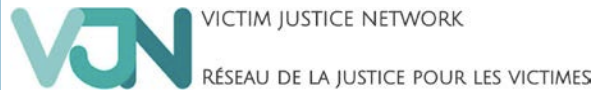


## Summary

**In a given year, one in seven victims of violent crime experiences trauma-related symptoms congruent with post-traumatic stress disorders following the victimization. Early detection and assessment of traumatic stress exposure in victims of crime are essential in order to provide the appropriate referral, and consequently reducing risks that victims develop a trauma-related disorder.**

## Research in Brief



# Assessing and Treating Traumatic Stress in Crime Victims

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In order to adequately serve and support victims of crime, it is important to understand the psychological changes that result from victimization. This Research Brief reviews the literature pertaining to traumatic stress experienced in the context of criminal victimization. It is designed as a reference tool for those who deliver services and support these victims. This document is divided into three sections. (1) The first section presents a number of the key concepts. (2) The second section reviews knowledge on crisis intervention, and offers guidelines to prepare the assessment interview. (3) The third section offers tools for the assessment of traumatic stress, as well as guidelines to orient crime victims to the appropriate treatment modality.



# **PART I: Traumatic Stressor, Crime Victims, and Acute Stress Responses**

## **1.1 Stressors and the Stress Response**

Life inevitably includes the experience of stressors, which are events or circumstances that threaten an individual's physical or mental wellbeing (Ford, Grasso, Elhai, & Courtois, 2015). When exposed to a stressor, individuals automatically evaluate two characteristics linked to the stressor: (a) its degree of *threat*, and (b) the probability that one can successfully cope with it, or their *self-efficacy* (Lazarus & Folkman, 1984). This evaluation, in turn, determines the person's experience of *stress*. Although unpleasant, stress reactions are adaptive because they prompt the use of coping strategies that will enable the person to eventually adapt to the stressor (Fergus & Zimmerman, 2005; Grych, Hamby, & Banyard, 2015). *Internal* coping mechanisms include certain personality dispositions, as well as emotional, cognitive, and behavioral abilities. *External* coping mechanisms include supportive resources in the person's environment. It is important to note that the amount and efficiency of coping mechanisms needed for adaptation depends on the degree of stress reactions (Calhoun & Atkeson, 1991). For instance, stressors of minimal threat will provoke minimal stress reactions and thus necessitate minimal coping strategies.

The individual's capacity to cope will determine in part the amount of stress *experienced* along with the severity of the stressor (Ford et al. 2015). For instance, everyday stressors posing minimal threat provoke only slight stress reactions that are generally easy to cope with, and thus stress levels remain low. Yet, certain types of stressors pose significant threat and thus provoke debilitating stress reactions that are significantly more difficult to cope with (Ford et al., 2015). *Traumatic stressors* are an example of the latter.

## **1.2 Traumatic Stressors, Traumatic Stress Reactions, and Crime Victims**

### *Defining traumatic stressors and traumatic stress reactions*

According to the DSM-5 (American Psychiatric Association [APA, 2013], p. 271), a *traumatic* stressor is an event characterized by the exposure to actual or threatened death, serious injury, or sexual violence. The event can be experienced in one (or more) of the following ways: (1) Directly experiencing the event; (2) Witnessing, in person, the event as

it occurred to others; (3) Learning that the event occurred to a close other. (4) Experiencing repeated or extreme exposure to aversive details of a traumatic event.

### *At-risk population for psychological trauma: Crime victims*

Traumatic stress and crime often co-occur. A *crime* is defined as an activity that violates the criminal code and that is punishable by sanction. In 2015, national police services in Canada reported 1.9 million criminal code incidents, excluding traffic incidents (Allen, 2015). Most can be classified as violent crimes, involving the use of force or presence or threat of injury (sexual assault, physical assault or robbery), and as non-violent crimes, often referred to as household victimization, involving mostly property crimes such as breaking and entering, theft of motor vehicle or parts, theft of household property or vandalism (Perreault, 2015). In 2015, police reported 381,000 violent crimes and 1.5 million non-violent incidents (Allen, 2015). However, it is important to keep in mind that these numbers are based on police reports. According to Canada's General Social Survey of 2014, less than one-third (31%) of crimes were reported to the authorities in 2014, including 50% of break-ins and 5% of sexual assaults (Perreault, 2015).

A *victim of crime* is defined as an individual who has experienced physical or emotional harm, or who has suffered economic loss, as a result of a criminal act (Allen, 2015). One quarter of violent crimes take place at the victim's workplace, and half of the victims (52%) know their attacker (Allen, 2015; Perreault, 2015). Moreover, one in seven victims of violent crime experienced symptoms congruent with post-traumatic stress disorder following their victimization (Allen, 2015; Perreault, 2015).

## **1.3 Coping Strategies Typically Used by Crime Victims**

Coping strategies can be classified as adaptive or maladaptive, and the use of one type of strategy over the other can play a role in resilience and post-traumatic recovery (Gloria & Steinhardt, 2016; Kirby, Shakespeare-Finch & Palk, 2011; Sharma, Shoshanna, Brennan, & Betancourt, 2017). *Positive, or adaptive coping strategies* are focused on changing one's experience of the traumatic stressor by concentrating on self-growth or by focusing on possible solutions to diminish stress. In contrast, *negative, or maladaptive coping strategies* diverge attention away from self-growth and from problem-solving efforts. Table 1 lists adaptive and maladaptive coping strategies.

## 1.4 Determining Factors for Coping Efficacy and Adaptation

There is considerable variation in the ability of victims to cope with traumatic stress. It is important to remember that most victims display *resilience* in the face of adversity (Feder, Nestler, & Charney, 2009; Bonanno, 2004), such that they are able to successfully adapt to the traumatic stressor (Charney, 2004; Breslau, 2002; Masten, 2011). Yet, some victims of violent crime are unable to cope efficiently with traumatic stressors, and a psychological crisis may ensue (Breslau, 2009; Martin et al., 2013). Exposure to the same traumatic stressor can impact two individuals very differently, and thus their individual determining factors must be considered. The impact of traumatic stressors results from the dynamic interaction of personal and situational factors that were present before (pre-), during (peri-) and after (posttraumatic) the event (Rutter, 2012; Sayed, Iacoviella, & Charney, 2015; Lauth-Lebens & Lauth, 2016; Carlson et al., 2016). These three groups of factors are further described below and summarized in Table 2.

### *Pretraumatic Factors*

Certain skills, or personal strengths, of the individual can increase the probability that they will efficiently cope and adapt to a traumatic stressor (Peterson, Park, Pole, D'Andrea, & Seligman, 2008). Firstly, self-regulatory skills, one's ability to monitor and modulate their emotional experiences, influence how efficiently the individual can manage both initial and long-term stress reactions (Cole, Martin, & Dennis, 2004). They also influence the individual's ability to control emotional experience through emotion regulation, and are associated with increased self-efficacy (Layous, Chancellor, & Lyubomirsky, 2014; Grych et al., 2015). Secondly, cognitive flexibility skills influence the meaning that victims will attribute to the event as they attempt to understand its significance (Lazarus & Folkman, 1984; Park, 2010). Lastly, interpersonal skills ease adaptation by promoting better quality social support networks (Thoits, 2011). The more an individual possesses these characteristics, and the more varied these skills are, the higher the probability that the individual will display resilience in the face of trauma (Schnell, 2011; Grych et al., 2015).

