Remembering Historical Child Sexual Abuse

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1. Introduction

Predominantly since the late 1980s, Canadian criminal courts have faced the singular challenge of adjudicating cases of child sexual abuse (hereafter CSA) that is alleged to have occurred many years ago ("historic child sexual abuse", hereafter HCSA). In a recent British Columbia Court of Appeal decision Madam Justice Southin stated, "[h]istoric sexual assault prosecutions . . . are now a thriving legal industry". In both the legal and psychological literatures, these kinds of cases sparked and fuelled a debate concerning the veracity of repressed or recovered memories versus the possibility of false memories. With the greatest of respect for those engaged in this very important dialogue, it is important to take notice of the fact that claims of repression and subsequent memory

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recovery represent a very small proportion of criminal prosecutions involving HCSA — in the vast majority of cases the complainant reports continuous memory for the alleged offence.\(^3\)

There have been relatively few discussions of delayed prosecutions of CSA wherein the complainant reports continuous memory for the alleged offence.\(^4\) That is an important purpose of this article. In the first section we consider possible explanations for the currently high incidence of HCSA cases and we argue that, in the absence of changes in the law or its application or interpretation, the incidence of criminal prosecutions of HCSA will continue to be high. In the balance of the article, we discuss particular issues related to the credibility and reliability of witnesses’ reports of HCSA. Specifically, we discuss (1) the confidence-accuracy relationship, (2) long-term forgetting of autobiographical information, (3) the effect that the age of the complainant when the alleged offence occurred has on memory for the event, (4) memory for instances of repeated events, (5) errors of omission, (6) memory for time, (7) memory for frequency of occurrence of the event and (8) noncontinuous memory. Each of these issues is discussed in terms of their impact at trial and in psychology scholarship.

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3. This article is part of a large-scale study of legal and psychological issues related to HCSA. The study involved reviewing 1,628 criminal complaints of HCSA. Only 6.7% of the complaints involved reports of noncontinuous memories for the offence. These retrospective reports of a perceived lack of access to memories of the offence have often been taken to be examples of “repression” or “dissociative amnesia”. Although other estimates of the proportion of noncontinuous memories in legal proceedings have not, to our knowledge, been determined, it is the case that claims of the prevalence of noncontinuous memory among CSA victims have varied quite widely. For example, D. Brown, A.W. Schefflin and D.C. Hammond, *Memory, Trauma, Treatment, and the Law* (New York: W.W. Norton, 1998), reviewed 30 studies in which the percentage of CSA survivors who self-reported memory impairments (both “partial” and “complete” amnesia) varied from 16% to 78% with an overall average of 51% across studies. On the other hand, the American Psychiatric Association reported that loss of CSA memories is a rare event: American Psychiatric Association, *Statement on Memories of Sexual Abuse* (Washington, D.C.: Office of Public Communications, 1995).

2. Why Delay?

There is little doubt that delayed reporting of CSA is the norm rather than the exception. As early as 1984 it was reported “Child sexual assault is largely hidden . . . only a few victims of sexual offenses seek assistance.” The Supreme Court of Canada stated, “Particularly with respect to sexual abuse, it is well known that non-reporting, incomplete reporting and delay in reporting are common and an expected consequence of that abuse.” In one study, 63% of the children who were involved in a Child Witness Program between 1988 and 1993 delayed disclosing the abuse. The authors concluded, “cases of child sexual abuse that are known to the authorities are the proverbial tip of the iceberg”.

It is useful to think of the reasons for delayed disclosure of CSA as belonging to two broad classes — factors related to the legal system (systemic) and factors inherent in the offence (intrinsic). We discuss systemic factors first and then intrinsic factors.

“Before 1982, sexual offences involving children were virtually impossible to prosecute to conviction.” There were three primary obstacles to successful prosecution. First, the

8. W. v.T. Harvey and P.E. Daubs, ibid., at p. 148. Many CSA cases that are before the courts today involve offences that occurred in the 1970s and 1980s. In our
recent complaint doctrine was not abrogated until 1983. Briefly, this doctrine stated that if a victim of sexual assault did not complain at the first opportunity after the assault, the trier of fact was required to draw an adverse inference with respect to credibility or consent. Second, it was not until 1988 that the requirement that courts warn triers of fact of the dangers of convicting on the uncorroborated evidence of an unsworn child was abrogated. This rule would have been particularly oppressive for CSA victims because, generally, in these cases there is no corroborative evidence. Because young children often testify as unsworn witnesses, the only evidence in many such cases, until 1988, was the subject of a judicial warning. Third, there was an attitudinal barrier: a pervasive belief that the evidence of children is far less reliable than the evidence of adults. Although the courts have done much to dispel this belief, it persists in some jurisdictions. Importantly, there is evidence that the negative stereotype is

11. Supra, footnote 9, s. 659.
diminishing, at least in cases involving CSA. Clearly, the systemic barriers that existed when many of the current HCSA offences occurred would have discouraged even the most resolute prosecutor from proceeding with a case of CSA when the only evidence was given by a child.

The second class of factors that explains the failure of CSA victims to report the offence in a timely manner concerns components inherent in the offence. This class of factors is complex and varied and includes the child’s understanding of the wrongful nature of the behaviour, perpetrator-child relationships, and personal or psychological motives. In *Tipping the Balance*, it was reported that 40% of the 135 children interviewed did not report the offence immediately because they did not know the behaviour was wrong. Not surprisingly, children who were younger when the offence began were more likely to report this as the reason for failure to disclose. Even if the child does know that the behaviour is wrong there are powerful reasons to refrain from reporting the abuse. One concerns the relationship between the perpetrator and the child victim. Often, the victim is emotionally and/or economically dependent on the perpetrator. In such situations, a report to the authorities would likely lead to considerable emotional turmoil, economic uncertainty, or both. In some extreme cases,
the child is even led to believe that she has the power to destroy (by disclosing the abuse) or preserve (by concealing the abuse) the family.\textsuperscript{19}

Interviews with adult CSA victims who did not make a timely official report revealed offence-related factors that explain the very lengthy delays in reporting. The most common reasons were: “Too ashamed it happened”, “Too personal a matter to tell anyone”, “Afraid of the person who did it”, and (for males) “Wasn’t important enough to do anything”\textsuperscript{20} In another study, children who delayed disclosing their victimization for up to 12 years reported that their worst fears of disclosing were: fear of physical or psychological harm or disbelief (58%), concern for the family (21%), embarrassment (12%), and no reason to disclose (\textit{i.e.,} did not know it was wrong, the act was “no big deal”, or it was consensual) (7\%).\textsuperscript{21} When presented with a list of possible reasons for failing to disclose and asked to endorse those that applied to them, the two most common reasons endorsed were fear of disbelief (69%) and embarrassment (68%).\textsuperscript{22}

There are varied and powerful factors inherent in CSA that compel the child victim’s silence. If she knows that the behaviour is wrong, her relationship with the perpetrator and her ostensible control over the maintenance of the family strongly dissuade her from reporting the abuse. The shame and fear she feels as well as the threats and inducements to “keep the secret” also operate to keep CSA a silent offence.\textsuperscript{23}

We propose two classes of explanations for delay in reporting CSA: systemic and intrinsic. If delay is primarily a consequence of systemic factors, we should see a decline in the number of HCSA cases as the backlog of unprosecuted offences becomes cleared. Arguably, because there are far fewer systemic barriers to children testifying today than 20 years ago, many more CSA offences will be prosecuted in a timely fashion, leaving fewer undisclosed offences to become

\textsuperscript{20} \textit{Supra}, footnote 5, at p. 189.
\textsuperscript{21} \textit{Tipping the Balance}, \textit{supra}, footnote 7, at pp. 128-29.
\textsuperscript{22} \textit{Ibid.}, at p. 129.
\textsuperscript{23} For a review see M.L. Paine and D.J. Hansen, \textit{supra}, footnote 7.
HCSA cases in the distant future. If, on the other hand, the explanation rests primarily on circumstances inherent in the offence, courts can expect to continue to be faced with the very difficult task of deciding cases involving HCSA.

