The Impact of Trauma on Adult Sexual Assault Victims

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Report Submitted to: Justice Canada

by

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Executive Summary

Sexual assault is a widespread and serious problem in our society. Yet instead of delivering justice the criminal justice system is too often a source of further distress for victims of sexual assault.

It is well known that many victims choose not to report the crimes of sexual violence committed against them. For those who choose to report and go through the trial process, sexual assault complainants have frequently experienced the criminal justice system as a place that retraumatizes and even harms them.

Sexual assault is very often an experience of trauma. Trauma has a neurobiological impact – it affects our brains and our nervous-systems. For this reason, it is imperative that those working within the criminal justice system have a basic appreciation of the effects and impact of trauma in relation to victims of sexual assault. This will help criminal justice professionals process sexual assault cases more effectively and to receive evidence in these cases in a more fair and impartial manner.

There has been an important and significant paradigm shift in our understanding about victim reactions to traumatic events like sexual assault, including the impact of trauma on memory. This understanding has deepened knowledge and led to improved practices, both of which assist with developing more effective criminal justice system responses to sexual assault cases. Insights from the neurobiology of trauma has assisted professionals working in a wide range of fields to better understand the psychological and physiological responses of crimes such as sexual assault, and how these affect victim response. This in turn, has facilitated more trauma-informed service delivery and more appropriate and effective interventions, from first responders like police through to advocates and legal professionals in courtrooms.

The focus of this report is on outlining some of the key findings from the body of knowledge of neuroscience, and applying them to the issue of sexual assault and its impacts on victims. More specifically, we review and highlight some of the significant developments, which have emerged from the field of the neurobiology of trauma as they relate to the unique crime of sexual assault. We apply their relevance to the many challenges surrounding the criminal processing of sexual assault cases.

Victim reactions to sexual assaults are still not well understood in society and "rape myths" are still common. These misunderstandings, unfortunately, continue to persist in the justice system. In fact, they contribute to ongoing deficiencies in criminal justice system processing of sexual assault cases, leading to imperfect justice for victims and survivors. This has been described as the "justice gap" for sexual assault cases. We argue that this justice gap can, in part, be closed by moving towards a more trauma-informed criminal justice system. This will lead to more just outcomes for sexual assault complainants and also allow for the fuller realization of the impartiality and fairness that criminal trials can and should provide for all participants.

PART I – The Traumatic Impact of Sexual Assault on Victims Introduction

All professionals working in the criminal justice system – Crown attorneys, judges, police officers, and defence lawyers – want to see justice done and do their work as effectively as possible without harming anyone. Both their professional duties and ethics require this of them. Yet it is well known and well documented that sexual assault complainants have too often experienced the criminal justice system as a place that retraumatizes and even harms them. (Lonsway & Archambault, 2012; Temkin & Krahé, 2008) How can this problem be remedied?

Law reform and policy changes have brought about some necessary improvements to the way the criminal justice system processes sexual assault cases. However, much work remains to be done. Recently, a significant paradigm shift in knowledge about victims' reactions to traumatic events like sexual assault has led to a deeper understanding of the neurobiological impacts on the brain's defence circuitry and on memory encoding and recall. This has allowed for improved sensitivity to the range and diversity of victim trauma responses. It has already generated some improved police practices and has the potential to assist with developing further effective criminal justice system responses for processing sexual assault cases.

Society at large still does not understand victims' reactions to sexual assaults. Unfortunately, these misunderstandings also continue to persist in the legal system and contribute to serious ongoing deficiencies in how the criminal justice system processes sexual assault cases. These deficiencies have been most starkly felt by Indigenous women in Canada, who experience disproportionately high rates of sexual victimization and who have also experienced the most tragic gaps in police and criminal justice system responses. Other groups of racialized women, disabled women, young women, women who have used alcohol or drugs, are impoverished or homeless, or have other circumstances of marginality, are particularly vulnerable to sexual assault as well as decreased access to justice.

This leads to imperfect justice for victims and survivors, also described as the "justice gap" for sexual assault cases. We argue that this justice gap can, in part, be closed by moving towards a more trauma-informed criminal justice system, that is, one based on a neurobiological understanding of how the brain processes trauma. This will lead to more just outcomes for sexual assault complainants. It will also move us towards the fuller realization of the impartiality and fairness that criminal trials should provide all participants, including the victims of sexual assault.

¹ Research by Statistics Canada reveals that Indigenous women are subject to violent victimization at a rate 2.7 times that of non-Indigenous women, including violent attacks of varying types. For sexual assault specifically, Indigenous women have rates 3 times higher than that of non-Indigenous women.

Human Rights Watch, *Those Who Take Us Away: Abusive Policing and Failures in Protection of Indigenous Women and Girls in Northern British Columbia Canada*, (Human Rights Watch: 2013), online: http://www.hrw.org/sites/default/files/reports/canada0213webwcover_0.pdf; See also, Craig, E. (2016) Person(s) of Interest and Missing Women: Legal Abandonment in the Downtown Eastside 60:1 McGill Law Journal.

² See for example Conroy, S., & Cotter, A. (2017). *Self-Reported Sexual Assault in Canada*, 2014 (Statistics Canada). Ottawa, ON. See also, Benoit, C. et al (2015). *Issue Brief: Sexual Violence Against Women in Canada* (Statistics Canada), Ottawa, ON.

This report outlines highlights from this body of knowledge, and applies them to the issue of sexual assault and its impacts on victims. The report also reviews and highlights some of the key findings about the neurobiology of trauma that are relevant to the unique crime of sexual assault. We apply these findings to the many challenges surrounding the criminal processing of sexual assault cases.^{3, 4}

How Myths and Misunderstandings about Sexual Assault Affect How Victim Testimony is Heard

Sexual assaults are both pervasive and unique crimes. As Justice Peter Cory of the Supreme Court of Canada has noted, a sexual assault is "an assault upon human dignity and constitutes a denial of any concept of equality for women." (*R. v. Osolin*, 1994, para. 165) Sexual assault is overwhelmingly a gendered crime and women's responses to sexual assault are deeply shaped by gender socialization. Sexual assault is also an intensely private crime that is caught up in and reflects social expectations about gender roles and sexuality. For all these reasons, sexual assault is highly challenging to prosecute. (see, for example, Cameron, 2003)

Because the victim-witness in a sexual assault trial is, in the overwhelming majority of cases, the primary or even exclusive source of evidence, her testimony is of crucial importance. Yet it is precisely in how this testimony is heard, received, and understood, including *mis*understood, that many of the difficulties in how the criminal justice system processes sexual assault cases arise. This is because many of the misunderstandings continue to arise from still commonly held rape myths, failures to understand common trauma reactions, and mistaken assumptions about small and apparent inconsistencies in recall about upsetting and traumatic events. These lead to the mistaken belief that victim-witness testimony lacks credibility or reliability.

There are a number of rape myths about women and sexual violence that have been formally rejected by the Supreme Court of Canada and by important law reform⁵. Yet these rape myths still persist. These are the mistaken and pernicious ideas that a woman who is "promiscuous" or of so-called "unchaste" character is untrustworthy and more likely to have consented to the sexual acts in question (which are the subject of the sexual assault charge); these are the "twin myths" the Supreme Court repudiated in enacting s. 276 of the *Criminal Code*, otherwise known as Canada's "rape shield law". Another persistent rape myth is the baseless idea that women who do not promptly disclose or report sexual assaults are lying, or the mistaken idea that women who do not want to engage in sex will physically fight back and/or attempt to escape the situation to "prove" they really did not consent. Many still cling to the erroneous idea that women who use drugs or alcohol are responsible for sexual assaults perpetrated against them, or

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³ We use various terms to refer those who have been sexually assaulted, including using victim and survivor interchangeably. We use "complainant" specifically in the context of a criminal trial. It is also important to note that the terms "rape" and "sexual assault" are both used throughout the report, though the term rape is used mostly to reference rape myths. The term "sexual assault" is most often used as this is the broader and general legal term which captures a wide range of sexual contact without consent.

⁴ As research has documented and the Supreme Court of Canada has recognized, sexual assault is a gendered crime, with most victims female and most perpetrators male. As such, in this report, we typically refer to sexual assault victims as female, given that the vast majority of sexual assault victims are women, though we recognize that sexual assaults can also be perpetrated against men.

⁵ See for example, $R \vee G(A)$, SCC (2000) and $R \vee Ewanchuk$, SCC (1999).

mistakenly believe that consent is continuous in intimate relationships and does not need to be explicitly given, even between partners.

Research literature extensively documents that women who are sexually assaulted are still subject to social pressures to respond in particular ways to "prove" that they are "real" and "credible" victims. (see for example, Busby, 1999; Randall, 2010) While the justice system recognizes that there is no single "ideal victim" of sexual assault, social attitudes are nevertheless slow to change. Women who deviate from expected scripts are still treated by police and the courts with suspicion and skepticism – about whether or not they were really sexually assaulted, or whether or not they were to blame for what happened to them.