Table 1.

| <b>Coping Strategies Typically Used by Victims of Crimes</b>   |
|--|
| <b>Adaptive Coping Strategies</b>  |
| <p><b>Problem-solving or approach coping:</b> strategies and efforts in the form of direct action, decision-making, planning. These are directed at solving a problem and mitigating sources of distress<sup>2-9-14-18</sup>. Among others, this coping strategy includes:</p> <ul style="list-style-type: none"> <li>• <b>Use of social support:</b> Seeking help from natural support sources (members of their social network), spiritual leaders and professional support groups (justice system, social services, and mental health providers)<sup>7-9</sup>.</li> <li>• <b>Self-Help, or information seeking:</b> Collecting information concerning the justice system, community resources, common experiences amongst victims of violent crime, and so on<sup>1-10-16-18</sup>.</li> <li>• <b>Activities geared towards empowerment:</b> This includes taking self-defense classes to reduce the possibility of future victimization; activism, such as sharing one's experience with others with the aim of advocating for the protection of future victims<sup>10-11</sup>.</li> </ul> <p><b>Emotion-focused coping:</b> This includes <i>positive thinking, relaxation, expression of emotion, and distraction</i>, all of which are aimed at ameliorating the victim's emotional experience<sup>4-8</sup>.</p> <p><b>Cognitive reframing of victimization, or accommodation:</b> Altering one's view of the trauma and its significance using: (1) <i>Self-comparison</i>, whereby the victim compares their initial status of victim to their later status of survivor. This places emphasis on the positive aspect of traumatic exposure, namely survival; or (2) <i>Social comparison</i>, also referred to as upward or downward comparison. The victims compare themselves to other victims that are either doing well as a means of inspiration, or who are doing poorly as a means of self-enhancement<sup>4-10-17-18</sup>. This approach also involves self-encouraging and positive thinking<sup>5-16</sup>.</p> |
| <b>Maladaptive Coping Strategies</b>   |
| <p><b>Avoidance of trauma-related cues:</b> Deliberate avoidance of cues reminding the victim of the traumatic stressor, such as people, places, and activities that are associated with the event (e.g., social services and mental health providers)<sup>4-10-11-12-14-15</sup>.</p> <p><b>Misuse of drugs and alcohol:</b> <i>Self-medicating</i> through the use of drugs, medication, and alcohol, which allow the individual to avoid dealing with distressing feelings and thoughts<sup>4-11-13</sup>.</p> <p><b>Denial and self-deception:</b> <i>Denying</i> the occurrence of the traumatic event through active blocking of associated thoughts and feelings; <i>self-deception</i> by minimizing the magnitude of their traumatic stress reactions<sup>11-17</sup>.</p> <p><b>Opposition:</b> is an externalized behavior or a reactance coping, expressed by verbal or physical aggression, projecting anger and blame onto others, noncompliance, negative externalization<sup>16</sup>.</p> <p><b>Self-destructive behaviors:</b> <i>Deliberate self-harm</i>, such as by inflicting physical pain (e.g., cutting) oneself; <i>self-destructive behaviors and risk-exposure</i> such as jay walking, careless driving, sexual promiscuity and eating disorders<sup>3</sup>.</p> <p><b>Behavioral disengagement:</b> is a strategy reflecting the abandonment of any efforts and actions to deal or cope with the event and its consequences. Contrary to the approach coping where actions are taken to reduce distress, this coping can be identified when an individual ceases to engage in any helpful practice (e.g., pharmaceutical, professional support)<sup>2-6-14</sup>. This can also include isolation, the practice of emotional and social withdrawal<sup>16</sup>.</p>  |

<sup>1</sup>Altman & Sherwood, 2003; <sup>2</sup>Carver, 1997; <sup>3</sup>Cyr, McDuff, Wright, Theriault, & Cinq-Mars, 2005; <sup>4</sup>Feder et al., 2016; <sup>5</sup>Gloria & Steinhardt, 2016; <sup>6</sup>Goldberg-Looney, Perrin, Snipes & Calton, 2016; <sup>7</sup>Greenberg & Beach, 2004; <sup>8</sup>Green & Diaz, 2008; <sup>9</sup>Gul & Karanci, 2017; <sup>10</sup>Hagemann, 1992; <sup>11</sup>Hill, 2009; <sup>12</sup>Kirby, Shakespeare-Finch & Palk, 2011; <sup>13</sup>Morrison & Doucet, 2008; <sup>14</sup>Sharma, Shoshanna, Brennan & Betancourt, 2017; <sup>15</sup>Scarpa, Haden, & Hurley, 2006; <sup>16</sup>Skinner, Edge, Altman & Sherwood, 2003; <sup>17</sup>Thompson, 2000; <sup>18</sup>Zuckerman & Gagne, 2003.

Experiencing prior traumatic event is an important risk factor for pathological outcomes in traumatized individuals (Carlson et al., 2016; Pietrzak, Goldstein, Southwick, & Grant, 2011a). The risk conveyed by prior exposure is magnified if events were severe and occurred frequently, particularly if the victim experienced these at a young age (Karam et al., 2014; Carlson et al., 2016; Ozer et al., 2003). As such, the presence of intimate partner violence and childhood maltreatment should be noted (Copeland, Keeler, Angold, & Costello, 2007; Ford & Gomez, 2015).

Gender influences the probability of experiencing and adapting to a traumatic stressor, such that women are less exposed to traumatic situations but at a greater risk for pathological outcomes (Breslau, Peterson, & Schultz, 2008; Sareen, 2014; Olf et al., 2007). Specifically, women are more likely to react more severely to traumatic stressors (Breslau, 2009), their traumatic stress response lasts longer and have a greater negative impact on their quality of life (McLean & Anderson, 2009; Olf et al., 2007). This could be due to women's more frequent victimization through sexual assault, from which the majority of victims, both men and women, frequently develop pathological outcomes (Dunn, Gilman, Willett, Slopen, & Molnar, 2012; Rothbaum, Foa, Riggs, & Murdock, 1992). While women are more likely to use adaptive coping mechanisms, such as seeking out professional help and undergoing treatment, men are more likely to use maladaptive coping, such as abusing substances (Zhou et al., 2013). Moreover, low socioeconomic status (SES) is associated with an increased risk for pathological outcomes after exposure (Hobfoll, 2001) across cultures (Alim et al., 2006). Individuals with low SES tend to have less education and this represents a risk factor for subsequent pathology (Carlson et al., 2016; Hobfoll, 2001; DiGrande, Neria, Brackbill, Pulliam, & Galea, 2011). The presence of mental illness prior to exposure to the traumatic event is another risk factor (Kremen, Koenen, Afari, & Lyons, 2012; Breslau et al., 2014; Carlson et al., 2016). Moreover, a family history of mental disorders places an individual at increased risk following a trauma exposure (Koenen, 2006).