One way to study this issue is to compare CSA profiles of timely official reports and delayed reports. As a result of systemic barriers applied to children’s allegations of CSA in general there would be no reason to expect particular case characteristics to be more prevalent in delayed disclosures relative to timely complaints. Accordingly, if the explanation for delay is only systemic, the profiles of timely versus delayed reports should be similar. On the other hand, if the explanation is associated with factors that are intrinsic to the offence, characteristics that discourage reporting should be more prevalent in cases of delayed disclosure compared to cases of timely disclosure.24 Connolly and Read25 compared the profiles of HCSA cases with a modal year of 1983 with cases of timely disclosures made in 1981. Compared to timely complaints, female complainants in the HCSA data were statistically younger when the offence occurred and more likely to have been subjected to very serious abuse including vaginal penetration and threats, and alcohol was more likely to have been involved. Both male and female complainants in the HCSA data were statistically more likely to have been abused by a blood relative or a non-blood relative who was either in a position of trust or had a guardianship role vis-à-vis the child victim, and they were less likely to have been abused by a family friend/acquaintance or stranger.26

24. Recall that intrinsic factors include failure to comprehend the wrongful nature of the offence (more likely among younger victims); the relationship of dependence of the child on the perpetrator; the ostensible role of the child victim in “preserving the family”; shame and the personal nature of the details; and fear both of the perpetrator and of not being believed.


26. Many of the offences included in this analysis occurred in the late 1970s and early 1980s. It is possible that inherent factors articulated here are no longer compelling and children are less averse to reporting the offence. As imperfect as these data are, they are the best data we can obtain. There is no way to compare timely and delayed complaints in the year 2002 because there is no way to identify cur-
Immediate and delayed disclosers of CSA were also compared in *Tipping the Balance*. Delayed disclosers were younger when the abuse began, were subjected to more intrusive abuse including anal and vaginal penetration, were exposed to more family violence overall, were more likely to have parents who abuse alcohol, were more likely to have been abused by a father figure or a person in a position of trust or caregiving, and were less likely to have been abused by a stranger. Not surprisingly, their perceived treatment in the justice system did not distinguish immediate from delayed disclosers, except among the very few children (3%) who had had prior experience with the criminal justice system as victims. Recently, Smith *et al.* reported that among victims of “child rape” the following factors predicted delayed disclosure: younger age at the time of the rape, multiple incidents, and closer relationship to the perpetrator.

We conclude that delayed reporting of CSA is due in large part to factors intrinsic to the offence. It follows that, as long as new legal barriers are not created, large numbers of HCSA cases will continue to be heard in Canadian criminal courts. In the balance of this article we discuss some of the common memory issues that arise in these cases.

3. **Worthiness of Belief**

There is rarely physical or other corroborating evidence in timely reports of CSA. *A fortiori*, this applies to HCSA cases. Accordingly, at trial the complainant’s worthiness of belief takes on special importance and prominence. How does the trier of fact decide if a witness is worthy of belief? Ordinarily, the trier of fact will consider both the credibility of the witness and the reliability of the evidence.

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27. *Supra*, footnote 7. All complainants were under the age of 18 when they were involved in the project.
29. D.W. Smith *et al.*, *supra*, footnote 7. For a review of the disclosure literature and support for the conclusion that intrinsic factors are substantial contributors to delayed reporting see M.L. Paine and D.J. Hansen, *supra*, footnote 7.
(1) **Credibility**

Equal weight should not be given to credibility and reliability.\(^{31}\)

We all know from our personal experiences as trial lawyers and judges that honest witnesses, whether they are adults or children, may convince themselves that inaccurate versions of a given event are correct and they can be very persuasive. The issue, however, is not the sincerity of the witness but the reliability of the witness’s testimony. Demeanor alone should not suffice to found a conviction where there are significant inconsistencies and conflicting evidence on the record.

Notwithstanding this, many scholars have found that the single best predictor of belief of a witnesses’ account is the confidence with which the account is expressed: the higher the confidence the more likely the witness is believed.\(^{32}\) However, in general, the level of confidence a person displays about memory reports of a variety of types of information, from eyewitness identification to general knowledge, is not highly related to report accuracy.\(^{33}\) Extension of this kind of research

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33. For a modified position, that methodological and statistical procedures may partially explain the weak confidence-accuracy relationship observed, see J.D. Read, D.S. Lindsay and T. Nicholls, “The Relationship Between Confidence and Accuracy in Eyewitness Identification Studies: Is the Conclusion Changing?” in C.P Thompson *et al.*, eds., *Eyewitness Memory: Theoretical and Applied Perspectives* (New Jersey: Erlbaum, 1998), p. 107. There are several important factors that may have resulted in an underestimate of the strength of the relationship between confidence and accuracy. First, in much research these two variables are compared across individuals with regard to one question. As a result, because different people understand and use confidence judgments differently, there is no uniform calibration of the two measures across people for this one question. It makes more sense to investigate the strength of the relationship within persons across a great many recall opportunities or questions. When this is done for laboratory stimulus materials, the relationship’s strength is somewhat stronger. Second, controlled laboratory procedures do not well mimic the full range of observations experienced by witnesses, and range restriction is known to reduce the strength of a relationship. Third, the weak confidence-accuracy relationship generally reported in the legal context is based on group averages. That is, on average the level of confidence a person exhibits is only weakly predictive of accuracy. It may be that a particular person’s confidence is strongly associated
to autobiographical memory of events from years, perhaps decades, earlier has not received the empirical attention it deserves. We have no reason to anticipate that increasing the delay between an event and its recall should increase the predictive value of a witness’ confidence in regard to accuracy, but there are several reasons to believe that the relationship would be weakened by delays of years. These are the generally detrimental effects of delay on memory coupled with the unusually high confidence that accompanies some autobiographical events, particularly those involving surprise, emotion or trauma. With respect to delay, the reduced availability of an event’s details may be ignored in favour of the recollection of the event’s occurrence, generating a weak relationship between accuracy and confidence for the event details. Occurrence of the event itself however may be attested to correctly and with high confidence. With respect to emotional events, it is well known that their availability to recall likely engenders a higher than usual level of confidence as to their occurrence. However, even with such events, errors are well known. Surprising, emotional and traumatic events are usually remembered by virtue of their distinctiveness and are usually accompanied by high confidence. Given this strong

34. W.F. Brewer, “What is Recollective Memory?” in D.C. Rubin, ed., Remembering Our Past: Studies in Autobiographical Memory (New York: Cambridge University Press, 1996), p. 19, has written about the relationship between confidence and accuracy for autobiographical events and argues that the relationship is moderately strong and, hence, usefully predictive of one from the other. However, the delay intervals in question are usually in the range of weeks or months rather than in years or decades. Anecdotal and scientific evidence from emotional, surprising and notoriously traumatic events recalled years or, with Holocaust survivors, decades later also demonstrate that error is not uncommon even when accompanied by high affect and confidence. See W.A. Wagenaar and J. Groeneweg, “The Memory of Concentration Camp Survivors” (1990), 4 Applied Cognitive Psychology 77; C.R. Barclay, “Autobiographical Remembering: Narrative Constraints on Objectified Selves” in D.C. Rubin, ed., Remembering Our Past: Studies in Autobiographical Memory, p. 94; U. Neisser and N. Harsch, “Phantom Flashbulbs: False Recollections of Hearing the News About the Challenger” in E. Winograd and U. Neisser, eds., Affect and Accuracy in Recall (New York: Cambridge University Press, 1992), p. 9.
cautionary advice, the trier of fact is urged to place more weight on reliability than credibility. Accordingly, the balance of the article focuses on reliability of memory for events that are alleged to have happened a long time ago.

(2) Reliability

Often the only inculpatory evidence in HCSA trials is the memory report of the complainant and, of course, the only exculpatory evidence is the denial of the accused. In a sense then, memory is on trial. In the following section we argue that some report characteristics that are used to evaluate the reliability of memory of single-occurring recent events may not be as useful in terms of assessing the reliability of reports of an instance of a repeated event that occurred in the distant past when the complainant was a child.\(^{35}\) In other words, the context of HCSA must be considered when deciding how to evaluate the reliability of related memory reports.\(^{36}\) Specifically, we discuss seven issues: the effect of a long delay on memory, the young age of the complainant when the offence occurred, memory for instances of repeated events, omission errors, memory for time, memory for frequency, and noncontinuous memory.

\(^{35}\) Certainly, there is no single set of features that describes all cases of HCSA. However, there are at least three characteristics that are relevant to most HCSA offences: the offence occurred a long time ago; it occurred when the victim was a child; and the victim probably was repeatedly abused.

