



V-VICTA®

VirTra - Virtual Interactive Coursework Training Academy®

***MENTAL ILLNESS: A PRACTICAL APPROACH -
TRAUMA & PTSD***

Training Manual

VirTra

DISCLAIMER

The attached documents, related digital media simulation and related course work material are provided to clients to assist in the training of their employees. Due to the variation in policies from agency to agency and regional differences in applicable laws, clients must ensure the appropriateness of the material for their personnel. VirTra assumes no liability in the use of the associated material that is produced to assist agencies in the training of their personnel.

The Customer shall implement and enforce the safety notices shown below for all users of the VirTra system and accessories.

- Do not attempt to open or service VirTra recoil kits while under pressure. VirTra recoil kits contain high-pressure which can cause severe injury or death. If a problem occurs with a VirTra recoil kit, contact VirTra immediately.
- Absolutely no live weapons or ammunition shall be allowed within the vicinity of the training simulator. Violation of live firearms mixing with non-live firearms could result in injury or death.
- Never activate a laser emitting device towards your eyes or another person's eyes. This equipment contains products that emit invisible laser energy that could, if misused, damage the user's eyes. Users must never point a training firearm (or any other laser emitting device) at their own eye or another's eye.
- Some VirTra products contain raised or elevated stages. Users shall be warned that falling off the stage could cause injury to person or property.
- Some VirTra products contain V-Threat-Fire® devices. V-Threat-Fire devices provide an electric impulse of up to 2.5 seconds in duration at the point of contact (do not connect or place V-Threat-Fire devices over the user's heart). Only VirTra trained instructors are authorized to activate or use V-Threat-Fire devices, and the use of V-Threat-Fire devices for punishment or to cause repeated pain to a user is strictly prohibited.

TRADEMARKS

VirTra, the VirTra logo are either registered trademarks or trademarks of VirTra in the United States and/or other countries. Product names used in this manual are ascribed to their respective owners and acknowledged.

AUTHOR

Nicole Florisi, M.S. - VirTra Subject Matter Expert; Investigative Focus

TRAINING COURSE CERTIFICATION

This "Mental Illness: A Practical Approach" training course has been certified by the IADLEST™ National Certification Program on 9/23/2022.

Certification number: 22505-2209



MENTAL ILLNESS: A PRACTICAL APPROACH - TRAUMA & PTSD

TOPIC

Mental Illness: A Practical Approach - Trauma & PTSD

ESTIMATED TIME

1 hour

PERFORMANCE OBJECTIVE

(Slide 3) At the end of 1 hour of instruction in a video simulation the student will successfully be able to:

- A. Understand the role of contact professionals
- B. Recognize signs, symptoms, and behaviors associated with trauma/PTSD
- C. Explain tips and skills for dealing with individuals who have trauma or PTSD

CLASS SIZE

Designed for pairs of officers with maximum class size of 8 (4 pairs). If class size is smaller than 8 (4 pairs) scenarios can be cycled through.

The following training plan and lesson plan is designed to be used with the VirTra simulator. Where as many of the techniques have been used over many years in LE, this training plan maximizes training time and leverages the strengths of the VirTra Training System.

The instructor shall first ensure that students are familiar with the presented material. The outline is provided to supplement and provide context to the use of the simulation scenarios.

The simulation scenarios are used as a tool to facilitate the understanding of the concepts. The first scenarios will be provided in a slower tempo with the use of the PLAY/PAUSE feature to elaborate on the training points. Once the first simulation is provided in this format the remaining scenarios will be provided to each pair of officers. The Socratic methodology should be used for event debriefing.

“What did you know?”

“What did you see or hear?”

“What did you do and the reason behind it?”

“What would you do differently in the future?”

All officers will be allowed to watch the other pairs participate in the exercise. This is done to maximize the benefit of modeling for adult learners. Students shall be given the opportunity to ask questions at the end of each section.

SAMPLE STUDENT GROUP SET UP

Non-test scenarios should be used with the concept of social learning theory and observation. The non-participating students should be watching their peers and be ready to answer what other options may have been available after the initial Socratic debrief.