### *Peritraumatic Factors*

There are four event characteristics that can potentially engender psychological trauma, namely their predictability and controllability, the intentionality and the presence of a physical injury (Ford et al., 2015; Vogt, King, & King, 2007). First, traumatic events causing irrevocable physical damage to the victim or to a loved one symbolize an important loss, either with regards to the victim's pre-exposure physical state or to with regards to the permanent loss of a deceased loved one. Second, traumatic events that are unpredictable or unexpected cause shock. This element of surprise generates intense initial stress reactions, disadvantaging the person from the beginning. Third, traumatic events that occur uncontrollably or that are unmanageable are particularly damaging because victims are unable to protect themselves or their loved ones, thus robbing them of any kind of power over the situation or the outcome. Finally, whether one was exposed to a traumatic event accidentally or intentionally is fundamental. Compared to accidental trauma, intentional



Table 2.

| <b>Pre-, Peri-, and Posttrauma Factors modulating Adaptation to Crime Victimization</b> |  |  |
|---|--|--|
| <b>Factor</b>   |  | <b>Outcome</b>   |
| <b>Pretraumatic</b>   | <b>Self-regulation</b>                                   | <ul style="list-style-type: none"> <li>· Determine ability to manage initial and long-term stress reactions</li> <li>· Better emotion regulation allows better control over the experience, maintenance, and generation of specific emotions, thus easing emotional disturbances post-exposure</li> <li>· Elevated self-efficacy belief, whereby the individual's perception of threat diminishes and manageability increases</li> </ul> |
|   | <b>Cognitive Flexibility</b>                             | <ul style="list-style-type: none"> <li>· Influences the meaning attributed to the event</li> <li>· Accepting that the traumatic event occurred decreases its interference with core values and beliefs and increases optimism</li> </ul>   |
|   | <b>Interpersonal Skills</b>                              | <ul style="list-style-type: none"> <li>· Ability to initiate and maintain relationships and to promote their growth leads to better quality social support and better adaptation</li> </ul>  |
|   | <b>Past Traumatic Exposure</b>                           | <ul style="list-style-type: none"> <li>· Individuals who have been exposed to trauma in the past are at-risk for pathological outcomes</li> <li>· More severe and frequent prior exposure magnify the risk</li> <li>· Exposure at a younger age increases this risk</li> </ul>   |
|   | <b>Gender</b>  | <ul style="list-style-type: none"> <li>· Female gender conveys risk for more severe traumatic stress reactions that last longer and are more detrimental</li> </ul>  |
|   | <b>Socioeconomic Status/ Education</b>                   | <ul style="list-style-type: none"> <li>· Low socio-economic status increases the risk of criminal victimization and domestic violence</li> <li>· Lower education is associated with pathological outcomes</li> </ul>   |
|   | <b>Prior psycho-pathology</b>                            | <ul style="list-style-type: none"> <li>· Experiencing anxiety and depressive symptoms prior to exposure increases the risk for pathology</li> <li>· Presence of psychopathology in one's family</li> </ul>   |
| <b>Peritraumatic</b>  | <b>Type, Frequency &amp; Severity of traumatic event</b> | <ul style="list-style-type: none"> <li>· Intentionally-perpetrated traumatic stressors convey greater risk, particularly if the perpetrator is someone close to the victim</li> <li>· The more frequent and severe exposure is, the greater the risk</li> </ul>  |
|   | <b>Event Appraisal</b>                                   | <ul style="list-style-type: none"> <li>· Appraisals of the event as being threatening and unmanageable increase the risk for psychopathology</li> <li>· Appraisals of the event as being threatening yet manageable increase the perception of control and convey a lesser risk for psychopathology</li> </ul>   |
| <b>Posttraumatic</b>  | <b>Social Support</b>                                    | <ul style="list-style-type: none"> <li>· The more social support was received, the lower the risk of pathology</li> </ul>  |
|   | <b>Post-Traumatic stressors</b>                          | <ul style="list-style-type: none"> <li>· The more the victim is faced with additional life stressors after traumatic exposure, the more their coping ability is undermined</li> <li>· This is particularly true when support systems are of low quality</li> </ul>   |

trauma is associated with a significantly greater and more detrimental impact on almost every aspect of the trauma survivor's life, making it markedly difficult to adapt (Santiago et al., 2013). Intentional events convey greater risk, particularly if the perpetrators are close to the victim (Santiago et al., 2013; Vogt et al., 2007; Martin et al., 2013). This is due, in part, because violence committed by someone close to the victim violates their assumptions about the world and weakens their support system, which is critical for recovery (Martin et al., 2013). The more frequently exposed an individual is, and the more severe these exposures are, the more the individual will develop clinically significant impairment (Vogt et al., 2007; Carlson et al., 2016; Karam et al., 2014). One such example is interpersonal violence (Cloitre et al., 2011).

As noted above, victims make an appraisal of the threat and manageability of a traumatic stressor (Lazarus and Folkman, 1984), and this subjective appraisal is more important than the objective characteristics of the trauma (Ozer et al., 2003; Chiu, Deroon-Cassini, and Brasel, 2011; Sareen, 2014). As such, appraisals of high threat and low manageability place an individual at risk (O'Donnell, Elliott, Creamer, and Wolfgang, 2007; Elsesser and Sartory, 2007), and vice versa (Ullman, Filipas, Townsend, and Starzynski, 2007; Ahmed, 2007). Specifically, if the victim's attempts at restoring balance continue to fail, their perception of control and self-efficacy continues to diminish (Seguin, Brunet, and Leblanc, 2006). In turn, feelings of helplessness and hopelessness may be evoked, and victims may stop actively searching for solutions while also becoming unreceptive to those proposed by others (Friedman, 2014). Taken together, exposure to severely injurious, unpredictable, uncontrollable, and intentionally perpetrated traumatic events conveys considerable difficulty in adaptation (Hamby, 2014; Ford et al., 2015; Friedman, 2014). As a result, a state of *crisis* often develops, wherein the individual's coping mechanisms are overwhelmed and traumatic stress symptoms (or reactions) are experienced (Santiago et al., 2013; Martin, Cromer, DePrince, & Freyd, 2013).

### *Posttraumatic Factors*

Social support is the principal posttraumatic factor that influences the development of pathological outcomes (Sayed et al., 2015; Moak & Agrawal, 2010; Guay, Billette, & Marchand, 2006). Lack of or negative social support places victims at risk for developing pathological outcomes, particularly those that deter disclosures or discussions about trauma-related topics (Norris & Kaniasty, 2008; Cordova, Walser, Neff, & Ruzek, 2005). Posttraumatic life stressors are particularly important because they continue to emerge after the traumatic event, and they seriously undermine the victim's ability to cope, particularly if the social support network is of poor quality (Boccellari et al., 2007; Bonanno, Galea, Bucciarelli, & Vlahov, 2007).



## 1.5 Acute Traumatic Stress Reactions and Pathological Outcome

### *Acute Traumatic Stress Reactions*

*Acute stress reactions* are the precursor of PTSD. They are different from regular stress reactions in that they are significantly more severe and are more likely to occur in response to particularly threatening and intensely impactful stressors (Ford et al., 2015). Nevertheless, acute stress reactions signify an automatic, or instinctive, attempt of to protect the mind and the body and essentially, to survive exposure to trauma, both physically and mentally (Ford et al., 2015). Consequently, they are more likely to occur in response to particularly threatening and intensely impactful stressors, and are thus a normal *initial* reaction to stressors like violent crime (Hamby, 2014; Ford et al., 2015; Friedman, 2014). Like normal stress reactions, acute stress reactions are experienced on a physical, emotional, cognitive, and behavioral level and are coupled with the experience of anxiety, as elicited by the traumatic event (WHO, 1992). For a summary of acute traumatic stress reactions, see table 3.