\(^{36}\) Applying a contextual approach to admissibility and interpretation of evidence is not new. In \textit{R. v. W. (R.)}, supra, footnote 14, the court found that the presence of inconsistencies in children’s evidence may not always indicate lack of reliability; in \textit{R. v. Khan}, supra, footnote 14, the court held that the strict application of the rules concerning the admissibility of hearsay evidence should be reconsidered when the complainant is a young child; in \textit{M. (K.) v. M. (H.)}, supra, footnote 19, the Supreme Court of Canada held the limitations legislation should not be applied to bar all cases of HCSA. To reach a just result the traditional rules that have been established over the centuries sometimes require adaptation in light of the context of the offence.

We do not endorse lessening the standards used to judge the reliability of a report. We do argue, however, that some report characteristics have limited value in terms of assessing the reliability of HCSA reports.
(a) **Effect of Delay on Memory for the Event**

Generally, courts do make allowances for memory failures if the pre-charge delay was very long. In *R. v. B. (J.)* the trial judge held that the effect of a 20-year pre-charge delay was to blur memory for some details.\(^37\) The British Columbia Court of Appeal, in *R. v. C. (D.A.)*, held that the testimony of one complainant was “full of frailties”, but this was to be expected given the 25-year delay between the last incident and her testimony in court.\(^38\) In an interesting twist, one accused was found not guilty in part because the complainant’s testimony was too detailed to be believable given the 13-year pre-charge delay.\(^39\)

Until recently, memory research and consequent theory generation was based on studies of memory for nontraumatic events. An important question concerns the generalizability of this research to the study of memory for traumatic events. The jury is still out.\(^40\) Compared to remembering positive experiences, there is evidence that trauma is remembered with more detail generally, but with less sensory\(^41\) and more emotional information.\(^42\) Research has also shown that compared to memory for neutral events, memory for central details of negative events is superior (i.e., more complete and less susceptible to forgetting) and memory for peripheral details of negative events is poorer (i.e., less complete and more susceptible to
At least two general explanations have been offered to account for these findings. First, attention is focused on the most salient aspects of the negative events (including, of course, those details that directly elicited the emotion) and this supports strong memory for those details, at the expense of memory for more peripheral details. Second, memories of trauma are rehearsed, discussed and/or thought about more often than positive events. Importantly, these explanations do not postulate a separate memory system for trauma — normal memory processes can explain the observed quantitative differences in memory for negative events compared to memory for positive or neutral events. It follows from this that research and theories based on the study of memory for neutral events can inform the study of memory for trauma. Thus, in this section we review memory for traumatic events but we do not ignore the wealth of research and theory on memory for non-traumatic events.

Given that memory is imperfect, the obvious next question is “How accurate is long-term memory for autobiographical events?” The effect of delay upon the quantity and accuracy (reliability) of recall from long-term autobiographical memory is best characterized as a power function in which the effects of delay upon recall are most substantial within the first 10-15 years following an event and generally diminish over the next 20-30 years. As a result, the amount of forgetting following a

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44. S.A. Christianson and M.A. Safer, ibid.

45. S. Porter et al., supra, footnote 42; D. Bernsten, supra, footnote 42; C.A. Bryne et al., supra, footnote 41.

46. D.C. Rubin and A.E. Wenzel, “One Hundred Years of Forgetting: A Quantitative Description of Forgetting” (1996), 103 Psychological Review 734 described the mathematical relationship between delay and memory for a wide variety of stimuli, research tasks and retention intervals. Not surprisingly, the effects of delay on memory have been much more frequently investigated with delays much shorter than those of typical HCSA complainants. Further, events selected for research in these autobiographical memory studies were not selected on the basis of their emotionality. Although researchers have investigated the long-term recollection
40-year delay may not necessarily be appreciably greater than what was lost in the first 10-15 years. As discussed below, this pattern is more likely to be characteristic of the peripheral than the central details of any event or sequence of events because the central, core or gist of autobiographical events tend to be remembered well over long periods of time.

C.R. Brewin, B. Andrews and I.H. Gotlib provide a review of long-term autobiographical memory for early family life.\textsuperscript{47} As measured by agreement between members of the same family and/or agreement with independent records created at the time of the event, they concluded that long-term memory for the core details (\textit{i.e.}, central facts) of autobiographical events is quite accurate, particularly if the event was unique, consequential or unexpected. Indeed, for certain kinds of central and integrated information, the effects of delay on forgetting may be trivial. In related studies, psychologists have shown that core knowledge of foreign language learning appears to be particularly resistant to forgetting,\textsuperscript{48} core knowledge about documented painful injuries in children appears not to suffer memory losses following a one-year\textsuperscript{49} or a five-year delay,\textsuperscript{50} and core knowledge of sustained bullying in school that occurred several years earlier is generally consistent across two reports separated by a year.\textsuperscript{51}

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\item of natural disasters and tragedies like floods, criminal victimization, earthquakes, hurricanes, sinking ships, vehicle accidents and assassinations, long-term delay was not their focus of interest. When it was included as a variable, the data had also been, unfortunately, collected from multiple recall trials over time and thus preclude their generalization to the HCSA situation where variations in length of delay are usually not accompanied by explicit prior statement.
\item C.R. Brewin, B. Andrews and I.H. Gotlib, “Psychopathology and Early Experiences: A Reappraisal of Retrospective Reports” (1993), 113 Psychological Bulletin 82.
\item I. Rivers, “Retrospective Reports of School Bullying: Stability of Recall and its
Long-term memory for peripheral details, attitudes, thoughts, feelings and attributions (of, for instance, height, weight, age, degree of family warmth, parenting style etc.) suffers from a greater degree of distortion. Often, distortions in reports of a variety of types of events, attitudes and attributions are not random — they tended to be consistent with current global attitudes about early life. This explanation is consistent with a large body of research that concludes that autobiographical memory is at least partly reconstructive and that the reconstruction is based on current expectations and general knowledge stored in memory.

One theoretical explanation of the relatively fast decay of memory for peripheral details is fuzzy-trace theory. According to this theory, when an event is encountered two independent memory traces are created. A gist trace contains information about the core or central meaning of the event and a verbatim trace contains particular details about the event. Verbatim traces fade relatively quickly while gist traces are resistant to forgetting.

Accordingly, assessors of descriptions of HCSA should anticipate relatively high accuracy for the core details of the event, even following a substantial delay. Delay may have a greater impact on memory for peripheral details, and could continue to have a substantial and continuing impact for up to 15 years. Particularly (but not exclusively) with respect to reports of past subjective states such as attitudes, attributes,

Implications for Research” (2001), 19 British Journal of Developmental Psychology 129.
52. C. Peterson and N. Whalen, supra, footnote 50.
53. C. Brewin et al., supra, footnote 47.
feelings etc., current beliefs, attitudes and expectations could have a significant biasing influence.

(b) The Complainant was a Child when the Offence Occurred

When adults report incidents that occurred when they were children, the assessment of reliability is complicated. Should the trier of fact assess the testimony based on the present age of the complainant (i.e., an adult) or based on the age of the complainant when the offence(s) is alleged to have occurred (i.e., a child)? The Supreme Court of Canada ruled as follows:56

In general, where an adult is testifying as to events which occurred when she was a child, her credibility should be assessed according to criteria applicable to her as an adult witness. Yet with regard to her evidence pertaining to events which occurred in childhood, the presence of inconsistencies, particularly as to peripheral matters such as time and location, should be considered in the context of the age of the witness at the time of the events to which she is testifying.

Two particular propositions are relevant to this directive. First, “since children and adults may experience the world differently, it is hardly surprising that details important to adults, like time and place, may be missing from children’s recollection”.57 Second, “a flaw, such as a contradiction, in a child’s testimony should not be given the same effect as a similar flaw in the testimony of an adult. While children may not be able to recount precise details and communicate the when and where of an event with exactitude, this does not mean that they have misconceived what happened to them and who did it.”58

To understand how adults recall childhood events one must consider “age related differences in prior knowledge, in the strength and organization of underlying representations, [and] in the time course of forgetting”.59 As we discuss each of these

factors in turn it will become clear that children’s memories are, at the same time, fragile and robust.

