2 beers). Not setting a limit will almost always set you up for failure.
    b. Make the date public. Let your friends and family members know you are making a commitment to cut down or stop.

2) Consider attending some Alcoholics Anonymous (AA) meetings. AA meetings are often an invaluable support to people trying to quit drinking. You can find AA chapters in nearly every city or small town across the United States (visit www.aa.org).

3) Remove alcohol from your house if you are quitting. Don't talk yourself into keeping alcohol around for visitors or company.
   a. If you are cutting down, buy only what you are allowing yourself to drink for the day (if you are drinking 1-2 beers a day, you don't need to pick up 2 cases).

4) Break old routines and stay away from the cues that remind you of drinking. Plan new ways to spend your time in a productive activity. If you used to start drinking as soon as you left work, skip the bar and go directly to the gym.

5) Be very cautious when using tranquilizers. Keep track of how many you take and how often. Alcohol and tranquilizers have the same chemical action in the brain and many people start using more Xanax ®, Klonopin ® or Valium ® to make up for having less alcohol. This can be conscious or unconscious.
   a. Note-if your physician is trying to taper you off alcohol, they may prescribe a tranquilizer to help make sure you don't have seizures or other dangerous effects of stopping heavy drinking.

6) If you find it hard to follow through on your plan to quit or find that you're unable to cut down, ask for a referral to substance abuse treatment.

What Medications are helpful in PTSD?

Medications are commonly prescribed for managing the symptoms of PTSD. The majority of patients who take a medication for PTSD note some benefit. Medications are usually used in conjunction with some type of psychotherapy. Since PTSD is a complex disorder with many types of symptoms, it is not unusual to be prescribed more than one medication at a time, especially at first.

The type of medication most often prescribed for PTSD is antidepressants. Besides being effective in treating depression, antidepressants are also effective in treating almost all of the anxiety disorders, including PTSD. Antidepressants are divided into subtypes, including 1) Serotonin Selective Reuptake Inhibitors (SSRI), 2) Tricyclic Antidepressants (TCA), 3) Novel antidepressants, and 4) Monoamine Oxidase Inhibitors (MAOI).

SSRIs

The most frequently prescribed type of antidepressants is the *Serotonin Selective Reuptake Inhibitor* (SSRI). SSRI's are considered to be the first line of medication treatment for PTSD, meaning that they are usually the first type of medication tried. These medications work by blocking the re-uptake of a neurotransmitter in the brain (serotonin), making more of it available for binding to receptors. The SSRIs typically start to show an effect after 3-4 weeks, and don't reach full effect for weeks after that. This is why a person will usually take one of the SSRIs for at least 12 weeks in order to see if it works for them.

TCAs/MOAIs

If a trial of an SSRI doesn't work for a person, a physician might recommend trying one of the TCAs or MAOIs. These are older antidepressant medications, but are generally agreed to be equally effective as the SSRI's. The main advantage of the SSRI's over these older medications is that the older medications have more side effects. The TCAs can cause dry mouth, constipation, dizziness, blurred vision, and some other side effects. Generally, these side effects go away after the first few weeks of taking the medication. The MAOIs have some side effects as well, such as insomnia and dizziness when changing positions. However, the main caution with MAOIs is that there are dietary restrictions. There are certain foods, beverages

and medications that you absolutely cannot consume while on a MAOI.

Novel antidepressants

There are also several newer antidepressants that are available and have shown some promise in treating PTSD. These include Bupropion (Wellbutrin ®), Nefazodone (Serzone ®), Trazadone (Desyrel ®), and Venlafaxine (Effexor ®). While these medications do not have the same level of evidence that the SSRIs do, they may be very helpful for some patients.

Mood stabilizers/anticonvulsants

Another type of medications that have been used to treat PTSD are the Mood stabilizers / Anticonvulsants. Medications in this category include Lamotrigine (Lamictal ®), Topiramate (Topamax ®), Carbamazepine (Tegretol ®), Valproate (Depakote ®) and Gabapentin (Neurontin ®). These medications are primarily used to prevent seizures; they have been shown to be helpful in some cases of PTSD. These medications are usually used in addition to one of the antidepressants.