- A. Officer Yackley and Officer Emerson
- B. Officer Danninger and Officer Ashley
- C. Officer Bacon and Officer Adams
- D. Officer Stephens and Officer Marks

First Scenario - Executed in “PLAY/PAUSE” methodology for all students - key concepts are applied and discussed

Second Scenario - Group A participates while Groups B, C, and D watch

Third Scenario - Group B participates while Groups A, C, and D watch

Fourth Scenario - Group C participates while Groups A, B, and D watch

Fifth Scenario - Group D participates while Groups A, B, and C watch

Sixth Scenario - (Practical skills test) Class is sequestered with students brought one at a time (not pairs) to evaluate performance.

SCENARIO BANK TO BE USED

- A. Misery Mountain
- B. On the Case
- C. Office Anxiety

- I. INSTRUCTOR INTRODUCTION**

- II. INTRODUCTION TO MENTAL ILLNESS FOR CONTACT PROFESSIONALS**
 - A. WHAT IS MENTAL HEALTH?**

 - B. MENTAL ILLNESS**

 - C. WHO CAN DIAGNOSE?**

 - D. THE ROLE OF CONTACT PROFESSIONALS**

- III. TRAUMA, THE BRAIN & TRAUMA DISORDERS**
 - A. OVERVIEW**

 - B. THE LIMBIC SYSTEM, HIPPOCAMPUS & TRAUMA**

 - C. NEUROTRANSMITTERS & THE ROLE OF CORTISOL**

 - D. CONDITIONING**

 - E. CHILDHOOD TRAUMA & DEVELOPMENT INTO ADULTHOOD**



IV. POST-TRAUMATIC STRESS

A. SYMPTOMS

V. TIPS FOR DEALING WITH AN INDIVIDUAL WITH PTSD OR TRAUMA

A. VERBAL DE-ESCALATION LOOP INTERVENTIONS

B. ACTIVE LISTENING SKILLS

C. EXPRESS EMPATHY VS. SYMPATHY

VI. SIGNS OF DISTRESS

VII. CONCLUSION



TABLE OF CONTENTS

I.	INSTRUCTOR INTRODUCTION	7
II.	INTRODUCTION TO MENTAL ILLNESS FOR CONTACT PROFESSIONALS	7
	A. WHAT IS MENTAL HEALTH?	7
	B. MENTAL ILLNESS	7
	C. WHO CAN DIAGNOSE?	7
	D. THE ROLE OF CONTACT PROFESSIONALS	8
III.	TRAUMA, THE BRAIN & TRAUMA DISORDERS	8
	A. OVERVIEW	8
	B. THE LIMBIC SYSTEM, HIPPOCAMPUS & TRAUMA	8
	C. NEUROTRANSMITTERS & THE ROLE OF CORTISOL	9
	D. CONDITIONING	9
	E. CHILDHOOD TRAUMA & DEVELOPMENT INTO ADULTHOOD	9
IV.	POST-TRAUMATIC STRESS	10
	A. CRITERIA & SYMPTOMS	10
V.	TIPS FOR DEALING WITH AN INDIVIDUAL WITH PTSD OR TRAUMA	11
	A. VERBAL DE-ESCALATION LOOP INTERVENTIONS	11
	B. ACTIVE LISTENING SKILLS	11
	C. EXPRESS EMPATHY VS. SYMPATHY	12
VI.	SIGNS OF DISTRESS	12
VII.	CONCLUSION	13
VIII.	QUESTIONS?	13
IX.	REFERENCES	14
X.	CONTACT VIRTRA	15

I. INSTRUCTOR INTRODUCTION

Instructor will introduce themselves to the class. This introduction should be no more than 2-3 minutes long and establish why they are qualified to teach the course and how long they have been with the organization. This not a moment to brag but to build confidence and trust from the attending students.

II. INTRODUCTION TO MENTAL ILLNESS FOR CONTACT PROFESSIONALS

A. WHAT IS MENTAL HEALTH?

(Slide 6) Mental health includes our emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make choices. Mental health is important at every stage of life, from childhood and adolescence through adulthood.