**Knowledge**

Autobiographical memory is partly constructive and partly reconstructive and knowledge is an important factor that influences these processes.\(^{60}\) Specifically, knowledge, from experience with similar events, exposure to related information or general knowledge affects how children (and adults) understand, interpret and remember events.\(^{61}\) Relevant knowledge helps children to understand and interpret the event as well as to draw inferences and elaborations about it.\(^{62}\) This results in an elaborate, detailed and comprehensive representation of the event. Relevant knowledge also provides an organizing template for the event resulting in a well-integrated and coherent representation.\(^{63}\) Finally, knowledge, whether acquired before or after a target event, influences what is remembered, inferences that are drawn about the event and guesses about event details that are missing.\(^{64}\) Clearly, the facilitative effect of knowledge on event memory is substantial.

Knowledge can also lead to errors in autobiographical memory. Distortions that are consistent with knowledge-based expectations are not uncommon. Distortions may occur at the time of the event\(^{65}\) or after it.\(^{66}\) Related to this, knowledge is

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used to “fill in the gaps” in event memory. And, as memories for details fade, gap-filling strategies occur more often.\textsuperscript{67} Importantly, children’s knowledge structure changes more dramatically and more quickly than adults and this will affect their interpretations, inferences, elaborations, organizing templates and gap-filling strategies.\textsuperscript{68}

\textit{Strength and Organization of Information}

All things being equal, children’s memory is weaker and less well organized than adults.\textsuperscript{69} As discussed above, one explanation has to do with children’s poorer general knowledge as compared to adults. There is also evidence that children are less adept at using effective memory strategies to facilitate long-term memory. For instance, younger children will sometimes use a less sophisticated strategy, such as repetition, in circumstances that call for a familiar and more sophisticated strategy, such as elaboration.\textsuperscript{70}

\textit{Forgetting}

Children forget faster than adults and younger children forget faster than older children.\textsuperscript{71} An important question is whether this “forgetting” is retrieval-based or storage-based.

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\item \textsuperscript{70} E.g., R.V. Kail, \textit{supra}, footnote 63, at p. 174.
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In other words, are the differential forgetting rates a consequence of loss of information (storage-based) in memory or an inability to access an intact memory (retrieval-based)? There is evidence that storage-based failures may contribute more than retrieval-based failures to the developmental changes in forgetting.\textsuperscript{72} Fuzzy trace theory provides an explanation for age differences in storage-based forgetting. When children or adults experience an event two memory traces are created: one trace contains information about the essence or global patterns and relationships of the event (\textit{i.e.}, the gist trace) and the other contains more precise details related to the event (\textit{i.e.}, the verbatim trace). Verbatim traces are relatively more fragile than gist traces in that they are more vulnerable to interference and they fade faster.\textsuperscript{73} Because, compared to adults, children rely more on verbatim memory than gist memory, children are more susceptible to storage-based forgetting.\textsuperscript{74}

In spite of these inherent frailties of memory, even very young children can recall the gist and central features of an important event over a long period of time. This is true for positive events\textsuperscript{75} as well as traumatic events\textsuperscript{76} and is particularly pronounced for central features of traumatic events.\textsuperscript{77}

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\item[72.] V.F. Reyna and C.J. Brainerd (1995), \textit{ibid}.
\item[73.] C.J. Brainerd and V.F. Reyna, \textit{supra}, footnote 71.
\item[77.] C. Peterson & N. Whalen, \textit{ibid}. One important exception to this is the phenomenon of infantile amnesia. Generally, adults cannot recall events, traumatic or
Distinctiveness and perceived interest have been used to explain this pattern.

Distinctiveness is defined as an event that “stands out” in the context of the child’s knowledge or background. Distinctiveness, when systematically manipulated in research, has been shown to have a facilitative effect on memory, possibly because attention is focused on events, or parts of events, that are distinctive. A similar explanation is used to explain the positive effect of interest on memory: more attention is paid to events and details that are perceived to be more interesting. Memory encoding can be thought of as a by-product of cognitive processing like attention. The greater the attention paid to an event the more likely the event will be encoded. Notably, what is important to adults simply may not be important to children. Given that less attention is given to the “unimportant” information, memory for those details is correspondingly poor or non-existent.

Increased rehearsal of distinctive and/or interesting events may also contribute to improved event memory. Events that are rehearsed more often, as long as rehearsal begins within a reasonable time after the event occurred, could minimize or

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79. K.A. Renninger, “Interests, Representation, and Activity” in R. Fivush and J.A. Hudson, eds., Knowing and Remembering in Young Children (New York: Cambridge University Press, 1990), p. 127. Interest is probably not independent of knowledge because what we find interesting are the very things we know more about. However, interest is more than knowledge in that it includes a positive subjective evaluation of the stimulus.
eliminate the effect of delay on forgetting. Importantly, the gain associated with rehearsing the event, particularly rehearsing with another person, goes beyond the facilitative effect of repetition of details alone. Particularly with young children, discussing the event at the time it is occurring or retrospectively may help the child to organize and make sense of the event in a way that supports long-term retention. As it applies to child sexual abuse, internal rehearsal is more likely than rehearsal with the assistance of others.

Children and adults remember things differently. Children’s relatively impoverished and evolving knowledge base affects the organization, interpretation and retrieval of memories for past events. Children forget faster than adults, and this forgetting has been attributed, at least in part, to storage failures. Accordingly, recovery of forgotten details seems less likely than if the failure was retrieval-based. Notwithstanding this, children’s long-term memory for the gist and core details of distinctive and/or interesting events is quite impressive indeed.

Failure to report information that was not encoded or forgotten because of the unique perspectives and characteristics of the child at the time of the event ought not to be used to discredit the witnesses. However, this direction only leads to the conclusion that errors of omission (i.e., failure to report details) ought to be considered in light of the age of the complainant when the alleged event occurred. This reasoning should not be used to discount errors of commission (i.e., report different details on different occasions). It simply does

80. R. Fivush and A. Schwarzmueller, supra, footnote 75; C. Peterson, supra, footnote 76.
83. We do not argue that the court should not consider omissions when deciding if the prosecution has met the burden of proof. As discussed below, in some cases information that a child is not expected to encode is a material fact that must be proven at trial. Our argument is that failure to report such information should not be used to discredit the witness, even if it is used to support an acquittal.
84. We do not suggest that commission errors should not be present in the testimony of complainants in HCSA cases. Clearly they exist and the weight given to them
not follow that children’s unique perceptions and memories should lead to inconsistent reports.

The British Columbia Court of Appeal was sensitive to this distinction in *R. v. C. (S.R.)*. A conviction of sexual assault that was alleged to have occurred six years earlier was overturned on appeal and an acquittal was entered. The court held that the complainant’s testimony contained inconsistencies that ought not to be discounted because “inconsistencies are facts remembered on two different occasions in two different ways which is fundamentally different than the ability to recount details or to communicate details with exactitude”. Interestingly, just one year earlier the same court upheld a conviction for gross indecency, sexual intercourse with a female under 14 and sexual assault in spite of the fact that there were “as many inconsistencies as consistencies” in the complainant’s evidence. The Court of Appeal agreed with the trial judge that the essential nature of the accusation remained constant.

