

# TOWARD A TRAUMA-INFORMED APPROACH TO EVIDENCE LAW: WITNESS CREDIBILITY AND RELIABILITY

Thor Paulson, Benjamin Perrin,  
Robert G. Maunder and Robert T. Muller\*

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*The truth-seeking function of Canadian courts is impaired because the current approach to assessing the credibility and reliability of witness testimony is not trauma-informed (i.e., it does not reflect what is known about the causes and impacts of psychological trauma on the individual). The adverse effects of trauma are widespread in Canadian society, particularly amongst those groups most likely to come into contact with the legal system. Unfortunately, the longstanding proposition that the assessment of witness credibility and reliability is “a matter within the competence of lay people” suffers from its reliance on “common-sense” understandings of human cognition and behaviour that contradict the scientifically proven effects of trauma.*

*After a review of Canadian case law and model jury instructions, we demonstrate that the rules governing two commonly used inferential “tools” used to evaluate witness testimony—impeachment by prior inconsistent statements and assessments of demeanor—are fundamentally flawed when it comes to witnesses who have experienced trauma, whether they are victim-witnesses, third party witnesses or accused persons. This has profound implications for confidence in the administration of justice in civil and criminal trials, and other forums that rely on the law of evidence. While other jurisdictions, such as the United Kingdom, have begun to address this serious error, Canada has yet to do so.*

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\* Thor Paulson, JD, Peter A. Allard School of Law, University of British Columbia (this paper was written prior to the commencement of the author's judicial clerkship at the Supreme Court of British Columbia and reflects his views alone); Benjamin Perrin, Professor, Peter A. Allard School of Law, University of British Columbia; Dr. Robert G. Maunder, Chair in Health and Behaviour at Sinai Health, Deputy Psychiatrist-in-Chief & Head of Psychiatry Research, Professor, Department of Psychiatry, University of Toronto; Dr. Robert T. Muller, Professor of Clinical Psychology, York University & Fellow of the International Society for the Study of Trauma & Dissociation. We are grateful for feedback on an earlier draft by Dr. Jonathan Hunter, Head of the Consultation-Liaison Program at Mount Sinai Hospital's Department of Psychiatry & Professor, Department of Psychiatry, University of Toronto. We also would like to acknowledge editorial assistance by Amy Kaustinen and Lara Mercier-Jung as well as financial support from the Law Foundation of British Columbia and UBC Hampton Research Fund.

savoir qu'elles ne mettent pas en application nos connaissances des causes et effets des traumatismes psychologiques touchant l'individu), et cela nuit aux tribunaux canadiens dans leur travail de recherche de la vérité. Or, les traumatismes sont répandus dans la société canadienne, en particulier chez les groupes les plus susceptibles d'entrer en contact avec le système judiciaire. Malheureusement, la prémisse de longue date voulant que l'évaluation de la crédibilité et de la fiabilité d'un témoin « relève de la compétence des profanes » pêche par le fait qu'elle repose sur une perception de la cognition et des comportements humains qui, fondée qu'elle est sur le « bon sens », entre en contradiction avec les effets scientifiquement établis des traumatismes.

Après un examen de la jurisprudence canadienne et du modèle de directives au jury, les auteurs démontrent que les règles régissant deux « outils » inférentiels d'application courante pour l'évaluation des témoignages—l'invalidation par déclaration antérieure incompatible et l'évaluation du comportement—sont fondamentalement erronées dans le cas des témoins ayant déjà été victimes d'un traumatisme, que cette personne soit une victime, un tiers ou l'accusé. Il s'ensuit de profondes répercussions sur la confiance dans l'administration de la justice dans les procès civils et criminels, et dans les autres instances reposant sur le droit de la preuve. On a commencé à corriger le tir ailleurs dans le monde, notamment au Royaume-Uni, mais le Canada n'a pas encore bougé.

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## 1. Introduction

Albert Einstein attributed his scientific success to a refusal to “ever accept any unproven principles as self-evident.”<sup>1</sup> To Einstein, common sense was “nothing more than a deposit of prejudices laid down in the mind prior to the age of eighteen [that e]very new idea one encounters in later years must combat.”<sup>2</sup> Einstein’s comments provide an apt diagnosis of the problem that plagues the current approach to assessing the credibility and reliability of witnesses in Canadian evidence law. The proposition that this task is “a matter within the competence of lay people”<sup>3</sup> suffers from its reliance on “common-sense” understandings of human cognition and behaviour that contradict the scientifically proven effects of trauma. For this research, legal and scientific scholars have collaborated to address these deficiencies.

Two inferential “tools for testing the truthfulness of evidence and assessing its value”<sup>4</sup> often relied upon by judges and juries are problematic because they are inconsistent with scientific understandings of trauma:

1. impeachment by “prior inconsistent statements”, which assumes that discrepancies between a witness’s in-court testimony and previous statements on the same matter are indicative of deceit or unreliability;<sup>5</sup> and,
2. the belief that certain aspects of witness’s testimonial demeanour can indicate a lack of credibility or reliability.<sup>6</sup> Reliance on these assumptions to assess witness testimony, particularly by judges

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<sup>1</sup> Lincoln Barnett, *The Universe and Dr. Einstein* (London, UK: Victor Gollancz, 1949) at 49.

<sup>2</sup> *Ibid.*

<sup>3</sup> *R v Marquard*, [1993] 4 SCR 223 at 248, 108 DLR (4th) 47 [*Marquard*].

<sup>4</sup> *R v Bradshaw*, 2017 SCC 35 at para 19 [*Bradshaw*].

<sup>5</sup> *R v RWB*, 24 BCAC 1 at para 29, [1993] BCJ No 758 [*RWB*].

<sup>6</sup> See *R v NS*, 2012 SCC 72 at para 25.

and juries who lack an adequate understandings of trauma, risks impairing the truth-seeking function of courts.

This article demonstrates that Canadian evidence law orthodoxy and practice on assessing witness credibility and reliability are inconsistent with modern knowledge of how trauma affects both memory and demeanor. These findings have the potential to fundamentally change how judges and juries assess the testimony of traumatized witnesses. After a thorough review of Canadian case law and model jury instructions, we demonstrate that rules governing prior inconsistent statements and demeanor assessments are fundamentally flawed when it comes to traumatized witnesses, whether they are victims, third party witnesses, or accused persons. This has profound implications for both civil and criminal trials and other forums that rely on the law of evidence. While other jurisdictions, such as the United Kingdom, have begun to address this serious error, Canada has yet to do so.

This research reveals a deeply troubling flaw in the Canadian justice system, which has operated to disbelieve traumatized witnesses who were likely telling the truth. Profound injustices, including miscarriages of justice and secondary victimization, have undoubtedly occurred because of arcane evidentiary rules that have denied justice to myriad accused persons and victims of crime, whose inability to recall information or behave in an expected manner stems from the trauma that they have suffered. This is particularly significant given the disproportionate levels of traumatization experienced by racialized and marginalized groups, including Indigenous peoples, prior to and while engaging with the criminal justice system.

Part 2 of this article defines trauma and explains what it means to adopt a trauma-informed approach. Part 3 summarizes the current law regarding witness credibility assessment. In Part 4, we demonstrate how the impeachment of witnesses by their prior inconsistent statements is a poor tool for assessing credibility when applied in the absence of a trauma-informed approach. In particular, there is a great deal of uncertainty in the case law regarding how trauma affects memory and whether information about trauma's effects on memory requires expert evidence. In Part 5, we consider how assessing a witness's credibility based on their demeanour (already a practice subject to much juristic and scholarly criticism) is particularly problematic for witnesses who have experienced trauma. We conclude by identifying areas for future research and calling for greater continuing education among judges and lawyers about trauma-informed approaches to the administration of justice.

## 2. What is a Trauma-Informed Approach, and Why is it Necessary?

### A) What is Trauma?

Applying a trauma-informed approach to witness credibility is the theoretical bedrock of this article. It is, therefore, essential to clearly define the concept of trauma and the characteristics of a trauma-informed approach. The U.S. Substance Abuse and Mental Health Administration (“SAMHSA”) formulated the following highly influential definition of trauma, that we adopt for this article:

Individual trauma results from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or life threatening and that has lasting adverse effects on the individual’s functioning and mental, physical, social, emotional, or spiritual well-being.<sup>7</sup>

SAMHSA’s definition of individual trauma is often called the “three E’s of trauma”<sup>8</sup> due to its tripartite structure of potentially traumatic event(s), experience, and effects. The “three E’s” emphasize the importance of subjective individual experience in incidents of trauma: Both the traumatic nature of an event and the effects that flow from it are contingent on the affected individual experiencing the event as a trauma.

The first “E”—the potentially traumatic event(s)—covers a wide variety of circumstances, including: single incident trauma stemming from “an unexpected and overwhelming event such as an accident, natural disaster, a single episode of abuse or assault, sudden loss, or witnessing violence”;<sup>9</sup> complex or repetitive trauma “related to ongoing abuse, domestic violence, war, ongoing betrayal, often involving being trapped emotionally and/or physically”;<sup>10</sup> developmental trauma inflicted by “exposure to early ongoing or repetitive trauma (as infants, children and youth) involving neglect, abandonment, physical abuse or assault, sexual abuse or assault, emotional abuse, witnessing violence or death, and/or coercion or betrayal”;<sup>11</sup> intergenerational trauma, where traumatized

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<sup>7</sup> Substance Abuse and Mental Health Services Administration, “[Concept of Trauma and Guidance for a Trauma-Informed Approach](#)” (2014) at 7, online (pdf): *National Center on Substance Abuse and Child Welfare* <ncsacw.samhsa.gov/userfiles/files/SAMHSA\_Trauma.pdf> [perma.cc/FD27-2R9T] [SAMHSA].

<sup>8</sup> SAMHSA, *supra* note 7 at 8.

<sup>9</sup> BC Provincial Mental Health and Substance Use Planning Council, “[Trauma-Informed Practice Guide](#)” (May 2013) at 6, online (pdf): <bcccewh.bc.ca/wp-content/uploads/2012/05/2013\_TIP-Guide.pdf> [perma.cc/L9SQ-SPD5] [Planning Council].

<sup>10</sup> *Ibid.*

<sup>11</sup> *Ibid.*

individuals pass their “[c]oping and adaptation patterns developed in response to trauma” onto the next generation;<sup>12</sup> and historical trauma, which describes the “cumulative emotional and psychological wounding over the lifespan and across generations emanating from massive group trauma [...] inflicted by a subjugating, dominant population.”<sup>13</sup> It also includes the vicarious trauma inevitably suffered by those delivering services to traumatized individuals.<sup>14</sup>

Importantly, these events are only *potentially* traumatic. Whether they *actually* cause trauma is contingent on the second “E”—experience. To be traumatic, an event must be experienced in a manner that is “exemplified by feelings of powerlessness, disconnection, and loss of control”<sup>15</sup> such that those experiencing the event are “confront[ed] with the extremities of helplessness and terror [thereby] evok[ing] the responses of catastrophe.”<sup>16</sup> Whether a potentially traumatizing event will cause such a reaction depends on the individual, who will view it “through the lens of earlier experiences in [their] lives.”<sup>17</sup> As a result, an event “may be experienced as traumatic for one individual and not for another [depending on h]ow the individual labels, assigns meaning to, and is disrupted physically and psychologically.”<sup>18</sup> How meaning is assigned to a potentially traumatic event will vary, depending on a person’s prior history of trauma; personal resilience; cultural beliefs; access to social, economic, and familial supports; age and stage of development; gender; and temperament, along with the characteristics of the trauma suffered.<sup>19</sup>

The third “E”—effects—refers to how traumatic events experienced as such by the individual will “replace normal and adaptive coping skills

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<sup>12</sup> *Ibid.*

<sup>13</sup> *Ibid.*

<sup>14</sup> See Nancy Poole, Christina Talbot & Tasnim Nathoo, “[Healing Families, Helping Systems: A Trauma-Informed Practice Guide for Working with Children, Youth and Families](#)” (January 2017) at 5, online (pdf): *British Columbia Ministry of Children and Family Development* <gov.bc.ca/assets/gov/health/child-teen-mental-health/trauma-informed\_practice\_guide.pdf>.

<sup>15</sup> Nicole C McKenna & Kristy Holtfreter, “Trauma-Informed Courts: A Review and Integration of Justice Perspectives and Gender Responsiveness” (2020) 30:4 *J Aggression, Maltreatment & Trauma* 450 at 451.

<sup>16</sup> Judith Lewis Herman, *Trauma and Recovery: The Aftermath of Violence—From Domestic Abuse to Political Terror* (New York, NY: Basic Books, 1992) at 33.

<sup>17</sup> Department of Justice Canada, *The Impact of Trauma on Sexual Assault Victims*, by Lori Haskell & Melanie Randall, Catalogue No J4-92/2019E-PDF (Ottawa: Department of Justice Canada, 2019) at 12.

<sup>18</sup> *SAMHSA, supra* note 7 at 8.

<sup>19</sup> See Louise Ellison & Vanessa E Munro, “Taking Trauma Seriously: Critical Reflections on the Criminal Justice Process” (2016) 21:3 *Intl J Evidence & Proof* 183 at 185; *SAMHSA, supra* note 7 at 8.

with maladaptive behaviors.”<sup>20</sup> Trauma is known to have a wide variety of adverse physical, mental, emotional and spiritual impacts.<sup>21</sup> In the arguments that follow, we will pay particular attention to how trauma’s adverse effects on behaviour and cognitive processing (particularly memory) conflict with the purported efficacy of using prior inconsistent statements and demeanour to assess witness testimony.<sup>22</sup>

The SAMHSA definition of individual trauma is expansive. It includes—but is not limited to—those whose exposure to trauma has led them to be diagnosed with post-traumatic stress disorder (“PTSD”), a “trauma- or stress-related disorder” defined in the American Psychiatric Association’s *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition, Text Revision (“DSM-5-TR”).<sup>23</sup> PTSD occurs in the aftermath of one or more traumatic events, which the DSM-5-TR defines as “exposure to actual or threatened death, serious injury, or sexual violence.”<sup>24</sup> This exposure can occur either by

1. Directly experiencing the traumatic event(s).
2. Witnessing, in person, the event(s) as it occurred to others.
3. Learning that the traumatic event(s) occurred to a close family member or close friend.
4. Experiencing repeated or extreme exposure to aversive details of the traumatic event(s) (e.g., first responders collecting human remains; police officers repeatedly exposed to details of child abuse).<sup>25</sup>

To qualify as PTSD, the individual who has experienced trauma must report symptoms from within four symptom clusters (re-experiencing symptoms, avoidance symptoms, negative cognitions and mood, and hyperarousal symptoms) that persist for over a month after the traumatic

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<sup>20</sup> McKenna & Holtfreter, *supra* note 15 at 451.

<sup>21</sup> See SAMHSA, *supra* note 7 at 8; McKenna & Holtfreter, *supra* note 15 at 451.

<sup>22</sup> See SAMHSA, *supra* note 7 at 8.

<sup>23</sup> “Trauma- and Stressor-Related Disorders” in American Psychiatric Association, ed, *Diagnostic and Statistical Manual of Mental Disorders*, 5th ed, Text Revision (Washington, DC: American Psychiatric Association, 2022).