B. MENTAL ILLNESS

(Slide 7) Mental illnesses are health conditions involving changes in emotion, thinking or behavior (or a combination of these). Mental illnesses are associated with distress and/or problems functioning in social, work or family activities. Many factors contribute to mental illness: biological factors, stress and trauma, life experiences, and long-lasting health conditions. Mental illness becomes problematic when daily activities, relationships, and work is affected. Mental illness can be very impactful in a person's life.

C. WHO CAN DIAGNOSE?

(Slide 8, 9) Psychiatrists, psychologists, counselors, clinicians, therapists, clinical social workers, psychiatric nurse practitioners, physicians, and nurse practitioners. This can vary by state, licensing requirements, and master's level program requirements. Only psychiatrists, physicians, physician's assistants, psychiatric nurse practitioners, and nurse practitioners (state dependent) can prescribe medication.

A mental health professional will conduct a full mental health assessment before diagnosing a person with a mental illness. The assessment may consist of:

1. Physical Exam
2. Lab Tests
3. Mental Health History
4. Personal History
5. Mental Evaluation
6. Cognitive Evaluation

D. THE ROLE OF CONTACT PROFESSIONALS

1. Contact professionals are not trained to diagnose nor should they. Familiarization and recognition of behaviors are critical in deciding an intervention response. The intervention response should be as safe and effective as possible for all parties involved.
2. Behavioral health response and/or crisis intervention should be a coordinated effort that is as safe and effective as possible for everyone involved.
3. The focus should fall in recognizing indicators and signs associated with behaviors.
4. Safety is paramount and should not be compromised situationally for a behavioral health response or crisis intervention. Crisis intervention, behavioral health intervention, and de-escalation tactics are integrated responses based on the totality of circumstances.
5. Refer to department policies and legal department mandates for behavioral health or crisis response.

III. PTSD VIDEO

Play the “Trauma, The Brain and Trauma Disorders” 12 minute video from the simulator. Click on the V-VICTA icon > Content > Manuals > V-VICTA > Mental Illness > Videos

IV. TRAUMA, THE BRAIN & TRAUMA DISORDERS

(Slide 11-21) Not everyone who experiences a traumatic event will develop a trauma disorder or PTSD. Each person perceives events differently and while one person may perceive an event as traumatic, another person may not. There can be mixed reactions into a traumatic event. Most emotional responses after a trauma are considered normal and many people recover from a critical incident while remaining productive and healthy.

Trauma exposure affects the brain and how a person may react to certain stimuli for various reasons. Trauma can change brain structure as well as physiological, emotional, psychological and behavioral responses.

A. OVERVIEW

1. Brain areas implicated in a stress response are the hippocampus, amygdala and medial prefrontal cortex.¹
2. The hippocampus and the amygdala are important for processing emotional memory.
3. During trauma response, the primitive brain takes over and sends the body into survival mode as stress hormones increase, causing “fight, flight, freeze or faint.”
4. For many people, after the immediate threat is gone, the brain and body work together in a restorative process, shifting back to normal.
5. For some people, the restorative process does not occur and the brain remains in survival mode.
6. Difficulties arise in overcoming the fear response to thoughts and memories that are traumatic, and traumatic stress causes alterations in memory function.²

B. THE LIMBIC SYSTEM, HIPPOCAMPUS & TRAUMA

1. The limbic system governs emotions of fear, survival and pleasure. It is also tied to the endocrine system and regulates hormone output.
2. The hippocampus is very sensitive to the effects of stress.¹ It is a part of the limbic system and plays a role in the consolidation of short-term memory to long-term memory. It is also involved in verbal declarative memory.
3. Trauma has been shown to reduce the volume of the hippocampus.^{3 4}

C. NEUROTRANSMITTERS & THE ROLE OF CORTISOL

1. Dopamine is a neurotransmitter associated with the pleasure centers of the brain. It is responsible for feelings related to love, joy, pleasure, reward and motivation. Dopamine is associated with feeling euphoric and “high on life.” Low dopamine in the brain causes reduction in energy, depression, anhedonia and a reduction in emotional arousal.
2. Serotonin is also a neurotransmitter and helps to regulate mood, irritability, impulse, obsession and memory. Serotonin moderates memory, sleep, behavior and certain physiological functions of the body. Low serotonin can cause paranoia, sleeplessness, memory issues and behavioral issues.