### (c) Memory for Instances of a Repeated Offence

When a person is charged with an offence he or she must be provided with details of the offence that are sufficient to answer the charge. The sufficiency principle, articulated in *Brodie v. The King* and affirmed in *R. v. B. (G.)* states, “the indictment must describe the offence so as to lift it from the general to the particular”. This can be particularly difficult for victims of repeated abuse because a predictable consequence of repeated similar experiences is that memory for the individ-

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89. *Supra,* footnote 14.
90. A majority of HCSA cases involve allegations of multiple offences: R.L. Binder, D.E. McNeil and R.L. Goldstone, “Patterns of Recall of Childhood Sexual Abuse as Described by Adult Survivors” (1994), 22 Bulletin of the American Academy of Psychiatry and Law 357. In our data set of 1,628 criminal complaints of HCSA, 73.2% of the complainants reported that the alleged abuse had occurred more than once.
ual episodes become more general and less particular. According to what are known as “schema” theories, memory for recurring events includes a combination of some event-specific details and general details that are characteristic of most instances in the event sequence. This general memory (“schema” or “script”) is not associated with specific instances of the event; it represents what typically occurs and would be predicted as being true for the majority of instances. Importantly, instances of repeated events are more difficult to retrieve than unique events, and so for these instances there is a greater reliance on general knowledge about the event and reconstruction of the event. Moreover, such reliance on general knowledge increases as the frequency of similar events increases because access to particular common instances and their specific characteristics decreases with event frequency. For example, it is understood that as event frequency increases, memory for event-specific temporal detail decreases. Accordingly, when asked to remember an instance of a repeated event, the person will attempt to retrieve memory of the instance, extract the information contained therein and “fill in the gaps” with information contained in the schema or script. The reduced availability of specific instances of repeated incidents does not imply however that all instances in the sequence have the same memory-related fate. Indeed, some

91. For instance see R.P. Abelson, “Psychological Status of the Script Concept” (1981), 36 American Psychologist 715; J.A. Hudson, R. Fivush and J. Kuebli, “Scripts and Episodes: The Development of Event Memory” (1992), 6 Applied Cognitive Psychology 483. One reason for the reduced availability of details of highly predictable similar events is that less attention is given to new instances of the same event, thereby reducing the probability of memory encoding for the specific new instance. This argument provides another foundation for the comparatively good memory of abuse events that are schema- or script-discrepant.
specific instances may be recalled very well. There are several factors that affect both availability and content of memory for specific instances. For example, an instance that is atypical of the recurring events is likely to be retained as a distinct memory because it stands out against the backdrop of other similar events by virtue of atypical characteristics. Examples of atypical characteristics include its temporal position (first and last instances in series are generally recalled better than those in the middle), its association with a specific landmark event of personal importance to the complainant (e.g., a birthday) or its deviation from the “script” (e.g., the transition from genital fondling to vaginal penetration). All of these features would serve to engage more of the complainant’s attention and result in improved memory encoding. Indeed, as the absolute number of similar events increase, there is a greater likelihood that one event will be script-discrepant or unique in some way and therefore remembered relatively well.

In our research of HCSA cases that have gone to trial we found that complainants do report details of some of the incidents of the alleged repeated CSA. For instance, in R. v. G. (B.L.) two complainants could specifically recall three particular incidents of sexual touching that allegedly had happened many times. In R. v. B. (D.E.), three children claimed that their father had touched them for a sexual purpose “many times”. One complainant reported details of five occurrences, one complainant could recall the first and last instance, and a third complainant had distinct memory for the first time the offence occurred. In R. v. Joudrie one complainant’s memory was described as follows: “although her recollection of specific incidents was spotty, she was able to recall several occasions in some detail”. In R. v. Makarenko a 21-year-old reported that her swimming coach had fondled her “a lot” over a four-year period, but was only able to provide particulars about “three or four incidents”. In R. v. S. (C.J.) one com-

plainant alleged that her brother had had sexual intercourse with her “daily or weekly” for four years, but was able to provide details of only one instance. In each of these cases the accused was convicted, suggesting that the trial judges were sensitive to the predictably impoverished memory for some details of particular instances of repeated abuse.\textsuperscript{100} In fact, in one interesting case the judge interpreted the complainant’s ability to describe minute details of each of several instances of repeated abuse that had occurred 13 years earlier as suggestive of fabrication and rehearsal.\textsuperscript{101}

Contrast these cases with the decision in \textit{R. v. Keough}: “[a]lthough there may be a psychological explanation for it, it does seem rather surprising to me that regular sex or ‘something we did together’ as the complainant puts it would trigger only these two memories during the period covered by the indictment”.\textsuperscript{102}

Distinct or unusual instances of repeated events are far more likely than routine instances to be accessible. However, even with distinctive instances, memory reports are likely to be a combination of particular memory and memory for what typically occurs during the event. Ordinarily, this is not a problem because in a long series of instances there will probably be a few that are distinctive and this will be sufficient to support a conviction. However, if the trier of fact is unfamiliar with memory for instances of repeated events erroneous inferences may result.

\textbf{(d) Errors of Omission}

How should a court assess errors of omission? First, it is important to consider the nature of the error. Omission errors may become evident when (1) other evidence or conspicuous

\textsuperscript{100} In \textit{R. v. Joudrie} the conviction was overturned because the dates of the offence were not adequately specified. In \textit{R. v. S. (C.J.)} the conviction was overturned because it was held that the burden of proof had been shifted to the accused.


\textsuperscript{102} [1993] N.J. No. 102 (QL) at para. 23, 104 Nfld. & P.E.I.R. 24 \textit{sub nom. R. v. B.E.K.} (Nfld. S.C.) (Q.L.). The accused was acquitted of sexual interference with a female under the age of 14, although the accused admitted to having had sexual relations with the complainant 18 years earlier when she was 16 years old.
gaps in the complainant’s testimony alerts the court to the omission(s) or (2) the complainant’s provision of later details suggests that earlier reports contained omissions.

With respect to option one, it may be that the details were not encoded or were forgotten over time. In these cases, if the detail is peripheral, two directions of the Supreme Court of Canada seem appropriate. First, “since children and adults may experience the world differently, it is hardly surprising that details important to adults, like time and place, may be missing from children’s recollection”. 103 Second, “[w]hile children may not be able to recount precise details and communicate the when and where of an event with exactitude, this does not mean that they have misconceived what happened to them and who did it”. 104 Importantly, the omitted information was either not perceived or forgotten. Logically, the detail(s) cannot be reported later because there is no memory for the complainant to recover. 105

The second class of omission errors is more problematic in terms of its value in assessing reliability. The inclusion of information in one account that was absent in an earlier account may reflect normal memory processes or, if these omission errors outweigh what is frequently recalled across reports, an inconsistent, unreliable or possibly fabricating complainant. Different courts have assessed these errors differently and reflect at least these two interpretations. In R. v. T. (D.A.) the accused was acquitted in part because the trial judge was concerned about the reliability of the complainant’s report given that new facts emerged across reports. 106 In R. v. P. (E.) a similar concern led the trial judge to acquit the accused of charges of indecent assault that had occurred more than 20 years earlier. 107 In R. v. Marenko an allegation of sexual intercourse was not revealed until after the complainant reported

105. It is possible that a conviction cannot be found without the omitted detail(s). This, of course, is not the same as challenging the reliability of the report based on the omitted information.
details of sexual touching.\textsuperscript{108} The trial judge found the accused not guilty of sexual intercourse but guilty of sexual assault (\textit{i.e.}, sexual touching).

On the other hand, in \textit{R. v. M. (R.)}\textsuperscript{109} the British Columbia Court of Appeal upheld a conviction for sexual assault despite the fact that the trial judge found that the complainant’s report became more detailed across time. Similarly, in \textit{R. v. Lane}\textsuperscript{110} notwithstanding that the complainant’s account became more detailed across reports the accused was convicted of sexual assault and gross indecency. In \textit{R. v. T. (D.R.)}\textsuperscript{111} the trial judge held that the complainant was more credible because her reports became increasingly detailed across time.

Other than fabrication, there are two classes of explanations for complainants to include more information in subsequent reports. One concerns the complainant’s willingness or motivation to provide detail early on and focuses on the affective effect of reporting such events. The other focuses on the memory phenomenon known as \textit{reminiscence} characterized by the provision of new, previously unreported information across successive retrieval attempts. With respect to the first, some adult complainants may be too embarrassed or ashamed to reveal the full extent of the abuse in early reports.\textsuperscript{112} It is not until they become less uncomfortable with the reporting process that further details emerge. This explanation predicts that details reported later should be relatively more intimate than details reported earlier. Research into the disclosure of CSA by children confirms that, not infrequently, complainants do initiate disclosure with rather general descriptions of the abuse, to be followed later by considerable specificity as to the type and frequency of abuse perpetrated upon them.\textsuperscript{113}

\begin{enumerate}
\item \textsuperscript{108} [1994] O.J. No. 2367 (QL) (Gen. Div.).
\item \textsuperscript{110} [1995] O.J. 2030 (QL) (Gen. Div.).
\item \textsuperscript{111} [1992] Y.J. No. 177 (QL) (S.C.).
\end{enumerate}
Second, when an event is recounted multiple times, the reports often have considerable variability as to what is included in each account: new correct information may emerge (reminiscence) and old correct information may be omitted in later reports.\textsuperscript{114} For example, when researchers have compared recalls of an event on two separate occasions, up to 40\% of the correct information recalled at Time 2 had not been recalled at Time 1. Further, some 25\% of the correct information recalled at Time 1 was not again recalled at Time 2. However, overall, the majority of the correct information recalled was present in both reports.\textsuperscript{115} In short, when a complainant makes multiple retrieval attempts without benefit of rehearsal or reference to her prior recall protocols, omission errors are expected and are not diagnostic of an impaired, recovered or false memory.