Social expectations to conform to the stereotype of what real or "ideal" victims (Randall, 2010) look like mean that women who are sexually assaulted are expected to do the following:

- offer physical and/ or verbal resistance to unwanted sex;
- express clear and explicit non-consent to unwanted sexual contact;
- discontinue contact with the person who has been inappropriate sexually or who has assaulted them; and
- demonstrate perfect or near perfect recall, including a consistent and linear narrative of "what happened."

These are, of course, unrealistic expectations. They do not represent how most women who are sexually assaulted actually cope and respond. As a result, these myths, biases, assumptions, and expectations interfere with how victims' testimony about their experiences is heard and understood in sexual assault trials, and with how legal actors in the criminal justice system assess their credibility.

Traumatic Impacts of Sexual Assault Experiences

Sexual assault is an experience of trauma, and trauma has a neurobiological impact – that is, it affects our brains and our nervous systems. For this reason, it is imperative that those working within the criminal justice system understand the impact of trauma on victims of sexual assault so they can process sexual assault cases more effectively and hear evidence in these cases fairly and impartially.

The impact of the sexual assault depends on many factors. These include (but are not limited to) (Boyd, 2011; Daane, 2005):

- the nature of the assault itself,
- how long it lasted,
- the extent of the physical harm,
- the victim's relationship to the perpetrator,
- whether the victim has had an earlier childhood history of abuse or neglect, and
- how family, friends and others respond to what the victim says about the assault.

Victims may experience the impact of a sexual assault physically and psychologically over both the short and long term. (Chivers-Wilson, 2006):

These impacts can include (Littleton, Axsom, Breitkopf & Berenson, 2006):

- shock and anger,
- fear and anxiety,
- hyper-alertness and hypervigilance,
- irritability and anger,
- disrupted sleep, nightmares,
- rumination and other reliving responses,
- increased need for control,
- tendency to minimize or deny the experience as a way of coping,
- tendency to isolate oneself,
- feelings of detachment,
- emotional constriction,
- feelings of betrayal, and
- a sense of shame.

The sexualized nature of the violation of sexual assault adds a particularly traumatic aspect to the experience. In fact, being sexually assaulted or raped can be one of the most traumatizing experiences a woman can go through. When the victim knows the offender (Conroy and Cotter, 2017), especially a person the woman believes should be trustworthy and safe, and who she never believed would violate her, her sense of betrayal is a profound element of the harm and the trauma she experiences. This only compounds her sense of shame and self-blame, along with her reluctance to disclose what happened, all of which increase trauma.

Some studies have suggested that victims of sexual assault often fear that while they are being sexually violated they will be seriously physically harmed or even killed. This fear of death or severe physical injury is correlated with similar or more severe post-traumatic harm, like that in prolonged military combat. (Dunmore, Clark & Ehlers, 2001) Even when a sexual assault occurred without a weapon, almost half of all victims in one study stated that they feared serious injury or death during the assault. (Koss, 1993; Tjaden & Thoennes, 2006)

What Is Still Misunderstood about Victim Responses to Sexual Assault

Why are victims' responses to sexual assault often so difficult to understand? Many of the most common rape myths in our society reflect a failure to grasp the realities of the dynamics of sexual violence. Moreover, these rape myths reinforce unreasonable expectations of how victims *should* respond to sexual assaults – specifically that victims should react to experiences of sexual violation, which are often unnerving, humiliating, and destabilizing, with calm, strategic planning, and decision making. These misunderstandings may be held by members of the public, by professionals within the criminal justice system, including triers of fact, and by women who are themselves victims of sexual assault about some of their own reactions.

Though it is important to recognize that there is no uniform or predictable victim response to sexual assault, there are common reactions. These are well documented in the research literature, and they are important for triers of fact in the criminal justice system to understand and recognize. (Campbell, Sefl, Barnes, Ahrens, Wasco & Zaragoza-Diesfeld, 1999; Herman, 1992;

Koss, Goodman, Browne, Fitzgerald, Keita & Russo, 1994; Koss, Figueredo & Prince, 2002; Koss & Figueredo, 2004)

Some of the most common ways that victims react to sexual assault are precisely what people often have difficulty understanding. Women who experience sexual violence may not always be able to make decisions to protect themselves. In fact, they might:

- freeze,
- not report or delay reporting,
- not remember aspects of the event,
- have blanks in memory,
- have inconsistencies in memory,
- struggle with decision making,
- not say no clearly to unwanted sexual contact,
- exhibit no physical evidence of injury from a sexual assault,
- be unable to identify the perpetrator to police,
- exhibit no apparent emotional expression following a sexual assault,
- provide what might appear to be inconsistent statements at different points in time,
- blame themselves for the assault,
- have a relationship with the perpetrator after the assault,
- deny or minimize the assault,
- recant the experience.

In the aftermath of trauma, victims may make statements that appear to be incomplete or inconsistent. They may also seek to hide or minimize behaviors they used to survive, such as appearement, or flattery, out of fear that they will not be believed or that they will be blamed for their assault.

But what might appear to be an "inconsistency" in the way a victim reacts, or tells her story, may actually be a typical, predictable, and normal way of responding to life-threatening events and coping with traumatic experiences. Many responses that seem inexplicable to those who are unfamiliar with normal trauma responses can be appreciated by understanding the brain's way of coping with and processing overwhelming psychological events.

These reactions to sexual assault have been characterized as "counterintuitive" in some of the literature aimed at enhancing the understanding of those working within the criminal justice system. (Gentile Long, 2005)

A significant number of sexual assault victims experience post-traumatic stress disorder (PTSD). In fact, research suggests that sexual assault is by far the most frequent cause of PTSD in women. (National Center for Post-Traumatic Stress Disorder, 2005)

Social Context of Sexual Assault and Increased Trauma

Women who have been sexually assaulted are more than twice as likely as men victims of sexual assault to develop PTSD, with PTSD symptoms lasting up to four times longer even when

controlling for the extent of trauma exposure and type of trauma experienced. (Blain, Galovski, & Robinson, 2010; Kessler, 2000; Tolin & Foa, 2006) Women also report greater degrees of emotional numbing, less range of feeling, and avoidance responses, and experience higher levels of psychological reactivity to traumatic stimuli. (Litz, Orsillo, Kaloupek, & Weathers, 2000; Orsillo, Batten, Plumb, Luterek, & Roessner, 2004; Spahic-Mihajlovic, Crayton, & Neafsey, 2005)

Shame, blame, and the attendant experience of social isolation that sexual assault victims feel create a significant barrier to receiving much needed social support. In some cases, that isolation and the negative emotional responses a victim receives increase the feeling of threat and lack of safety. A social context of victim blaming, therefore, has a neurophysiological consequence for the victim of sexual assault, by keeping her in a protracted state of anxiety and fear.

The most compelling explanation for this significant difference in PTSD is that women victims of sexual assault experience lower levels of social support. More importantly, in a society that continues to blame sexual assault victims for their conduct it is not surprising that so many women are reluctant to disclose or report. Victims often feel a great deal of shame and this can hinder access efforts to support and can increase negative reactions such as rejection and blame. These have been linked to increases in the number of PTSD symptoms that survivors experienced. (Brewin, Andrews, & Valentine, 2000)

Judith Herman (1992) explains that trauma enhances the need for protective relationships, but that one of the harms of trauma is that it also violates human connection. This can make such relationships difficult to establish or maintain. (Herman, 1992)

Neurobiological theories of trauma now predominate the trauma literature. They offer considerable insight into both potential trauma responses as well as the critical role and necessity of sensitive and well informed understanding of these complex responses in delivering services to victims. (Fosha, Siegal, & Solomon, 2009; Levine, 1997; Ogden, Minton, & Pain, 2006; van der Kolk, 1994, 2006)

PART II – The Neurobiological Impact of Trauma on the Brain What is Trauma?

A traumatic event is one in which a person experiences something that is frightening, and overwhelming, and that entails a sense of loss of control. In experiences of extreme threat, such as a rape or torture, it can feel like a threat to one's ability to survive. Because events are viewed subjectively, this expansive trauma definition is more of a guideline. Everyone processes a traumatic event differently because we all endure them through the lens of earlier experiences in our lives.

In her paradigm-shifting book, *Trauma and Recovery: The Aftermath of Violence--From Domestic Abuse to Political Terror*, Judith Herman (1992) explains trauma in the following way:

Traumatic events overwhelm the ordinary systems of care that give people a sense of control, connection and meaning. Traumatic events are extraordinary, not because they occur rarely, but because they overwhelm the ordinary human adaptations to life . . . They confront human beings with the extremities of helplessness and terror and evoke the responses of catastrophe. (p. 65)

Traumatic events are not necessarily violent, though they violate a person's sense of self and security. (Kammerer & Mazelis, 2006) Trauma is subjective; what is traumatic to one person might not be to another.

It is helpful for those in the criminal justice system to understand the defence circuitry and the neurobiology of trauma in order to understand the range of reactions victims might exhibit in threatening circumstances, such as being sexually violated or attacked. We have all heard victims say things like, "I just froze," or "I was just lying there until it ended," or "I didn't know what to do, I didn't feel like I could do anything."