<sup>24</sup> *Ibid.*

<sup>25</sup> *Ibid.*

event(s).<sup>26</sup> The precise symptoms suffered can vary significantly between people diagnosed with PTSD.<sup>27</sup>

While understanding PTSD is essential to a trauma-informed approach, it is important to remember that trauma can manifest itself in other ways that do not meet its diagnostic criteria. Indeed, PTSD is but one condition in a constellation of trauma- and stressor-related disorders described in the DSM-5-TR,<sup>28</sup> all of which arise through “exposure to a traumatic or stressful event.”<sup>29</sup> Trauma is associated with several other mental disorders, including depression, various phobias, and psychosis.<sup>30</sup> It is also possible for a person exposed to trauma to experience all the symptoms necessary to be diagnosed with PTSD, but for some or all of those symptoms to abate prior to the clinically-required four weeks. Where this occurs, a diagnosis of Acute Stress Disorder may instead be made.<sup>31</sup> Finally, one must keep in mind how, as a matter of practicality, the DSM-5-TR’s function as a diagnostic tool necessitates clear threshold criteria, the boundaries of which are delineated by and rooted in the modern American sociopolitical context in which PTSD was first clinically recognized.<sup>32</sup> In highlighting the conceptual limits of PTSD, the DSM-5-TR excludes from its definition

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<sup>26</sup> See Ellison & Munro, *supra* note 19 at 185; American Psychiatric Association, *supra* note 23.

<sup>27</sup> As the DSM-5-TR explains: “In some individuals, fear-based reexperiencing, emotional, and behavioral symptoms may predominate. In others, anhedonic or dysphoric mood states and negative cognitions may be most prominent. In some other individuals, arousal and reactive-externalizing symptoms are prominent, while in yet others, dissociative symptoms predominate. Finally, some individuals exhibit combinations of these symptom patterns”: American Psychiatric Association, *supra* note 23.

<sup>28</sup> Other such disorders include “reactive attachment disorder, disinhibited social engagement disorder, [...] acute stress disorder, and adjustment disorders”: American Psychiatric Association, *supra* note 23.

<sup>29</sup> *Ibid.*

<sup>30</sup> British Psychological Society Research Board, “[Guidelines on Memory and the Law: Recommendations from the Scientific Study of Human Memory](#)” (2008) at 25, online (pdf): *British Psychological Society* <antoniocasella.eu/dnlaw/Memory\_law\_2008.pdf> [perma.cc/YL4Y-ZATD] [*Psychological Society*].

<sup>31</sup> *Psychological Society*, *supra* note 30 at 26.

<sup>32</sup> Derek Summerfield argues that PTSD’s recognition as a mental disorder represents the American psychiatric establishment’s response to the vicissitudes of Vietnam War veterans, serving to “legitimi[se] their ‘victimhood,’ g[i]ve them moral exculpation, and guarante[e] them a disability pension because the diagnosis could be attested to by a doctor”: Derek Summerfield, “The Invention Of Post-Traumatic Stress Disorder And The Social Usefulness Of A Psychiatric Category” (2001) 322:7278 *BMJ* 95 at 95.

a variety of events that plausibly could produce elevations in PTSD symptoms[, including the following] patients suffering PTSD symptoms[:] (a) a mother whose child was diagnosed with incurable cancer;

(b) a young mother who was imprisoned on a minor charge for apparent political reasons;

(c) a middle-age man, entirely identified with his company, who was falsely suspected of embezzlement and therefore fired, on 1 day's notice, and escorted from the building; and

(d) a 17-year-old-girl who was grabbed out of a shower (as a “prank”) by her schoolmates at a summer camp and pushed naked out into the group of other campers.”<sup>33</sup> While the primary and secondary sources considered in this paper frequently treat PTSD as synonymous with trauma, such a narrow definition of trauma risks understating its severity and may result in a trauma-informed approach that prescribes incomplete remedies.<sup>34</sup> For these reasons, when we refer to trauma in this paper, we use the term as authoritatively defined by SAMHSA above.

It is also important to note that trauma is not randomly distributed throughout the population. Rather, marginalized and disadvantaged groups of people are disproportionately impacted by trauma, including “First Nations, Inuit, and Métis children; LGBTQ+ youth; homeless, street-involved youth and youth who misuse drugs; children with low socioeconomic status; children who have experienced previous violent victimization; and immigrant and racialized youth of first-generation and ethnic minorities.”<sup>35</sup>

## **B) The Need for a Trauma-Informed Approach to Witness Credibility Assessments**

Defining and understanding trauma are only the initial steps in adopting a trauma-informed approach, which also requires “a commitment to providing human services and the institutional contexts which recognize and understand the extent and impact of trauma in people’s lives, aim to uncover and understand the complex root causes of violence and abuse, and strive to provide programs and services which avoid retraumatizing

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<sup>33</sup> Constance J Dalenberg, Elizabeth Straus & Eve B Carlson, “Defining Trauma” in S N Gold, ed, *APA Handbook of Trauma Psychology: Vol 1, Foundations in Knowledge* (Washington, DC: American Psychological Association, 2017) 15 at 22.

<sup>34</sup> See Ellison & Munro, *supra* note 19 at 186.

<sup>35</sup> Robert Maunder & Jonathan Hunter, *Damaged: Childhood Trauma, Adult Illness, and the Need for a Health Care Revolution* (Toronto: University of Toronto Press, 2021) at 194.

people while supporting their movement towards resilience, recovery and wellness.”<sup>36</sup> In the public health context, a trauma-informed approach is used to implement services that “take into account an understanding of trauma in all aspects of service delivery [to avoid] traumatization or re-traumatization.”<sup>37</sup> Applying a trauma-informed approach to the legal context reveals how an understanding of trauma is vital to the administration of justice and the truth-seeking function of the legal system. The failure to properly account for trauma in the context of witness credibility assessment risks undermining these functions: “What might appear as ‘inconsistencies’ in the way a victim reacts or tells her story in ... a legal proceeding [may be a] typical, predictable, and normal way of responding to life-threatening events and coping with and remembering traumatic experiences.”<sup>38</sup>

The need for a trauma-informed approach to assessing witness credibility is all the more pressing when one considers the shocking prevalence of trauma within our society, both generally and especially within those groups most likely to have contact with the criminal justice system as witnesses. According to one study, 76.1% of Canadians report having experienced a traumatic event within their lifetimes, and 9.2% of Canadians will experience PTSD at some point in their lives (which, as discussed above, represents only one of many possible pathological manifestations of exposure to trauma).<sup>39</sup>

Victims of crime have an even higher risk of experiencing adverse psychological symptoms due to trauma, with PTSD rates of 20.9% for victims of assaultive violence, 49% for victims of rape, and 53.8% for those who have been kidnapped, held captive and/or tortured.<sup>40</sup> Trauma is also endemic among another group likely to take the witness stand:

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<sup>36</sup> Melanie Randall & Lori Haskell, “Trauma-Informed Approaches to Law: Why Restorative Justice Must Understand Trauma and Psychological Coping” (2013) 36:2 Dal LJ 501 at 517.

<sup>37</sup> *Planning Council*, *supra* note 9 at 12. SAMHSA similarly describes a trauma-informed approach as resting upon four key assumptions referred to as the “Four R’s”: “A program, organization, or system that is trauma-informed realizes the widespread impact of trauma and understands potential paths for recovery; recognizes the signs and symptoms of trauma in clients, families, staff, and others involved with the system; and responds by fully integrating knowledge about trauma into policies, procedures, and practices, and seeks to actively resist re-traumatization”: *SAMHSA*, *supra* note 7 at 9.

<sup>38</sup> Randall & Haskell, *supra* note 36 at 523.

<sup>39</sup> See Michael Van Ameringen et al, “Post-Traumatic Stress Disorder in Canada” (2008) 14:3 CNS Neuroscience & Therapeutics 171 at 176.

<sup>40</sup> Naomi Breslau et al, “Trauma and Posttraumatic Stress Disorder in the Community: The 1996 Detroit Area Survey of Trauma” (1998) 55:7 Archives General Psychiatry 626 at 631.

those who have been accused of crimes. Many accused will have multiple interactions with the criminal justice system including prior incarceration, and according to a systemic review of PTSD in prison populations, the lifetime prevalence estimates of PTSD are 18% in male prison populations and a staggering 40% in female prison populations.<sup>41</sup> These numbers represent “an approximately 5-fold higher point prevalence of PTSD in male prisoners and an 8-fold higher point prevalence of PTSD in female prisoners [than the general population, demonstrating that] PTSD appears to be a common mental disorder in prison populations, and absolute numbers will be large.”<sup>42</sup>

There are also signs that Indigenous individuals, whose over-representation in the criminal justice system has been recognized as a worsening crisis by the Supreme Court of Canada,<sup>43</sup> suffer from high rates of trauma and trauma-related disorders. While research regarding the prevalence of PTSD and other trauma- and stressor-related disorders among Indigenous people in Canada has been described as “inadequate,”<sup>44</sup> one study reviewing the forensic reports of 127 Indigenous individuals who had been litigants in proceedings related to abuse suffered at residential schools in British Columbia found that 64.2% had been diagnosed with PTSD, 20% with dysthymic disorder,<sup>45</sup> and 21.1% with major depression.<sup>46</sup> Of the 127 individuals surveyed, only two individuals *did not* show signs of one or more mental disorders.<sup>47</sup> This research supports the inference that most individuals who come into contact with the criminal justice system as complainants, victims, survivors, accused and/or offenders are likely to

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<sup>41</sup> Gergő Baranyi et al, “Prevalence of Posttraumatic Stress Disorder in Prisoners” (2018) 40:1 *Epidemiologic Reviews* 134 at 141.

<sup>42</sup> Baranyi, *supra* note 41 at 142.

<sup>43</sup> See *R v Gladue*, [1999] 1 SCR 688 at paras 58–64, 1999 CanLII 679 [*Gladue*]. See also *R v Ipeelee*, 2012 SCC 13 at para 62.

<sup>44</sup> Sherry Bellamy & Cindy Hardy, “[Post-Traumatic Stress Disorder in Aboriginal People in Canada: Review of Risk Factors, the Current State of Knowledge and Directions for Further Research](#)” (2015) at 9, online (pdf): *National Collaborating Centre for Aboriginal Health* <ccnsa-nccah.ca/docs/emerging/RPT-Post-TraumaticStressDisorder-Bellamy-Hardy-EN.pdf> [perma.cc/BYH9-JF6U].

<sup>45</sup> Dysthymic disorder, also referred to as persistent depression disorder, is “a longstanding mood disorder that is characterized by fluctuating dysphoria that may be punctuated by brief periods of normal mood”: Randy A Sansone & Lori A Sansone, “Dysthymic Disorder: Forlorn and Overlooked?” (2009) 6:5 *Psychiatry* (Edgmont) 46 at 46.

<sup>46</sup> Raymond R Corrado & Irwin M Cohen, “[Mental Health Profiles for a Sample of British Columbia’s Aboriginal Survivors of the Canadian Residential School System](#)” (2003) at 25, 50, online (pdf): *Aboriginal Healing Foundation* <https://www.ahf.ca/files/mental-health.pdf>.

<sup>47</sup> Corrado & Cohen, *supra* note 46 at 50.

have experienced trauma. As we will argue, it is crucial that the Canadian legal system, including evidence law, be trauma-informed.

### 3. How Canadian Courts Assess Credibility

Before turning to the jurisprudence, we will first review the fundamental law of witness assessment, as this practice is so deeply ingrained in our legal system that it is easy to take for granted. The trial process has a truth-seeking function “predicated on the presentation of evidence in court.”<sup>48</sup> During a trial, the parties make their case by adducing real and testimonial evidence directly observed by the trier of fact.<sup>49</sup> The function of the trier of fact is “to weigh the evidence and make findings of fact within a legal framework.”<sup>50</sup> Assessments of witness credibility are of fundamental importance to the adjudicative function of courts: “Since the majority of ‘data’ in our legal process comes from witness testimony, a significant consideration in drawing conclusions lies in deciding what to believe, a process that obviously depends upon first deciding *who* to believe”<sup>51</sup> (emphasis in original). In determining the weight to give to testimonial evidence, a trier of fact must assess the witness’s credibility and reliability. Credibility refers to the veracity of witness testimony, while reliability is concerned with the accuracy of witness testimony as assessed based on their ability to observe, recall, and recount the events in issue.<sup>52</sup> A witness who is found to be unreliable cannot give credible evidence; however, a credible witness (i.e., one who is endeavouring to tell the truth) may still inadvertently give unreliable evidence.<sup>53</sup>

The Supreme Court of Canada has described credibility findings as “the product of the judge or jury’s view of the diverse ingredients it has perceived at trial, combined with experience, logic and an intuitive sense of the matter.”<sup>54</sup> Assessing credibility “is not a science,”<sup>55</sup> and “[t]here is no crucible for truth, as if pieces of evidence, a dash of procedure, and a measure of principle mixed together by seasoned judicial stirring will yield proof of veracity.”<sup>56</sup> Instead, the direct observation of testimonial

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<sup>48</sup> *Bradshaw*, *supra* note 4 at para 19.

<sup>49</sup> *Ibid.*

<sup>50</sup> *R v Murrin*, [1999] BCTC 30 at para 8, 1999 CanLII 7224 (BCSC).

<sup>51</sup> Peter Sankoff, *The Law of Witnesses and Evidence in Canada*, (Toronto: Thomson Reuters, 2019) vol 1 (loose-leaf updated 2020, release 3), ch 12 at 12-2.

<sup>52</sup> *R v HC*, 2009 ONCA 56 at para 41 [HC].

<sup>53</sup> See *R v Morrissey*, (1995) 22 OR (3d) 514 at 526, 1995 CanLII 3498 (ONCA).

<sup>54</sup> *Marquard*, *supra* note 3 at 248.

<sup>55</sup> *R v Gagnon*, 2006 SCC 17 at para 20.

<sup>56</sup> *R v DDS*, 2006 NSCA 34 at para 77 [DDS].

evidence at trial provides the trier of fact with a set of “robust tools”<sup>57</sup> that they can apply as they see fit, which include the consideration of:

- The witness’s demeanour during examination-in-chief and cross-examination;<sup>58</sup>
- The characteristics of the witness, including their “general integrity,” intelligence, ability to observe and remember the events in question, and “accuracy in statement”;<sup>59</sup>
- The internal consistency of testimony (i.e., whether the testimony contains details that conflict with one another), including its consistency with prior statements made by the witness regarding the events in question;<sup>60</sup>
- The external consistency of the testimony (i.e., its consistency with other evidence, including the testimony of other witnesses);<sup>61</sup>
- Any motive the witness may have to fabricate their evidence;<sup>62</sup> and,
- The plausibility of the testimony as determined by “its harmony with the preponderance of the probabilities which a practical and informed person would readily recognize as reasonable in that place and in those conditions.”<sup>63</sup>

Using these deductive “tools,” the trier of fact must decide “how much, if any, of the testimony it accepts” and how much weight it will carry in their ultimate determination of guilt.<sup>64</sup>

Appellate courts afford great deference to findings of credibility made by trial judges because of the alleged “advantage”<sup>65</sup> the trier of fact gains by being able to observe firsthand the demeanour of witnesses as they testify and the peculiar institutional expertise trial judges develop through

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<sup>57</sup> *Bradshaw*, *supra* note 4 at para 19.