3. Low levels of dopamine and serotonin can severely impact personality traits and emotional behavior responses. Emotional responses become muted, especially remorse for one's actions.

Cortisol is a primary stress hormone released by the adrenal glands and aids in the stress response.¹

1. Studies have shown that cortisol in the brain breaks down brain cells, including hippocampus cells. Cortisol affects other parts of the body negatively as well: weight gain, loss of bone density, immune response issues, early cataracts, type 2 muscle fiber atrophy and type 2 diabetes.
2. Cortisol reduces levels of dopamine and serotonin in the brain leading to depression and associated symptoms and increased stress.

Neurobiology of Trauma

1. Decreases in serotonin disturb the dynamic between the amygdala and hippocampus.⁵
2. Increased activity in the amygdala increases hypervigilance and impairs threat discrimination.
3. Increased cortisol levels drive abnormal stress levels and fear processing abilities

D. CONDITIONING

1. Classical conditioning: At the time of the traumatic event, traumatic circumstances represent cues and stimuli present in the environment that become conditioned in the future to produce the same type of response.
2. Operant conditioning: In the immediate aftermath of a traumatic event, the primary behavior exhibited by trauma survivors is avoidance of trauma-related cues because the cue triggers distressing memories, or because the cue now seems dangerous.
 - i. Avoidance is a typical reaction to trauma as an initial coping skill
 - ii. Avoidance interferes with developing new ways of dealing with distressing stimuli.⁶
3. Single Trial Learning: Severe stimulus leads to strong response. Associations occur very quickly in traumatic events and do not require repeated pairing.

E. CHILDHOOD TRAUMA & DEVELOPMENT INTO ADULTHOOD

1. There are noticeable changes in brain development between children who have experienced trauma and those who have not. There are both physical changes in brain structure and behavior changes due to developmental factors.
2. In children and youth who exhibit symptoms consistent with trauma disorders, there is a surface and volume difference in the insula of the brain. The insula lies within the cerebral cortex and is responsible for interoceptive perception, emotional regulation and self-awareness.⁷
3. Trauma can manifest itself in the body and cause physical illness and sickness as well as behavioral symptoms. A key factor in trauma is that the autonomic nervous system (ANS) becomes dysregulated. An individual's response to a real or perceived threat (including older or unprocessed trauma) can include:
 - i. Increased respiration and breathing constriction, elevated heart rate and muscle tension. The body has basically gone on "alert."
 - ii. At this point (almost simultaneously) the "flight, fight or freeze" response occurs. The easiest way to describe it is there is one foot on the brake (brain) and one foot on the accelerator (body).
 - iii. If that energy isn't released or discharged, it builds up in the nervous system and over time, trauma response can occur. As human, we are conditioned NOT to discharge that energy.

V. POST-TRAUMATIC STRESS

(Slide 23) Post-Traumatic Stress Disorder (PTSD) is a mental health disorder that can occur from exposure to a traumatic event. Exposure comes from experiencing or witnessing the event. Acute Stress Disorder and Adjustment Disorder are two other disorders that may be present in relation to a traumatic event. Individuals who experience trauma lose their sense of safety and stability.

Trauma exposure affects the brain and how a person may react to stimuli for various reasons. Trauma can change brain structure as well as physiological, emotional, psychological and behavioral responses.

A. CRITERIA & SYMPTOMS

(Slide 24-27) PTSD has a specific set of criteria that clinicians look for. The emotions and reactivity cause distress or impairment in important areas of functioning (relationships, work, school, etc.) for longer than a month. PTSD is a multi-faceted diagnosis and it is important to understand the complexity of someone receiving this diagnosis. What is important otherwise is the recognition and understanding of what an individual may experience.

1. The person was exposed to: Death, threatened death, actual or threatened serious injury, or actual or threatened sexual violence in the following way(s):
 - i. Direct exposure
 - ii. Witnessing the trauma
 - iii. Learning that a relative or close friend was exposed to a trauma
 - iv. Indirect exposure to aversive details of the trauma, usually in the course of professional duties (e.g., first responders, law enforcement, medics, etc.).