To understand the effects of trauma, it is necessary to grasp the fundamentals of the brain's defence circuitry – how it protects itself – and the crucial role this circuitry plays in shaping victim responses to, and coping with, traumatic events, both at the time they occur, and in recalling and narrating them later. It is to these issues that the next sections now turn.

How the Brain's Defence Circuitry Takes Control When Under Threat

In the face of fear and threat we react *automatically*. These reflexive reactions include the well-known fight, flight, or freeze responses. Most people are familiar with these responses. They register at two levels: conscious cognitive levels and unconscious physiological levels.

The field of neuroscience is moving towards understanding this two-system framework: one set of networks generates conscious feelings of fear and anxiety; a second set controls behavioural and physiological responses to threats. (Ledoux & Pine, 2016) The second operates largely unconsciously because the network is subcortical. (Ledoux & Pine, 2016) In other words, it is deep in the brain and disconnected from conscious awareness or language.

This distinction is important, since threats can present themselves below the threshold of consciousness and can thus trigger the defence circuitry without the person consciously

recognizing feelings of fear. (Ledoux & Pine, 2016) Our nervous system is also continuously evaluating risk and safety in the environment, monitoring whether there is any danger or threat.

When any of our five senses detects a serious threat, the brain's defence circuitry is activated and a cascade of stress chemicals are released. When a threat to physical survival is imminent, the human brain, unless specifically trained to do otherwise, will switch to subcortical dominance and the defence responses of fight, flight, or freeze. The defence circuitry *dominates brain functioning once activated*. (Mobbs et al., 2009)

How the Brain Responds to Traumatic Threat: Hormones and the HPA Axis

When the human brain senses a life-threatening event, some sensory information bypasses the cortex and goes directly to the defence circuitry. This includes the amygdala, part of the brain's limbic system, which predicts dangerous stimuli and triggers the appropriate physiological responses to danger and threat. This is *automatic* and often largely unconscious. Under these circumstances, the amygdala can be informed about something fearful or threatening before the cortex even knows what's going on. (Sapolsky, 2017) "The amygdala is not itself responsible for the experience of fear. Its job can be more appropriately viewed as detecting and responding to present or imminent threats." (Ledoux & Pine, 2016, p. 1086)

The amygdala sends a message to another part of the brain called the hypothalamus which sends a message further down in the brain to the pituitary gland which then sends a message to the adrenal glands. This is called the Hypothalamic Pituitary Adrenal axis or the HPA axis. When the signal reaches the adrenal glands they release two types of hormones: adrenaline and cortisol. Adrenaline bolsters the 'fight or flight' response by constricting blood vessels and making the heart pump faster to rush blood to the body and brain. Cortisol is the other stress hormone which is released by the adrenal glands in times of stress – this suppresses the body from doing anything which isn't necessary, such as digestion or higher cognitive processing. This allows the brain and body to focus all of its' resources into dealing with the threat at hand. The defence circuitry rapidly takes control of brain functioning, activating a multitude of brain body responses.

The activation of the defence circuitry is a key moment because—from then on—brain, body, attention, thinking, behavior, and memory processes are all dramatically altered in particular ways. (Hopper, 2018) The first brain-based reflex response is to *freeze*. Freezing occurs when the amygdala detects a threat and signals the brainstem to inhibit movement. This can happen in less than a second; it is automatic and beyond conscious control. This response shifts a person into a state of vigilance for incoming attacks as the brain scans the environment to assess for danger while seeking out possibilities for escape.

To this extent, then, it is a misconception to think that people make a calculated or rational assessment when they are in a moment of threat or terror about what to do – should they "freeze," or should they take "flight" or "fight"? The process is much faster and more automatic than that. It happens almost *beneath* or under our consciousness. When under threat, our capacity for rational and conscious calculation, which would occur under ordinary circumstances, is minimized or impaired.

Defence Circuitry Activation Impairs the Prefrontal Cortex Function

The prefrontal cortex is the center of executive functions in the brain. It is involved in managing complex processes like reason, logic, problem solving, planning and memory. Stress hormones flooding the brain can cause a rapid and dramatic loss of prefrontal cognitive abilities, limiting our ability to think, plan and reason in the face of threat. (Arnsten, 2009)

When an individual is under threat and their stress response is activated, and people temporarily lose executive functioning. This impairs not only planning and decision making but also affects the brain's capacity to organize experience into logical sequences. What this means is that when people are in the midst of a serious threat or assault, brain regions are activated to help them survive the experience, increasing intense responses such as hyperarousal and altered attentional focus, while decreasing activity of brain structures involved in planning and strategizing. These neurological changes are why pilots, mountain climbers, paramedics and hospital emergency personnel practice emergency procedures over and over again, and they also carefully review checklists of what to do in a crisis. It needs to become automatic for them how to handle a crisis situation.

These alterations in decision making and strategizing capacities help explain why asking a victim to account for the decisions she made around a traumatic sexual assault is not a reasonable request; it can be perceived and experienced as victim blaming. Most people who have experienced a traumatic, overwhelming event are not knowledgeable about the complex brain and body alterations that they experienced. They may not be able to explain even to themselves their own often confusing and counterintuitive behaviours at the time of the event or immediately afterwards.

For example, a woman reported to the police a sexual assault by a male roommate who had been out drinking and returned to their apartment intoxicated but forgot his door key, and pounded on the door, demanding to be let in. When she was later interviewed by a detective, this woman acknowledged unlocking the door to this roommate who she reported she feared, and who had previously assaulted her. During the preliminary hearing she was asked by defence counsel why, if she was so afraid of this person, she had answered the door to him, rather than simply calling 911. The woman answered that she didn't know why she had opened the door. This response was mocked and challenged by defence counsel and used to undermine her credibility.

The problem, of course, was that the victim would not be able to explain that her brain was flooded with stress hormones and she was unable to effectively choose the best course of action. If the victim had been interviewed by a trauma-informed detective she may have been asked questions that would have made her neurobiological alterations explicit and as a result it would have helped explain this counterintuitive response.

To ask sexual assault victims to account and explain their behaviors can result in undermining their credibility because they may try to offer explanations for their behavior that when challenged by defence, can expose feelings of shame and vulnerability, exacerbated in a victim blaming social context. Or they may make what appear to be inconsistent statements about what they think they were doing. These kinds of evidentiary difficulties can be avoided by trauma-informed police interviewing and prosecutions.

Altered Brain Functioning and the Shift to Reflexes and Habits

Following the immediate and initial brain based freeze response, the person must quickly assess other ways to respond to the threat. Again, this assessment is not a cool, collected rational assessment such as one would make when carefully weighing all the relevant factors in a normal life choice or set of circumstances. Instead, what happens is a split-second reaction following quickly on the heels of the freeze; the person selects the response from among the range of other typical, habit-based responses to extreme circumstances.

Why Sexual Assault Victims Rarely take Flight or Fight

These habit-based reflex reactions, including "flight" or "fight," are the ones most sexual assault victims are least likely to have. Most women are not trained to effectively fight. Most sexual violence prevention information is cognitively based and fails to offer repetitive practice on how to physically defend themselves. Without this training, highly stressed brains will default to habitual behavior. Police forces and the military know the importance of sustained, repetitive training to prevent police officers and soldiers from freezing in the face of threat and to promote the ability to take carefully planned steps to respond effectively.

An additional barrier to effective, strategic resistance or defence for most women is the fact that the offenders are often men they know (Conroy and Cotter, 2017), persons who are supposed to be trusted. As a result, the experience is not only alarming and threatening, it is also simultaneously profoundly confusing and destabilizing. In these circumstances, women often report a diverse range of intense emotional and psychological responses, particularly in situations where they are sexually assaulted by men known to them.

Understanding these complex yet common psychological and neurologically based responses to traumatic and threatening experiences such as sexual assault helps to explain why some sexual assault victims don't exhibit "fighting back," "yelling," "escaping," or taking some other kind of expected action for which they are later judged or blamed.

Extreme Survival Responses: How Women Cope When There's No (Perceived) Escape

What happens to a sexual assault victim when her passive habitual response of making an excuse, or attempting to appease doesn't work? In these circumstances, she is not consenting to the escalating sexual intrusiveness and she is unable to offer resistance because she is afraid and overwhelmed. These moments of sustained stress reactions have flooded her brain further with stress hormones and her functional prefrontal cortex is impaired so she is unable to strategize or plan an escape. When the escape seems impossible and the outcome of an assault unavoidable, then extreme survival reflexes will take over (Hopper, 2017)

These extreme responses include dissociation, tonic immobility (temporary paralysis) and collapsed immobility (e.g., fainting). These common survival responses to traumatic threat, which are triggered after the initial freeze, are explored below.