Acute stress reactions aim to protect the mind and body from harm and maximize the probability of survival by activating all processes required to confront immediate threat quickly and forcefully (WHO, 1992; Ford et al., 2015). Many individuals who are exposed to an overwhelmingly threatening traumatic event experience *hyperarousal* and *hypervigilance*. It is therefore normal for victims to remain physiologically aroused for several hours, and even days, after exposure, and this disrupts sleep patterns such that disturbances like insomnia can emerge (Babson and Feldner, 2010; Friedman, 2014). As a result, survivors often experience fatigue, tension, and edginess (Friedman, 2014). In addition, somatization is often experienced, which allows the victim to avoid the trauma by concentrating on bodily symptoms instead (APA, 2013). Traumatic stressors that are recurrent (such as is the case for interpersonal violence and rape), may lead to other means of self-protection, such as *peritraumatic dissociation*. Peritraumatic dissociation, a feeling of being detached from the harm that the individual must endure in order to survive, and thus results in numbness towards, or a lack of reactivity to, the traumatic stressor, is sometimes experienced in the form of derealization, depersonalization, and amnesia (Hetzl-Riggin & Wilber, 2010; Ford et al., 2015; Friedman, 2014). Another form of dissociation occurs when victims relive the traumatic event in the form of *flashbacks* (APA, 2013; Ford et al., 2015; Friedman, 2014). While unwanted memories force the individual to relive the traumatic event and thus seem torturous, they can serve to redirect victims' attention from their stress reactions to the traumatic stressor itself, and thus allow the individual to attribute more of their resources to immediately surviving the stressor (Ford et al., 2015). Some suggest that intrusive flashbacks promote acceptance given that they force confrontation and thus increase the probability that the victim will find a sense for the event (Ford et al., 2015).

Victims often suffer an important disruption in core beliefs that guided assumptions about oneself, others and the world, and the future, and that essentially gave meaning and order to the person's life (Janoff-Bulman, 1992; Beck, Rush, Shaw, & Emery, 1979). Due to their intensely destabilizing nature, traumatic stressors can lead the victim to: perceive themselves as incompetent or irreversibly damaged; to view others, and the world in general, as unsafe and unpredictable; and to perceive the future as being hopeless, such that suffering seems inevitable and permanent, and recovery seems impossible. These beliefs are thought to be due to the generalization of threat (Ehlers & Clark, 2000), such that the threat experienced during a severe, unpredictable, and uncontrollable trauma is generalized, leading the victim to perceive ongoing danger, and in turn, to be suspicious and doubtful of one's self-efficacy, of others' inherent goodness, and of a hopeful future.

During or immediately after trauma exposure, many individuals experience an intense emotional response characterized by disbelief or shock (Ford et al., 2015; Friedman, 2014). Because traumatic stressors are rare, victims are often shocked at their occurrence and thus often feel emotionally disconnected from, or numbed to, the experience. This emotional disconnect is initially beneficial given that it spares the victim from the emotional reality, or meaning, of the event, which they are not yet ready to process (Ford et al., 2015). In contrast, some victims suffer intense emotional experiences after exposure. For example, some victims are resentful, such that they don't understand why *they* were the chosen victims (Ford et al., 2015; Friedman, 2014). Anger sometimes turns into uncontrollable and excessive negative emotions, sadness in particular, although dysregulated emotional experience and expression is also common without prior anger (WHO, 1992; Friedman, 2014). Sadness is particularly likely to be experienced by victims who were exposed to a traumatic event with others but were among one of the only to survive (Friedman, 2014).

Immediately after the event, many victims will attempt to avoid external reminders of the trauma, such as people, places, and/or activities that are associated with this. Avoiding trauma-related cues can initially protect and promote survival by shifting the victim's focus from rumination (i.e., negative internal and external aspects of the trauma) to posttraumatic growth (i.e., concentrating on personal goals that can promote psychological, emotional, or spiritual growth, and in turn, overall wellbeing). However, if the individual begins distancing, withdrawing, and isolating oneself from all social interactions, trauma-related or not, more problematic adaptation can be predicted (WHO, 1992; Friedman, 2014). Specifically, traumatic exposure is often followed by a change in victims' beliefs and expectations of others (O'Donnell et al., 2007). Victims often assume the worst from others. For example, survivors often become distrustful of and irritable towards others, and may feel rejected or abandoned by those around them, especially if the individual's support system is not efficient (Friedman, 2014). As a result, some victims choose to maintain these relationships but become overly controlling of the other person because of this trust issue, while others simply prefer distancing themselves from others. Either way, victims may avoid activities in which their friends or family participate in as a means of protecting

oneself from others' assumed wrongful intentions (Friedman, 2014). Table 3 provides a summary as well as identifiable example of physical, cognitive, emotional and behavioral acute stress reactions.

## 1.6 Unsuccessful Adaptation and Posttraumatic Stress

As noted above, acute traumatic stress reactions in victims of violent crime represent a normal reaction to an abnormal circumstance, as well as an attempt to survive such adversity, given the threatening, unpredictable, uncontrollable, and intentional nature of such stressors (Hamby, 2014; Ford et al., 2015; Friedman, 2014). However, if acute stress reactions are still present 48 to 72 hours after exposure, a clinical diagnosis of acute stress disorder (ASD) is made.

### *Defining Posttraumatic Stress*

If the person meets the criteria for an acute stress disorder (ASD) for more than 30 days, then the ASD diagnosis is switched to PTSD. Post-traumatic stress disorder is characterized by four symptoms clusters: (1) intrusion, (2) avoidance, (3) alterations in arousal and reactivity and (4) negative alterations in cognitions and mood. Symptoms of *intrusion* include thoughts, feelings, and behaviors related to the traumatic stressor, and which are experienced persistently and involuntarily. Symptoms of *avoidance* include attempts to diminish distress caused by intrusion symptoms through cognitive efforts (memories, thoughts, and emotions) and/or behavioral efforts (people, places, and activities). *Negative alterations in cognitions and mood*, either beginning or worsening post-exposure, occur in the form of dissociation, or as negative alterations in feelings and beliefs about oneself, others, and the world in general. These include dissociative amnesia, negative expectations for the future, diminished interest or social detachment, inability to experience positive emotions, consistent experience of negative emotions, and self-blame. *Alterations in arousal and reactivity*, are marked by elevated and easily provoked emotional experience. This is manifested as irritable behavior, angry outbursts, reckless or self-destructive behaviors, hypervigilance, exaggerated startle reaction, and concentration and sleep.

### *Defining ASD and PTSD*

ASD and PTSD differentiate in the severity and duration of these symptoms as indicated in Table 4. Moreover, some people with no prior history of ASD are diagnosed with delayed-onset PTSD. While symptoms of PTSD typically emerge within three months, they can suddenly appear months, even years after the traumatic event (Bryant et al., 2008; Substance Abuse and Mental Health Services Administration [SAMHSA], 2014). This is particularly the case when avoidant coping mechanisms, which were initially successful, begin to fail, or are no longer accessible (SAMHSA, 2014).

