

# The Science of Children's Lies (and their Detection):

## A Primer for Justice Practitioners

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Justice systems would be much more efficient if it were possible to detect liars at a glance. Police investigations would be facilitated, and judges in bench trials, or jurors in jury trials would easily make their decision without fearing the conviction of innocents and the acquittal of offenders. For decades, however, research has shown that lie detection is a difficult undertaking. The use of nonverbal cues, for example, does not improve lie detection accuracy in face-to-face interaction. And when distorted by misconceptions about “body language,” behavioral observation can result in miscarriages of justice.<sup>1</sup> This is one of the reasons why researchers now advocate the importance of interaction, rather than passive observation for the discovery of truth.<sup>2</sup> While this approach is mostly developed with adult participants, and applied to adult witnesses, over the past two decades researchers have increasingly focused on children, vulnerable individuals who may be the only witnesses of horrific crimes (e.g., sexual abuse or child pornography). The NICHD (National Institute of Child Health and Human Development) protocol,<sup>3</sup> for example, is a research-based protocol for conducting forensic interviews with suspected child sexual abuse victims.

However, in practice, although only properly trained individuals (e.g., police officers and social workers) should interview suspected child sexual abuse victims, justice practitioners, including lawyers and judges, interact daily with children in contexts other than forensic interviews. And what children say can be crucial. In court proceedings, for example, lawyers meet with children and listen to them, and, once the trial has begun, children are examined and cross-examined. Their testimony can be a key part of evidence. But law education does not usually include courses on psychology and interpersonal communication. Similarly, there are no courses on children's social and cognitive development. Therefore, despite acting in good faith, lawyers working with children do not necessarily have knowledge about children's social and cognitive development or how to best interact with them. The same holds true for judges. For example, during trials, children will testify, but without an ade-

quate understanding of children's lying behavior and memory skills, their assessment of the credibility of children's testimony can be seriously flawed, not because of bad faith, but simply because judges may have long-standing court practices and, like everyone else, may adopt stereotypes and prejudices.

This article aims to highlight basic, research-based concepts related to children's reports, which are crucial for justice practitioners, including lawyers and judges, who interact daily with children. We review what the scientific literature has reported regarding children's tendency to lie, debates about the reliability of children's testimony and whether they make false denials and report false allegations, and subsequently, the accuracy of their testimonies. Finally, a number of research-based questioning strategies for child witnesses are presented, as well as recommendations for improving the ability of justice practitioners to interact with children and other vulnerable populations.

### CHILDREN'S LIES

When police officers meet child witnesses, central concerns are that the children may be reluctant to disclose wrongdoing by others;<sup>4</sup> and, when they do, they may have inaccuracies in their eyewitness reports<sup>5</sup> or they may make false denials and report false allegations. Thus, a challenge for police officers is to elicit truthful disclosures, despite the children's reluctance, without increasing false denials and false allegations, and to accurately assess if child witnesses are honest or dishonest. Lawyers meeting with children and listening to them might have similar concerns about honesty or dishonesty. The same holds for judges because the failure to do so can result in far-reaching consequences for children, defendants, and society as a whole. The failure to adequately conduct trials involving children, for example, can undermine public confidence in the justice system. This is why the question of whether child witnesses are honest or dishonest, and how to detect deception, is pivotal for justice practitioners.

Research has shown that children's lie-telling behaviors begins in the preschool years,<sup>6</sup> and their early lies typically aim to conceal misdeeds.<sup>7</sup> However, lying can occur for a variety of other

### Footnotes

1. See Vincent Denault, *Misconceptions About Nonverbal Cues to Deception: A Covert Threat to the Justice System?* 11 *FRONTIERS IN PSYCH.* 573460 (2020).
2. See Aldert Vrij & Pär Anders Granhag, *Eliciting Cues to Deception and Truth: What Matters Are the Questions Asked*, 1 *J. APPLIED RES. MEMORY & COGNITION* 110 (2012).
3. See Michael E. Lamb et al., *A Structured Forensic Interview Protocol Improves the Quality and Informativeness of Investigative Interviews with Children: A Review of Research Using the NICHD Investigative Interview Protocol*, 31 *CHILD ABUSE & NEGLECT* 1201 (2007).
4. See Kamala London et al., *Review of the Contemporary Literature on*

*How Children Report Sexual Abuse to Others: Findings, Methodological Issues, and Implications for Forensic Interviewers*, 16 *MEMORY* 29 (2008).