<sup>58</sup> *NS*, *supra* note 6 at para 25.

<sup>59</sup> *White v The King*, [1947] SCR 268 at 272, 1947 CanLII 1 [*White*].

<sup>60</sup> *RWB*, *supra* note 5 at para 29.

<sup>61</sup> *Ibid.*

<sup>62</sup> *R v Laboucan*, 2010 SCC 12 at paras 11–12, 21.

<sup>63</sup> *Faryna v Chorny*, [1952] 2 DLR 354 at 357, 1951 CanLII 252 (BCCA) [*Faryna*].

<sup>64</sup> *R v WH*, 2013 SCC 22 at para 32.

<sup>65</sup> *R v W(R)*, [1992] 2 SCR 122 at 131, 1992 CanLII 56.

their experience in “the sifting and weighing of this kind of evidence.”<sup>66</sup> This deference is also convenient. Practically speaking, appellate review of credibility assessments is exceedingly tricky, as many considerations will not be apparent on the evidentiary record or from the transcript or recording of the proceedings.<sup>67</sup> A related issue is the difficulty trial judges face in “articulat[ing] with precision the complex intermingling of impressions that emerge after watching and listening to witnesses and attempting to reconcile the various versions of events” in their reasons.<sup>68</sup> In the following pages, we will explore how two of these “tools” for assessing credibility are particularly problematic when viewed from a trauma-informed perspective: the use of prior inconsistent statements and demeanour.

#### **4. How Trauma’s Effects on Cognition Undermine the Assumption that Prior Inconsistent Statements Reduce Witness Credibility**

Witnesses can expect to be interviewed at least once prior to trial. In civil matters, the parties will be interviewed at an examination for discovery, and third-party witnesses may also be called to a pre-trial examination.<sup>69</sup> In criminal matters, a victim-witness will be interviewed one or more times during the police investigation, again at a preliminary inquiry (if one is conducted), and then again when they testify at trial.<sup>70</sup> Because of these multiple interviews, there is a chance that a witness’s trial testimony may be inconsistent with prior statements made regarding the matter.<sup>71</sup>

Such inconsistencies are legally relevant, as a witness’s prior out-of-court statement may be used to impeach their credibility and/or reliability.<sup>72</sup> The permissibility of this practice rests on the assumption that consistency in witness testimony is more likely to render it accurate

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<sup>66</sup> *R v Belnavis*, [1997] 3 SCR 341 at para 76, 1997 CanLII 320, Iacobucci J, dissenting in part.

<sup>67</sup> *Ibid.*

<sup>68</sup> *Gagnon*, *supra* note 55 at para 20.

<sup>69</sup> See Justice Education Society, “[Guidebooks for Representing Yourself in Supreme Court Civil Matters: The Discovery Process](#)” (2010) at 1, online (pdf): *Supreme Court BC Online Help Guide* <supremecourtbc.ca/sites/default/files/web/The-Discovery-Process.pdf> [perma.cc/6NL5-KATT].

<sup>70</sup> See Deborah A Connolly & Heather L Price, “Repeated Interviews About Repeated Trauma from the Distant Past: A Study of Report Consistency” in Barry S Cooper, Dorothee Griesel, & Marguerite Ternes, eds, *Applied Issues in Investigative Interviewing, Eyewitness Memory, and Credibility Assessment* (New York, NY: Springer, 2013) 191 at 192.

<sup>71</sup> *Ibid.*

<sup>72</sup> *Deacon v. The King*, [1947] SCR 531 at 534, [1947] 3 DLR 772.

and, conversely, that inconsistencies are indicia of either attempts to deceive or an unreliable memory. The nature and quantum of these inconsistencies matter. While some minor inconsistencies may on their own be excusable, a series of inconsistencies—particularly inconsistencies relating to significant rather than peripheral details—may lead to an adverse assessment of a witness’s credibility or reliability.<sup>73</sup> Judges have a great deal of discretion in determining whether and how one or more prior inconsistent statements will impact their assessment of a witness’s credibility and/or reliability, with such inconsistencies being said to fall within “the heartland of the discretion of triers of fact”.<sup>74</sup>

Impeaching witnesses on prior inconsistent statements has been described as “a highly effective strategy to attack credibility”<sup>75</sup> that is “[p]robably the most valuable means of assessing the credibility of a crucial witness”<sup>76</sup> and “can have a powerful impact on credibility both as it relates to the specific inconsistency and the overall veracity and reliability of a witness.”<sup>77</sup> Books written about effective courtroom advocacy “encourage attorneys to monitor, or even create, inconsistencies in (their opponents’) eyewitnesses’ testimonies for the purpose of impeaching them.”<sup>78</sup> According to one study, 82% of police officers, 71.9% of prosecutors, and 74% of judges agree with the statement that “consecutive statements from liars are less consistent than consecutive statements from truth-tellers.”<sup>79</sup> As demonstrated by numerous scientific studies, this sentiment is shared by the general population, suggesting it also plays a role in jury trials.<sup>80</sup> For example, a study of undergraduate

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<sup>73</sup> See *R v Norman*, 87 CCC (3d) 153 at 173–174, 68 OAC 22 (CA); *RWB*, *supra* note 4 at para 29.

<sup>74</sup> *Giron v. Canada (Minister of Employment & Immigration)* (1992), 143 NR 238 at 239, 2006 CarswellNat 3229 (FCA).

<sup>75</sup> Ronald Joseph Delisle et al, *Evidence: Principles and Problems*, 12th ed (Toronto: Thomson Reuters, 2018) at 980.

<sup>76</sup> *R v MG*, 93 CCC (3d) 347 at 354, 1994 CanLII 8733 (Ont CA).

<sup>77</sup> *R v Calder*, 19 OR (3d) 643 at 666, 1994 CanLII 8729 (CA) [*Calder*].

<sup>78</sup> Ronald P Fisher, Aldert Vrij & Drew A Leins, “Does Testimonial Inconsistency Indicate Memory Inaccuracy and Deception? Beliefs, Empirical Research, and Theory” in Cooper, Griesel & Ternes, *supra* note 70, 173 at 174.

<sup>79</sup> Leif Strömwall & Pär Anders Granhag, “How to Detect Deception? Arresting the Beliefs of Police Officers, Prosecutors and Judges” (2001) 9:1 *Psychology Crime & L* 19 at 25–26.

<sup>80</sup> See e.g., Garrett L Berman & Brian L Cutler, “Effects of Inconsistencies in Eyewitness Testimony on Mock-Juror Decision Making” (1996) 81:2 *J Applied Psychology* 170; Garrett L Berman, Douglas J Narby & Brian L Cutler, “Effects of Inconsistent Eyewitness Statements on Mock-Jurors’ Evaluations of the Eyewitness, Perceptions of Defendant Culpability and Verdicts” (1995) 19:1 *L & Human Behavior* 79; Sarah L Desmarais, “Examining Report Content and Social Categorization to Understand Consistency Effects on Credibility” (2009) 33:6 *L & Human Behavior* 470.

students found that previous inconsistent statements were perceived as the strongest indicator of inaccuracy among the ten indicators included in the survey.<sup>81</sup> Accordingly, federal legislation enshrines counsel's right to cross-examine a witness on prior statements inconsistent with their sworn testimony so long as the prior statement is first put to the witness.<sup>82</sup> In the case of alleged inconsistent oral statements, should the witness fail to "distinctly admit" having made the prior statement, evidence may be led to contradict them.<sup>83</sup>

This body of research demonstrates the deeply held and widespread assumption solidified in evidence law that prior inconsistent statements are indicative of a lack of witness credibility and/or reliability—an inference that grows in strength with the number and significant of the inconsistencies. We will now interrogate this proposition generally before specifically critiquing it from a trauma-informed perspective.

### **A) The Weak Relationship Between Consistency, Honesty and Testimonial Accuracy**

Despite its acceptance by the legal establishment and society at large, the utility of inconsistent prior statements to assess credibility is questionable. Not only have numerous studies raised doubts as to whether inconsistency is a reliable indicator of dishonesty or inaccuracy, but also the belief that a witness who has made prior inconsistent statements is less likely to be credible and/or reliable rests on assumptions regarding human memory that are especially problematic when viewed from a trauma-informed perspective. In her consideration of the relationship between credibility and consistency in the context of immigration proceedings, Juliet Cohen describes one of the main assumptions that undergird this "common-sense" belief:

First comes the observation: '*liars change their story*'. This is supposedly because a made-up story is harder to remember consistently than autobiographical event, or because when challenged, liars change details to cover inconsistencies. This leads to the hypothesis: '*changes in a story indicate falsehood*', but this is the converse of the observation and has never been conclusively proven to be so. [...] In logic this is known as the 'fallacy of converting the proposition'.<sup>84</sup>

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<sup>81</sup> See Neil Brewer et al, "Beliefs and Data on the Relationship Between Consistency and Accuracy of Eyewitness Testimony" (1999) 13:4 *Applied Cognitive Psychology* 297 at 310–311.

<sup>82</sup> See *Canada Evidence Act*, RSC 1985, c C-5, s 10.

<sup>83</sup> *Canada Evidence Act*, *supra* note 82 at s 11.

<sup>84</sup> Juliet Cohen, "Questions of Credibility: Omissions, Discrepancies and Errors of Recall in the Testimony of Asylum Seekers" (2001) 13:3 *Intl J Refugee L* 293 at 307–308 [emphasis in original].

Appositely, scientific studies question the assumed relationship between inconsistency, accuracy and honesty, having found a “weak (negative) relation between inconsistencies and actual accuracy,” which, in short, means that a person who has been inconsistent across interviews may nonetheless be providing accurate testimony.<sup>85</sup> Illustrating this point is a 1986 case study where thirteen witnesses to a real-life robbery who gave an interview to police were subsequently re-interviewed by researchers between four and five months later.<sup>86</sup> In these follow-up interviews, 60.05% of witnesses provided information in their subsequent interview that was not divulged during their initial police interview.<sup>87</sup> Applying the judicial assumption that prior inconsistent statements are indicative of deceit or inaccuracy, this new information would risk being given little weight in a court of law; however, its accuracy rate was found to be 81.07%, which “compared favourably to the 84.14% accuracy of their police accounts.”<sup>88</sup>

This study hints at the genuine relationship between inconsistency, accuracy, and honesty. For one, the type of inconsistency matters.<sup>89</sup> Where an individual has been interviewed about the same event multiple times, statements made at subsequent interviews that directly contradict previous statements are much less accurate than statements that provide new information while being otherwise consistent with the events relayed.<sup>90</sup> This distinction between inconsistencies arising through previous omissions versus inconsistencies where testimony directly contradicts past statements is absent from the jurisprudence—indeed, omissions are often dealt with interchangeably with other types of inconsistencies, errors and even falsehoods.<sup>91</sup>

While, as noted above, the jurisprudence does account for the “significance” of the inconsistency in a general sense,<sup>92</sup> what precisely is significant about one or more inconsistencies is unclear and subject to the idiosyncratic discretion of the trier of fact, meaning that credibility assessments based on prior inconsistent statements are highly subjective—and, for this reason, prone to their own inconsistency. Even if the significance of inconsistencies could be uniformly assessed, triers of fact are permitted to allow inconsistencies regarding collateral matters

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<sup>85</sup> Connolly & Price, *supra* note 70 at 193.

<sup>86</sup> John C Yuille & Judith L Cutshall, “A Case Study of Eyewitness Memory of a Crime” (1986) 71:2 J Applied Psychology 291 at 291–292.

<sup>87</sup> See Yuille & Cutshall, *supra* note 86 at 296.

<sup>88</sup> *Ibid.*

<sup>89</sup> Fisher, Vrij & Leins, *supra* note 78 at 187.

<sup>90</sup> *Ibid.* at 177.

<sup>91</sup> See e.g. *R v EB*, 2012 ONCA 875 at para 15; *R v MacKay*, 2021 BCCA 446 at para 97.

<sup>92</sup> See *RWB*, *supra* note 5 at para 29.

to inform their credibility assessment so long as they are not “over-emphasized in that assessment”.<sup>93</sup> Only when a judge’s handling of these inconsistencies represents a palpable and overriding error will appellate intervention be warranted.<sup>94</sup>

Two other empirically proven trends significantly undermine the logic underpinning the impeachment of witness testimony through past inconsistent statements, calling into doubt the aforementioned belief that “[s]elf-contradiction through proof of a prior inconsistent statement can have a powerful impact on credibility both as it relates to the specific inconsistency and the overall veracity and reliability of a witness”.<sup>95</sup> First, the fact that a witness makes one or more inconsistent statements does not, empirically speaking, indicate inaccuracy in their testimony generally.<sup>96</sup> As a result, the practice of impeaching a witness’s testimony as a whole based on one or more inconsistent detail lacks empirical support, suggesting that it rests on faulty assumptions about memory and accuracy.<sup>97</sup> The jurisprudence does appreciate this truth—at least a on surface level—as indicated by the fact that a witness can be found credible and reliable despite some minor inconsistencies in their testimony.<sup>98</sup> However, the troubling combination of great deference and a high standard of review creates the possibility for fact-finding errors, injects the process with a high degree of subjectivity (because, as noted before, triers of fact will inevitably have different views on the significance of an inconsistency is, on its own or cumulatively) and shields questionable inferences from meaningful review.

Second, the belief that inconsistency indicates deceit has only been experimentally proven where the questions asked are unexpected.<sup>99</sup> So long as liars can anticipate the question they will be asked (as they often can during legal proceedings), their answers will be consistent at the time they first testify (because they will have rehearsed their answer) and in subsequent interviews (because they will remember the answers they gave at their first interview).<sup>100</sup> Thus the assumption that the presence of prior inconsistent statements can be used to detect liars—an assumption that is fundamental to the impeachment of witnesses through their past statement(s)—has not been proven empirically.

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<sup>93</sup> *R v Kulasingam*, 2018 ABCA 97 at para 10.

<sup>94</sup> See *Gagnon*, *supra* note 55 at para 10.

<sup>95</sup> *Calder*, *supra* note 77 at 666.

<sup>96</sup> See Fisher, Vrij & Leins, *supra* note 78 at 178.

<sup>97</sup> *Ibid* at 187.

<sup>98</sup> See *RWB*, *supra* note 5 at para 29.

<sup>99</sup> See Fisher, Vrij & Leins, *supra* note 78 at 187.

<sup>100</sup> See *ibid* at 186.

Having demonstrated some of the questionable assumptions and flawed reasoning upon which the impeachment of a witness by prior inconsistent statements rests, we now turn to an examination of the issue from a trauma-informed perspective.