Dissociation

Dissociation describes the process of the brain protecting itself from overwhelming stimulus by splitting some aspect of the experience away from consciousness. This may include memory loss

of certain time periods, events, people and personal physical responses (both physical and emotional). Dissociated people report a sense of being detached from themselves and their emotions. They often have the perception of things as unreal and report being unable to make sense of what is going on. Dissociation can be automatic for people who were traumatized earlier in life. Victims describe their experience as feeling like being on autopilot. Others report trance states, feeling in a fog or in a dream, and that they don't feel their bodies.

Tonic Immobility

A person in a state of tonic immobility is in a state of involuntary paralysis and is unable to move or speak. Women describe feeling cold, and as having rigid muscles. Despite being paralyzed, the individual is fully aware of what is happening to her. Humans cannot control this defense mechanism. A recent Scandinavian study reported the sexual assault victims who experienced extreme tonic immobility were twice as likely to suffer PTSD and three times more likely to suffer severe depression flowing the assault. (Moller, Sondergaard & Helstrom, 2017) This response often leaves victims expressing distress that they were not able to move or to call out for help. Also, some victims can quickly go into and out of this state, paralyzed one moment and able to move the next. (Kozlowska et al., 2015)

Collapsed Immobility

A person in a state of collapsed immobility experiences a sudden and drastic drop in heart rate and blood pressure to the point that she may faint or pass out. She often loses muscle tone and may describe feeling limp.

In conclusion, dissociation, tonic immobility and collapsed immobility all can result from extreme fear and perception of defeat. Yet, in the context of a sexual assault it may appear to an uninformed observer that the victim who experienced tonic or collapsed immobility did not resist the assault at all. While it is true that the victim might not have resisted, it may well be because she was incapable of taking action due to the extreme constriction of thought, movement or action. Victims who respond with these extreme responses often feel shame and confusion and blame themselves for "failing" to resist.

Affirmative Consent Helps Address the Most Enduring Rape Myth

A woman does not need to fight back or resist in order to prove that she did not consent to unwanted sex. Canadian sexual assault law does not require proof of resistance to demonstrate a lack of consent. Nevertheless, in the popular imagination, women are often expected to resist in order to prove that they really were "real" victims of sexual assault. This is one of the enduring rape myths, that is, that a "true" victim of sexual assault will fight back or scream and yell, and if she didn't she must have consented to the sex. This mistaken idea simply fails to understand typical responses to sexual threat, coercion, intrusion and/or fear.

Too often, sexual assault victims are asked, "Why didn't you just fight back, or scream, or struggle, or run away?" Sexual assault victims who had a freeze response during an assault may also experience much higher levels of self-blame (i.e., "Why did I just lie there?"). These apparently passive responses of some victims of sexual assault may be perplexing to those who don't understand the neurobiology of trauma or gender socialization. In fact, the brain's defence

circuitry often causes human beings to freeze initially in the face of danger. This is a normal response to threat. It's the brain's way of priming us for the next steps in reflexive action.

We have all been caught off guard by an unsettling and disturbing situation with someone. Now imagine that same experience with a person of greater power, a situation that also instills fear and danger and a sense of a looming threat combined with a sense of your own vulnerability and powerlessness.

People who are used to a sense of self-efficacy and personal power and agency find it difficult to imagine such circumstances. But women in intimate situations with men who they believe are trustworthy – exactly the situations where research⁶ has documented that most sexual assaults take place – may feel disempowered because they are destabilized by the unexpected betrayal, or cognitively constricted because of altered thinking capacity or physically restricted due to neurobiological responses. These complex reactions are often a hallmark of the context.

Conclusion: A Need for Specialized Education to Understand the Neurobiology of Trauma

The general public, the criminal justice system, even victims themselves often misunderstand neurobiological based responses to threat and to traumatic events. Victims cannot explain many of the responses they experienced, nor do they understand their own coping and reflexes. Sexual assault victims often find these reactions extremely frightening and confusing and they often blame themselves for these responses.

The self-blame and lack of information about these natural brain-based responses keeps many victims from coming forward to report their sexual assault experiences to police or to get support services. Many police also do not understand these responses and they may respond verbally or non-verbally (for example, through body language) in a manner that communicates disbelief, as a result undermining their investigation. In court, victims' credibility is often undermined when lawyers inaccurately characterize, question, and challenge these seemingly counterintuitive behaviours. (Craig, 2018)

It is essential that members of the entire criminal justice system receive specialized education to understand the neurobiology of trauma, the defence circuitry, and the types of habits and reflex behaviours that victims of sexual assault often exhibit. Exposing triers of fact to this information will then allow them to determine the facts more impartially and make more informed decisions.

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⁶ For example, according to Statistics Canada (Rotenburg, 2017), in cases of sexual assault, "the female victim knew the accused as a casual acquaintance (25%), a family member other than a spouse (23%), or an intimate partner (21%)."

PART III - How Trauma Affects Memory and Recall

People often assume and expect that we will be able to recollect major events in our lives with clear and unwavering accuracy and that this determines the "truth" of what happened.

"One of the most critical contributors to achieving just outcomes in [sexual assault] cases is eliciting the most complete and accurate information from the primary source of evidence – the complainant." (Westera, Zydervelt, Kaladelfos, & Zajac, 2017, p. 15)

However, traumatic events such as sexual assaults, are encoded (converted) differently than more routine, everyday experiences in life. It is well known within the scientific and psychological communities that human memory and recall do not function like a tape recorder, faithfully recording events later to be recalled on command. Our memories are fallible and have gaps and inconsistencies. As a result, we recall and narrate traumatic events differently than routine events.

Memory and Recall: Some General Points

Memory is essentially the capacity for storing and retrieving information. Three processes are involved in memory: encoding, storage, and recall.

First we receive the information (e.g., from what we see, hear, and understand). Then we convert the information so it can be stored in various parts of the brain. There are three main ways in which information can be encoded: visual, acoustic and semantic. When encoding an event, we focus more attention on aspects that our brain appraises as important and less on those deemed insignificant.

This differential focus is what memory scientists refer to as central versus peripheral details. Memory retrieval refers to "the access, selection, reactivation, or reconstruction of stored internal representations". (Dudai, 2002) Additionally, over time memory works to edit information, and we lose memories, forget some details of memories we do retain, and modify aspects of other memories as the result of repeated retrievals.

Our brain-based memory systems have been sculpted to function adaptively. Memories of trauma are like normal memories in these respects, but they have important characteristics that make them much different from normal, everyday memories.

However, after being traumatized certain central events may be remembered forever and this is an adaptive outcome. The brain has learned "this is important, remember this because it could later save your life." To understand this more fully it is necessary to look at two key brain structures, the hippocampus and the amygdala.

The Hippocampus and the Amygdala: Encoding and Consolidating Memory

The hippocampus and the amygdala are two brain structures that encode memory. The hippocampus is responsible for putting experience into chronological order and into perspective; it is necessary for forming new explicit memories. Explicit memory is what we usually think of

as memory. It is a "cognitive memory," a memory we can remember in our thinking brain, or prefrontal cortex.

For explicit memory, we need the hippocampus. This part of the brain is responsible for integrating the raw sensory data into a coherent picture, putting a time tag on it, and transferring it into long-term episodic memory, where it can be retrieved later. Over time, when memory is consolidated, its long-term storage is distributed in different parts of the neocortex.

The amygdala, part of the limbic system, catalogues past sensory experiences (threats, anger) as implicit memories, memories that are unconscious but can affect thoughts and behaviours. These memories are associated with intense arousal making them readily primed in order to quickly associate them with future situations that are stressful or threatening. This is a critical survival feature of implicit memory, enabling an instant response to danger.

Memory consolidation signifies the stabilization process of a newly formed long-term memory. McGaugh (2002) explains, that initially, unconsolidated memory is in a fragile state and can be disrupted by several types of interference, including behavioral, pharmacological, and electrical. Over time, the memory becomes resilient to these forms of interference through the process known as consolidation (McGaugh, 2000).

Scientific information on the stabilization of memory through consolidation has significant implications for the timing of police interviews. A victim interviewed shortly after an assault, or while still very stressed or traumatized, will not be able to retrieve everything that's been encoded into her brain. Two full sleep cycles may be necessary for the episodic memory circuitry to consolidate information that was encoded at the time of a trauma such as sexual assault. Researchers have found that processes occurring during both rapid eye movement (REM) and non-rapid eye movement (NREM) sleep also play critical roles in the consolidation of memories. During memory consolidation, the brain reorganizes and integrates initially fragile memory traces into long-term storage. (McGaugh, 2000)

In many police services in the US and now in Canada, trauma informed police officers understand that it is best practice for a sexual assault investigator to conduct only a brief initial interview when a victim first reports a sexual assault. This should be followed by a fuller interview several days later when the victim has had time to sleep and consolidate her memories of the traumatic experience. In fact, some police services maintain this same practice, of allowing for memory consolidation after two full sleep cycles before interviewing police officers who have been involved in a shooting.

How Threat and Highly Stressful Events Affect Memory

Normally, the amygdala neurons encode fear memory traces (or fragments) while the hippocampus learns about the context of the fear. But when faced with threatening experiences, this emotionally arousing information increases amygdala activity. That activity correlates with more deeply remembered memory traces in the amygdala.