Accounts of the reminiscence effect presume a stimulus sampling model in which any given recall attempt samples some amount of finite information within the memory representation for an event.\textsuperscript{116} Such sampling variability results from both accessing different features of the memory representation as well as the availability on different occasions of different cues that may elicit retrieval of particular details. Current theoretical perspectives would suggest that across retrieval attempts, central (core or gist) information is more likely to be consistently reported than is peripheral information and this pattern has been obtained in children’s recall. Similarly, when adults engaged in the sustained and repeated recall of the names of high school classmates the proportion error increased with the number of retrieval attempts.\textsuperscript{117} Recall variability has

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\textsuperscript{114} J.W. Turtle and J.C. Yuille, “Lost But Not Forgotten: Repeated Eyewitness Recall Leads to Reminiscence But Not Hypermnesia” (1994), 79 Journal of Applied Psychology 260. Reminiscence was observed in reports of events that were non-threatening and recently observed.


\textsuperscript{116} E.g., M.A. Conway and C.W. Plydell-Pearce, \textit{supra}, footnote 54.

\textsuperscript{117} Indeed, in one study children who recalled an event shortly after it occurred and again one or two years later included a considerable amount of new information in the latter interview, although between 30\% and 50\% of the new information was incorrect. However, Pipe \textit{et al.} reported that the errors contained in this new
been reported for children and adults for both mundane\textsuperscript{118} and traumatic\textsuperscript{119} events.

We presented three explanations for omissions in reports of CSA. Omission errors may occur if the complainant did not encode the detail or spontaneously forgot it. They may also occur if the complainant is uncomfortable with the disclosure process or if multiple retrieval attempts lead to sampling different details from the memory representation. Of course, it is also possible that new information emerges because a fabricated story is becoming more complete or a true report is being embellished. The probative value, in terms of assessing reliability of early omissions, is equivocal. A careful examination of the reasons for reporting additional new facts, in light of possible emotional or cognitive explanations, is necessary before a trier of fact can reasonably interpret the significance of different details included in later reports.

\begin{itemize}
  \item[(e)]\textbf{Memory for Time}
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Another consequence of the delay in reporting autobiographical events is some complainants’ inability to report accurately when the alleged assaults occurred. Generally, in

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  information reported at the long delay only were of a minor or peripheral nature. M.E. Pipe, S. Gee, J.C. Wilson and J.M. Egerton, “Children Recall 1 or 2 Years After an Event” (1999), 35 Developmental Psychology 781; M.D. Williams and J.D. Hollan, “The Process of Retrieval From Very Long-Term Memory” (1981), 5 Cognitive Science 87.
\end{flushleft}

\textsuperscript{118} In one study children who described an event shortly after it had occurred and again five years later included a substantial amount of new information in the latter report and the new information was largely correct, at least according to the children’s mothers: R. Fivush and A. Schwarzmueller, supra, footnote 75.

\textsuperscript{119} For example, individuals who had been granted asylum in the United Kingdom were asked to describe details of a traumatic event on two separate occasions. Particularly concerning peripheral details of traumatic events there were substantial discrepancies between the reports and the difference was more pronounced among those whose psychiatric disorders were more severe. The authors concluded that inconsistencies, including the addition of new information in subsequent reports, is a predictable consequence of repeated reporting and should not be used to assess credibility: J. Herlihy, P. Scragg and S. Turner, “Discrepancies in Autobiographical Memories — Implications for the Assessment of Asylum Seekers: Repeated Interview Study” (2002), 324 British Medical Journal 324. See also S.M. Southwick, C.A. Morgan III, A.L. Nicolau and D.S. Charney, “Consistency of Memory for Combat-Related Traumatic Events in Veterans of Operation Desert Storm” (1997), 154 American Journal of Psychiatry 173.
cases of HCSA, time and place are not essential elements, except in some particular circumstances.\textsuperscript{120} One example of such a circumstance was illustrated in \textit{R. v. Daniels}\textsuperscript{121} where the dates of the alleged offence spanned the period during which the accused reached the age of majority. Time was an important fact because it determined which court had jurisdiction to hear the case.

A more common circumstance in which time will be material is when the accused raises an alibi defence. In \textit{R. v. P. (M.B.)}\textsuperscript{122} the complainant’s uncle was convicted of indecently assaulting his niece seven years earlier. The indictment was amended three times to change the dates during which the offence was alleged to have occurred. The final amendment occurred at trial after the accused elected to call evidence. The Ontario Court of Appeal held that because the accused had raised an alibi defence the dates of the offence were material. The amendments in fact prejudiced the accused and so the conviction was quashed and the court declined to order a new trial.\textsuperscript{123} Similarly, in \textit{R. v. Tarnovsky} a conviction for sexual assault and sexual touching was quashed, and an acquittal was entered because the prosecution was unable to prove that the offence occurred within the time frame stated in the indictment.\textsuperscript{124} In that case time was a material fact because the accused school-bus driver raised an alibi defence.

Contrast the above two cases with the decision in \textit{R. v. L. (O.J.)}.\textsuperscript{125} In this case the accused was found not guilty in part because he was “in this case, denied, \textit{for example}, the defense of alibi, and the luxury of precise recall of a specific time and place so that he may distance himself from it on the evi-

\begin{itemize}
\item \textsuperscript{120} \textit{R. v. B. (G.)}, supra, footnote 14.
\item \textsuperscript{123} The Supreme Court of Canada upheld the Court of Appeal’s decision, but on the grounds that prejudice to the accused flowed from the timing of the final amendment to the indictment. See \textit{R. v. P. (M.B.)}, \textit{ibid}.
\item \textsuperscript{125} [1994] O.J. No. 951 (QL) (Gen. Div.).
\end{itemize}
dence”\(^\text{126}\) (emphasis added). It is important to note that in \(R. v. L. (O.J.)\) the accused did not in fact raise an alibi defence. The trial judge held that he was prejudiced because the possibility of an alibi defence was closed to him.

Is it reasonable for judges to expect complainants to be precise in stating the time the alleged offence occurred? In a recent report on the ability to place autobiographical events in time, C.P. Thompson stated that “these data . . . lead us to the conclusion that there is no temporal trace in autobiographical memory . . . we believe that the location of personal [autobiographical] events in time is entirely reconstructed”.\(^\text{127}\) Thompson does not claim that judgments of time are notoriously inaccurate: his conclusion is that the process of locating autobiographical events in time is reconstructive and, therefore, will depend upon the recall of other event information, and general autobiographical knowledge as to the ways in which life events normally occur. On rare occasions however, memory for temporal location may be \textit{reproductive}, rather than reconstructive, because the date has special meaning for the person and can serve as an organizing landmark for one’s life (\textit{e.g.}, a wedding, graduation.) It is also the case that such landmarks have been shown to improve the dating accuracy of events that are temporally or thematically related to them.\(^\text{128}\)

A distinction should be made, however, between temporal dating and temporal ordering. The first concerns the specifica-

\(^{126}\) \textit{Ibid.}, at para. 20.


\(^{128}\) M.S. Shum, “The Role of Temporal Landmarks in Autobiographical Memory Processes” (1998), 124 Psychological Bulletin 423. It follows from this work that a complainant’s or witnesses’ testimony may be more reliable if such dating is elicited through the use of a timeline or “event history calendar” (as described by R.F. Belli, “The Structure of Autobiographical Memory and the Event History Calendar: Potential Improvements in the Quality of Retrospective Reports in Surveys” (1998), 6 Memory 383) in which landmark or anchor events are located. Recommendations for the elicitation of testimony based upon similar premises have been articulated by W. v.T. Harvey and P.E. Daubs, \textit{supra}, footnote 7.
tion of a specific temporal location (i.e., that is, a date of some specificity) and the second the description of a temporal framework within which various independent events are ordered in time. Generally, temporal dating is expected to be less accurate than temporal ordering.\footnote{129} Further, the impact of delay upon temporal dating is such that the date estimates are increasingly less likely to be accurate as the length of the delay increases, although an uneven distribution of landmark events in one’s life may complicate this pattern. As we saw with the effects of delay on memory generally, the longer the delay the less information that may be retrieved by a complainant and, because temporal dating depends upon the recall of such information, the lower the likelihood that an accurate date will be provided. Temporal ordering of unique events on the other hand has a greater likelihood of being accurate because of the availability of cognitive heuristics, schemata (week, year and calendar knowledge) and a personal autobiographical framework or reference system that logically places some events before others (regardless of the scale of the time period under consideration: days, weeks or years), and relates them to known landmarks.