## **B) Traumatic Memory, Credibility and Reliability**

The notion that prior inconsistent statements indicate inaccuracy, already questionable on the basis of experimental data, is further complicated when one considers the scientifically proven effects of trauma on memory. Memory is defined in contemporary psychology as “the faculty of encoding, storing, and retrieving information.”<sup>101</sup> The type of memory that a witness accesses while giving testimony is called autobiographical memory, which consists of “mental constructions [...] of various types of information”<sup>102</sup> that are of “fundamental significance for the self, for emotions, and for the experience of personhood.”<sup>103</sup> Of the various types of information stored in autobiographical memory, two are of particular importance during witness testimony: episodic memories, which “represent information derived from specific experiences, often in the form of visual mental images,” and autobiographical knowledge, which “represents factual and conceptual knowledge about a person’s life.”<sup>104</sup> Long-term memories containing episodic memories and autobiographical knowledge are formed in three stages: encoding, retention (which involves both memory storage and an ongoing consolidation process), and retrieval<sup>105</sup>—all of which are adversely impacted by trauma.<sup>106</sup>

Encoding, the first stage of memory processing, involves “the conversion of a sensory input into a form capable of being processed and deposited in memory.”<sup>107</sup> A complicated array of processes associated with trauma can affect encoding. The high emotional arousal associated with trauma causes the release of the stress hormones adrenaline and cortisol into the bloodstream, which—after temporarily intensifying memory

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<sup>101</sup> Gregorio Zlotnik & Aaron Vansintjan, “Memory: An Extended Definition” (2019)10:2535 *Frontiers Psychology* 1 at 2.

<sup>102</sup> *Psychological Society, supra* note 30 at 11.

<sup>103</sup> Martin A Conway & Christopher W Pleydell-Pearce, “The Construction of Autobiographical Memories in the Self-Memory System” (2000) 107:2 *Psychological Rev* 261 at 261.

<sup>104</sup> *Psychological Society, supra* note 30 at 11.

<sup>105</sup> See M Rose Barlow, Kathy Pezdek, & Iris Blandón-Gitlinin, “Trauma and Memory” in Gold, *supra* note 33, 307 at 315.

<sup>106</sup> *Ibid.*

<sup>107</sup> Gary R VandenBos, ed, *APA Dictionary of Psychology*, 2nd ed (Washington, DC: American Psychological Association, 2007) sub verbo “encoding”.

encoding—impair the brain’s ability to form new memories.<sup>108</sup> The initial improvement in memory is attributable to the release of adrenaline, which causes the hippocampus (a structure in the brain responsible for long-term memory that is vital to the formation of episodic memories) to temporarily “super-encode” sensory inputs, leading to the formation of vivid “flashbulb memories” of the initial moments of the traumatic event.<sup>109</sup> Importantly, studies indicate that the apparent clarity and intensity of “flashbulb memories” are subjective, leading individuals to have increased confidence in their accuracy despite these memories not being any more accurate than regular memories.<sup>110</sup> Prolonged exposure to these stress hormones during a protracted traumatic experience impairs encoding, leading to a fragmented memory common to those who have experienced trauma.<sup>111</sup>

In addition to this surge of memory-altering stress hormones, trauma affects memory by interfering with other physiological processes. High emotional arousal caused by trauma can cause the hippocampus to dissociate from the amygdala (the part of the brain that assists in encoding the emotional and sensory content of memory).<sup>112</sup> As a result, “[s]ensation, emotion, behaviour, and conscious awareness, which are usually integrated with one another, can be disconnected from their context in time and space,”<sup>113</sup> contributing to the non-linear nature of traumatic memory. Traumatic experiences also reduce the activity in a part of the brain called Broca’s area, which is associated with speech.<sup>114</sup> This results in “traumatic memories [that] are encoded without words and are difficult to access verbally.”<sup>115</sup> Instead, a trauma “survivor’s memory is ‘imprinted’ with the sensory data from the traumatic event—the sights, sounds, smells, and bodily sensations.”<sup>116</sup> In addition, the defence mechanism of dissociation, often experienced during trauma, subsequently impacts the “trauma victim’s ability to remember the entire event,” leading to

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<sup>108</sup> See Department of Justice Canada, *supra* note 17 at 20.

<sup>109</sup> *Ibid*; VandenBos, *supra* note 107 sub verbo “hippocampus”.

<sup>110</sup> See Elizabeth A Phelps, “Emotion’s Impact on Memory” in Lynn Nadel & Walter P Sinnott-Armstrong, eds, *Memory and Law* (Oxford, UK: Oxford University Press, 2012) 7 at 9.

<sup>111</sup> See J Douglas Bremner, “Does Stress Damage the Brain?” (1999) 45:7 *Biological Psychiatry* 797 at 798.

<sup>112</sup> See Department of Justice Canada, *supra* note 17 at 21; VandenBos, *supra* note 107 sub verbo “amygdala”.

<sup>113</sup> Department of Justice Canada, *supra* note 17 at 21.

<sup>114</sup> See Barlow, Pezdek, & Blandón-Gitlinin, *supra* note 105 at 315.

<sup>115</sup> *Ibid*.

<sup>116</sup> Stephen Paskey, “Telling Refugee Stories: Trauma, Credibility, and the Adversarial Adjudication of Claims for Asylum” (2016) 56:3 *Santa Clara L Rev* 457 at 487.

memory “gaps.”<sup>117</sup> The cumulative impact of these encoding issues is that memories of trauma are often incomplete, consisting primarily of vivid sensory memories without context, time sequence information, or “the linguistic narrative structure that gives a person’s ordinary memories a sense of logical and chronological coherence.”<sup>118</sup> These issues are only exacerbated during the next stage of memory (retention), during which initially fragile new memories are stored in the brain and undergo a process of consolidation, becoming increasingly stable over time.<sup>119</sup> Sleep is a necessary component of this process; thus, trauma-related sleep interruptions, including “nightmares, hypervigilance, and substance abuse can interrupt sleep cycles in the aftermath of trauma and even years later,” negatively affecting memory consolidation.<sup>120</sup>

Trauma also affects the final stage of memory, retrieval. Retrieval describes the “process of recovering or locating information stored in memory”<sup>121</sup> when “one attempts to mentally identify a past event.”<sup>122</sup> The hippocampus is smaller and abnormally shaped in traumatized individuals due to prolonged exposure to cortisol, making memories “vulnerable to disruption and difficult to access.”<sup>123</sup> Further, traumatic memories may be either consciously or unconsciously suppressed or avoided, inhibiting recall and “lineal, verbal reprocessing.”<sup>124</sup> Traumatized individuals also struggle to inhibit involuntary retrieval of irrelevant memories, which “makes it more difficult to retrieve relevant, on-task information”—further affecting cognition.<sup>125</sup>

As a result of the many disruptions trauma causes to the encoding, storage, consolidation, and retrieval of memory, traumatic memories possess a number of predictable, scientifically proven qualities that set them apart from regular memory:

- Traumatic memories are “are fragmentary, disordered, disjointed, and often contain details that do not derive from experience.”<sup>126</sup>

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<sup>117</sup> *Psychological Society, supra* note 30 at 27.

<sup>118</sup> Paskey, *supra* note 116 at 487; Department of Justice Canada, *supra* note 17 at 21.

<sup>119</sup> See James L McGaugh, “Memory—A Century of Consolidation” (2000) 287:5451 *Science* 248 at 248.

<sup>120</sup> Barlow, Pezdek, & Blandón-Gitlinin, *supra* note 105 at 317–318.

<sup>121</sup> VandenBos, *supra* note 107 sub verbo “retrieval”.

<sup>122</sup> Phelps, *supra* note 110 at 11.

<sup>123</sup> Barlow, Pezdek, & Blandón-Gitlinin, *supra* note 105 at 315–316.

<sup>124</sup> *Ibid* at 318–319.

<sup>125</sup> *Ibid* at 319.

<sup>126</sup> Martin A Conway, “Ten Things the Law and Others Should Know about Human Memory” in Nadel & Sinnott-Armstrong, *supra* note 110, 359 at 359.

- The memories of individuals who suffer trauma will often have “gaps,” and the memories that do form will focus on “several key ‘hotspot’ moments which will often be recalled out of sequence, and often only as part of an ongoing and unfolding dialogue or engagement.”<sup>127</sup> These moments are typically hotspots because of their idiosyncratic relevance to the person, not because they are, by some objective measure, the most salient.
- Traumatic memories tend to be “highly repetitive [...], mainly consisting of sensory experiences of short duration [relating to the] moments signalling that the traumatic event was about to happen or that the meaning of the event had become more threatening.”<sup>128</sup>
- Contrary to the normal process of memory retrieval, traumatic memories may be experienced as intrusive “flashbacks” that are “triggered involuntarily by specific reminders that relate in some way to the circumstances of the trauma” and experienced as if happening in the present.<sup>129</sup> Despite their subjective intensity, flashbacks do not have greater reliability or immutability over time than regular memories.<sup>130</sup>
- While “all memories can change with repeated retelling,” this phenomenon is heightened for those who have experienced trauma.<sup>131</sup>
- Trauma can affect both the memory of the traumatic event itself and autobiographical memory generally.<sup>132</sup>
- People who have experienced trauma may exhibit some or all of these memory issues, even absent a clinical diagnosis for PTSD or similar.<sup>133</sup>

Unfortunately, these fragmented, non-linear, sparse traumatic memories stand “in direct opposition to common notions of what constitutes a

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<sup>127</sup> Ellison & Munro, *supra* note 19 at 189.

<sup>128</sup> Chris R Brewin, “Autobiographical Memory for Trauma: Update on Four Controversies” (2007) 15:3 *Memory* 227 at 232–233.

<sup>129</sup> Chris R Brewin & Emily A Holmes, “Psychological Theories of Posttraumatic Stress Disorder” (2003) 23:3 *Clinical Psychology Rev* 339 at 340–41.

<sup>130</sup> See Richard J McNally, “Debunking Myths About Trauma and Memory” (2005) 50:13 *Can J Psychiatry* 817 at 818.

<sup>131</sup> *Psychological Society*, *supra* note 30 at 27.

<sup>132</sup> See Brewin & Holmes, *supra* note 129 at 340; Phelps, *supra* note 110 at 22–23.

<sup>133</sup> See *Psychological Society*, *supra* note 30 at 25.

‘good’ victim account.”<sup>134</sup> They also dramatically increase the chance that a traumatized witness will have made previous inconsistent statements, as trauma increases the chance that memories will “alter on retelling, with some details being lost as memory fades over time whilst repeated recall can bring novel details to mind.”<sup>135</sup> Numerous studies have shown that traumatic memories are less likely to be believed due to the positive correlation between richness of detail and perceptions of credibility and reliability.<sup>136</sup> With respect to victim-witnesses, Martin A. Conway describes this state of affairs as a “tragic irony” that adversely affects both the decision to bring charges and the evidence adduced at trial:

[T]he erroneous beliefs about human memory that permeate our legal agencies lead to prosecution on the basis of fluent, highly detailed narratives of events that took place in childhood (for which there usually is no other evidence), but a fragmentary, jumbled account, with gaps, of an assault that took place on the weekend is not accepted because it is viewed as too easy to discredit in court. The point is that the very features of reports that make them more likely to be accurate are taken by courts as evidence of unreliability, whereas features of reports that make them more likely to be filled with errors are taken as evidence that they are accurate.<sup>137</sup>

To make matters more complex, there is also notable variability among trauma survivors regarding the issue of how their stories are recalled and told.<sup>138</sup> Some trauma survivors exhibit many of the aforementioned memory recall characteristics while others exhibit very few. Some recall their stories with greater narrative coherence than others. Why would this be? The way that we recall stories seems to depend, to some extent, on the nature of our “attachment” patterns. Those who have a “secure” attachment pattern tell much more coherent and consistent stories than those who have an “insecure” attachment pattern. As an example, “dismissing” attachment is one of the insecure attachment patterns, and individuals who have this pattern will dismiss or exclude a good deal of vulnerable emotional information, even when such information is highly relevant to the topic at hand. For example: “*Yeah, my dad used to beat me up pretty badly, but no, I never felt rejected or hurt as a child. He was just super stressed out. No big deal, dads are just like that.*” In this example, the speaker leaves the listener with the distinct impression that the speaker is not being truthful with himself.

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<sup>134</sup> Ellison & Munro, *supra* note 19 at 188.

<sup>135</sup> *Ibid.*

<sup>136</sup> *Ibid.*

<sup>137</sup> Conway, *supra* note 126 at 364 [emphasis added].

<sup>138</sup> See Robert T. Muller, *Trauma & the Struggle to Open Up: From Avoidance to Recovery and Growth* (New York, NY: WW Norton, 2018), ch. 1.

In contrast, someone with a secure attachment pattern would recall childhood experiences in ways that are much more coherent. For example: *“My dad used to beat me up. Yeah, I felt pretty hurt and rejected by that, it’s true. But he wasn’t always a horrible guy, especially when he was sober; still, yeah, that really sucked.”* This is an example of the same event recalled in a manner that is much more coherent and consistent. And the listener is left with the distinct impression that the speaker is being honest with himself. Trauma survivors vary with respect to the way in which they recall their own traumatic stories. Survivors with different attachment patterns can recount the same event with very different emphases, including or excluding very different information.

### **C) Judicial Consideration of Trauma and Memory**

While the preceding discussion highlights the theoretical risks posed to the truth-seeking function of the legal system by an inadequate understanding of trauma’s effects on memory, there has never been a comprehensive review of the case law to assess how judges have in practice dealt with trauma’s effect on memory while assessing witness credibility. Accordingly, we reviewed the case law for Canadian court decisions since January 1, 2000, where judges considered the impact of trauma on memory in their assessments of witness credibility.<sup>139</sup> The vast majority of these cases involved assessments of the credibility of sexual assault complainants. We found a troubling inconsistency in judges’ knowledge of traumatic memory. Some are willing (and able) to consider the consequences of traumatic memory by drawing on their “common sense and wisdom gained from personal experience,” while others are wary of doing so in the absence of expert testimony. Where judges have considered the effects of trauma without hearing expert testimony, witnesses with trauma-related memory issues are generally only believed where their testimony is corroborated by other evidence, or judges have been favourably impressed by their demeanour. Alternatively, where judges have heard expert evidence regarding the effects of trauma on memory, reliance on this testimony leads to a risk that their decisions will be overturned should an appellate court find that the expert was testifying outside of their area of expertise, despite the solid scientific consensus regarding this subject matter. The result is a perverse situation where

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<sup>139</sup> The cases in this section of the paper were found via the following keyword searches of the Canadian Legal Institute “CanLII” case law database conducted on or before 13 April 2022:

- (“judicial notice” or “expert evidence”) /s trauma\*
- (memory or (inconsistent /2 statement\*)) /15 trauma NOT ((head OR physical or neurological) /1 trauma) [with search results limited to those cases published after 1 January 2000].

more poorly informed decisions are less vulnerable to appellate review due to hairsplitting regarding the testimony of expert witnesses.