5. See Stephen J. Ceci & Maggie Bruck, *Suggestibility of the Child Witness: A Historical Review and Synthesis*, 113 *PSYCH. BULL.* 403 (1993).
6. See Karissa Leduc et al., *The Contributions of Mental State Understanding and Executive Functioning to Preschool Aged Children's Lie Telling*, 35 *BRITISH J. DEVELOPMENTAL PSYCH.* 288 (2017); Shanna Williams et al., *Young Deceivers: Executive Functioning and Antisocial Lie-Telling in Preschool Aged Children*, 26 *INFANT & CHILD DEV.* e1956 (2017).
7. See Anne E. Wilson et al., *The Nature and Effects of Young Children's Lies*, 12 *SOC. DEV.* 21 (2003).

reasons, including to avoid a punishment. Children's early lies are usually unsophisticated simple denials or false statements and can be easily detected, but throughout their early school years, children's ability to tell and maintain their lies increases. They will start telling lies for the benefit of others, sometimes at their own personal cost, because they learn social norms of politeness and prosocial behaviors.<sup>8</sup> As children's capacity to lie effectively develops along with the cognitive development through early and middle childhood, the detection of children's lies also becomes more difficult, more so when children are extensively coached to lie by adults.<sup>9</sup> This is not to be overlooked, especially since research has shown that the ability of adults to detect children's lies is hardly better than chance,<sup>10</sup> though it should be noted that the same holds for adults' lies.<sup>11</sup> And research has failed to identify nonverbal cues useful to improve lie detection accuracy in face-to-face interaction. That is, there are no facial expressions, no gestures that are always there when witnesses are dishonest, and never there when they are honest.<sup>12</sup> There is no sign similar to Pinocchio's nose. Therefore, because the ability of adults to detect children's lies is no better than chance, the first objective of justice practitioners meeting with children, and listening to them, should not be trying to detect liars.

## RELIABILITY OF CHILDREN

Rather than trying to detect liars, research has shown the value of taking a neutral stance and of establishing and maintaining an environment in which witnesses are more likely to disclose information, which, depending on the context, can be subsequently corroborated with other testimonial and physical evidence.<sup>13</sup> For children, however, before taking this direction, an important question arises. Can children's testimony be trusted?

The answer is often yes. Even though justice practitioners sometimes believe otherwise.<sup>14</sup>

Stereotypes and prejudices about children's ability to provide detailed, accurate, and reliable eyewitness reports have long been prevalent in American and Canadian justice systems.<sup>15</sup> For example, although substantial progress in assessing children's testimony has been made in recent years,<sup>16</sup> the Supreme Court of Canada held in 1962 and 1967 that even if children were capable of being sworn, "their testimony bore all the frailties of testimony of children"<sup>17</sup> because of their mental immaturity.<sup>18</sup> This was based on widespread assumptions promoted by famous jurists, including John Henry Wigmore.<sup>19</sup> But while children are vulnerable to suggestibility,<sup>20</sup> research has shown that children's testimony can be trusted, and that under certain conditions, adults are even more vulnerable to suggestion than children.<sup>21</sup>

Research has shown that children, including preschoolers, can provide detailed, accurate, and reliable eyewitness reports.<sup>22</sup> Their memory development, and their verbal development (i.e., language skills) are some of the factors that influence the length and the detail of their statements.<sup>23</sup> For example, although their ability to recall many details is less, preschoolers can provide detailed and accurate reports of past events, including very distressing events (e.g., medical emergencies), even many years later.<sup>24</sup> Their ability improves as they become older.<sup>25</sup> Detailed and accurate eyewitness reports can also be provided by children with cognitive deficits, even those with more severe impairment, provided that justice practitioners turn to appropriate question-