Stress and fear heighten activation of the amygdala. This reinforces and intensifies traumatic memories while at the same time impairing hippocampal function, which is involved in episodic

or explicit memory. Victims whose memories are not integrated into their hippocampus and cortical circuitry have implicit or limbic memory traces (or fragments). This happens because the amygdala activates the HPA axis, resulting in a flood of neurohormones that interfere with hippocampal learning. This is why, after a stressful situation, people have trouble remembering some specific details, and say things like, "It was all a blur."

Implicit memory, also called procedural or sensorimotor memory, refers to behavioral knowledge of an experience without conscious recall. It is not a memory we can reflect on or think about. These memories are impossible to verbalize. They are often fragmented in time, and for the most part consist of primary sensory information (images, smells, sounds) that are linked to physiological fear symptoms. (Brewin, 2011)

Trauma and Memory

Cognitive models highlight the nature of the traumatic memory: fragmented, associated with intense arousal, readily primed and triggered, and poorly contextualized into memory. (Ehlers & Clark, 2000) As a result, memories of traumatic events such as a sexual assault can be fragmentary. It can be difficult for victims to recall many details of a sexual assault in a complete or linear way.

Intensified Traumatic Memories: Flashbulb Memories and the Hippocampus in Overdrive⁷

The effect of fear, threat or states of intense stress on memory can result in intensified memory recollection, or it can result in fragmented or impaired memories. Both are the result of the stress hormones released (the HPA axis) when the defence circuitry is activated.

Some elements of traumatic memories are more acutely remembered. The adrenal glands release adrenaline, which has been shown to help encode memories to the hippocampus more intensely.

A burst of adrenaline is thought to enhance memory storage of the events closer to the onset of a traumatic or highly stressful event. This strengthens memory pathways and creates what are referred to as "flashbulb memories." (McGaugh, 2000)

It is not unusual for victims of sexual assault to have some full and vivid memories about the beginning of a sexual assault when the defence circuitry was first triggered and the initial burst of stress hormones were released. As well, central details or aspects of the experience that were of most significance may be intensely remembered.

Experiences with emotional significance are more likely to be consolidated into episodic memory and made available for intentional, conscious recollection than those with little or no emotional significance. The brain encodes what it pays attention to. During a threatening event, the brain focuses on what is central to survival so it does not focus on insignificant and peripheral details, so it does not encode them.

⁷ See Wilson, Lonsway & Archambault, 2016, for the idea of hippocampus being in "overdrive" to explain the way in which the flashbulb memories are encoded in the initial stages of a traumatic event.

From Intensified to Fragmented Memories

When high levels of the stress hormone cortisol are secreted, along with adrenaline, the hippocampus super-encodes these intense early moments of the event. Following this, if the threat or fear continue, the hippocampus continues to be flooded with stress hormones and it is temporarily impaired and there may be minimal encoding. That is how the hippocampus goes from flashbulb mode to fragmentary mode.

For example, if during the 9/11 terrorist attacks an individual whose family member was working in an office at the world trade center turned on their television and witnessed the plane hitting the tower where their loved one worked, they would have a flashbulb or intensified memory of that terrible moment. But as events unfolded and they realized their loved one was not going to be able to escape, their brain would continue to be flooded with stress hormones and the events for the hours following the initial hit by the plane into the tower would be described as a blur.

When the hippocampus is in this fragmented mode, it encodes (converts) fragments of sensory memory without contextual details. As a result, a sexual assault victim might not recall the layout of the room where the rape happened. The hippocampus might not encode time-sequencing information because its functioning is altered during a traumatic event.

Not only can the hippocampus not integrate various systems of attention and memory, it also disrupts the storage of information. The hippocampus can disrupt memory encoding for conscious explicit memory when it is blocked or damaged by stress hormones or inhibited by intense amygdala activation. (Cozolino, 2017)

The amygdala is critically involved in calculating the emotional significance of events. When it perceives a threat, it creates emotional arousal. This is intended to alert us to pay attention and be ready to respond. The amygdala also has a selective effect on the particular stimuli we notice and encode. Fear focuses one's attention on a few details at the expense of a lot of others. As a result, a victim of a sexual assault may not remember some of the details of the assault, for example, what colour of clothing the offender was wearing. Conversely, the central details of an assault or the parts of the experience that were the most disturbing are often well encoded and consolidated.

During states of fear (high arousal), the hippocampal and amygdala networks can become dissociated, resulting in a disconnection between the emotional memories of the amygdala and explicit hippocampal processing. Sensation, emotion, behaviour, and conscious awareness, which are usually integrated with one another, can be disconnected from their context in time and space. (Cozolino, 2017) As a result, few peripheral details, little or no context or time-sequence information, and no words or narrative surrounding the memory may be recalled.

How Attention and Memory Affect Recall of Traumatic Events like Sexual Assault Much of what is remembered of a traumatic or threatening event functions as if existing in separate islands of memory.

Information encoding and storage are impaired for aspects of the experiences that are not considered essential for survival or are of little emotional importance. This includes the sequence of events as well as peripheral details. This often results in a disorganized and incomplete narrative memory.

This is immensely important for how victims of trauma are interviewed. The primary emphasis of the sexual assault police interview should therefore be on the sensory, emotional memories that the victim has encoded and remembered rather than expecting the victim to give a narrative with a chronology.

Enhanced Traumatic Memory Coexists with Incomplete Memory

Some elements of traumatic memories are actually more acutely remembered than others. These are called enhanced memories. They are etched more deeply in our memories precisely because they are traumatic and overwhelming to us.

Victims often focus on some specific sensory details from the assault. For example, they often remember specific smells (the smell of body odour), but very few details of other aspects of what happened, for example, how long the assault lasted or the specific order in which some things happened. These are normal limitations of memory. They are caused by the stress and fear of the traumatic events and how the brain's defence circuitry affects attention and memory consolidation. (Schwabe, 2016)

Some fragments of a traumatic experience, then, can seem like they are "burned into" memory. This is how they are recalled. This is normal and typical for how humans recall virtually any traumatic or terrifying event. For example, a person may claim that, "I'll never forget!" a certain powerful memory of an experience, in reference to some particular aspect of it, which seems indelibly etched upon them. Yet they may have no memory of other peripheral details that were irrelevant to their survival at the time of the experience.

This is, in fact, what we all witnessed in the very high profile media attention surrounding Dr. Blasey Ford's testimony at Brett Kavanaugh's United States' Senate hearing pertaining to his appointment to the Supreme Court in that country. Dr. Blasey Ford had some gaps in her memory of the night she describes being sexually assaulted by Kavanaugh. She was able to recall central details of what she experienced that night but was unable to recall some of the peripheral details, including how she got home from the party that night. These gaps in her memory became the subject of high profile attacks on her credibility, including by Republican Senators in a memo rife with inaccuracies written by prosecutor Rachel Mitchell, as well as attacks by others. However, these critics fail to understand that lack of recall of these kinds of peripheral details does not impugn the veracity of Dr. Ford's account, or indeed the account of other sexual assault victims; instead it is consistent with the way in which traumatic memories are encoded.⁸

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⁸ See Hopper, J. Why Can't Christine Blasey Ford Remember How She Got Home? Time-dependent effects of stress on the hippocampus and memory—and why they matter. Scientific American, blog, October 5, 2018. https://blogs.scientificamerican.com/observations/why-cant-christine-blasey-ford-remember-how-she-got-home/ for an excellent discussion of this.

These kinds of normal inconsistencies have been seized upon by defence lawyers, amplified to intersect with dominant and pernicious rape myths in our society, and used to undermine victims' credibility in sexual assault trials. These are impermissible lines of reasoning in the Canadian criminal justice system.

Conclusion: Putting Advances in Understanding How Trauma and Memory Function to Work in the Criminal Justice System

Advances in cognitive neuroscience and neuroimaging have facilitated a much greater and deeper understanding of the neuroanatomy and neurophysiology of trauma and its impact on how we encode, and then later recall, traumatic events.

The science of memory and psychological trauma must be applied to interview approaches and techniques. The belief that inconsistent statements mean the victim is lying has created a focus on techniques that focus on lie detection. These approaches further stress the victim and often inhibit what memory the victim is able to recall.

This knowledge is of critical importance to sexual assault investigations: if a victim is interviewed in a stressful way – for example, if they are not treated with compassion, if their narrative is interrupted, if they receive only expressions of doubt about what they are reporting – they will not be able to recall potentially crucial information that is stored in the brain.

Memories that are consolidated are more stable and more resistant to interference (McGaugh, 2002). This means that consolidated memories would be more reliable and more consistently remembered and hence more useful for detailed victim statements taken by police.

These memories are not recalled in the same ways as other, more typical, life events. In fact, memories associated with a traumatic experience are encoded in the brain differently than "normal" and more everyday memories. This is crucial information for the prosecution of sexual assault cases in the criminal justice system because sexual assaults are not normal events but ones that typically have profound neurobiological effects on brain, body and behaviour.