### **i) Uncertainty Regarding the Need for Expert Testimony in Considering Traumatic Memory**

There is a lack of clarity in reported judicial decisions regarding when expert evidence is admissible to help triers of fact interpret the assessment of the testimony of witnesses who have experienced trauma. A key reason for this uncertainty is the general position in Canadian evidence law that credibility assessments of witnesses are deemed to be “a matter within the competence of lay people” that “must always be the product of the judge or jury’s view of the diverse ingredients it has perceived at trial, combined with experience, logic and an intuitive sense of the matter.”<sup>140</sup> Conversely, one of the criteria for the admissibility of expert evidence is its necessity: Experts are permitted to testify only to matters “likely to be outside the experience and knowledge of a judge or jury.”<sup>141</sup> In other words, since credibility assessments are deemed to be within the competence of juries and judges, there is a bias against expert evidence related to credibility. There are, however, notable exceptions to this general approach.

As Justice Wilson, writing for a majority of the Supreme Court of Canada, cautioned in *R. v. Lavallee*, “the belief that judges and juries are thoroughly knowledgeable about ‘human nature’ and that no more is needed” risks obfuscating the need for expert evidence.<sup>142</sup> Accordingly, expert evidence may be used for credibility assessments, but only regarding matters that are “beyond the ordinary experience of the trier of fact”, and only so long as it does not speak directly to the “ultimate credibility of the witness.”<sup>143</sup> Indeed, in *Lavallee*, the Court held that expert testimony could assist triers of fact in assessing the credibility of women who had stayed with their partners despite being victims of domestic violence (a phenomenon referred to in the case as “battered spouse syndrome”).<sup>144</sup> The narrowly circumscribed use that judges may make of expert testimony in assessing witnesses requires them to walk a fine line. They must be careful not to judge testimony affected by matters outside of their “ordinary experience” but also avoid excessive reliance on expert assistance to the point that they abandon their “duty to [themselves] determine the credibility of the witness.”<sup>145</sup>

<sup>140</sup> *Marquard*, *supra* note 3 at 248.

<sup>141</sup> *R v Abbey*, [1982] 2 SCR 24 at 42, 1982 CanLII 25, citing *R v Turner* (1974), 60 Cr App R 80 at 83, [1975] 1 All ER 70.

<sup>142</sup> *R v Lavallee*, [1990] 1 SCR 852 at 871, 1990 CanLII 95 [*Lavallee*].

<sup>143</sup> *Marquard*, *supra* note 3 at 249.

<sup>144</sup> *Lavallee*, *supra* note 142 at 871–872.

<sup>145</sup> *Marquard*, *supra* note 3 at 227; *R v Mohan* [1994] 2 SCR 9 at 24, 1994 CanLII 80.

As a result, many judges are reluctant to consider the potential impacts of trauma on memory while assessing witness credibility without expert evidence. For example, in *R. v. A.C.*, after considering discrepancies between a complainant-witness's testimony at trial and her evidence at a preliminary inquiry, the trial judge held that these inconsistencies raised concerns that "she may have substituted her retrospective assessment of A.C.'s conduct for her actual state of mind at the time of their sexual activity."<sup>146</sup> While accepting that "some victims of trauma may experience memory problems," the trial judge declined to apply this knowledge without expert assistance.<sup>147</sup>

Judicial uncertainty regarding the effects of trauma on memory can also work in the complainant-witness's favour by preventing the anticipated trauma of a crime from being used to undermine their credibility. In *R. v. O'Keefe*, the accused attempted to use the trauma suffered by the witness-complainant during a sexual assault to attack her ability to remember the perpetrator's identity, arguing that "the assault would have impaired Ms. N.'s powers of observation or memory of the perpetrator."<sup>148</sup> While Justice Hoegg acknowledged that trauma could impair memory, she also noted how trauma might "enhance one's powers of observation in that images from traumatic events could leave an indelible mark on one's memory"—an apparent reference to flashbulb memories whose enhanced reliability is, as discussed previously, largely subjective.<sup>149</sup> Ultimately, the court rejected this argument, as there was no evidence that the complainant's memory was affected by trauma.<sup>150</sup> The defence's argument in this case highlights how the science of trauma risks being employed to further undermine truthful victim testimony, and demands a robust trauma-informed approach to this topic.

## ii) Judicial Consideration of Trauma's Effects on Memory

This reluctance to engage with the intricacies of traumatic memory is understandable. It is counterintuitive, making the application of "common sense" a risky proposition.<sup>151</sup> Yet, the Supreme Court of Canada has affirmed that triers of fact may use their common sense to assess the quality and nature of memory when assessing a witness's credibility and reliability, and judges routinely draw inferences regarding the impact of trauma on memory based on their experience and intuition alone.<sup>152</sup> The

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<sup>146</sup> *R v AC*, 2019 BCSC 173 at paras 147–148 [AC].

<sup>147</sup> *Ibid* at para 148.

<sup>148</sup> *R v O'Keefe*, 2018 NLCA 11 at para 15.

<sup>149</sup> *Ibid*.

<sup>150</sup> *Ibid*.

<sup>151</sup> See e.g. *AC*, *supra* note 146.

<sup>152</sup> See *R v François*, [1994] 2 SCR 827 at 840, 1994 CanLII 52.

result is that the perceived credibility of a witness whose memory has been affected by trauma is often contingent on the idiosyncratic views of the trier of fact rather than the proven science of traumatic memory. This raises concerns about arbitrariness and widespread inconsistency in foundational assessments of witness testimony among judges and jurors.

In our review of the case law, we found numerous propositions regarding trauma and memory of which judges have taken tacit judicial notice,<sup>153</sup> including the following:

- Victims of sexual assault can be presumed to have suffered psychological trauma.<sup>154</sup>
- “[T]he combination of trauma and passage of time would result in lapses of memory.”<sup>155</sup>
- “[P]eople exposed to traumatic events can and do suppress memories of the same.”<sup>156</sup>
- “[O]bservations made by witnesses in the course of traumatic events can be difficult to recall and to describe accurately at a later date”.<sup>157</sup>
- “[A] witness cannot be expected to have a faithful memory of minor incidents that occurred during a traumatic event, and the inability to recall a minor or insignificant event does not detract from the witness’s overall reliability or credibility”.<sup>158</sup>
- “[I]t is human nature to try to make sense out of bits and pieces of memories about an event, and this may impact the accuracy of a witness’s testimony concerning events”.<sup>159</sup>

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<sup>153</sup> Tacit judicial notice may be taken of facts that are either “(1) so notorious or generally accepted as not to be the subject of debate among reasonable persons; or (2) capable of immediate and accurate demonstration by resort to readily accessible sources of indisputable accuracy”: *R v Find*, 2001 SCC 32 at para 48.

<sup>154</sup> See *R v McCraw*, [1991] 3 SCR 72 at 84–85, 1991 CanLII 29.

<sup>155</sup> *R v Eze*, 2022 ONSC 277 at para 55 [*Eze*].

<sup>156</sup> *R v JDH*, 2022 SKQB 6 at para 45 [*JDH*].

<sup>157</sup> *R v GMC*, 2022 ONCA 2 at para 38 [*GMC*].

<sup>158</sup> *Ibid.*

<sup>159</sup> *Ibid.*

While these statements all align with the scientific consensus regarding the nature of traumatic memory as outlined above,<sup>160</sup> the way judges arrive at and apply these supposedly common-sense propositions gives rise to several issues. For one thing, the point at which it becomes impermissible for a judge to take judicial notice of trauma's effects on memory is unclear. Illustrating this point is *R. v. J.M.*, where the Court of Appeal for Ontario held that the trial judge erred when he drew on his personal experience to conclude that a sexual assault complainant's failure to distance herself from her abuser should not adversely impact her credibility or reliability.<sup>161</sup> The Court of Appeal stated:

While it may prove difficult in some cases to know where to draw the dividing line, the general view is that unless the criteria of notoriety or immediate demonstrability are present, a judge cannot take judicial notice of a fact within his or her personal knowledge, even if it has been proved before the judge in a previous case.<sup>162</sup>

Accordingly, because this inference was neither notorious nor immediately demonstrable, the failure to allow formal submissions by the parties had “sidestepp[ed] the test for judicial notice”.<sup>163</sup> It is unclear why it was an error for the *J.M.* trial judge to rely on certain beliefs about the complainant's post-assault conduct in his credibility assessment when there are few limits on the assumptions judges may make about the nature of traumatic memory.

Furthermore, even when judges take tacit judicial notice of accurate statements regarding how trauma affects human cognition and behaviour, their application of this knowledge is inconsistent, resulting in reasoning that varies widely in its adherence to accepted science.<sup>164</sup> The following passage from a trial court judgment, upheld by the Court of Appeal for Ontario, highlights the difficult task facing the trier of fact who grapples with traumatic memory:

Each judge is left to his or her own devices in making these assessments. Judges are expected to integrate our life experiences with the reality of the world to come to conclusions as to what is logical and reasonable. Similarly, we are left on our own to determine the theory for whether a memory is good or bad. Judges rarely hear expert evidence concerning memories. The exception is when expert witnesses are

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<sup>160</sup> See e.g. Anke Ehlers & David M Clark, “A Cognitive Model of Posttraumatic Stress Disorder” (2000) 38 *Behaviour Research & Therapy* 319 at 331–32; Bremner, *supra* note 111 at 798; Brewin, *supra* note 128 at 232–234.

<sup>161</sup> 2021 ONCA 150 at paras 40–45 [*JM*].

<sup>162</sup> *Ibid* at para 34.

<sup>163</sup> *Ibid* at para 54.

<sup>164</sup> See *R v S(RD)*, [1997] 3 SCR 484 at 537, 1997 CanLII 324.

called with respect to the memories of children, repressed memories, memories of post-traumatic stress victims, [and] other unique and vulnerable witnesses.

...

So, really, in the absence of expert evidence a judge is left alone to sort through the sorts of arguments that are presented in assessing the evidence based on memories.

Finally, a judge is left with questioning whether a witness has a good memory versus a bad memory as an over-generalization. Is there a rating skill for memories? I wonder whether the real test is our ability to access a memory at the time of testifying.<sup>165</sup>

Similarly, even when a judge has a good understanding of traumatic memory, it is often unclear how this knowledge should be applied in the circumstances. The Court in *R. v. Castro-Wunsch* observed:

The Crown suggested I can take “judicial notice” of the fact that shock and trauma can impact on a witness’s memory. In my view, that is the wrong question to ask. The question is whether there was a sufficient factual foundation before me to infer that this witness’s actions at or near the time of the alleged assault, and/or her memory at trial were impacted by shock and trauma.<sup>166</sup>

Appositely, in *R. v. J.D.H.*, the Court noted how taking judicial notice of the fact that trauma can lead to the suppression of memory did little to assist the Court in determining the extent to which such suppression had occurred in a given instance.<sup>167</sup>

There is also the risk that judges who attribute an individual’s memory issues to trauma without a clinical diagnosis may inadvertently engage in “circular reasoning”,<sup>168</sup> where the fact that a witness claims their memory was affected by trauma is treated as evidence that the alleged crime occurred. In *R. v. M.C.*, the Court heard an appeal from a sexual assault conviction, where both the accused’s and the complainant’s testimonies corroborated one another except as to whether consent had been given.<sup>169</sup> The trial court’s decision was ultimately overturned, and a new trial ordered, as the trial judge was found to have erred by excusing “inconsistencies and memory lapses as to significant portions of the

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<sup>165</sup> *GMC*, *supra* note 157 at para 25 [emphasis removed].

<sup>166</sup> *R v Castro-Wunsch*, 2021 ABQB 337 at para 300.

<sup>167</sup> *Supra* note 156 at para 45.

<sup>168</sup> *R v MC*, 2021 ONSC 2181 at para 96 [MC].

<sup>169</sup> *Ibid* at para 5.

complaint [...] by reason of trauma which in turn only flows from an assumption that the assault happened.”<sup>170</sup>

In some cases, the problems posed by a traumatized individual’s memory are avoided through the application of other inferential “tools”<sup>171</sup> for assessing witness credibility and reliability. Based on our survey of the jurisprudence, judges appear to give greater weight to the evidence of witnesses who claim to have memory issues attributable to psychological trauma when they acknowledge and explain inconsistencies,<sup>172</sup> are corroborated by external evidence,<sup>173</sup> clearly and carefully explain what they can and cannot remember,<sup>174</sup> admit to gaps in their memory despite these admissions weakening the prosecution’s case<sup>175</sup> and testify in a “candid and straight-forward”<sup>176</sup> manner. In *R. v. Eze*, a judge found a witness whose memory was affected by trauma to be both credible and reliable, based largely on these criteria.<sup>177</sup> However, while *Eze* may show a potential path forward for judges dealing with witnesses who have suffered trauma, the subjective nature of credibility assessments means that seemingly similar cases can have different outcomes.

Illustrating this point is *R. v. D.R.*, where the Court assessed the credibility of a witness who claimed to suffer from trauma-related memory issues.<sup>178</sup> The factual matrix in *D.R.* was similar to that in *Eze*: The complainant had acknowledged inconsistencies in her testimony, carefully explained what she could and could not remember, admitted to gaps in her memory that harmed the prosecution’s case and was found to be an articulate witness who answered questions directly and thoughtfully.<sup>179</sup> While the judge accepted these factors as enhancing the witness’s credibility, he ultimately held that her testimony was unreliable because the witness had described her memories as “‘pictures’ of events”<sup>180</sup> that had been subject to suppression caused by post-traumatic stress disorder.<sup>181</sup>

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<sup>170</sup> *Ibid* at para 97.

<sup>171</sup> *Bradshaw*, *supra* note 4 at para 19.

<sup>172</sup> See *Eze*, *supra* note 155 at para 71.

<sup>173</sup> See *R v Qhasimy*, 2017 ABPC 83 at para 109 [*Qhasimy*], *aff’d* 2018 ABCA 228; *Eze*, *supra* note 155 at paras 59–60; *R v Virk*, 2018 BCSC 2409 at paras 338–39.

<sup>174</sup> See *Eze*, *supra* note 155 at paras 55–57.

<sup>175</sup> *Ibid* at para 55.

<sup>176</sup> *Qhasimy*, *supra* note 173 at para 117.

<sup>177</sup> *Supra* note 155 at paras 55–57, 71.

<sup>178</sup> 2018 ONCJ 518 [*DR*].

<sup>179</sup> *DR*, *supra* note 178 at paras 21–22.

<sup>180</sup> *Ibid* at para 29.

<sup>181</sup> *Ibid* at paras 29–32.