Symptoms of PTSD:

1. Avoidance: Individuals tend to avoid trauma-related stimuli (people, places, conversations, objects, etc.).
 - i. Avoidance is a typical reaction to trauma as an initial coping skill and can be useful in keeping an individual safe.
 - ii. Avoidance as a predominant strategy can be a significant roadblock to natural recovery.
 - iii. Avoidance becomes self-perpetuating due to the temporary relief of negative symptoms in the beginning of the traumatic event.
 - iv. Avoidance interferes with learning new things and developing new ways of dealing with distressing stimuli
2. Intrusive thoughts or feelings: Nightmares, flashbacks, distressing memories, emotional distress and/or physical reactivity to traumatic reminders.
3. Negative alterations in cognitions and mood: Inability to remember traumatic events (usually due to dissociative amnesia), other memory related issues, exaggerated negative beliefs or expectations, feelings of shame, guilt, self-blame, fear, anger or horror, emotional numbness or detachment, inability to experience positive emotions.
4. Alterations in arousal or reactivity: Irritability and anger (with little or no provocation), aggression, reckless and self-destructive behavior, hypervigilance, difficulty concentrating, sleep disturbances.
5. 80% of people with PTSD have one or more additional mental health diagnoses as well as an increase in physical health problems.¹⁰
 - i. Traumatic brain injury (especially in the veteran population)
 - ii. Neurocognitive disorders
 - iii. Substance use
 - iv. Chronic pain
 - v. Moral injury¹¹

- a. Moral injury is not a mental health diagnosis, but a psychological construct.
- b. Moral injuries occur when extreme experiences “transgress deeply held moral beliefs and expectations.”
- c. Moral injury can occur as a result of combat or killing in combat, although not all war experience results in adverse effects for military personnel.

VI. TIPS FOR DEALING WITH AN INDIVIDUAL WITH PTSD OR TRAUMA

(Slide 29-31) Many times, law enforcement or other personnel deal with an individual with PTSD during a crisis or other upsetting situation. A police response may trigger PTSD symptoms in some individuals. The goal of an individual in crisis many times is to increase personal safety. The ability to recognize PTSD can increase the effectiveness of response.

A. VERBAL DE-ESCALATION LOOP INTERVENTIONS

- 1. Speak in a low, calm voice
- 2. Listen with empathy
- 3. Respond to some aspect of communication with understanding
- 4. Be clear but non-confrontational
- 5. Use active listening skills

B. ACTIVE LISTENING SKILLS

- 1. Emotional labeling - Labeling the emotion or identifying the feeling
- 2. Mirroring - Repeating the last few of the person's words to capture the gist of his/her feelings
- 3. Paraphrasing - Putting meaning of others' statements into your own words
- 4. Effective pauses - Silence
- 5. Minimal encouragers - Best used when the person is talking through an extended thought or for an extended period of time.
- 6. “I” messages - Used to confront the subject about a behavior that is counterproductive without being accusatory. “When you...I feel...Because...”
- 7. Open-ended questions and statements - Questions/statements that require more than a “yes” or “no” answer

C. EXPRESS EMPATHY VS. SYMPATHY

(Slide 32) Empathy is, at its simplest, awareness of the feelings and emotions of other people. It is a key element of emotional intelligence and the link between self and others, because it is how we as individuals understand what others are experiencing as if we were feeling it ourselves. Active listening skills are what underpin an empathic response.

- 1. Open sentences with the following:
 - i. It sounds like
 - ii. You must be feeling
 - iii. That sounds very
 - iv. That seems really
- 2. Close with an emotion

- i. It sounds like you're exhausted
 - ii. You must be feeling frustrated
 - iii. That sounds really overwhelming
 - iv. That seems really difficult
3. Reinforce coping skills that have worked in the past.
Ask the individual what helped them get through similar situations in the past. This can be a reminder that the skill set to deal with heightened emotions and challenging situations already exists.

VII. SIGNS OF DISTRESS

(Slide 34) A person in crisis may exhibit many signs of distress and may require medical attention at some point during contact. Staging medical during a crisis situation is appropriate so there is not a delay in treatment for the person in crisis.