Table 3.

| Evaluating and Identifying Acute Traumatic Stress Reactions |   |   |
|---|---|---|
| Modality  | Evaluating Traumatic Stress Reactions   | Identifying Examples  |
| Physical  | <p><b>Hyperarousal:</b> Heightened heart rate, muscle tension, sweating, accelerated breathing, and a possible startle response, similar to the experience of an “adrenaline rush”.</p> <p><b>Hypervigilance:</b> Extreme alertness to additional stress-related cues.</p> <p><b>Somatization:</b> Bodily symptoms or dysfunctions that have no organic cause, but that are instead an indirect manifestation of repressed emotional distress.</p>  | <ul style="list-style-type: none"> <li>● Increased heart rate</li> <li>● Increased reactivity and startle response</li> <li>● Sleep disturbances (e.g., insomnia)</li> <li>● Fatigue, tension, and edginess</li> </ul>  |
| Cognitive   | <p><b>Peritraumatic dissociation:</b> Automatic dissociation during traumatic exposure as a means for protecting oneself; characterized by a feeling of detachment from: oneself (<i>Depersonalization</i>), reality (<i>Derealization</i>) and of traumatic exposure – (<i>Peritraumatic amnesia</i>)</p> <p><b>Trigger:</b> The result of an association between a sensory characteristic of the traumatic event (e.g., sound, smell, visual image, etc.) and an unrelated characteristic that resembles, to whatever degree, the trauma</p> <p><b>Flashbacks:</b> Intrusive memory that occurs during a dissociative state in which the person unwillingly recalls facts about the stressor as well as their subjective experience of it as if they were truly reliving it (i.e., thoughts, feelings, physiological reactions)</p> <p><b>Altered cognitive patterns:</b> important disturbances to core beliefs about oneself, the world and others, and the future.</p> | <ul style="list-style-type: none"> <li>● Perception of the world as unreal</li> <li>● Feeling like an observer of one’s own life, or feeling like a fly on the wall</li> <li>● Feeling as though behavior is on auto-pilot</li> <li>● Inability to recall all or some aspects of the traumatic event</li> </ul> |
| Emotional   | <p><b>Shock and disbelief:</b> Feeling shock at the occurrence of a traumatic event given their rarity</p> <p><b>Emotional numbness:</b> Failure to experience strong emotional reactions in response to traumatic exposure</p> <p><b>Resentment:</b> Disbelief about their exposure to the trauma in the form of anger</p> <p><b>Dysregulated emotional expressions:</b> Excessive and inappropriate experience and expression of emotions, such as anger and sadness</p>  | <ul style="list-style-type: none"> <li>● Blunted affect</li> <li>● Inability / unwillingness to talk about emotions</li> <li>● Disbelief in the form of anger or verbal aggression or sadness</li> <li>● Excessive and inappropriate anger or sadness</li> </ul>  |
| Behavioral  | <p><b>Avoidance of trauma-related cues:</b> Deliberate efforts to avoid people, places, and/or activities actually or perceptually associated with the trauma</p> <p><b>Social withdrawal:</b> Deliberate or unconscious efforts to isolate oneself from friends and family</p>   | <ul style="list-style-type: none"> <li>● Failing to generate or accept invitations to spend time with family and friends</li> <li>● Avoiding places where family and friends might go, or that are associated with the event</li> </ul>   |

Table 4.

| <b>Difference in DSM-5 Diagnostic Criteria</b> |  |   |
|--|--|---|
|  | <b>ASD</b>   | <b>PTSD</b>   |
| <b>Symptom Severity</b>                        | Any 9 symptoms from the <i>intrusion, avoidance, negative mood, arousal, and dissociative clusters</i> . | At least: one <i>intrusion</i> symptom, one <i>avoidance</i> symptom, two <i>negative mood</i> symptoms, and two <i>arousal</i> symptoms. |
| <b>Presence of Dissociative Symptoms</b>       | The presence of dissociation is included as one of the 9 symptoms  | The presence of dissociation is marked as a specifier and represents a more severe presentation   |
| <b>Duration of Symptoms</b>                    | Can be diagnosed anytime between 3 days and 1 month after exposure                                       | Can be diagnosed any time after 1 month following exposure  |

## **PART II: Crisis Assessment and Intervention**

As previously mentioned, victims of violent crime are particularly vulnerable to pathological outcomes given the nature of injurious, unpredictable, uncontrollable, and intentionally-perpetrated trauma (Ford et al., 2015; Vogt et al., 2007). Thus, it is crucial for crime victims to be properly identified in order for crises and pathological outcomes to be prevented (Roberts, 2002). Such identification is possible through crisis intervention.

A crisis intervention consists of a counsellor, behavioral clinician, or therapist listening to an individual’s disclosure and subsequently assessing the kind and severity of distress and impediment experienced (Yeager & Roberts, 2015). As such, victims with unfavorable pretraumatic, peritraumatic and posttraumatic factors can be identified for immediate and delayed risk of traumatic stress symptoms. This assessment allows the crisis intervenor to construct an accurate picture of the situation, and in turn to alleviate or prevent any risk by mobilizing and facilitating access to resources. For instance, victims can be taught facts regarding traumatic stressors, and skills to better manage traumatic stress reactions. While this type of *psychoeducative* intervention may suffice those with minimal to moderate distress and impediment, victims experiencing elevated distress and impediment should be referred to psychological interventions (Yeager & Roberts, 2015). Such resources may also be offered to any person having suffered along with the victim, such as family members and close friends (Roberts, 2002). The guidelines below are based on Roberts’ (2005) classic Seven Stage Crisis Intervention model.

## 2.0 Setting-up for the Clinical Interview

### *Rapport-Building and the Establishment of Safety, Security, and Control*

Victims of violent crime suffer an intense disturbance in their perception of safety, security, predictability, and control, and this disturbance is a crucial factor in the crisis state (Brunet et al., 2001; Ford et al., 2015). Specifically, a crisis emerges when attempts at diminishing the threat conveyed by the stressor fail, and the individual is unable to regain safety, security, or control (Roberts, 2002; Santiago et al., 2013). As a result, a sense of persistent danger is experienced, resulting in negative and hostile appraisals of oneself, others, the world, and the future (Ehlers & Clark, 2000; Beck et al., 1979). As such, victims may find it hard to believe that someone can actually help them, thus reducing their level of engagement in the therapeutic process (Seguin et al., 2006; Shea, 2005). Consequently, the clinician must first build a rapport with the person in order to elicit therapeutic engagement and, in turn, collect as much information as possible in order to conduct the most adequate assessment. Rapport-building should remain a priority throughout the entire process (Yeager & Roberts, 2015). Several factors determine the clinician's ability to build rapport with the victim, and are thus important in the elicitation of therapeutic engagement (Shea, 2005).

Empathy, genuineness, and warmth are three traits that have been identified in effective crisis professionals who successfully build rapport with the victim (Yeager & Roberts, 2015). Because of the professional's active and non-judgmental attitude, survivors will feel more comfortable and are thus more likely to disclose information (Walsh et al., 2003). As such, displays of empathy, genuineness, and warmth can decrease the victim's feeling of solitude and in turn promote their confidence in the clinician's ability to help (Seguin et al., 2006; Shea, 2005). Respecting the victim's emotional privacy, such that the clinician follows the person's pace and is mindful of boundaries (Shea, 2005), promotes a safe environment. Specifically, providing the victim with respect and control, both of which were previously violated by the traumatic stressor, empowers the victim. Consequently, victims become increasingly comfortable with disclosing information as the clinician continues to demonstrate empathy, genuineness, and warmth, and continues to respect boundaries (Shea, 2005). As a result of the clinician's patience, the rapport builds and the victim's trust in the clinician's competency increases as well (Roberts and Yeager, 2009). In turn, projecting professional competence can convey safety, such that the victim feels reassured by the clinician's competencies and feels he or she is in good hands (Shea, 2005).