While one can distinguish *Eze* from *D.R.* due to the lack of external evidence supporting the complainant's testimony in the latter,<sup>182</sup> differentiating them in this way implies that, absent corroboration, traumatized individuals risk not being believed on account of trauma stemming from the same crime that is the subject of the proceedings in which they are testifying—precisely the “tragic irony” of which Martin Conway warns.<sup>183</sup> Indeed, there are clues that this may be what occurred in *R. v. G.M.*<sup>184</sup> In that case, the Court acquitted the accused on two of three counts of sexual assault because the complainant was unclear of the order in which they occurred, the complainant lacked context for the memories and there were inconsistencies in the complainant's testimony regarding matters not relevant to the material aspects of the crime (in this case, the type of bathing suit she wore during one of the assaults).<sup>185</sup> The Court found that the complainant's “testimony that memories of the trauma come ‘in different pieces’ and ‘you remember things in different sections’ demonstrates that it would be unsafe to convict on her evidence.”<sup>186</sup> Troublingly, the aspects of the witness's testimony that the judge found rendered her testimony unreliable strongly correspond with the expected presentation of memories of a sexual assault due to the impacts of trauma on memory encoding, storage and retrieval.<sup>187</sup> While, as noted in *M.C.*, a witness's claim that trauma has affected their memory should not be used to infer that a crime has occurred, neither should signs that a witness's memory has been impacted by trauma be used to discredit their account of a traumatic event.<sup>188</sup>

While the use of expert testimony (where available) may seem an obvious solution to the aforementioned problems, in practice, the strict criteria used to judge the admissibility of expert evidence often only compound the challenges facing judges. For example, in *R. v. Czechowski*, the Court of Appeal for British Columbia considered whether a trial judge had erred when they relied on the testimony of a medical doctor regarding the impact of trauma on memory.<sup>189</sup> The witness was qualified “as an expert in the diagnosis and treatment of injuries and illnesses, the assessment and examination of sexual assault victims, and performing forensic sexual assault examinations.”<sup>190</sup> During her testimony, she

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<sup>182</sup> See *ibid* at para 36.

<sup>183</sup> Conway, *supra* note 126 at 364.

<sup>184</sup> 2021 ONCJ 362 [*GM*].

<sup>185</sup> See *ibid* at paras 129, 132–133, 138.

<sup>186</sup> *Ibid* at para 139.

<sup>187</sup> Memories of trauma “are fragmentary, disordered, disjointed, and often contain details that do not derive from experience”: Conway, *supra* note 126 at 359.

<sup>188</sup> *Supra* note 168 at paras 96–97.

<sup>189</sup> 2020 BCCA 277 [*Czechowski*].

<sup>190</sup> *Ibid* at para 23.

asserted that the complainant's inability to remember some aspects of the assault could be linked to the trauma of the experience, as memory "is often fragmented in an acute traumatic situation".<sup>191</sup> The Court held that this evidence went beyond the scope of the doctor's expertise because she described "the impact of trauma on memory over time beyond the confines of an examination immediately following an assault".<sup>192</sup> Testimony regarding memory was said to be "a distinct subject usually dealt with by neurologists, psychiatrists, or psychologists".<sup>193</sup> While the Court's reasoning in *Czechowski* makes sense in a vacuum, the doctor's evidence regarding the nature of traumatic memory is similar to propositions of which judges have taken tacit judicial notice.<sup>194</sup> The end result is a paradoxical state of affairs in which a judge who places reliance on the evidence of a trauma expert risks censure in situations where a judge relying purely on their common sense would likely be immune to appellate review.

### iii) Rethinking the Assessment of Traumatic Memory

#### a) Judge-Alone Trials

As noted above, judges tend to assume that memories affected by trauma are inherently less reliable, when in reality, these memories are just different in predictable, scientifically proven ways. Instead of fixating on the alleged deficiencies in trauma survivors' testimonial evidence, what is needed is an approach that focuses on those elements of memory that are reliable despite the adverse impacts of trauma. *Joe Singer Shoes Limited v A.B.* ("*Joe Singer Shoes*") gives such an example of a trauma-informed approach to assessing witness credibility.

In *Joe Singer Shoes*, the Ontario Superior Court of Justice considered an application for judicial review of a Human Rights Tribunal of Ontario ("HRTO") award of damages for sexual harassment and "creating a poisoned work environment."<sup>195</sup> The applicant-defendant alleged that the HRTO had erred in finding the respondent-complainant credible because she had admitted to having memory issues consistent with exposure to trauma, "testif[ying] openly that her memory comes and goes, that sometimes she forgets many things and some days are a blank, but also that on other days she remembers things very well."<sup>196</sup> As a result, the HRTO adopted an approach, upheld on judicial review, that assessed the

<sup>191</sup> *Ibid.*

<sup>192</sup> *Ibid* at para 25.

<sup>193</sup> *Ibid*, citing *R v Palmer-Coke*, 2019 ONCA 106 at para 19.

<sup>194</sup> See e.g. *JDH*, *supra* note 156 at para 45; *GMC*, *supra* note 157 at para 38.

<sup>195</sup> 2019 ONSC 5628 at para 1 [*Joe Singer Shoes*].

<sup>196</sup> *Ibid* at para 44.

credibility and reliability of the complainant's testimony based on two key factors: (1) its consistency or implausibility when compared with other established facts, and (2) the "quality [...] rather than the consistency" of the complainant's memories, which consisted primarily of sensory details.<sup>197</sup>

The HRTO's approach to assessing the complainant's testimony in *Joe Singer Shoes* is innovative because, rather than treating trauma's effects on memory as a hurdle to be overcome, it evaluates traumatic memories in a manner that recognizes their fragmented, incomplete, and non-linear nature—a genuinely trauma-informed approach. Admittedly, courts like that in *Eze* have previously recognized the utility of evaluating the testimony of trauma survivors based on its coherence with external evidence.<sup>198</sup> However, it is not always the case that a trier of fact will have access to such facts, particularly in cases like sexual assault, which often come down to competing narratives dependent on credibility assessments. The HRTO's focus on the "quality" of memory rather than consistency helps to ameliorate this issue, recognizing that the memories of a traumatic event will consist of both highly vivid "flashbulb" memories of the moments at which the traumatic event first elicits the release of adrenaline and subsequent "fragmentary, disordered, disjointed" memories of the trauma itself. While this is far from a standalone deductive tool, as the complainant's testimony will by its very nature be incomplete, it is a step in the right direction, helping to ensure that the truth of a traumatized witness's testimony is correctly considered alongside other evidence, rather than being treated with undue, unscientific skepticism.

## b) Jury Trials

Of course, juries are also tasked with determining the weight to give to the recollections of traumatized witnesses. In a jury trial, "the jury is the 'judge' of the facts, while the presiding judge is the 'judge' of the law."<sup>199</sup> After hearing the evidence at trial, the jury applies the law to the facts to reach a conclusion based on "instructions from the trial judge as to the relevant legal principles."<sup>200</sup> As a result, jury instructions play a crucial role in guiding a jury's decision-making process and preventing errors that can arise when juries assess the credibility of witnesses without the benefit of a trauma-informed approach.

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<sup>197</sup> *Ibid* at paras 96–97.

<sup>198</sup> *Supra* note 155 at paras 55–57, 71.

<sup>199</sup> *R v Pan; R v Sawyer*, 2001 SCC 42 at para 43 [*Pan; Sawyer*].

<sup>200</sup> *Ibid*.

While other jurisdictions have taken steps towards providing some guidance for this task, the Canadian Judicial Council's (CJC) model jury instructions for assessing testimony leave much to be desired when considered from a trauma-informed perspective. The CJC model jury instructions for assessing the impact of witnesses' prior inconsistent statements on their credibility are as follows:

[1] You have just heard [the witness]'s evidence regarding a prior statement. Common sense tells you that if a witness says one thing in the witness box, but has said something quite different on an earlier occasion, this may reduce the value of his or her evidence.

...

[4] If you find, after you have heard all the evidence, that [the witness] gave an earlier and different version of events, consider whether the differences are significant. You should consider any explanation the witness gives for the differences. You should also consider the fact, nature and extent of any differences when you decide whether to rely on [the witness]'s testimony.<sup>201</sup>

Like the jurisprudence, paragraph 1 explicitly encourages jurors to rely on their common sense, a practice which is problematic and may lead to questionable—or outright erroneous—inferences, as we have explained in the previous discussion. While paragraph 4 does encourage jurors to “consider whether the differences are significant”, this instruction suffers from the same flaw we identified with regards to the guidance given to judges: What precisely makes a difference significant is unclear, opening the door to a highly subjective analysis that is vulnerable to prejudice against the testimony of traumatized witnesses. Ultimately, these instructions fail to give jurors trauma-informed guidance, leading to a very real possibility that the testimony of traumatized witnesses will be erroneously disbelieved despite the scientifically proven effects of trauma on memory.

Contrast this to comparable model jury instructions given in the UK to jurors at sexual assault trials, which explicitly acknowledge that trauma's impacts on memory should factor into assessing the impact of prior inconsistent statements on a potentially traumatized witness's credibility:

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<sup>201</sup> Canadian Judicial Council, National Committee on Jury Instructions, “[7.10 Prior Inconsistent Statements of Non-Accused Witness \(Credibility\)](#)” (last visited 2 April 2023), online: *National Judicial Institute* <nji-inm.ca/index.cfm/publications/model-jury-instructions/mid-trial-instructions/prior-inconsistent-statements-of-non-accused-witness-credibility/> [perma.cc/F8KD-W5FA]. While there is a separate instruction for accused witnesses, it contains language identical to that quoted above.

Just because W has not given a consistent account does not necessarily mean that W's evidence is untrue. Experience has shown that inconsistencies in accounts can happen whether a person is telling the truth or not. This is because if someone has a traumatic experience such as the kind alleged in this case, their memory may be affected in different ways. It may affect that person's ability to take in and later recall the experience. Also, some people may go over an event afterwards in their minds many times and their memory may become clearer or can develop over time. But other people may try to avoid thinking about an event at all, and they may then have difficulty in recalling the event accurately. Your assessment of this factor will be influenced by your conclusions as to the facts of this case. You must form a view of what happened in this case based on all the evidence you have heard.<sup>202</sup>

This instruction provides a good summary of the principles discussed in this section, including trauma's adverse effects on memory formation and recall at the time as well as the way that these memories are more vulnerable to changing through subsequent recall than regular memories. The CJC should adopt similar guidance for both sexual assault trials and more generally to account for the prevalence of trauma within Canadian society and particularly among those in contact with the legal system.

## **5. The Science of Trauma and Deceit Detection Through Assessments of Witness Demeanour**

### **A) The Current Cautionary Approach to the Use of Demeanour Evidence**

Testimonial demeanour is another "tool" for assessing witness credibility that is problematic when considered from a trauma-informed perspective. In *R. v. Khelawon*, the Supreme Court of Canada explained the centrality of assessing witness testimony in making factual determinations: "the calling of witnesses, who testify under oath or solemn affirmation, whose demeanour can be observed by the trier of fact, and whose testimony can be tested by cross-examination [is] the optimal way of testing testimonial evidence."<sup>203</sup> Broadly speaking, assessing a witness's demeanour involves paying attention to "not just 'what was said, but to how it was said'".<sup>204</sup> Demeanour is a vast and nebulous concept referring to "every visible or audible form of self-expression manifested by a witness whether fixed

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<sup>202</sup> Maddison et al, "[The Crown Court Compendium: Part I Jury and Trial Management and Summing Up](#)" (June 2022) at 20-7, online (pdf): *Judicial College* <judiciary.uk/wp-content/uploads/2022/07/Crown-Court-Compendium-Part-I-June-2022.pdf> [perma.cc/6NEB-97V8].

<sup>203</sup> 2006 SCC 57 at para 35.

<sup>204</sup> *R v Ceal*, 2012 BCCA 19 at para 24, citing *R v Howe*, 192 CCC (3d) 480 at para 46, 2005 CanLII 253 (Ont CA).

or variable, voluntary or involuntary, simple or complex”.<sup>205</sup> It includes facial cues, “certitude in speaking, dignity while on the stand, exhibition of disability, exhibition of anger, exhibition of frustration, articulate speaking, thoughtful presentation, enthusiastic language, direct non-evasive answering, non-glib answering, exhibition of modesty, exhibition of flexibility, normal (as in as expected) body movement, cheerful attitude, kind manner, normal exhalation, normal inhalation.”<sup>206</sup> The myriad untested assumptions behind each of these variables, and their inter-relationship with race, culture, gender, class, mental health and ability is beyond the scope of this paper.

It is well-established that triers of fact are entitled to consider witness demeanour in assessing credibility and reliability.<sup>207</sup> Affirming this principle in 2012, the Supreme Court of Canada stated in *R. v. N.S.* that “[n]on-verbal communication can provide the cross-examiner with valuable insights that may uncover uncertainty or deception, and assist in getting at the truth”;<sup>208</sup> however, the Court was careful to note that “[b]eing able to see the face of a witness is not the only—or indeed perhaps the most important—factor in cross-examination or accurate credibility assessment”<sup>209</sup> and that its findings in *N.S.* could be overturned should future cases raise other factors or adduce fresh scientific evidence “diminish[ing] the force of the arguments made in this case.”<sup>210</sup>

Indeed, there is a long history of judicial warnings against placing too much weight on a witness’s demeanour in assessing their credibility. Among the oldest of these is found in *Faryna v. Chorny*, which states that “[t]he credibility of interested witnesses, particularly in cases of conflict of evidence, cannot be gauged solely by the test of whether the personal demeanour of the particular witness carried conviction of the truth”<sup>211</sup>, as a truthful demeanour may mask both deliberate deceit by an experienced liar and a good-faith mistake made by an otherwise credible witness. Accordingly, the Court cautions how relying solely on demeanour would lead to the unacceptable situation where the “appearance of sincerity [would lead to] a purely arbitrary finding and justice would then depend

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<sup>205</sup> *NS*, *supra* note 6 at para 98, Abella J, dissenting (but not on this point), citing Barry R Morrison, Laura L Porter & Ian H Fraser, “The Role of Demeanour in Assessing the Credibility of Witnesses” (2007) 33:1 *Adv Q* 170 at 179.

<sup>206</sup> *NS*, *supra* note 6 at para 98, citing Morrison, Porter & Fraser, *supra* note 205 at 189.

<sup>207</sup> See *White*, *supra* note 59 at 272.

<sup>208</sup> *NS*, *supra* note 6 at para 24.

<sup>209</sup> *Ibid* at para 27.

<sup>210</sup> *Ibid* at para 44.

<sup>211</sup> *Supra* note 63 at 357.

upon the best actors in the witness box.”<sup>212</sup> While trial judges may consider demeanour in their assessment of a witness’s credibility, it can lead to an error of law where: (1) a credibility determination is based entirely or predominantly on witness demeanour, or (2) “the trial judge appears to be unaware of the risks associated with over-reliance on demeanour.”<sup>213</sup> Thus, there is an evident tension in how a witness’s demeanour may be used in assessing their credibility. On the one hand, the trier of fact is entitled to consider demeanour. On the other hand, their decision is vulnerable to being overturned on appeal should they over-rely on demeanour or fail to demonstrate an awareness of the hazards posed by the use of demeanour evidence; however, the distinction between legitimate usage and error is ambiguous.

The use of demeanour evidence presents several challenges to the truth-seeking function of the legal system. For one, credibility assessments rely on assumptions regarding precisely which demeanour cues indicate honesty versus deceit, and these assumptions are derived, once again, from “common sense and wisdom gained from personal experience.”<sup>214</sup> There are few limits on what inferences may be drawn, so long as the trier of fact does not draw conclusions based on matters that were not in evidence or on the basis of generalizations or stereotypes, including with regard to “race, religion, nationality, gender, occupation or other characteristics.”<sup>215</sup> In practice, however, the personal experiences used to assess credibility will predominantly be those of privileged, white males due to the underrepresentation of women, visible minorities, and Indigenous people in Canada’s judiciary.”<sup>216</sup> This lack of diversity creates the potential for error due to both unconscious bias and because “studies have shown that people are better at determining the emotion of a person who is of the same culture as them.”<sup>217</sup> The following treatment of this issue by a Provincial Court of British Columbia judge gets to the core of why assessments of courtroom demeanour are of dubious utility in assessing witnesses:

I caution myself that rarely do I ever find the demeanour of anybody in the courtroom overly helpful. This is a nervous place. People do not feel comfortable

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<sup>212</sup> *Supra* note 63 at 356.