Tranquilizers

A commonly prescribed type of medication for PTSD is tranquilizers, specifically a type of tranquilizers called benzodiazepines. Medications in this class include: Clonazepam (Klonopin ®), Lorazepam (Ativan ®), Diazepam (Valium ®), and Alprazolam (Xanax ®). These medications are very effective in the immediate management of anxiety; they have a rapid effect. Unlike the SSRIs, which can take weeks to start showing effects, medications like Klonopin ® decrease anxiety in about half an hour. Despite being effective in the very short run, we caution people not to take benzodiazepines for longer than a few weeks, and advise them to avoid starting on them if they can avoid it. The rationale for this advice is that Benzodiazepines have:

1) **High risk of dependence** - Benzodiazepines can be very addictive. People will find that they develop tolerance to them, needing more and more to get the same level of relief, and having withdrawal symptoms once they run out or stop taking them. Much like drinking alcohol to manage anxiety, over-reliance on benzodiazepines can lead to even more problems.

2) **Rebound anxiety**- Once a person stops taking these medications after a long period, they can have rebound anxiety. This means that they have a spike in their anxiety levels after stopping the medication. Many times this anxiety will be worse than the symptoms which they took the medication for in the first place. It is estimated that up to 70% of patients experience rebound anxiety from benzodiazepines when they discontinue the medication.

3) **Do not address core symptoms-** Benzodiazepines do help with anxiety, and to some degree decrease irritability and insomnia. But other symptoms of PTSD aren't helped by taking these medications. For example, avoidance and dissociation.

4) **Limit benefits of exposure therapy-** In exposure therapy, the person has to experience anxiety, and stay in the situation until the anxiety goes down. Because benzodiazepines can chemically prevent a person from feeling anxiety, taking benzodiazepines can reduce the effectiveness of your exposure therapy sessions.

Due to these factors PTSD experts advise against the long-term use of benzodiazepines in the management of PTSD.

Atypical antipsychotics:

Although primarily used to treat more severe psychiatric disorders like bi-polar disorder and schizophrenia, the newer antipsychotics have been shown to have positive effects in some studies. Medications like Risperdal (Risperidone ®) Ziprasidone (Geodon ®), Olanzapine (Zyprexa ®), Aripiprazole (Abilify ®), and Quetiapine (Seroquel ®) are atypical antipsychotics. Medications in this class have been used to enhance the effectiveness of SSRI's and other types of antidepressants. These medications have shown promise in decreasing overall symptom severity, particularly dissociative flashbacks and aggression.

Antiadrenergic medications:

A few medications normally used to control blood pressure have been shown to be helpful for some symptoms of PTSD. Prazosin (Minipress®) has recently been shown to reduce nightmares and some other symptoms in PTSD patients. Propranolol (Inderal ®) has also been shown to have beneficial effects in symptom reduction in some smaller studies.

Sleep agents:

There are several options for helping improve sleep. While most people should benefit from the interventions covered in Module # 2, some people may also need additional short term help with sleep. A commonly prescribed class of medications are non-benzodiazepine sedatives. Some examples include: Zolpidem (Ambien®), Zaleplon (Sonata®), and Eszopiclone (Lunesta®), all generally acting at the GABA receptor. While these medications aren't as addictive as the benzodiazepines, they shouldn't be used for more than a few weeks at a time. If you are still having sleep problems after a few weeks, your physician may suggest trying another medication: Trazadone (Desyrel ®). Trazadone is actually an antidepressant that has sedation as a side effect and is prescribed at lower than antidepressant doses to help with sleep. You can take Trazadone for long periods of time with no worries about addiction.

How to get the most out of medications:

Medications prescribed by your doctor to manage PTSD symptoms can make a positive difference in the way you feel. Medication may also make it easier to participate in and benefit from cognitive behavioral therapy.

Most people who take prescription medications use them responsibly. However, many medications carry a risk of abuse or dependency, and can be misused. Prescription drug abuse includes taking a medication that was prescribed for someone else, or taking the medication in a manner or dosage different from what was prescribed. Taking medications inappropriately can produce serious illness or injury. It can also result in an unhealthy dependence on the medication.