It is neither realistic, nor rational, to expect victims of sexual assault to recall all aspects of their traumatic experiences with detailed accuracy from start to finish. That is not how the brain works when the defence circuitry has kicked in. Understanding this is part of what a trauma-informed criminal justice system requires if justice is to be done and fair trials are to be conducted for the accused *and* for victims.

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⁹ This is also true of other violent crimes and violent or catastrophic events; however the focus of this analysis is on sexual assault.

PART IV – Promising Practices: Why We Need a Trauma-Informed Criminal Justice System

This section discusses why a trauma-informed criminal justice system enhances the processing of sexual assault cases. This section also outlines promising practices that criminal justice professionals can put into place for trauma-informed investigations and prosecutions of sexual assault cases.

Victims Have Low Expectations of Police When They Report Sexual Assault

The overwhelming majority of sexual assaults in Canada are never reported to the police. Findings from the 2014 General Social Survey (GSS) reveal that more than eight in ten (83 percent) of sexual assault incidents were not reported to the police. (Conroy & Cotter, 2017) This finding is consistent with the 2004 GSS, which showed that 88 percent of sexual assaults went unreported to the police. (Gannon and Mihorean, 2005)

However, there is a social expectation that "ideal," "real," and "credible" victims of sexual assault should report their experiences of sexual assault to the police and follow through the criminal justice system. This is an unrealistic and unreasonable expectation for multiple reasons: the victim's sense of shame and stigma, compounded by a victim-blaming society, along with fear of what might happen to the perpetrator if the assailant is someone they know.

One of the major reasons for the extremely low reporting rate of sexual assault is victims' lack of confidence in the police and the criminal justice system. (Conroy & Cotter, 2017) Taking a trauma-informed approach to the investigation and prosecution of sexual assault in the criminal justice system might reduce these difficulties.

Victim Disclosure

It is important for police officers to recognize that disclosure is a process, not a one-time event. It is also important for police to recognize that disclosing sexual assault incidents, which victims often experience as humiliating and disempowering, is particularly difficult. This is especially true in a society where rape myths still exist.

One of the rape myths identified by the Supreme Court of Canada is that some women are "less worthy of belief" (*R. v Seaboyer*, 1991). Another dominant rape myth is that women and children are prone to "lie" about experiences of sexual assault and sexual abuse. These kinds of harmful beliefs and rape myths create a context of suspicion and doubt, making it particularly difficult for victims to report experiences of sexual assault. The fear of not being believed creates a profound barrier to disclosure for sexual assault victims.

Victims' experiences of disclosing sexual assault to police or others is key to the investigation as well as to their recovery. As such, it is essential that police receive disclosures respectfully and patiently, in a way that empowers the victim. Professionals in the criminal justice system must receive specialized trauma-informed training in this area.

Promoting a Victim-Centred Approach to How the Criminal Justice System Processes Sexual Assault Cases

Taking a victim-centred approach to how the criminal justice system processes a sexual assault case means treating victim-witnesses with care and respect and recognizing the particular difficulties and needs facing those who have experienced this unique crime and the social stigma surrounding it. It means making a victim-centred approach a central priority in processing, clearing, and closing sexual assault cases.

According to many experts, the attitude conveyed by law enforcement is "the single most important factor in determining the success of the victim interview, and therefore the entire investigation." (Archambault & Lonsway, 2007, p. 6) Effective sexual assault investigations require impartial, skilled, empathic, well-trained, and experienced investigators, who carefully document all the details of the crime and properly collect all available evidence. (International Association of Chiefs of Police, 2005) As one police captain observed about sexual assault investigations, "If you want justice, it is helpful to care for the victim." (Human Rights Watch, 2013)

Why Standard Interrogation Practices Don't Work with Sexual Assault Victims

We are in the midst of a sea change in the way police are conducting sexual assault interviews. This comes from the new knowledge and insights from the neurobiology of trauma and the best practices emerging from the field. It also comes from learning from the mistakes made in traditional interrogation practices, which should not be applied to *victims* of crime as they were developed to interrogate criminal *offenders/suspects*.

These standard interrogation practices emphasize establishing a timeline and key facts as soon as possible when it is believed that memory is "freshest" and most complete. Furthermore, in sexual assault cases, victim interviews with police often start with police skepticism, with a view to establishing whether or not the complainant is telling the truth. ¹⁰

This skepticism, however, does not reflect a position of neutrality but rather a position of doubt and suspicion. Standard interrogation practices therefore actually interfere with interviews, and can close down the flow of information necessary to investigate the assault. Examples of typical and problematic police approaches to testing victims during traditional approaches to sexual assault reports have included:

- asking sexual assault victims to repeat their narrative from different points in the sequence, for example, asking a victim to start the story from the end and tell it backwards;
- asking victims questions designed to confuse or test their narrative (as a way to assess its validity).

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¹⁰ This is why a national campaign by End Violence Against Women International (EVAWI), "Start by Believing," was rolled out in the United States, to counter the tendency to disbelieve victim reports of sexual assault and break down the blame and shame which prevents them from disclosing and getting help they need. See: http://www.startbybelieving.org/home.

The effect of the police investigator's attitude towards a victim, especially a sexual assault victim, is a very significant variable in a first encounter (and indeed any encounter). Victims often feel intimidated, ashamed, or afraid when police respond to them with detachment, harshness, disbelief, or dismissal.

Research (Holmberg, 2004) has demonstrated that sexual assault victims acknowledged omitting significantly more information during interviews with police officers they perceived as:

- rushed.
- aggressive,
- brusque,
- impatient, and/or
- unfriendly.

Insufficiently trained police can contribute to assaulted women experiencing secondary victimization. If victims feel unsafe when questioned they may not be able to use their prefrontal cortex to understand the questions and retrieve certain memories. If victims feel traumatized by the questioning, it may trigger the retrieval of fragmentary sensations and emotions that are nearly as intense as those they experienced during the assault itself. Also, poor memory retrieval is associated with high levels of stress and high arousal, which in turn is associated with the prefrontal cortex being threatened.

Traditional Police Approaches to Sexual Assault Interviews Can Retraumatize Victims

Domestic violence and sexual assault victims frequently encounter police services that mirror the unequal power and control experienced in the abusive relationships that caused past trauma. This retraumatizes victims and is to be assiduously avoided. Instead, police should focus on making it easier for victims to recall and disclose the assault. This can include allowing the victim to make a delayed disclosure several days or weeks after the assault.

Too often, traditional police interviews involve too many interruptions when victims are giving statements about their sexual assault experiences. One study found that the average police interview had 3 open-ended questions and 26 close-ended questions with an average of only 1 second pauses between each question. (Fisher, 1995) Most detectives interrupted responses to open-ended questions after 7.5 seconds, with an average of 4 interruptions per response. Victims were not allowed to complete an interrupted response in any of the interviews studied. (Fisher, 1995) Interruptions are a fatal flaw in investigative approach and impede memory retrieval.

This has an extremely deleterious effect not only on victim well-being and willingness to disclose, but also on the quality of evidence and data available for criminal justice system processing of the sexual assault case.

Often traditional police approaches to victim interviews in sexual assault cases have focused on peripheral details, which are not easily recalled and may not even be relevant. Instead, police need to focus on central details which victims more often and more easily recall.

Sexual assault investigations and prosecutions require victims to cooperate fully. This, in turn, requires that victims trust that the criminal justice system will treat them with fairness and respect. Moving towards a trauma-informed criminal justice system approach to sexual assault investigations and prosecutions will help accomplish this. It will also help remedy the historical and contemporary difficulties and gender biases that have plagued sexual assault prosecutions, all part of the ongoing problem of under-reporting sexual assaults. Furthermore, trauma-informed interview approaches can teach police officers (as well as others in the criminal justice system) that victims' difficulties talking about aspects of the experience, and perceived gaps or inconsistencies in their story, may actually be a combination of inappropriate investigation and questioning methods, along with a failure to understand the ways in which trauma affects how victims remember the sequence of events and their reactions to them.

Offering more support to victims and responding to them patiently and with respect increases their ability to retell what happened to them. This speaks to the importance of trauma-informed interviewing approaches by police officers, and trauma-informed questioning by lawyers in their roles as Crowns and defence counsel. It requires specialized training, which should also be made available to the judiciary. This kind of knowledge is not taught in law schools, which often don't adequately cover the basics of sexual assault law and the fundamentals of affirmative consent law.

This leads to the conclusion that standard interrogation methods do not work well with trauma victims. This is empirically evident in the high rates of unfounded cases documented in Canada. (See Doolilttle, 2017a) Fortunately, many police forces in Canada are working to rectify this problem by adopting improved and more collaborative approaches to sexual assault investigations and case reviews involving the participation of victim services and women's groups. (See Chartrand, 2011; Doolittle, 2017b, 2017c)

Best Practices for Trauma-Informed Police-Victim Interviews Basic Listening Skills

Most people, including police, Crowns, or judges working in the criminal justice system, find it difficult to hear about traumatic events such as a rape, sexual assault, or other experiences of sexual violation or abuse. In a trauma-informed criminal justice system, it is important to develop this capacity and it is one that can be learned.