<sup>213</sup> *R v Bourgeois*, 2017 ABCA 32 at para 21, *aff’d* 2017 SCC 49.

<sup>214</sup> *S(RD)*, *supra* note 164 at para 129.

<sup>215</sup> *Ibid* at para 131.

<sup>216</sup> See Andrew Griffith, “[Diversity Among Federal and Provincial Judges](http://policyoptions.irpp.org/2016/05/04/diversity-among-federal-provincial-judges/)”, *Policy Options* (4 May 2016), online: <[policyoptions.irpp.org/2016/05/04/diversity-among-federal-provincial-judges/](http://policyoptions.irpp.org/2016/05/04/diversity-among-federal-provincial-judges/)> [perma.cc/V4ZL-PHTX].

<sup>217</sup> Amna M Qureshi, “Relying on Demeanour Evidence to Assess Credibility during Trial: A Critical Examination” (2014) 61:2 *Crim LQ* 235 at 258.

here. A courtroom is designed to create this feeling of solemnity. All that to say, it would be dangerous for me to read anything into the body language or demeanour of anybody unless they are in the witness box. Even then, I caution myself that we do not all share the same social or cultural cues. For example, in some cultures, not making eye contact is a sign of respect.<sup>218</sup>

In addition, when judges inevitably err in interpreting a witness's demeanour, this error is difficult, if not impossible, to detect or correct because demeanour evidence is not typically captured by the transcript of proceedings—the very reason that appellate courts afford great deference to trial judge findings regarding witness credibility.<sup>219</sup> Generally speaking, the demeanour cues judges consider are described using abstract language: A judge may be impressed by a witness's "straightforward manner"<sup>220</sup> or find that a witness's testimonial "assurance and certitude [...] cloak their words with an aura of truth."<sup>221</sup> However, what demeanour cues are being described—and whether the judge's inferences regarding the witness's credibility were accurate—is entirely unclear from such vague descriptions.

Further problematizing the use of demeanour evidence is a scientific consensus that calls into question the ability of humans to detect deceit based on demeanour. After reviewing several studies and meta-analyses investigating this question, Amna M. Qureshi found that the accuracy rate of those assessing credibility based on demeanour tends to hover between 40% and 60%—a rate "considered chance level", as the odds are similar to simply guessing.<sup>222</sup> Even proponents of the use of demeanour as part of a trier of fact's legitimate fact-finding process concede that there is "little difference between the demeanour of deceptive and truthful people"<sup>223</sup>

<sup>218</sup> *R v HL*, 2022 BCPC 51 at para 44.

<sup>219</sup> See Vincent Denault & Norah E Dunbar, "Credibility Assessment and Deception Detection in Courtrooms: Hazards and Challenges for Scholars and Legal Practitioners" in Tony Docan-Morgan, ed, *The Palgrave Handbook of Deceptive Communication* (London, UK: Palgrave Macmillan, 2019) 915 at 920. As noted above, absent "a palpable and overriding error by the trial judge, his or her perceptions should be respected": *Gagnon*, *supra* note 55 at para 20.

<sup>220</sup> *Babineau v LeBlanc and Cormier*, 62 NBR (2d) 428 at para 9, 1985 CanLII 4030 (QB).

<sup>221</sup> *R v Johnson and Wilson*, 78 NBR (2d) 411 at para 76, 1987 CanLII 7793 (Prov Ct (Crim Div)) [*Johnson and Wilson*].

<sup>222</sup> Qureshi, *supra* note 217 at 254–257. For a good plain-language explanation of some of these studies, see Brent Snook et al, "Assessing Truthfulness on the Witness Stand: Eradicating Deeply Rooted Pseudoscientific Beliefs about Credibility Assessment by Triers of Fact" (2017) 22:3 Can Crim L Rev 297.

<sup>223</sup> Vincent Denault, Norah E Dunbar, & Pierrich Plusquellec, "The Detection of Deception During Trials: Ignoring the Nonverbal Communication of Witnesses Is Not the

and that, at the very least, judges and jurors currently lack the training necessary “to mitigate false beliefs and inappropriate stereotypes”<sup>224</sup> that distort their ability to ascertain a witness’s trustworthiness. As Peter Sankoff concludes, “the science would seem to suggest taking even stronger steps and perhaps forbidding judges and jurors from relying upon demeanour at all, or at least making warnings against doing so mandatory. It is no longer enough to sporadically warn triers of fact not to rely too heavily on this sort of ‘evidence.’”<sup>225</sup> If assessing witness demeanour generally is a foolhardy exercise, then assessing the demeanour of a witness who has experienced trauma (whether they are a victim-witness, third-party witness or the accused) is doubly fraught.

## **B) The Potential Prejudice Arising from Trauma’s Effects on Demeanour**

Comparing the clinically observed impacts of trauma on demeanour with the treatment of demeanour evidence in the case law suggests the potential for a traumatized witness’s demeanour to be misevaluated as indicating deceit. While not exhaustive of how trauma can affect demeanour, the DSM-5-TR diagnostic criteria for PTSD provide a good starting place for analyzing how trauma and demeanour evidence intersect. For one, dissociative reactions associated with PTSD, including memory gaps and “flashbacks” as discussed in Part 4(B) of this article, cause changes in demeanour which may impact perceived credibility. Flashbacks can occur “on a continuum, ranging from brief visual or other sensory intrusions about part of the traumatic event without loss of reality orientation to a partial loss of awareness of present surroundings to a complete loss of awareness,” causing the individual to “behav[e] as if the event were occurring at that moment.”<sup>226</sup> These flashbacks can cause difficulties with concentration and communication, disorientation, confusion, acute fear and distress and/or trigger “a state of emotional numbness” that impacts their ability to be present.<sup>227</sup> As one would expect based on studies that suggest that underemotional or “flat” demeanour can lead to erroneous impressions of guilt,<sup>228</sup> judges associate demeanour that is

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Solution—A Response to Vrij and Turgeon” (2018) 24:1 Intl J Evidence & Proof 3 at 7.

<sup>224</sup> Denault & Dunbar, *supra* note 219 at 920.

<sup>225</sup> Sankoff, *supra* note 51 (loose-leaf updated 2021, release 1) ch 12 at 12-13.

<sup>226</sup> American Psychiatric Association, *supra* note 23.

<sup>227</sup> Ellison & Munro, *supra* note 19 at 190; Patrick Risan, Rebecca Milne & Per-Einar Binder, “Trauma Narratives: Recommendations for Investigative Interviewing” (2020) 27:4 Psychiatry, Psychology, & L 678 at 681.

<sup>228</sup> Amy Bradfield Douglass et al, “Does It Matter How You Deny It?: The Role of Demeanour in Evaluations of Criminal Suspects” (2016) 21:1 L & Criminological Psychology 141 at 141.

“wooden [or] flat”<sup>229</sup> with dishonesty. Thus, it is not difficult to imagine how a traumatized person experiencing the symptoms associated with a dissociative reaction could be found to be less credible.

Another behavioural symptom of PTSD is avoidance, which describes efforts to avoid “distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s).”<sup>230</sup> Avoidance symptoms make victims of trauma appear to lack appropriate emotions or seem evasive when discussing both the details of a traumatic incident itself or associated “places (like the location where an assault took place), people, actions (like driving if the traumatic event was a car accident), thoughts, or feelings.”<sup>231</sup> Judges often find witnesses who are evasive to lack credibility. For example, in *Watt v. Meier et al*, a judge found the following behaviour to have reflected poorly on a witness’s credibility:

Although the cross-examination was neither aggressive nor lengthy, Ms. Wallace’s demeanour during cross-examination was unusual. She turned her back on defence counsel and refused to look at him while answering his questions, despite counsel indicating that he was having difficulty hearing her answers. She fidgeted with her clothing and a pen, sighed audibly, grimaced, appeared sullen, and twice complained that she wanted to go home.<sup>232</sup>

In this case, there was external evidence suggesting that Ms. Wallace’s testimonial demeanour was an attempt to present “an exaggerated picture of fatigue and muscle pain”.<sup>233</sup> However, the science shows that a credible and reliable witness suffering trauma-related avoidance symptoms could present similarly—and risk having their testimony being accorded little weight as a result.

Trauma can also cause negative alterations in cognition and mood,<sup>234</sup> including “[p]ersistent and exaggerated negative beliefs or expectations about oneself, others, or the world.”<sup>235</sup> It would be difficult to maintain the “assurance and certitude [judges have found to] cloak [one’s] words with an aura of truth”<sup>236</sup> while experiencing these feelings. Perhaps most

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<sup>229</sup> *R v Redbreast*, 2004 ABQB 504 at para 167.

<sup>230</sup> American Psychiatric Association, *supra* note 23.

<sup>231</sup> Randall & Haskell, *supra* note 36 at 512. See also Risan, Milne & Binder, *supra* note 227 at 681.

<sup>232</sup> 2006 BCSC 1341 at paras 137 [*Watt*]; see also *MEG v MJK*, 2003 ABQB 20 at para 63.

<sup>233</sup> *Watt*, *supra* note 232 at para 149.

<sup>234</sup> American Psychiatric Association, *supra* note 23.

<sup>235</sup> *Ibid.*

<sup>236</sup> *Johnson and Wilson*, *supra* note 221 at para 76.

damaging to a trauma survivor’s credibility is how PTSD may cause them to “exhibit irritable or angry behaviour [or] engage in aggressive verbal or physical behaviour with little or no provocation”<sup>237</sup> as there are many examples of judges finding witnesses who are “insolent and hostile”<sup>238</sup> or demonstrating “excessively nervous or aggressive reaction[s]”<sup>239</sup> to questions to be less credible. Conversely, testimony that is “stable, thoughtful, intelligent, articulate, [...] constructive and forthcoming”<sup>240</sup>—all descriptors less likely to apply to the testimony of a traumatized witness—is thought to be more credible. In sum, there is a serious risk that witnesses who have experienced trauma will be disbelieved based on misinterpreted demeanour-related cues and behaviours that are entirely out of their control and attributable to the ongoing impacts of trauma.

## C) The Risks of Relying on Demeanour for Traumatized Witnesses

### i) Judge-Alone Trials

Already there has been some judicial recognition of the perils of relying on demeanour as a tool in assessing the testimony of witnesses who have experienced forms of trauma. In *R. v. D.D.*, the Supreme Court of Canada cautioned that there is “no inviolable rule on how people who are the victims of trauma like a sexual assault will behave.”<sup>241</sup> While this case is concerned with inferences based on a sexual assault complainant’s delay in reporting the crime, the phrasing of this proposition is broad, compelling trial judges to ensure that they are not making erroneous inferences about how trauma will influence behaviour. Accordingly, we surveyed the case law to assess how trial judges assess trauma’s effects on demeanour in practice.<sup>242</sup>

<sup>237</sup> American Psychiatric Association, *supra* note 23.

<sup>238</sup> *R v C(A)*, 2008 ONCJ 747 at para 13.

<sup>239</sup> *R v GL*, 2015 ONSC 385 at para 55.

<sup>240</sup> *Lindahl v Olsen*, 2004 ABQB 639 at para 213.

<sup>241</sup> *R v DD*, 2000 SCC 43 at para 65 [DD]. Similar logic is applied to battered spouses in *R v Lavallee*, where the court wrote about the “popular mythology about domestic violence” and its effect on jury assessments of credibility: *Lavallee*, *supra* note 142 at 272–273.

<sup>242</sup> These cases were found via the following keyword searches of the CanLII case law database conducted on or before 13 April 2022:

- (demeanour OR demeanor) /p credib\* /p trauma
- (demeanour OR demeanor) /p credib\* AND trauma
- (demeanour OR demeanor) /p trauma
- (demeanour OR demeanor) /p (PTSD or (post /1 “traumatic stress disorder”))

There are few cases where judges explicitly mention trauma in their assessments of demeanour; however, those that we could find demonstrate that, while trial judges generally appear to heed the SCC's instructions to avoid "resort[ing] to folk tales about how abuse victims are expected by people who have never suffered abuse to react to the trauma",<sup>243</sup> the inferences that trial judges draw from the demeanour of individuals who have experienced trauma varies widely. At times, a witness's demeanour has been found to bolster their credibility because it aligns with the judge's sense of how a trauma victim would behave, while at others times, demeanour cues associated with trauma have been thought to weaken the witness's reliability. This inconsistency is troubling.

An example of the former scenario can be found in *R. v. M.B.*, where a judge found that a complainant's expressions of emotions were evidence of trauma:

She repeated this recollection numerous times during her testimony, and when she did she was often very emotional and brought to tears, at times sobbing to such an extent that suggests she suffered a significant trauma. She vehemently denied any suggestion that, what she alleges to have happened did not occur.<sup>244</sup>

The emotional demeanour of the complainant-witness, both during her testimony and a medical examination, was used as evidence of her credibility because it corresponded with assumptions about how one would act if they suffered trauma, despite multiple inconsistencies with regards to "matters of detail" and the fact that the witness-complainant had deleted a text message that would have been the only extrinsic evidence corroborating her story.<sup>245</sup> The court's reasoning in *M.B.* on this point is problematic, as its use of demeanour cues seems prone to the circular reasoning condemned in *M.C.*—demeanour cues attributed to trauma enhance the credibility of the witness only if the trauma in question is presumed to have occurred.<sup>246</sup> Additionally, as discussed above in Parts 2(A), 4(B) and 5(B), dissociation is a common occurrence in victims of trauma that could cause a witness to appear disconnected or emotionally numb. A lack of emotion risks being misinterpreted as a demeanour cue that they are fabricating allegations.

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<sup>243</sup> *R v Shearing*, 2002 SCC 58 at para 121, citing *R v Mills*, [1999] 3 SCR 668 at paras 73, 117–19, 1999 CanLII 637. See also *DD*, *supra* note 241 at para 63.

<sup>244</sup> *R v MB*, 2016 ONSC 6480 at para 109 [*MB*].

<sup>245</sup> *Ibid* at paras 100–109.

<sup>246</sup> *MC*, *supra* note 168 at para 96.