There is no doubt that accused persons must be afforded the opportunity to make full answer and defence. The Supreme Court of Canada was alive to this when it articulated exceptions to the general principle that time and place are not essential elements in cases of HCSA.\footnote{130} However, an application of these exceptions should not be taken too far. Absent information that would allow the complainant to reconstruct the time of the offence, temporal information is simply not available in memory. Time should not be a material fact except when the accused is in fact prejudiced by failure to precisely specify time. Put another way, if we are going to place the complainant at a disadvantage by requiring her to place the event in time, it should only be done when to do otherwise would certainly be unfair to the accused.

(f) Memory for Frequency

Another issue that is sometimes contentious in cases of HCSA is the complainant’s inability to estimate the frequency with which the alleged offence occurred. Of course, frequency estimates only arise in cases that involve an allegation of multiple instances of the offence. In our data set, 50.1% of the complainants reported frequency with a particular number and 49.9% of the complainants described frequency. Of those who reported frequency as a particular number, 35.5% reported that the offence had occurred two or more times. In short, in the majority of cases we reviewed, frequency estimates were potentially in issue at trial.

There are conflicting judgments concerning the significance of inaccurate frequency estimates. In R. v. S. (C.J.)\(^{131}\) the P.E.I. Court of Appeal overturned a conviction of incest and indecent assault, largely because the complainants overestimated the frequency and duration of abuse.\(^{132}\) In R. v. S. (W.) the Ontario Court of Appeal substituted a “not guilty” verdict for a conviction in part because the complainant alleged that her uncle had fondled her breasts and vaginal area “200 times” when the evidence clearly showed that the opportunity to commit the offence did not exist 200 times.\(^{133}\)

On the other hand, in R. v. Francois four of the seven justices of the Supreme Court of Canada upheld a conviction for sexual assault in spite of the fact that the complainant’s estimates of frequency increased from three at the preliminary inquiry to 20 at trial.\(^{134}\) In R. v. H. (B.A.) the trial judge held that although, at the preliminary hearing, the complainant may have vastly overestimated the frequency of abuse that had occurred 20 years earlier, he found that this did not diminish her credibility.\(^{135}\) In R. v. M. (W.) it was held that “discrepan-

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cies evident in these various accounts of the events relate to precisely those types of peripheral details (particularly time, frequency and duration) which the Supreme Court has recognized to be problematic in the evidence of children”.136

Failure to report a peripheral detail that is not within the perception or perspective of children should not be used to discredit the witness.137 Is memory for frequency within the unique perception or perspective of children? There is evidence that information used to estimate event frequency is encoded automatically: purposeful cognitive effort is not needed.138 There is also evidence that the cognitive processes needed to encode or interpret the information used to estimate frequency are fully developed by the early school years.139 In other words, young children and adults have comparable information with which to estimate frequency and their frequency estimates are similarly (im)precise.140 Accordingly, in this section we discuss studies of adult’s frequency estimates.

Responses to questions about the frequency of events are virtually always estimates (as opposed to counts) of the actual frequency except in circumstances where the events occurred very infrequently and/or the person explicitly tallied the events as they occurred. Overall, frequency estimates are well corre-

lated with actual frequency; that is, the greater the number of events within a category, the higher the frequency estimate. However, systematic biases in these estimates occur such that low-frequency events tend to be overestimated whereas high-frequency events tend to be underestimated in number.\footnote{141} Further, the process of estimation is remarkably influenced by what is called the “availability heuristic”\footnote{142}. Briefly this cognitive strategy for making a judgment assesses the ease with which instances of some event come to mind: the more easily events come to mind, the higher the estimate of frequency of the event. Such availability to recall is influenced by the vividness and recency of the event. For example, because of highly frequent media depictions of dramatic but very infrequent events such as serial murder, airplane crashes and exotic medical conditions, they come to mind easily and are always overestimated in frequency by members of the public.\footnote{143}

Applied to cases of HCSA, the availability heuristic would predict that when asked to give an estimate of the frequency of abuse events, the complainant will attempt to bring to mind one or more examples of these events and her estimate will be influenced by the ease of recalling such event(s).\footnote{144} Given the frequently long delays between CSA experiences and a report, the complainant could have greater difficulty in bringing an event to mind than if it had occurred very recently. As a result, the initial estimate may underestimate the actual frequency of

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\item \footnote{142} A. Tversky and D. Kahneman, “Availability: A Heuristic for Judging Frequency and Probability” (1973), \textit{5 Cognitive Psychology} 207.
\item \footnote{144} As we discussed above, access to memory for similar instances of repeated events like CSA are unlikely to be individually represented in memory, and therefore the overall estimate will be influenced by the ease with which contextual features come to mind, not necessarily the abuse events themselves. For example, if a complainant recalls that the pattern of abuse included weekly visits by the perpetrator, the frequency estimate may be based upon an estimate of the number of weeks in the relevant time period rather than recall of individual episodes.
\end{itemize}
events. It could also be that the complainant thought about the abuse often and so retrieval of particular instances is quick and fluent. In this case, initial frequency estimates may be high. With further consideration, description and immersion in the legal process, however, we would anticipate changes in the number of events estimated, changes that could, for different reasons considered by the complainant, go up or down.

What should the trier of fact infer if the information about which the witness is mistaken is predictably imprecise? We suggest that the spirit of the Supreme Court of Canada’s direction is that information that a person is not reasonably expected to possess should not be used to discredit him or her. If a person has experienced an event many times, imprecise frequency estimates are expected. As illustrated in the cases discussed above, it is not clear whether inaccurate frequency estimates will be used to discredit a complainant or if the trier of fact will consider frequency peripheral and of no particular help in assessing reliability of the evidence. In our view, when actual frequency is high, the latter approach is more consistent with the psychology literature and with the spirit of the Supreme Court of Canada’s direction in *R. v. W. (R.)*.145

(g) Noncontinuous Memory

Complainants of HCSA sometimes report that there was a period of time during which the events and details of the abuse events could not be remembered. Indeed, we reported earlier that 6.7% of the HCSA complaints in our data were judged to have described periods of time during which some or all of the abuse experiences were unavailable to recall. It is important to note that because these beliefs surfaced only at the time the complainants’ complaints were made, their memories for the CSA events were never actually tested during the very periods of time for which unavailability to recall was claimed.146 The

146. Within the psychology and law research literature, complainants’ reports of periods of time for which they perceived, retrospectively, the relevant events to have been unavailable to recall memory have often been taken to reflect the hypothetical process of memory “repression” and thus have been called “repressed” memories. However, on scientific, clinical and legal grounds there is substantial
reliability of these kinds of reports does depend upon a number of factors identified by memory researchers and the manner of such recovery has also been considered by courts to be relevant to reliability.\textsuperscript{147}

There has been a debate among clinicians and memory researchers as to whether memories for emotional, negative, and possibly traumatic events like CSA may be lost to awareness for periods of time and then subsequently recovered.\textsuperscript{148} There are good reasons to believe, on the basis of the archival analyses of HCSA cases and from research on autobiographical memory for traumatic events, that while reports of inability to recall some or many details of an event are not unusual, an inability to recall the CSA event itself (and hence any of its details) is very unusual. However, most researchers and clinicians would agree that the occurrence of total inability to recall CSA events may be understood on the basis of a complainant’s age at the time of the abuse (with very young children, recollection would not be anticipated), the nature and understanding of the abusive acts (as to whether they were perceived to be unpleasant or abusive), and the circumstances in which the acts occurred (\textit{e.g.}, while near sleep or sleeping).