- A. Shallow, rapid breathing
- B. Grunting
- C. Bluish tinge from a lack of oxygen
- D. Nasal flaring
- E. Confusion/disorientation
- F. Seizures
- G. Vomiting
- H. Hyperventilating
- I. Unconsciousness
- J. Headache

IIX. CONCLUSION

As it is of utmost importance, below is a reiteration of the role of the contact professional.

- A. Contact professionals are not trained to diagnose nor should they. Familiarization and recognition of behaviors are critical in deciding an intervention response. The intervention response should be as safe and effective as possible for all parties involved.
- B. Behavioral health response and/or crisis intervention should be a coordinated effort that is as safe and effective as possible for everyone involved.
- C. The focus should fall in recognizing indicators and signs associated with behaviors.
- D. Safety is paramount and should not be compromised situationally for a behavioral health response or crisis intervention. Crisis intervention, behavioral health intervention, and de-escalation tactics are integrated responses based on the totality of circumstances.
- E. Refer to department policies and legal department mandates for behavioral health or crisis response.

IX. QUESTIONS?

X. REFERENCES

1. Bremner J. D. (2006). Traumatic stress: effects on the brain. *Dialogues in clinical neuroscience*, 8(4), 445–461.
2. Elzinga BM., Bremner JD. Are the neural substrates of memory the final common pathway in PTSD? *J Affect Disord.* 2002; 70: 1–17
3. Bremner JD., Randall PR., Vermetten E., et al. (1997). MRI-based measurement of hippocampal volume in posttraumatic stress disorder related to childhood physical and sexual abuse: a preliminary report. *Biol Psychiatry.* 1997;41: 23–32
4. Gilbertson MW., Shenton ME., Ciszewski A., et al. (2002). Smaller hippocampal volume predicts pathological vulnerability to psychological trauma. *Nat Neurosci.*;5:1242–1247
5. Sherin, J. E., & Nemeroff, C. B. (2011). Post-traumatic stress disorder: the neurobiological impact of psychological trauma. *Dialogues in clinical neuroscience*, 13(3), 263-78.\
6. Foa EB, Hembree EA, Rothbaum BO. Prolonged exposure therapy for PTSD: Emotional processing of traumatic experiences therapist guide (Treatments that work) Oxford University Press; USA: 2007.
7. Music, G. (2014). Top down and bottom up: trauma, executive functioning, emotional regulation, the brain and child psychotherapy. *Journal Of Child Psychotherapy*, 40(1), 3-19. doi:10.1080/0075417X.2014.88312
8. Quillman, T. (2013). Treating trauma through three interconnected lenses: Body, personality, and intersubjective field. *Clinical Social Work Journal*, 41(4), 356-365.
9. American Psychiatric Association. Diagnostic and statistical manual of mental disorders fifth edition (DSM-5). American Psychiatric Association; 2013
10. U.S. Department of Veteran Affairs. PTSD: Co-occurring Disorders. Retrieved from <https://www.ptsd.va.gov/professional/treat/cooccurring/index.asp>
11. Litz, B.T., Stein, N., Delaney, E., Lebowitz, L., Nash, W.P., Silva, C., & Maguen, S. (2009). Moral injury and moral repair in war Veterans: A preliminary model and intervention strategy. *Clinical Psychology Review*, 29, 695-706.
12. Weaver, C. M., Joseph, D., Dongon, S. N., Fairweather, A., & Ruzek, J. I. (2013). Enhancing services response to crisis incidents involving Veterans: A role for law enforcement and mental health collaboration. *Psychological Services*, 10, 66-72. doi:10.1037/a0029651
13. National Institute for Mental Health. (n.d.) Suicide Prevention. Retrieved from <https://www.nimh.nih.gov/health/topics/suicide-prevention/index.shtml>

XI. CONTACT VIRTRA

If you have any questions/issues with any part of this manual, please see contact below:

VirTra Training Department

VirTra

295 E. Corporate Pl
Chandler, AZ 85225 USA

Office: 480.968.1488
Email: training@virtra.com

VirTra

295 E. Corporate Pl
Chandler, AZ 85225 USA