Conversely, behaviour that has been scientifically proven to be a potential result of trauma has sometimes been interpreted as detracting from a witness's credibility. In *R. v. L.H.*, the complainant accused her former husband of multiple instances of sexual assault.<sup>247</sup> During the proceedings, both the complainant and the accused testified to an alleged break and enter at the matrimonial home, with each accusing the other of faking the incident. The complainant initially claimed—"somewhat dramatically"<sup>248</sup> in the judge's view—to have been traumatized by the accused's actions, "then almost immediately she said she was not blaming him. Then she said it was not that traumatic for her. She's had worse things happen."<sup>249</sup> While Justice Chown acknowledged that demeanour is a poor indicator of testimonial accuracy, she described the complainant's evidence on this point as "troubling"<sup>250</sup> and felt that the "subtle change in evidence (traumatizing to not that traumatizing)"<sup>251</sup> justified an adverse finding regarding the complainant's credibility. This inference is problematic when one remembers that attempts to minimize the impact of trauma are consistent with the avoidance behaviours that the DSM-5-TR recognizes as typical of those who have PTSD.<sup>252</sup> Having been triggered by the trauma of this experience, a person suffering from trauma may attempt to downplay its impacts as part of a coping mechanism to avoid the "distressing memories, thoughts, or feelings" associated with this event.<sup>253</sup>

## ii) Jury Trials

Where the trier of fact is a jury rather than a judge, the risks of assessing the demeanour of witnesses affected by trauma become all the more acute, as there is no way to tell how, or to what degree, demeanour evidence has been used, due to the "common law rule of jury secrecy, which prohibits the court from receiving evidence of jury deliberations for the purpose of impeaching a verdict".<sup>254</sup> Again, the CJC model jury instructions for assessing testimony leave much to be desired when considered from a trauma-informed perspective. While the Supreme Court of Canada has described them as "acknowledg[ing] the inherent limitations in relying on demeanour"<sup>255</sup> in assessing credibility, as currently written, the CJC

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<sup>247</sup> 2020 ONSC 7961 [*LH*].

<sup>248</sup> *Ibid* at para 33.

<sup>249</sup> *Ibid*.

<sup>250</sup> *Ibid* at para 34.

<sup>251</sup> *Ibid* at para 35.

<sup>252</sup> American Psychiatric Association, *supra* note 23.

<sup>253</sup> *Ibid*.

<sup>254</sup> *Pan; Sawyer, supra* note 199 at para 48.

<sup>255</sup> *NS, supra* note 6 at para 101.

model jury instructions also do little to dispel myths regarding how the trauma so commonly suffered by those who take the witness stand in our courts can affect witness demeanour:

[4] Was the witness able to communicate clearly and accurately?

[5] What was the witness's manner when he or she testified? Do not jump to conclusions, however, based entirely on the witness's manner. Looks can be deceiving. Giving evidence in a trial is not a common experience for many witnesses. People react and appear differently. Witnesses come from different backgrounds. They have different intellects, abilities, values, and life experiences. There are simply too many variables to make the manner in which a witness testifies the only or the most important factor in your decision.

[6] Was the witness forthright and responsive to questions, or was the witness evasive, hesitant, or argumentative?<sup>256</sup>

Simply highlighting that witnesses will “react and appear differently” and “come from different backgrounds,” as per paragraph 5 of the instructions, does little to help juries avoid drawing the wrong conclusions from demeanour based on their assumptions, biases, experiences and worldview. Indeed, these instructions could well reinforce such flawed reasoning. More troublingly, this warning is bookended by the instructions in paragraphs 4 and 6, neither of which stand up to trauma-informed scrutiny. For one, a witness may be credible and reliable despite their inability to communicate certain aspects of their testimony “clearly and accurately” due to trauma’s effects on their memory or demeanour. In addition, being “evasive, hesitant, or argumentative” have been recognized in the DSM-5-TR as emotional responses that can be attributed to having experienced trauma, further stacking the cards against witnesses who have suffered trauma. While there is a special instruction<sup>257</sup> for sexual assault cases that

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<sup>256</sup> National Committee on Jury Instructions, “[4.11 Assessing Testimony](#)”, online: *National Judicial Institute* <nji-inm.ca/index.cfm/publications/model-jury-instructions/preliminary-instructions/instructions-on-trial-procedure/assessing-testimony/> [perma.cc/64H9-NKPD] [*Assessing Testimony*].

<sup>257</sup> It reads as follows, and includes a footnote that references *DD*, *supra* note 241 at para 65: “I now want to caution you against approaching the evidence with unwarranted assumptions as to what is or is not sexual assault, what is or is not consent, what kind of person may or may not be the complainant of a sexual assault, what kind of person may or may not commit a sexual assault, or what a person who is being, or has been, sexually assaulted will or will not do or say. There is no typical victim or typical assailant or typical situation or typical reaction. [footnote removed] My purpose in telling you this is not to support a particular conclusion but to caution you against reaching conclusions based on common misconceptions.”: *Assessing Testimony*, *supra* note 256.

repackages the guidance from *D.D.* that there is no typical response to the trauma that results from this type of crime, this acknowledgement is, in our view, insufficient. No guidance is given as to how, specifically, trauma would impact the other elements of the model jury instructions, including those critiqued above, which represents inadequate guidance to protect against the risk of inappropriate or unsupportable inferences about the impact of trauma on demeanour.

The CJC should follow the lead of courts in other jurisdictions that have taken steps to make jury instructions more trauma-informed. In *Taniwha v. R.*, the Supreme Court of New Zealand rejected arguments grounded in social science that the finder of fact “can derive no benefit from a witness’s demeanour and this must be made clear to jurors by a direction given in all cases where credibility is at issue.”<sup>258</sup> However, the Court acknowledged that a warning regarding the way trauma can impact demeanour may sometimes be warranted:

[T]he need for a warning should be assessed in each case. Whether a warning is required will depend upon the nature of the evidence in the case and the way the trial has unfolded. The key consideration for the [j]udge will be whether there is a real risk that witness demeanour will feature illegitimately in the jury’s assessment of witness veracity or reliability. We must express a note of caution, however, given the risk that a jury will interpret a “tailored” direction as an expression of doubt by the judge as to the veracity of a particular witness or witnesses. Obviously, any direction should be formulated in a way that avoids this.<sup>259</sup>

A similar approach was taken by the England and Wales Court of Appeal in *R. v. Doody*, described by legal commentators as a “precedent for giving jurors information about aspects of trauma where false or misguided beliefs may otherwise distort their decision-making.”<sup>260</sup> In *Doody*, the Court held that a judge is entitled to instruct the jury “as to the way evidence is to be approached particularly in areas where there is a danger of a jury coming to an unjustified conclusion without an appropriate warning”, including through an acknowledgment of how the trauma of sexual assault “can cause feelings of shame and guilt which might inhibit a woman from making a complaint.”<sup>261</sup>

The impact of *Doody* can be seen in the model jury instructions issued by the UK’s Judicial Studies Board, now called the Judicial College, in their

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<sup>258</sup> [2016] NZSC 123 at para 40 [*Taniwha*].

<sup>259</sup> *Ibid* at para 43.

<sup>260</sup> Ellison & Munro, *supra* note 19 at 189.

<sup>261</sup> *R v Doody*, [2008] EWCA Crim 2557 at para 11.

2010 *Crown Court Bench Book* that explicitly grappled with the effect of trauma on the demeanour of sexual assault victims.<sup>262</sup>

[I]t is important that you do not bring to that assessment any preconceived views as to how a witness in a trial such as this should react to the experience. Any person who has been raped will have undergone trauma whether the defendant was known to her (or him) or not. It is impossible to predict how that individual will react, either in the days following, or when speaking publicly about it in court. The experience of the courts is that those who have been victims of rape react differently to the task of speaking about it in evidence. Some will display obvious signs of distress, others will not. The reason for this is that every person has his or her own way of coping. Conversely, it does not follow that signs of distress by the witness confirms the truth and accuracy of the evidence given. In other words, demeanour in court is not necessarily a clue to the truth of the witness' account. It all depends on the character and personality of the individual concerned.<sup>263</sup>

Incorporated here are some key aspects of trauma discussed in this article: The instruction acknowledges the highly idiosyncratic and counterintuitive responses people can have in response to trauma while also warning about using an apparent traumatic demeanour as proof that a crime causing trauma occurred.

In 2022, the Judicial College issued a revised version of this model jury instruction in their *Crown Court Compendium*, a publication intended to replace all previous guidance from the organization including the aforementioned *Crown Court Bench Book*, in their *Crown Court Compendium*, a publication intended to replace all previous guidance from the organization, including the aforementioned *Crown Court Bench Book* that differs in some key aspects.<sup>264</sup> The *Crown Court Compendium* contains new model jury instructions addressing how to assess the testimonial demeanour of sexual assault victims that incorporate two different introductory paragraphs, whose use depends on the nature of the complainant's demeanour:

Scenario 1: Strong display of emotion

You will recall that witness was sobbing when the police located him/her in [X location] and witness told them that he/she had been {raped/assaulted} by defendant. The prosecution suggests that the state witness was in when the police

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<sup>262</sup> Ellison & Munro, *supra* note 19 at 189–90.

<sup>263</sup> Judicial Studies Board, *Crown Court Bench Book: Directing the Jury* (Judicial Studies Board, 2010) at 357.

<sup>264</sup> Maddison et al, *supra* note 202 at 1-1.

found him/her supports their case that defendant had just attacked witness. The defence on the other hand suggests that witness's sobbing may have been something of an act.

Scenario 2: Lack of display of emotion

You will recall that witness appeared calm or unemotional when he/she spoke to the police shortly after witness told them that he/she had been {raped/assaulted} by defendant. The prosecution suggests that this lack of emotion was due to the shock of what had happened to witness. The defence on the other hand suggests that this lack of emotion was because witness was making up the allegation.

Whether the witness exhibited a strong display of emotion or there was a lack of display of emotion, the conclusion of the model jury instruction is the same:

When you consider the emotional state of witness you need to bear in mind two things. First, there is no "normal" reaction to a [rape or sexual assault]. Some people will show emotion or distress and may cry. But other people will seem very calm or unemotional. Second, it is possible for someone to put on an act if they choose to.

If you are sure that witness's behaviour at the time was genuine then it may help you decide whether the prosecution has proved its case. On the other hand, if you are not sure that witness's behaviour at the time was genuine, then it would not provide support for the prosecution case.

The warning I am giving you is that you should consider this issue with care. You should avoid making an assessment based on any preconceived idea you may have about how you think someone should behave in this situation.<sup>265</sup>

Interestingly, the instructions no longer explicitly refer to trauma. In one narrow sense, removing the word "trauma" could, ironically, be interpreted as a step towards being more trauma-informed, as this omission takes the emphasis off of the cause, i.e. experiencing trauma—which, as we have explained, engages a number of controversies and can lead to erroneous inferences due to incorrect knowledge and application of the science of trauma—and places it onto the tangible emotional responses observed by jurors that prompted the giving of these instructions in the first place. In addition, as discussed in Part 5(A), there are problems with assessing credibility with through testimonial demeanour even where issues of trauma are not engaged.

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<sup>265</sup> *Ibid* at 20-8

So long as juries are permitted to consider demeanour evidence (and, due to the secrecy surrounding their deliberations, it would likely be impossible to prevent them from doing so), the adoption of similar jury instructions by the Canadian Judicial Council, expanded to be used in a wider range of proceedings (rather than limited to sexual offences as is the case in the UK) and encompassing a wider range of demeanour cues beyond just the degree of emotional reaction, would represent a small but essential step towards making Canadian jury trials more trauma-informed.

## 6. Conclusion

Assessments of the credibility of witnesses who have been affected by trauma are currently at risk of being misguided by the use of two inferential “tools”—prior inconsistent statements and demeanour—that are applied in ways that conflict with a trauma informed approach. As a result, the truth-seeking function of our trials is impaired whenever their conclusions are grounded in inferences based on allegedly “common-sense” interpretations of a traumatized witness’s conduct and ability to remember events. At the moment, the “deposit of prejudices” identified by Einstein is impairing the ability of our courts to adjudicate disputes fairly and of survivors of trauma to be heard and, more importantly, believed. There is something particularly repugnant and ironic in the way that evidence law is systematically disbelieving truthful complainants because of the very well-known impacts of the trauma that they experienced through their victimization. And as we have shown, this not only impacts victims but also third-party witnesses and accused persons who have experienced trauma.

This paper uses the assessment of witness credibility and reliability as an example of the problems that can arise when supposedly common-sense beliefs about human nature are applied without a trauma-informed approach; however, the science of trauma can and should be applied to other areas of legal expertise to make necessary improvements and modifications.

While trauma-informed approaches are being mainstreamed in other disciplines, including public health and social work, criminal law and criminal justice have not kept pace. A trauma-informed perspective leads to deeper understanding and better response from public institutions. For example, there is a close analogy to clinical conversations in medical settings in which one experiences a “paradigm shift” once a patients’ difficulties in coherence are understood as information, rather than just as a barrier to getting information (i.e., when traumatized patients are understood as troubled rather than as creating difficulty for the clinician).

This can be seen in the fact that clinicians have shifted over the past 30 years from tending to diagnose “Borderline Personality Disorder” to diagnosing “Complex Trauma.” When viewed as having a personality disorder, patients were much more likely to be viewed as wanting to create difficulty for the clinician, whereas when viewed as exhibiting behaviour resulting from ongoing early trauma, the patient is much more likely to be viewed through an empathetic lens as simply troubled.

Taking a trauma-informed approach to law opens up vast and important horizons. On the topic of this paper alone, there are many areas for future research from a trauma-informed perspective. For example, considering that one in three Canadian adults have suffered from childhood sexual or serious physical abuse (the numbers of which are even higher when one includes adult traumas) and that legal professionals working in the criminal justice system risk suffering vicarious trauma, it stands to reason that a substantial proportion of judges, juries and lawyers trying to “truth-seek” also experience trauma-related phenomena which may obfuscate their perception of a person who is testifying to trauma (not always sympathetically).<sup>266</sup> This amplifies the layers of difficulty that are involved in resolving the question of how to determine facts when there will frequently be traumatized witnesses whose credibility is to be assessed by traumatized fact-finders, neither of whom may be at all aware that their perceptions are filtered through the lens of their own lived experiences with trauma and societal expectations of how both should think and behave in these roles. Given the centrality of *viva voce* evidence (oral testimony from witnesses) as a method of proof in trials, these questions are significant and pressing. They go to the very heart of the efficacy and legitimacy of dispute resolution mechanisms in our society.

Another area for research is how juries evaluate evidence from traumatized witnesses. A massive blind spot exists in Canada with respect to assessments of witness credibility and reliability by juries, whose members are prohibited from disclosing any information about their deliberations. There is also scant research into mock juries in Canada in comparison with jurisdictions like the United States. We consider there to be strong reasons to suspect that jury assessments of witnesses who have experienced trauma are likely to be problematic, and compounded by jury instructions that are inconsistent with the science of trauma presented in this article.

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<sup>266</sup> See Tracie O Afifi et al, “Child abuse and mental disorders in Canada” (2014) 186:9 CMAJ E324 at E331; Lila Petar Vrklevski & John Franklin, “Vicarious Trauma: The Impact on Solicitors of Exposure to Traumatic Material” (2008) 14:1 Traumatology 106 at 114.

The first step of a trauma-informed practice is education; however, knowledge without action is little more than tacit complicity. As recognized by trauma scholars Melanie Randall and Lori Haskell, “[l]egal responses to social problems can only be improved and strengthened when guided by an enhanced appreciation of the complexities of human psychology.”<sup>267</sup> The potential for trauma-informed approaches to change our legal system and enhance its truth-seeking function is immense, but can only advance with the collective effort and humility of the legal profession.

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<sup>267</sup> Randall & Haskell, *supra* note 36 at 531.