The therapeutic relationship must be collaborative in nature in order to give the victim control over the therapeutic process and thus provide an empowering sense of self-efficacy and control (Roberts & Yeager, 2009). As such, the intervener must avoid taking over, and instead present flexible options that consider the survivor's unique crisis (Shea, 2005). The intervener acts as a scaffold for the person, providing the victim with tools and resources that increase their coping repertoire, resulting in a greater sense of control and self-efficacy over the outcome of the crisis (Roberts & Yeager, 2009).



### *Cultural consideration*

The experience of traumatic stressors is influenced by culture on numerous levels, thus marking the importance of considering the victim's cultural background throughout the clinical interview (Marques, Robinaugh, LeBlanc, and Hinton, 2011). Specifically, the cultural significance of the traumatic stressor can influence the victim's subjective perception of the event and of their reactions to the event, in turn influencing the type and severity of symptoms experienced (Marques et al., 2011). Consequently, victims from different cultures may perceive and experience stressors in different ways, thus resulting in different descriptions of the same symptom (Hinton, Park, Hsia, Hofmann, & Pollack, 2009). Specifically, somatic symptoms, as well as symptoms of avoidance, numbing, and intrusion have been identified in the DSM-5 as being particularly affected by culture (APA, 2013). Moreover, the use of coping mechanisms differs by culture, such that the available and acceptable resources will vary (Hoshmand, 2007). It is thus crucial that the clinician considers the individual's cultural background, as it will likely influence the individual's perception of the traumatic stressor and its meaning (SAMSHA, 2014).

### *Secondary victimization*

Secondary injury or secondary victimization are terms used to describe additional challenges that may arise when a victim of a crime does not receive the appropriate support. These concepts reflect the notion that a victim can be harmed initially due to a criminal act, and secondly due to an unsympathetic response following the victimization (Wemmers, 2013). The latter can be defined as judgement or negative attitude aimed at the victim through inappropriate reaction or poorly directed support. Additionally, behaviors or practices resulting in further victimization are also considered to be secondary injuries (Williams, 1984; Campbell et al., 2001). A common example of an unhelpful reaction that can cause secondary victimization is victim-blaming (i.e., blaming the victim for the crime) or minimizing the impact of the crime, intentionally or unintentionally (Campbell et al., 2001). Such responses are likely to exacerbate the trauma lived by the victim, aggravate the victim's distress and lengthen recovery time (e.g., PTSD symptomatology; Hill, 2009; Maguire, 1991; Campbell et al., 2001; Wemmers, 2013). Conversely, anxiety and the likelihood of secondary victimization can be greatly reduced through positive interactions and perception where the victim perceives they have been treated fairly by the authorities in the aftermath of a crime (Wemmers, 2013). Shedding light upon this issue is crucial as secondary victimization is a malleable factor in trauma recovery that can be avoided by treating victims with dignity, respect and referring them to the appropriate services (Hill, 2009; Wemmers, 2013).

### *Indirect Victims of Crime*

Oftentimes, physical, psychological, and emotional perturbations, amongst others, are not only felt by the victims themselves but also by those close to the victim. Specifically, friends, family, coworkers, peers, and professionals interacting and involved with the

victim and which suffer an indirect consequence of the traumatic event can be referred to as indirect victims (SAMHSA, 2014). A sturdy support system provided by friends, family, professionals and communities surrounding the primary victim is a significant factor in trauma recovery, highlighting the importance of addressing the needs of indirect victims as well as primary victims (Hill, 2009).

### *Listening to the victim's disclosure and assessing the current crisis*

The clinician must perform *active listening*, such that they must attend, observe, and understand the victim's disclosures, and respond to these disclosures with empathy, genuineness, warmth, and respect (James & Gilliland, 2005; Roberts, 2005). Clinicians who actively listen allow the victim to express all emotions and thoughts, and respond with validation and support (Yeager & Roberts, 2015). As a result, victims feel safe, comfortable, and judgment-free, which increase their willingness to disclose and thus allows clinicians to extract information from the client more easily and completely (Roberts & Yeager, 2009), resulting in more successful interventions (Moyers & Miller, 2013).

Building rapport with the victim eases the main aim of this first part, which is to obtain a maximal amount of information from the victim in order to construct an unbiased evaluation of the current dangerousness and severity of the crisis. Dangerousness is assessed through a lethality evaluation, both towards themselves or others. Specifically, victims who engage in suicidal or non-suicidal self-harm, or who have the intention to harm others, should be identified rapidly (Yeager & Roberts, 2015; Seguin et al., 2006). Moreover, information concerning the severity of the individual's symptomatology must be elicited and evaluated. Specifically, the type and severity of physiological, cognitive, emotional, and behavioral stress reactions are evaluated (Myer, 2001; Seguin et al., 2006).

## **2.1 The Clinical Interview**

### *Understanding the Victim's Unique Crisis*

No two individuals experience or react to a traumatic event in the same way. Subjective appraisals of the trauma are more important than objective ones (Chiu et al., 2011; Sareen, 2014), it is essential for the crisis to be understood from the victim's perspective in order to identify factors that have promoted and maintained the development of the crisis state (Yeager & Roberts, 2015). Thus, the clinician approaches the situation analytically and must learn about the individual in order to identify factors that are promoting and maintaining the crisis state (Roberts, 2005; Yeager & Roberts, 2015). It is important to avoid directly confronting the victim about their inaccurate perceptions; instead, the clinician must continue to validate and support the victim, and to encourage emotional expressiveness, in order to collect as much accurate information as possible (Seguin et al., 2006; Roberts, 2005). The analysis involves a rigorous assessment of the victim's perception of: (1) the traumatic stressor, its characteristics, and its impact; (2) their use of

coping strategies and skills; and (3) all pretraumatic, peritraumatic and posttraumatic factors (Jackson-Cherry & Erford, 2014; Roberts, 2005).

Understanding how the victim appraises the traumatic stressor in terms of its severity and manageability can reveal important information concerning the type and severity of acute stress reactions that are likely, whereby the most negative appraisals are generally associated with the most severe acute stress reactions (Seguin et al., 2006; Lazarus & Folkman, 1984). Clinicians must gain insight into how victims perceive the traumatic event has impacted them, and can do so by inquiring into the person's therapeutic goal, or desired outcome (Seguin et al., 2006). By doing so, the clinician can gather information about the acute stress reactions that are troubling or inhibiting the person's normal functioning (Roberts, 2005).

The clinician must then inquire into the victim's current coping strategies used to diminish the impact (Seguin et al., 2006). Understanding the victim's coping strategies enables the clinician to propose alternate coping strategies and is thus useful for the next part of the intervention (Roberts, 2005). The victim's use of coping mechanisms can inform the clinician about the state of their crisis, such that as the severity of the crisis state diminishes, the use of coping mechanisms diminishes as well (Calhoun & Atkeson, 1991). Notably, the coping strategy per se is not as important as whether or not it enables the individual to cope with the stressor (SAMHSA, 2014). For a summary of positive and negative coping strategies, see table 1.