**"Rather than trying to detect liars, research has shown the value of a taking a neutral stance..."**

8. See Victoria Talwar & Angela Crossman, *From Little White Lies to Filthy Liars: The Evolution of Honesty and Deception in Young Children*, 40 *ADVANCES IN CHILD DEV. & BEHAV.* 139 (2011).
9. See Victoria Talwar et al., *Does Parental Coaching Affect Children's False Reports? Comparing Verbal Markers of Deception*, 36 *BEHAV. SCI. & L.* 84 (2018).
10. See Jennifer Gongola et al., *Detecting Deception in Children: A Meta-Analysis*, 41 *L. & HUM. BEHAV.* 44 (2017); see also Victoria Talwar et al., *Adults' Judgments of Children's Coached Reports*, 30 *L. & HUM. BEHAV.* 561 (2006).
11. See Charles F. Bond, Jr. & Bella M. DePaulo, *Accuracy of Deception Judgments*, 10 *PERSONALITY & SOC. PSYCH. REV.* 214 (2006).
12. See Bella M. DePaulo et al., *Cues to Deception*, 129 *PSYCH. BULL.* 74 (2003).
13. See, e.g., Aldert Vrij et al., *Psychological Perspectives on Interrogation*, 12 *PERSP. ON PSYCH. SCI.* 927 (2017).
14. See Jens Knutsson & Carl Martin Allwood, *Opinions of Legal Professionals: Comparing Child and Adult Witnesses' Memory Report Capabilities*, 6 *EUR. J. PSYCH. APPLIED TO LEGAL CONTEXT* 79 (2014).
15. See, e.g., Nicolas Bala, *Canada's Empirically-Based Child Competency Test and Its Principled Approach to Hearsay*, 19 *ROGER WILLIAMS U. L. REV.* 513 (2014).
16. Nicholas Bala et al., *The Competency of Children to Testify: Psychological Research Informing Canadian Law Reform*, 18 *INT'L J. CHILD. RTS.* 53 (2010).
17. *Horsburgh v. R.*, [1967] S.C.R. 746, at 747 (Can.).

18. See *Kendall v. The Queen*, [1962] S.C.R. 469 (Can.).
19. See Jeffrey Nels Westman, *No Matter How Small: Child Witnesses in Canadian Criminal Trials*, 23 *APPEAL* 63, 67-68 (2018).
20. See J. Zoe Klemfuss & Alma P. Olaguez, *Individual Differences in Children's Suggestibility: An Updated Review*, 29 *J. CHILD SEXUAL ABUSE* 158 (2020); J. Zoe Klemfuss & Stephen J. Ceci, *Legal and Psychological Perspectives on Children's Competence to Testify in Court*, 32 *DEVELOPMENTAL REV.* 268 (2012).
21. See Henry Otgaar et al., *Who Is the Better Eyewitness? Sometimes Adults but at Other Times Children*, 27 *CURRENT DIRECTIONS IN PSYCH. SCI.* 378 (2018).
22. See Carole Peterson, *Children's Autobiographical Memories Across the Years: Forensic Implications of Childhood Amnesia and Eyewitness Memory for Stressful Events*, 32 *DEVELOPMENTAL REV.* 287 (2012); Victoria Talwar & Angela M. Crossman, *Children's Lies and Their Detection: Implications for Child Witness Testimony*, 32 *DEVELOPMENTAL REV.* 337 (2012).
23. See Joshua Wyman & Victoria Talwar, *Best Practice Strategies for Questioning Child Eyewitnesses in Criminal Investigations*, 42 *CDA PROSECUTOR'S BRIEF* 147 (2020).
24. See Carole Peterson & Nikki Whalen, *Five Years Later: Children's Memory for Medical Emergencies*, 15 *APPLIED COGNITIVE PSYCH.* S7 (2001).
25. See Fiona Jack et al., *Age Related Differences in the Free Recall Accounts of Child, Adolescent, and Adult Witnesses*, 28 *APPLIED COGNITIVE PSYCH.* 30 (2014).

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ing strategies.<sup>26</sup> The popular belief that children with cognitive deficits are unreliable witnesses is both false and damaging because it can distort the course of police investigations and allow offenders to avoid prosecution. And if the case goes to trial, such popular belief can distort the assessment of credibility and the outcome of court proceedings: “credibility is an issue

that pervades most trials, and at its broadest may amount to a decision on guilt or innocence,”<sup>27</sup> and ultimately, in the worst case, can result in miscarriage of justice and undermine public confidence in the justice system.

It should be noted, however, that like adults, child witnesses sometimes make false denials and report false allegations. Scientific research has found that at times, children can falsely deny having experienced a transgression or falsely claim to have experienced a transgression.<sup>28</sup> Sometimes this can occur when children are coached by a parent, or someone else, to protect or to target a stakeholder in custody and support battles.<sup>29</sup> However, evidence suggests that this situation is quite uncommon. For example, although false allegations of child sexual abuse occur at rates generally between 2% and 5%, an overwhelming number of allegations are true. Unfortunately, when child sexual abuse does occur, it is substantially underreported,<sup>30</sup> which, combined with the popular belief that children’s testimony cannot be trusted, not only makes children vulnerable to not being believed about such crimes, but also can make them more vulnerable to child sexual abusers who rely on this popular belief. Hence the importance of developing better questioning strategies for children.