Emotional Competency and Empathy

Empathy is the capacity to understand the experience of another. Being empathic is an important skill when listening to the experience of a victim of sexual assault.

Listening with empathy does not make one biased. Connecting with the victim-witness depends on empathy and compassion for the sexual assault victim. It is possible to be both neutral and impartial, and to be compassionate and empathic.

Emotional competency requires developing essential social skills to recognize, interpret, and respond constructively to emotions in yourself and others. This means developing the ability to interview victims in ways that empower and calm them, so they are able to provide more accurate, coherent, consistent and persuasive narratives.

When victims of sexual assault feel:

- that someone is listening to them;
- that the listener can tolerate what they have to say;
- that the listener understands what they have to say; and
- that the listener can imagine their story to be true

they will feel more comfortable disclosing their experience and feel more comfortable providing information about it.

When speaking of the sexual assault, police should not refer to the "alleged" crime, or the "reported" crime. This conveys an attitude of doubt and suspicion. Instead, police must convey respect.

Empathy is not a skill that is typically taught in law schools or during police training. But it should be. It is a skill that can be learned and refined. Not only is it essential to effective work with sexual assault victims, it can also be widely applied to many other spheres of legal and police work.

The stance of the global "Start by Believing" campaign should guide our responses to sexual assault. This campaign was launched by End Violence Against Women International (EVAWI) to transform the way institutions like the criminal justice system respond to sexual assault. ¹¹ Of course, police still carry out a thorough investigation.

Brief Initial Police Interview: Setting the Tone

The best practice for a trauma-informed approach to the initial contact is for the sexual assault victim to have a brief, respectful, and empathic first contact with a police officer, who should take only a limited amount of information for the initial report. It is important for police to determine what is needed immediately, and what can wait.

By being empathetic, patient, and respectful, [the police officer] can contribute to the immediate and long term recovery of the victim and lay the foundation for mutual cooperation and respect on which the successful interview, investigation, and prosecution is built. (International Association of Chiefs of Police, 2017)

Taking the Report

The first officer who takes a report from a sexual assault victim "should address any safety or medical concerns, collect just enough information to establish the elements of the crime, identify potential witnesses and suspect(s), and identify and secure evidence." (Human Rights Watch, 2013; International Association of Chiefs of Police, 2005) At a slightly later date, the officer can fill in more details during a more in-depth interview.

¹¹ See, http://www.startbybelieving.org/home; Start by Believing is a philosophical stance that should guide our responses to sexual assault. It "flips the script" on the message victims have historically received from professionals and support people, which is: "How do I know you're not lying?".

It is important at this initial stage to help the victim get connected to a victim advocate or other support services. It is also important to provide her with information about next steps and about how the process will unfold, to make it as predictable as possible.

Delaying Taking Detailed Follow-up Statement

It is important to interview sexual assault victims in a way that is consistent with how memory works. Memory transfer to the cortex during sleep allows the episodic memory to retrieve information that was stored at the time of a sexual assault. Sexual assault victims thus ideally require two full nights of sleep to allow their memories to consolidate and transfer the information about the assault before they can relate detailed narratives about "what happened." Unless there are exceptional circumstances that require an accused to be immediately arrested, the best practice for conducting sexual assault investigations should be delayed follow-up interviewing. Delayed disclosure is a very typical pattern for many survivors (average of 25 days for sexual assaults, see Rotenburg, 2017).

This translates into a delay for police in taking detailed victim statements.

The initial victim statement is typically taken upon first contact with the victim. Taking this initial *verbal* statement from the victim is an opportunity for law enforcement to obtain basic information and establish the location and elements of the crime. It is **not** an opportunity to conduct a comprehensive interview. The initial statement is used to assess safety and health needs, ascertain jurisdiction, identify and preserve sources of evidence and determine next steps. (Governor's Commission on Domestic Violence and Sexual Assault, 2017, p. 18)

Trauma-Informed Interviewing for Sexual Assault Victims

In a trauma-informed approach to sexual assault investigations,

the interview is a way to allow the victim to express what their experience was rather than just what they remember or do not remember. Capturing the trauma and the sensory and peripheral details of the event is compelling evidence. (International Association of Chiefs of Police, 2017, slide 15)

During a traumatic event, people can dissociate as a way of coping with an overwhelming response to what is happening. This can often result in them not being able to remember the event later. They can divide their attention so that when they are being attacked they instead, for example, focus on some other aspect not central to the experience. Victims who dissociate may not be able to tell you what they felt because they were disconnected from their bodies. They may, however, vividly remember some specific aspect on which they focused, such as the colour of the carpet or some other detail of the experience (while not recalling other peripheral details at all).

Because the hippocampus does not remain focused on the present or attend to explicit details and time sequencing, the encoding for the details of the assault is impaired. However, sensory memories (i.e., what was actually being done to the person when they were assaulted) are encoded as implicit memories.

Knowing about dissociation explains why asking victims questions about what happened next, or other questions about peripheral details, often does not elicit useful information. Instead, it is more important to ask victims what they did focus on and what, if any, sensory memories they can recall (colour, smell, etc.). This type of dissociation is called dissociative PTSD and is associated with early childhood and cumulative trauma. (Lanius, 2015) It has recently been recognized as a subtype of PTSD in the DSM-5. (American Psychiatric Association, 2013)

A Paradigm Shift: The Forensic Experiential Trauma Interview (FETI)

FETI is a science-based methodology developed by Russell Strand that uses brain-based cues to facilitate collection of psychophysiological evidence. Strand integrates current forensic psychophysiological knowledge and practices, to develop a new approach for how to conduct law enforcement interviews with victims of trauma. Using the forensic experiential trauma interview approach, Strand argues that we can gather the best possible evidence by using brain based cues.

It is important to allow for an uninterrupted narrative, articulated by the victim, so that she can tell you what happened in her own words. The interview questions should be open-ended to focus on eliciting raw information, such as the victim's sensory experiences of sights, smells, and sounds. Police should also practice active listening and avoid victim-blaming language/questions and assumptions, such as "Why did you...?".

Opening questions in taking a sexual assault report should be probing and open-ended. These can include:

- What are you able to tell me about your experience?
- Where would you like to begin?
- What was the most difficult part of this experience for you?
- What can't you forget?

Other open-ended questions and probes can include:

- "Tell me more about ..." "What was your thought process during this experience?"
- "What are you able to remember (with your six senses)?"
- "Do you recall hearing anything? What do you recall hearing?"
- "Do you recall smelling anything? What do you recall smelling?"
- "What were your reactions to this experience?"
- "What do you remember feeling physically?"
- "What do you remember feeling emotionally?"
- "What was the most difficult part of this experience for you?"
- "What can't you forget?"

An open-ended approach that elicits sensory details and allows a victim to describe the assault in her own words is recommended. Unblocked memories can lead to identifying more memories. Asking about these details is a way of delicately gathering evidence, and making it possible to collect further information that may corroborate the victim's account.

How Victims Might Respond to Questioning

Victims will often recall many micro details about the sexual assault experience. Listen for them. Such details can actually support the victim's account, so look for ways to corroborate them to support the evidentiary record.

Although some of the sensory questions may be difficult for some victims to answer, many victims, including highly traumatized victims, report experiencing a catharsis when they are interviewed sensitively, skillfully and effectively.

Victims who have experienced a freeze response during a sexual assault may experience much higher levels of self-blame about what happened to them. These are complicated responses that may not make sense to triers of fact. They require some skill and information to explain their context, particularly in light of defence tactics which may seize on victim freeze responses and deploy them to suggest that they actually signaled consent to the sexual contact even though this is an error in law, which should be challenged by the Crown and corrected by the judge. The affirmative consent standard in law does not allow this yet defence counsel nevertheless continue to perpetuate this rape myth. (Craig, 2018)

The Important Role of Victim Advocates

Victim advocates are professionals trained to support victims of crime, such as women who have been sexually assaulted. They may be community hospital based (for example, a sexual assault nurse examiner), work in a rape crisis centre, or work in a victim-witness program. The presence and support of victim advocates for sexual assault complainants is an important best practice to improve how the criminal justice system processes sexual assault cases. Victim advocates from the community, the academy, and the women's movement have played a key role over many decades in developing service delivery, positive policy developments, and law reform to improve responses to sexual assault in Canada. (Gotell, 2010; Roberts & Mohr, 1994)

Advocates can play a range of roles throughout the victim's encounter with the criminal justice system. They can offer victims information and emotional support, and may assist with finding resources, provide counselling, and also attend court with the victim.