Why you should only take medications prescribed to you by your physician:

- The medication may interact with other drugs you are taking (even over-the-counter medications), and the combination could be very dangerous.

- It is illegal to take certain medications without a prescription (tranquilizers, pain medications, etc.).

Medications can be easily detected in urine and blood tests, so your provider will find out if you've been borrowing medications from another person.

Follow the dosage and directions for use carefully. Learn what side effects the medication could have.

Do not increase or discontinue taking medications without first getting approval from your physician. Many of the medications that are helpful with PTSD take several weeks to start working. This means that you may not see the full effect until 2-3 months. You may be tempted to increase your dosage to get faster results, but doing this can cause negative side effects or cause serious injury.

You may be tempted to discontinue taking a medication if you are experiencing unpleasant side effects or if it doesn't seem to be working. If you have side effects, or aren't seeing positive effects right away, hang in there. Sometimes medications take a while before you notice a difference in the way you feel. If you are experiencing side effects, contact your physician to discuss the issue before stopping or changing the dosage.

Medications for PTSD and alcohol do not mix. You should not drink alcohol and take medications for PTSD. Alcohol interacts with several psychiatric medications in ways that can be dangerous, and even lethal. The combination can impair your thinking and coordination, increasing the risk for motor vehicle accidents and serious injury. This is especially true of the tranquilizers such as Ativan ®, Xanax ®, Klonopin ®, Valium ®, and Librium ®.

MODULE 8: Other types of treatment for PTSD

What kinds of treatments are there for PTSD?

This module covers several forms of treatment that are available for PTSD. We will focus on those that have a strong evidence base and briefly point out therapies with little to no evidence base. This isn't meant to be an exhaustive list, but a general overview of the treatments available. Because medications used for PTSD are covered in a separate module, this module focuses only on psychological interventions.

Cognitive Behavioral Therapy (CBT). By far the largest evidence base for effectively treating anxiety disorders lies in cognitive behavioral interventions. The general components of CBT for anxiety disorders are:

1) **Cognitive therapy**-a systematic effort to change anxious thinking and beliefs.
2) **Exposure therapy**-using exposure to feared objects and situations in order to decrease conditioned fear reactions.
3) **Education** regarding the disorder and its causes.
4) **Arousal management strategies**-using relaxation exercises and other techniques to lower the physical symptoms of anxiety.

This manual is based on Cognitive behavioral therapy, and incorporates all of these core components.

There are several popular subtypes of CBT for PTSD. These subtypes have one or more of the core components of CBT (cognitive therapy, exposure therapy, education about the disorder and arousal management), with some variation in emphasis or procedures. We'll look at some of the most popular variations on CBT for PTSD.

Procedural variations of CBT for PTSD:

Prolonged Exposure (PE): This protocol for PTSD has been well researched, with numerous studies demonstrating its effectiveness. The program has all of the core components for CBT for PTSD, including cognitive restructuring, education, arousal management strategies, and exposure therapy. The protocol strongly emphasizes the exposure component of therapy.

Cognitive Processing Therapy (CPT): This is another CBT-based protocol for PTSD. This treatment program was originally developed for use with sexual assault victims, but has been successfully adapted for use with combat veterans. The protocol contains education, arousal management, and a heavy emphasis on cognitive therapy. The protocol has a much smaller exposure therapy component, with having patients repeatedly imagine their trauma as the main exposure therapy.

Eye Movement Desensitization Reprocessing therapy (EMDR)- This is a controversial but popular therapy and is currently listed as an effective therapy in the DoD/VA guidelines for PTSD. This therapy largely centers on having patients recall and describe their trauma memories, while the therapist makes movements with their finger or an object in front of the patients face. The patient holds their head still and follows the movement with their eyes, helping to "reprogram" and desensitize the traumatic nature of these memories. This obviously incorporates imaginal exposure to traumatic memories, and this is likely the reason that the therapy works. While the eye movements have been shown to be unnecessary, and the theory behind the use of eye movements has been show to be scientifically unsound, the overall therapy has been show to help patients with PTSD.