Finally, the clinician must inquire into pretraumatic, peritraumatic, and posttraumatic factors that could either promote or demote adaptation. In general, a greater amount of risk factors represents a greater amount of risk, although certain factors are more influential than others (Carlson et al., 2016). Specifically, factors surrounding the event are more important than pretrauma characteristics (Ozer and al., 2003; Vogt et al., 2007). These peritraumatic and posttraumatic factors include acute stress symptoms, quality of social support, and post-trauma life stress (Carlson et al., 2016; Vogt et al., 2007). Refer to table 2 for a summary of pretrauma, peritrauma, and posttrauma factors.

### *Identifying, promoting, and exploring adaptive coping mechanisms*

After the clinician has clearly assessed the dangerousness and severity of symptomatology, as well as the unique context in which the crisis is taking place, the therapeutic dyad can progress towards the next stage of the intervention aimed at identifying and exploring influential factors of the crisis state (Yeager & Roberts, 2015). First, the clinician provides psychoeducation about typical traumatic stress reactions that result from such immense traumatic stressors in an effort to normalize them. Specifically, victims should be reassured that their symptoms are normal, and that the level of distress that they are experiencing is frequently experienced by others in the same situation. The clinician must then educate the person on the ways in which prolonged traumatic stress reactions can seriously impact healthy functioning. The clinician also provides information about coping strategies that

can harm or promote adaptation. Subsequently, the clinician and client engage in collaborative brainstorming to identify problematic traumatic reactions and coping strategies (Yeager & Roberts, 2015). The therapeutic pair discuss the survivor's existing coping strategies while making parallels to the aforementioned adaptive coping strategies. As such, the clinician's analysis of the crisis is revealed progressively as to not directly confront or criticize the victim but instead provide knowledge that will lead them to make their own inferences regarding their maladaptive strategies. After problematic and adaptive coping mechanisms have been identified, the clinician must propose *all* resources that can diminish these specific traumatic reactions. As such, the clinician may summarize therapeutic options to diminish emotional and cognitive stress reactions, and problem-solving techniques to diminish behavioral stress reactions such as avoidance (Roberts, 2005). In addition to identifying possible treatment options, the clinician must inform the client about how and where to access external resources. The clinician can provide these resources to the client immediately, such that victims can be taught a variety of stabilizing strategies, such as breathing exercises, grounding, meditation, visualization amongst others. The client is thus in a position of control, whereby he or she can choose the course of action that will be taken. Of note, psychoeducation concerning normal and maladaptive traumatic stress reactions and coping strategies must also be offered to possible indirect victims, as should psychoeducation concerning the availability and accessibility of additional resources.

### *Implementing a Concrete Action Plan*

Firstly, the victim's safety and security must be ensured. For example, victims representing a suicide risk should be hospitalized. Hospitalization can also be an option for victims exhibiting traumatic stress reactions that are so severe that they require medication in order to blunt the stress response. Moreover, victims presenting with somatization complaints should be referred for a medical evaluation (SAMHSA, 2014).

Subsequent action should be aimed towards providing the victim with the adaptive coping resources to decrease risk developing further symptoms. If the victim's assessment reveals low risk for developing trauma-related symptoms, and/or if the victim does not require further assistance after the intervention, the clinician may proceed with a plan of intervention. On the contrary, if the victim requires further assistance, the clinician must initiate the first step in implementing the use of existing or additional resources. For instance, clinicians should mobilize friends and family of victims with poor social support networks in order to diminish feelings of isolation (Yeager & Roberts, 2015). Moreover, victims revealing moderate to high risk for developing trauma-related symptoms require help beyond the scope of the intervention and must be referred, either to medical doctors or to clinical psychologists (Yeager & Roberts, 2015). It is crucial for workers in this field to remain up-to-date with the most recent and empirically supported psychological and pharmacological interventions. For a complete summary, see Part III.

### *Follow-up*

The follow-up characterizes a crucial last stage in the intervention. Specifically, the clinician can communicate with the victim or with the service provider to whom they were referred to evaluate the individual's post-crisis adaptation.

## **PART III: Toolkit**

### **3.0 Assessing Symptom Severity and Client-Treatment Matching**

Assessing the severity of the victim's symptomatology plays a crucial role in the referral process. An efficient assessment will decrease the time lapse between the development of symptoms and the appropriate intervention response, therefore decreasing the likelihood of developing a consequent pathology (Hill, 2009). If an individual's reaction to the trauma is not severe, minimal interventions, such as giving advice and psycho-education, may be a sufficient form of assistance (Hill, 2009). If, on the other hand, the victim feels overwhelmed, have difficulties in adjusting or need a safe space to express themselves, an intervention may be required. Moderate forms of intervention can consist of active listening from a paraprofessional, an extended social support through support groups or even short term professional attention such as crisis intervention (Hill, 2009). If symptoms are so debilitating that they interfere with social functioning, the victim must be encouraged to seek professional help (Hill, 2009). Professional assistance can include a short-term therapy or longer-term psychological treatment, especially when an individual has been exposed to a constellation of traumatic events during the developmental phase.

There are various types of psychological and therapeutic approaches to treat or address symptoms present in trauma-related disorders. *Trauma-focused psychological approaches* address PTSD symptoms by directly confronting thoughts, feelings, or memories of the traumatic event (e.g., cognitive behavior therapy). *Non-trauma-focused psychological approaches* target an individual's experience of PTSD symptoms without a direct confrontation to thoughts and emotions related by the traumatic experience (e.g., interpersonal therapy; Cusack et al., 2016). Trauma-focused approaches are empirically supported and strongly recommended to address trauma-related disorders (Foa, Keane, Friedman, & Cohen, 2008; Cusack et al., 2016). In the circumstances where the victim's state is so disorganized and that the crisis is too extreme, hospitalization should be considered as a means to stabilize the victim (Hill, 2009). Table 5 lists a few of the most recurrent psychological assistance approaches discussed in the literature, most of which are highly suggested to treat PTSD.



Table 5.