The age of the complainant at the time of the abuse is relevant to both continuous and noncontinuous memories but has special significance in regard to claimed recovery. Specifically, if CSA events are alleged to have occurred at a...
very young age, there is good reason to question the accuracy of verbal descriptions of them. Developmental psychology researchers assert that a preverbal child will encode events in a manner very different than a verbal child and that recovery from the former in verbal terms is fraught with difficulty and, likely, unreliability. Further, as suggested above, memory researchers and developmental psychologists would not anticipate recall of the vast majority of experiences prior to the ages of about three years because of the well-documented observation of “infantile amnesia”. Therefore, information recovered from this period of time is unlikely to be reliable.

The losses described within infantile amnesia refer to events that had been attended to and encoded by the child. For events that were not attended to and encoded we similarly are unable to anticipate memory-recovery because the absence of encoding confers an absence of memory-recovery possibilities. In short, events experienced at young ages are unlikely to be successfully recalled by virtue of their nonverbal representations or their apparent elimination through the normal processes of childhood amnesia. It has also been argued that even very distinctive events like CSA beyond the ages of infantile amnesia may fail to be encoded and, therefore, a failure to recall such an event would be anticipated. By some accounts CSA, particularly repeated CSA, engages a child in such a way as to discover a mental strategy by which the event can be survived psychologically. For many clinicians this has meant that the child “dissociates” during CSA events such that memory encoding does not take place and that the absence of memory is evidence of dissociation. It follows that a claim of non-continuous memory for these experiences must be based upon a memory-recovery experience and would be inherently unreliable.

In some sense, all demonstrations of recall involve “recovery” because simply bringing a past event to mind alters one’s

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150. For the theory of dissociated traumatic memory see D. Brown et al., supra, footnote 3.
mental state from one in which an event was not the target of conscious thought to one in which it is. Bringing an event to mind requires some type of retrieval activity, albeit typically unnoticed and usually effortless, but readers will recognize from their own experiences that recall of information sometimes is difficult and requires greater concentration and effort. Thus, we might describe particularly recalcitrant memories as requiring some retrieval or memory-recovery work. However, these kinds of everyday recalls are different from those heard in HCSA cases because they have not followed claims that the information was unavailable to recall for substantial periods of time (that is, in terms of years). To the extent that retrieval activities require time, the use of special memory techniques (such as hypnosis), and the guidance of the recovery process through specialized readings, group therapy, and trusted individuals, the greater the likelihood that the events reconstructed will have been influenced by the process and be unreliable.  

There is no question that false beliefs and false memories can be created through suggestive influences in the memory-recovery environment. Numerous research studies have demonstrated the creation of false beliefs and memories through the intentional presentation of highly misleading information to research participants. Whereas much of this research has suggested very mundane, unemotional and trivial details to participants, more recent work has successfully gotten participants to accept misleading information about autobiographical memory including the creation of false memories about being lost as a child, an overnight stay in a hospital, a hot air balloon ride, and a serious childhood injury. Finally, sur-

151. For descriptions of the kinds of memory-recovery techniques that are known to produce inaccurate recall, see D.S. Lindsay and J.D. Read, “Psychotherapy and Memories of Childhood Sexual Abuse: A Cognitive Perspective” (1994), 8 Applied Cognitive Psychology 281.

veys of clinicians whose clients are CSA survivors have documented the use of memory-recovery techniques that incorporate the same kinds of suggestive techniques employed in the laboratory studies.\footnote{153}

Given the widespread recognition that heavy suggestive influences may render recovered memory reports particularly unreliable, it would be helpful to the courts if true and false memories could be successfully discriminated by the trier of fact or by experts through the use of pre-trial psychological testing. Whether triers of fact can do so is unknown; however, researchers have attempted to develop techniques to discriminate between true and false (but honestly believed) memories.\footnote{154} To date, these attempts have been unsuccessful. Somewhat greater (but nonetheless modest) success has been achieved in successfully discriminating between true and intentionally fabricated verbal descriptions of some event.\footnote{155} On the other hand, research has compared the accuracy of recovered (noncontinuous) and continuous memories of CSA reported by a small number of individual complainants whose recovery environments were judged not to be overly suggestive. With these limited observations overall differences in accuracy have not been found.\footnote{156} In short, when suggestive influences were judged absent, there was no evidence to support the claim that memories reported to have been noncontinuous are necessarily less accurate than other memories of a similar age that were reported to have been continuously held.

There are several reasons to expect that some memory for early life events will be unavailable for retrieval: the age of the child, how well the child comprehended the event, the amount of attention paid to the event, and dissociation are some exam-

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\footnote{154. J.D. Read (1999), supra, footnote 2.}
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Importantly, in these examples there is no memory available for later recovery. It has also been argued that memories for early trauma can be repressed and be available for later recovery. There is growing evidence that this is possible, although its occurrence is rare. There is also compelling evidence that false memories can be planted, with relative ease, and confidently held. Unfortunately, there is no credible way to discriminate between a true recovered memory and a false memory.

4. Conclusions and Recommendations

Adjudicating cases of historic child sexual abuse is a singular undertaking that we predict will continue to challenge Canadian courts. In the vast majority of cases the outcome rests on an evaluation of believability that, we argued, should rest primarily on an analysis of reliability of the evidence rather than demeanour of the witness. Our primary objective in writing this article is to describe and apply relevant psychology research that will assist legal professionals to understand and evaluate memory reports. In particular, we focused on research that related to memories of events that occurred when the complainant was a child, involved multiple similar experiences, and reporting was delayed from 2 to 40 years. Our principal conclusions and recommendations are the following.

First, the quantitative and qualitative characteristics of normal forgetting should be considered when the trier of fact evaluates reliability. Empirical research suggests that the largest memory losses for event details occur within the first 5-15 years following most autobiographical events. After this period of time the additional forgetting observed is likely to be comparatively modest and, therefore, beyond the 15-year mark the total length of time between abuse experiences and their formal disclosure to authorities may be relatively unimportant. We recommend however that triers of fact distinguish between the retention of central and peripheral information about the alleged events in memory: for core or central information there may be very little or no forgetting over the delay period, irrespective of its length.

Second, the age of the complainant at the time the offence
occurred ought to be considered when assessing the relevance of omission errors that are present in the complainant’s report. Omission errors arise for a variety of reasons related to the different perceptual and memory encoding processes seen in young children, normative variations across multiple attempts at recall, and predictable reluctance of some complainants to reveal the full extent of the abuse in the first disclosure session. We recommend that the trier of fact consider the type of information omitted in light of these explanations for omission errors.

Third, an inability to date the offence in time or to estimate accurately the frequency with which a repeated event occurred should not be used to discredit the witness and should only be considered a material fact when to do otherwise would in fact lead to an unfair trial. With few exceptions, the task of dating specific autobiographical events is heavily influenced by reconstructive processes and, as a result, demonstrates systematic distortion and unreliability.

Fourth, repeated abuse has several predictable effects on memory. These include an inability to recall particular instances or details of the abuse and an inability to estimate accurately the frequency with which the abuse events occurred. Further, these detrimental influences of repeated events appear to increase proportionally with increases in their actual frequencies. As a result, when abuse has occurred on many occasions, it is to be anticipated that only a very small proportion will be recallable as independent and unique events. These kinds of predictable memory errors should not be used to discredit the witness.

Fifth, for the small subset of complainants who believe their memories of the abuse have not been continuously available to recall we argue that in the absence of evidence that the memory-recovery process environment was tainted by suggestive influences, there is, at present, no reason to argue that these memories should be treated with greater skepticism than other memories of a similar age. On the other hand, when the memory-recovery environment did include highly suggestive influences, the research suggests that the memory reports should be scrutinized very carefully and skepticism is appropriate.
Sixth, as we believe we have demonstrated, there is a complex of developmental, abuse, contextual and individual difference factors that contribute to the reliability of memory and that the trier of fact may benefit from assistance from specialists. Psychologists who study long-term autobiographical memory ought to make their research accessible to the legal community through activities of publishing in legal scholarly journals, presenting at legal conferences, providing opinion evidence at trial, and training legal professionals.

In summary, there have been, and will continue to be, cases where the anticipated deficiencies in event recall because of delay and/or the nature of the offence will result in memory reports that are insufficient for the accused to raise an answer and defence. In such cases the failure to provide this information should lead to an acquittal or a stay of proceedings based on the principles of fundamental justice and the right of the accused to a fair trial rather than a finding that the complainant’s evidence is unreliable.