Therapies lacking adequate support:

The following therapies are not generally supported by evidence, and have not gained widespread approval in the scientific community although you may encounter providers who practice them. Many of these therapies are called "Power Therapies" by practitioners who believe that this set of therapies are much more potent than usual therapies. Some of these therapies are claimed to resolve PTSD in as little as one session. A common theme for the therapies listed below is a failure to back up the claims made with clinical evidence.

- **Trauma Incident Reduction (TIR):** This therapy involves having patients repeatedly imagine their traumatic memories-with the support of the therapist. This is done in an effort to gain insight into their trauma, and build positive emotions. There are few studies of this therapy-and they aren't well designed. If this therapy is effective, it's most likely due to the fact that patients are encouraged to use Imaginal exposure, which is a core component of CBT.

- **Thought Field Therapy (TFT):** This very controversial therapy involves forming an image of a traumatic situation, and literally tapping on yourself at various parts of your body in order to release anxiety. The idea is that various "thought fields" in the body contain perturbations that cause symptoms, and by releasing them-you can cure yourself of these symptoms. There is no consistent scientific evidence for either the therapy, or the theory behind it.

- **Visual Kinesthetic Dissociation (VK/D)**: This therapy was founded on a set of ideas from Neurolinguistic Programming (NLP). NLP is a loose grouping of ideas and theories which has largely been discredited as pseudoscience. VK/D therapy basically asks patients to imagine themselves "Observing" their traumatic memories as if on a movie screen and changing aspects of what happens during the movie. This supposedly leads to reduction and resolution of the negative emotions associated with the trauma. Like trauma incident reduction, there are a very small number of studies that suggest this may be an effective therapy, but the studies do not meet rigorous scientific standards. If this technique is eventually shown to truly help PTSD patients it will likely be due to the inclusion of an exposure component (repeatedly imagining the traumatic event) and not due to the supposed mechanism proposed by the NLP based theory.

Worksheet section

Contents:

Rate your level of anxiety for the day, using this scale:

0------1-------2------3------4------5------6------7------8------9------10
No anxiety moderate Worst you've felt

At the end of the week, add all your ratings and divide by 7. Plot this average score for each week on the Weekly Progress Chart at the bottom of the page. You should see your ratings go down as you work through the program.

Daily Anxiety Log								
Week ↓	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Average (add scores for the week and divide by 7)
1								
2								
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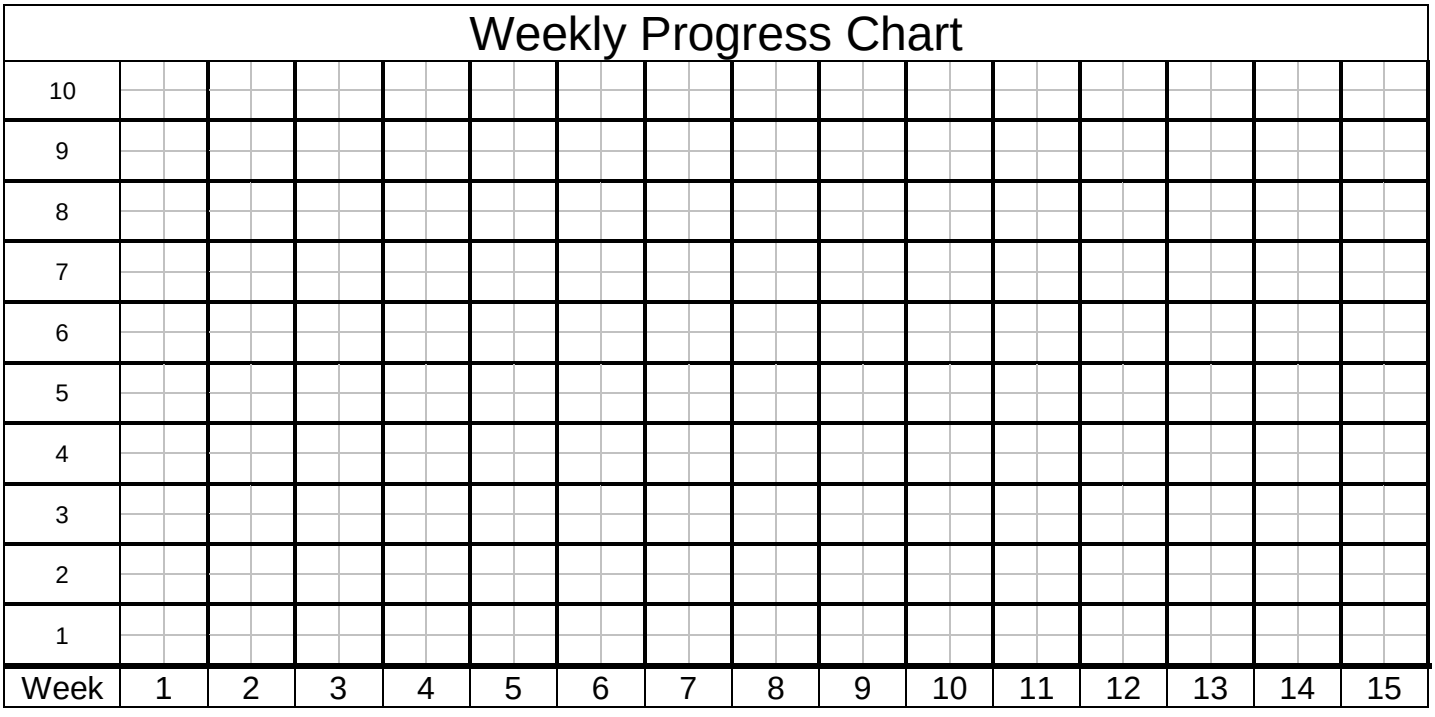