Best practices for victim advocates also allow for a support worker "to be present during the [police] interview, if the victim so desires. The role of the crisis centre advocate is to provide support to the victim, *not* to participate in the actual interview process." (Campbell & Martin, 2001, p. 231) In an interview, or in the court room, victims who become overwhelmed or triggered

may not be able to ground themselves in the present and recognize that [they are in] a safe environment ... This is one of the many reasons why it is important to include victim advocates in the interview process. In this case, it would be best to take a break to give the victim time to talk to the victim advocate in hopes that the situation can be deescalated. It's always a good rule for investigators to do whatever they can to prevent additional harm to the victim. (Wilson, Lonsway & Archambault, 2016)

This last point bears particular emphasis. Victim advocates play a crucial role in assisting and

protecting victim-witnesses as they navigate a system that was not designed with their interests or needs in mind. Put differently,

[t]hroughout all aspects of their work, rape victim advocates are trying to prevent 'the second rape'—insensitive, victim-blaming treatment from community system personnel ... The job of rape victim advocates, therefore, is not only to provide direct services to survivors but also to prevent secondary victimization. (Campbell & Martin, 2001, p. 231)

The crucially important role of the victim advocate, therefore, "is to provide emotional support and information, to listen, believe, and work to empower the victim while honoring the choices they make." (Governor's Commission on Domestic Violence and Sexual Assault, 2017, p. 36) The presence of a support person can be not only beneficial to the sexual assault victim throughout the investigative process and criminal justice system procedures but can also help the victim engage with the system, and can enhance how satisfied they are with the experience. (Human Rights Watch, 2013) A victim advocate is also consistent with a victim-centred and trauma-informed approach to processing sexual assault cases throughout the criminal justice system.

On the Stand: Preparing the Victim-Witness of a Sexual Assault in a Criminal Trial

Adequately preparing sexual assault victims for the rigours and challenges of the trial process is essential to a trauma-informed approach. Many Crown attorneys do not have adequate time for this preparatory work with victims in the currently backlogged, and often significantly underresourced, court system. This presents a systemic challenge, and requires a remedy if the criminal justice system is seriously going to move towards becoming trauma-informed and more supportive of sexual assault victims.

Many aspects of the court process are disempowering for victim-witnesses. For example, where victim-witnesses are positioned in the courtroom can make them feel intimidated and vulnerable when they are giving testimony in a sexual assault trial. This physical positioning can be, as one legal scholar has observed, "compounded by the inferior position of the complainant relative to other trial participants such as the lawyers and judges." (Craig, 2016a, p. 224) This vulnerability is quite literally demarcated by the heightened role of the judge in the court room, as "judges typically sit behind an elevated bench at the front and center of the courtroom, thereby allowing the judge to physically 'look down' upon the witness as he sits in judgement." (Craig, 2016a, p. 218)

Throughout the process of narrating her sexual assault and her reactions to it, the victim-witness, who has typically been isolated and without support, by herself in the witness box, must, under persistent and challenging questioning, lay bare her experience of being violated. All the while she is both under intense scrutiny from the various courtroom players, and also aware that she must mentally prepare for the adversarial and often hostile attack of defence questioning, after she has provided the evidence in chief. The Crown thus has a particular responsibility to prepare the victim-witness thoroughly and sensitively, and to lead the examination-in-chief in a trauma-informed manner.

Recent changes to the *Criminal Code* allow a number of measures to be invoked in cases such as sexual assault. These can increase the ability of a witness in a criminal proceeding to provide evidence. Having a support person present while a victim-witness testifies is one such testimonial aid. This is allowed by section 486.1(2).¹²

Two other measures can also help witnesses. The excesses of the difficult experience of testifying in a sexual assault trial may be blunted with a successful s. 486.2(2) application. That would allow a witness to testify outside the courtroom by closed-circuit television or behind a screen to avoid seeing the accused. A s. 486(1) application would allow the public to be excluded from the courtroom to allow the victim to have privacy. These, however, are not guaranteed because they depend upon the judge's decision. 15

Other changes at the trial, such as carefully pacing questioning and taking cues from the complainant (victim-witness) about her need for breaks, can assist the process.

These difficulties for victims testifying in court heighten the need for trauma-informed approaches to criminal justice system processes and trauma-informed questioning to reduce these issues for victim-witnesses whenever possible.

Social Expectations of Victim-Witnesses' Testimony in a Sexual Assault Trial

Speaking about traumatic life events such as sexual assaults is inherently difficult. They are intensely personal and private, and require discussing the private zones of the body, involve disclosures of sexual acts surrounded by social taboos, and they are also associated with victim-blaming and often shame.

Speaking about this kind of experience with a stranger, like a police officer or lawyer, let alone speaking about it in public courtroom, only increases these difficulties. Yet somehow there is a

¹² *Criminal Code*, RSC 1985, c C-46, s 486.1(2). The 2015 amendments changed the standard under s. 486.1(2) for a support person from being "necessary to obtain a full and candid account from the witness of the acts complained of" to simply requiring that the support person "would facilitate" full and candid account of evidence. The relevant provision reads: "In any proceedings against an accused, the judge or justice may, on application of the prosecutor in respect of a witness, or on application of a witness, order that a support person of the witness' choice be permitted to be present and to be close to the witness while the witness testifies if the judge or justice is of the opinion that the order would facilitate the giving of a full and candid account by the witness of the acts complained of or would otherwise be in the interest of the proper administration of justice."

¹³ *Criminal Code*, RSC 1985, c C-46, s 486.2 (2) reads "in any proceedings against an accused, the judge or justice may, on application of the prosecutor in respect of a witness, or on application of a witness, order that the witness testify outside the court room or behind a screen or other device that would allow the witness not to see the accused if the judge or justice is of the opinion that the order would facilitate the giving of a full and candid account by the witness of the acts complained of or would otherwise be in the interest of the proper administration of justice."

¹⁴ *Criminal Code*, RSC 1985, c C-46, s 486 (1) reads "any proceedings against an accused shall be held in open court, but the presiding judge or justice may, on application of the prosecutor or a witness or on his or her own motion, order the exclusion of all or any members of the public from the court room for all or part of the proceedings, or order that the witness testify behind a screen or other device that would allow the witness not to be seen by members of the public, if the judge or justice is of the opinion that such an order is in the interest of public morals, the maintenance of order or the proper administration of justice or is necessary to prevent injury to international relations or national defence or national security."

¹⁵ Courts are also increasingly seeing the use of support dogs to assist vulnerable victim-witnesses, but again, this is contingent upon availability and judicial discretion.

social expectation that sexual assault victims should relay information about their sexual assault experiences in a calm, linear, and straightforward manner, as if they were speaking about any other routine matter, rather than one that is privatized, stigmatized, or sexualized and involves being violated and humiliated. Not only is this entirely unrealistic and unreasonable, it is at odds with basic knowledge about human psychology or about how trauma affects memory and recall. It is neither trauma-informed, nor trauma-aware.

Trauma is often shrouded in secrecy and denial. The Crown attorney should thus try to understand the victim's history, because it may help explain her unique reactions to the assault and how she is processing the associated trauma. It is important for the Crown attorney to know about this information before the trial: first, to prevent or minimize retraumatizing the victim; and second, to elicit testimony about victim behaviour and trauma from an expert so that triers of fact have the proper context through which to process the victim's testimony. (Kristiansson & Whitman, 2015)

Best Practices: Trauma-Informed Training and Education for All Criminal Justice System Professionals

One of the key recommended best practices, given the complexities of victim responses, is the need for criminal justice professionals to have specialized in-depth training and education across all sectors of the system on the neurobiology of trauma, violence, and abuse, and the social contexts of victim responses.

Another best practice in the field is partnerships across sectors and close and ongoing collaborations between criminal justice system players to improve service delivery and responses. This should include police, community and women's organizations, health care providers, victim-witness support workers and advocates, lawyers, and government policy makers working in the area of sexual assault. This education will enhance judicial knowledge about a complex subject area and assist in neutralizing biases.

Conclusion: Why We Need a Trauma-Informed Criminal Justice System for Sexual Assault Cases

In recent years there has been much public and media attention on the subject of sexual assault and sexual violence. As a result of a number of high profile trials, the #Metoo movement and outpourings of disclosures in Canada and beyond, the scale and pervasiveness of sexual assault and sexual misconduct in Canadian society has been revealed. Sexual assaults and their social, health, economic, and legal costs pose a major problem for equality in Canadian society.

The criminal justice system remains in need of significant reform to achieve better outcomes for victims of this crime and an improved version of justice. A trauma-informed approach is a fundamental and necessary step in this direction.

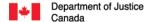
Criminal justice professionals, including prosecutors, law enforcement and victim services, need to apply trauma-informed practices as a case progresses through the justice system. (Kristiansson & Whitman, 2015) This requires a basic knowledge of the neurobiology of trauma and its impact on victims who have lived through sexual assault and its harms. As such, improved efforts should be made to increase the availability and delivery of specialized trainings and educational

workshops to all criminal justice professionals, as well as continued support for on-going and/or new partnerships between criminal justice and other system sectors. These efforts will enhance access to justice for victims of sexual assault, as well as contribute to the ever-growing professional and public awareness about the impact of trauma.

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