| <b>Psychological Assistance Approaches</b>                  |  |  |  |
|---|--|--|--|
| <i>Trauma-Focused Therapeutic Techniques</i>                |  |  |  |
| <b>Psychological Approach</b>                               | <b>Description</b>   | <b>Aim</b>   | <b>Comments</b>  |
| <b>Cognitive Behavioural Therapies (CBT)</b>                | <b>Trauma Focused Cognitive Behavioural Therapies (TF-CBT):</b> A broad category of therapies based on the concepts of learning, conditioning and cognitive theories. Minimum of 8 to 12 weekly 60 to 90 min. sessions <sup>1-5</sup>  | -To help people identify distorted thinking <sup>5</sup><br>-To modify existing beliefs in order to better coping and problematic behaviors <sup>5</sup>   | Suggested as a first-line treatment option for PTSD <sup>5</sup>   |
|   | <b>Cognitive Processing Therapy:</b> Includes psychoeducation and cognitive restructuring while focusing on the implications and meaning of the trauma. Typically 12 sessions lasting 60-90 min. <sup>12</sup>   | -Improving PTSD symptoms, improving depression/ anxiety symptoms, and reducing PTSD disability <sup>12</sup>   | Suggested as a first-line treatment option for PTSD <sup>5-8</sup>   |
|   | <b>Cognitive Restructuring:</b> Based on the premises that the interpretation of the event, more than the event itself, is what determines an individual's emotional response. Typically 8 to 12 sessions of 60-90 minutes <sup>4-5</sup>  | -Increase recognition of dysfunctional trauma-related thoughts/beliefs <sup>4-5</sup><br>-Relearn adaptive thoughts/beliefs <sup>4-5</sup>   | Suggested as a first-line treatment option for PTSD <sup>4-5</sup>   |
| <b>Exposure-Based Therapy (EBT)</b>                         | Based on the emotional processing theory of PTSD and involves confrontation with distressing stimuli related to the trauma. Typically 8 to 12 weekly or biweekly sessions lasting 60 to 90 minutes but should be continued until anxiety is reduced <sup>8</sup> <u>Different techniques include:</u><br><b>Imaginal Exposure:</b> use of mental imagery from memory or introduced in scenes presented to the patient by the therapist <sup>5</sup><br><b>In Vivo Exposure:</b> confronting real life situations that provoke anxiety and are avoided because of their association with the traumatic event <sup>4-8</sup><br><b>Virtual Reality Exposure-Based Therapy (VR-EBT):</b> use of virtual reality technology to create artificial environments for a simulated exposure <sup>5</sup><br><b>Prolonged Exposure:</b> manualized intervention including both imaginal and in vivo exposure components <sup>7</sup> | -Extinguish the conditioned emotional response to traumatic stimuli <sup>5</sup><br>-By learning that nothing “bad” will happen during a traumatic event the patient experiences less anxiety when confronted by stimuli related to the trauma and reduces or eliminates avoidance of feared situations <sup>5</sup> | Suggested as a first-line treatment option for PTSD. Evidence supports the efficacy of exposure therapy for improving PTSD symptoms, achieving loss of PTSD diagnostic, improving depression symptoms for adults with PTSD <sup>3-16</sup> |
| <b>Eye Movement Desensitization and Reprocessing (EMDR)</b> | The patient holds the distressing image in mind while engaging in saccadic eye movements until desensitization has occurred and the individual reports little or no distress response to the traumatic event. Saccadic eye movements are theorized to interfere with working memory and elicit an orienting response, which lowers emotional arousal. Recommended treatment is 8 to 12 weekly 90-minute sessions <sup>4-5</sup>  | -Decrease or extinguish responses of distress to a traumatic event <sup>5</sup>  | Suggested as a first-line treatment option for PTSD and can be used in conjunction with in vivo exposure. Often classified as a subgroup of EBT <sup>10-16</sup>   |



|   |  |  |  |
|---|--|--|--|
| <p><b>Narrative Exposure Therapy (NET)</b></p>          | <p>Short term approach in which the patient constructs a narrative about their whole life from birth to the present, while focusing on the detailed report of the traumatic experiences. Based on the principal of exposure therapy and testimony therapy but adapted to address specific needs of a traumatized clientele <sup>11</sup></p>   | <p>-Highlight an individual's value as a mean to develop adaptive coping strategies <sup>11</sup></p>                            | <p>Evidence supports the efficacy of NET for improving PTSD symptoms <sup>5</sup></p>  |
| <p><b>Brief Eclectic Psychotherapy (BEP)</b></p>        | <p>Manualized treatment for PTSD that combines cognitive-behavioral and psychodynamic approaches to include psychoeducation, imaginal exposure, relaxation exercises, emotional expression through writing tasks amongst others. A strong focus on learning from the trauma. 16 session (45-60 minutes)</p>  | <p>-Every session targets different aspects of PTSD symptoms<br/>-To reduce or cease PTSD symptomatology</p>                     | <p>Some evidence supports the efficacy of BEP for improving PTSD symptoms, reducing depression and anxiety <sup>5</sup></p>  |
| <p><b>Psychodynamic Therapy</b></p>                     | <p>Functions under the principle that PTSD symptomatology result from the outburst of unconscious memories of the traumatic event. Focuses on the translation of unconscious memories to conscious awareness to reveal the psychological meaning of a traumatic event. Approximately 3 to 7 months in duration <sup>5-9</sup></p>  | <p>-Reduce PTSD symptoms through awareness of unconscious memories</p>   | <p>Evidence supports its efficacy in conditions known to be comorbid to PTSD: depression, anxiety, panic, somatoform disorders, substance-related disorders and mostly in personality disorders <sup>5-14</sup></p>  |
| <p><i>Non-Trauma-Focused Therapeutic Techniques</i></p> |  |  |  |
| <p><b>Interpersonal Therapy</b></p>                     | <p>A dynamic approach that focuses on improving interpersonal relationships or adjusting one's expectation of interpersonal relationships in two phases: the acute phase (10 to 20 weekly sessions) and maintenance phase (time un-limited) <sup>15</sup></p>  | <p>-Improve social support to in turn alleviate interpersonal distress and improve interpersonal relationships <sup>15</sup></p> | <p>Interpersonal therapy has been identified as highly effective for treating depressive disorders <sup>6-15</sup></p>   |
| <p><b>Coping Skills Therapies</b></p>                   | <p>Use of various techniques to build sufficient coping abilities for one to adapt to stressful or traumatic situations. Does not target trauma-related memories or cognition directly. Approximately 8 sessions (60-90 minutes) <sup>4-5</sup><br/><u>Different techniques include:</u><br/><b>Stress Inoculation Training (SIT):</b> validated approach to manage stress in several settings. 10-14 sessions <sup>5-13</sup><br/><b>Assertiveness Training:</b> ameliorate self-confidence through modification of self-perception. Assists in learning social skills and ease adaptive coping <sup>2-5</sup><br/><b>Relaxation Training:</b> teach strategies to obtain a state of relaxation and calmness <sup>5</sup></p> | <p>-Using various techniques to decrease anxiety and ameliorate coping skills <sup>5</sup></p>                                   | <p>Although evidence is not sufficient to determine efficacy of relaxation or SIT for adults with PTSD, some suggests SIT as a first-line treatment option for PTSD. Coping Skills Therapies help to diminish potential for negative cognition, psychological and behavioral reactions and thus prepare an individual for further stressor events <sup>5-13-16</sup></p> |

<sup>1</sup> American Psychiatric Association, 2004; <sup>2</sup>Aschen, 1997; <sup>3</sup>Basoglu, Salcioglu, & Livanou, 2007; <sup>4</sup>Committee on Treatment of Posttraumatic Stress Disorder and Institute of Medicine, 2008; <sup>5</sup>Cusack et al., 2016; <sup>6</sup>De Mello et al., 2005; <sup>7</sup>Foa et al., 2005; <sup>8</sup>Foa et al., 2008; <sup>9</sup>Gersons, Carlier, Lamberts, & Van Der Kolk, 2004; <sup>10</sup>National Institute for Health and Clinical Excellence, 2005; <sup>11</sup>Neuner, Schauer, Klaschik, Karunakara, & Elbert, 2004; <sup>12</sup>Resick & Schnicke, 1993; <sup>13</sup>Serino et al., 2014; <sup>14</sup>Shedler, 2010; <sup>15</sup>Stuart, 2006.

## Concluding Remarks

In 2015, national police services in Canada reported 1.9 million criminal code violations (Allen, 2015). The high prevalence of crimes and crime victims raises the relevant concern whether their needs are being managed effectively. Addressing victim's needs involves detecting, assessing, intervening and referring victims of crime in an adequate manner. The importance of rapidly detecting and assessing symptoms of traumatic stress resulting from victimization is a crucial step in intervening effectively and directing the victim to appropriate resources. Given that many victims who suffer from symptoms of traumatic stress are left untreated, it is of utter importance for those who deliver support and services to these victims, to possess the appropriate tools to assess one's risk of developing further pathology and their need for further assistance.

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