Triggering situation recording sheet			
Date / Time	**Event** or situation just before you felt the emotion	**Emotion** and Level (1-10)	**Thinking**-Beliefs and assumptions

Triggering situation recording sheet			
Date / Time	**Event** or situation just before you felt the emotion	**Emotion** and Level (1-10)	**Thinking**-Beliefs and assumptions

Triggering situation recording sheet			
Date / Time	**Event** or situation just before you felt the emotion	**Emotion** and Level (1-10)	**Thinking**-Beliefs and assumptions

Thought challenging record

Date / Time	**Event** or situation just before you felt the emotion	**Distorted thinking**-Beliefs and assumptions	**Emotion** and #	**Corrective thinking-**change the thinking to be realistic and helpful, take a different perspective, look for alternative explanations….
	1)			
	2)			

Thought challenging record				
Date / Time	**Event** or situation just before you felt the emotion	**Distorted thinking**-Beliefs and assumptions	**Emotion** and #	**Corrective thinking-**change the thinking to be realistic and helpful, take a different perspective, look for alternative explanations….
	1)			
	2)			

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Date /	**Event** or	**Distorted thinking**-Beliefs and	**Emotion**	**Corrective thinking-**change the thinking to be

Time	situation just before you felt the emotion	assumptions	and #	realistic and helpful, take a different perspective, look for alternative explanations….
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Date /	**Event** or	**Distorted thinking**-Beliefs and	**Emotion**	**Corrective thinking-**change the thinking to be

Time	situation just before you felt the emotion	assumptions	and #	realistic and helpful, take a different perspective, look for alternative explanations….
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	1)			
	2)			

Example Hierarchy for:_____

Step Number	Situations	Date Completed
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Example Hierarchy for:_____

Step Number	Situations	Date Completed
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Example Hierarchy for:_____

Step Number	Situations	Date Completed
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Example Hierarchy for:_____

Step Number	Situations	Date Completed
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Hierarchy for:_____

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Hierarchy for:_____

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Step Number	Situations	Date Completed
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Step Number	Situations	Date Completed
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Hierarchy for:_____

Step Number	Situations	Date Completed
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Hierarchy for:_____

Step Number	Situations	Date Completed
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Hierarchy for:_____

Step Number	Situations	Date Completed
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Exposure Exercise Record

Date	Situations-(steps from hierarchy)	Step #	Time in situation	Highest distress in situation (0-100)

Getting the most out of your exercises:

- Do the steps from your hierarchy in order.
- Do the same step over and over.
- Have your calming thoughts worked out ahead of time-keep control of your thinking.
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