## **RESEARCH-BASED QUESTIONING STRATEGIES FOR CHILDREN**

To best ensure detailed, accurate, and reliable eyewitness reports, children should be properly questioned. Among the research-based questioning strategies central for the discovery of truth with children, the importance of rapport-building and free-

recall questions must be emphasized.<sup>31</sup> Before asking questions about important issues, for example, it is recommended that an environment of empathy and trust be established and maintained with the child. Using open-ended questions, the interviewer can ask the child about what he or she likes to do, and ask follow-up questions (e.g., Tell me more about that) to encourage the child to talk. This part should not be lengthy, so that the child does not become anxious and tired.<sup>32</sup> Justice practitioners should also engage in other appropriate behaviors, such as using the child’s first name, and respecting the child’s rhythm and/or silence.

In addition to rapport-building, and also to prevent anxiety, the child should know about the expectations of justice practitioners. Encouraging the child to ask for clarification, if necessary, to answer “I don’t know” if the child does not have an answer, and to correct whoever says something incorrect. These are some of the recommended ground rules justice practitioners should establish with the child.<sup>33</sup> This adds to simply asking the child “Do you promise that you will tell the truth?” a questioning strategy shown to increase honesty, rather asking the child to define what is the truth and a lie, the latter question being developmentally inappropriate.<sup>34</sup> Not to mention there is no evidence that the ability to define these terms is related to children’s lying behavior.<sup>35</sup>

Following the rapport-building phase, research has shown the importance of free-recall questions. To obtain detailed and accurate eyewitness reports, the NICHD protocol, for example, recommends that the interviewer ask the child: “Now that I know you a little better, I want to talk about why you are here today,” or “I understand that something may have happened to you. Tell me everything that happened from the beginning to the end.” The interviewer then lets the child answer, uninterrupted, and encourages the child to continue speaking through verbal and nonverbal behaviors (e.g., establishing eye contact, smiling, leaning forward) consistently throughout the interview to avoid influencing the child’s eyewitness report.<sup>36</sup> The interviewer can also ask the child brief follow-up questions (e.g., And then what happened?).<sup>37</sup>

Closed-ended questions, usually in a leading format, on the other hand, should not be used by justice practitioners. They are

26. See Deirdre A. Brown et al., *The Influences of Delay and Severity of Intellectual Disability on Event Memory in Children*, 80 J. CONSULTING & CLINICAL PSYCH. 829 (2012).  
27. R. v. Handy, [2002] 2 S.C.R. 908, at para. 115 (Can.).  
28. See Ida Foster et al., *Does Eyewitness and Interviewer Gender Influence Children’s Reports? An Experimental Analysis of Eyewitness and Interviewer Gender on Children’s Testimony*, 26 PSYCHIATRY, PSYCH.& L. 499 (2019).  
29. See Fiona Black et al., *Allegations of Child Sexual Abuse in Family Court Cases: A Qualitative Analysis of Psychiatric Evidence*, 19 PSYCHIATRY, PSYCH.& L. 482 (2012); Thomas D. Lyon et al., *Coaching, Truth Induction, and Young Maltreated Children’s False Allegations and False Denials*, 79 CHILD DEV. 914 (2008); Victoria Talwar et al., *Children’s Lie-Telling to Conceal a Parent’s Transgression: Legal Implications*, 28 L. & HUM. BEHAV. 411 (2004).  
30. See William O’Donohue et al., *The Frequency of False Allegations of Child Sexual Abuse: A Critical Review*, 27 J. CHILD SEXUAL ABUSE 459 (2018); Cindy S. Lederman & Erna Olafson, *The State of the Debate About Children’s Disclosure Patterns in Child Sexual Abuse Cases*, 57

JUV. & FAM. CT. J. 27 (2006).  
31. See Jennifer Lavoie et al., *Meta-Analysis of the Effects of Two Interviewing Practices on Children’s Disclosures of Sensitive Information: Rapport Practices and Question Type*. 113 CHILD ABUSE & NEGLECT 104930 (2021).  
32. See Irit Hershkowitz et al., *Does Enhanced Rapport-Building Alter the Dynamics of Investigative Interviews with Suspected Victims of Intra-Familial Abuse?* 30 J. POLICE & CRIM. PSYCH. 6 (2015).  
33. See Yee-San Teoh & Michael E. Lamb, *Preparing Children for Investigative Interviews: Rapport-Building, Instruction, and Evaluation*, 14 APPLIED DEVELOPMENTAL SCI. 154 (2010).  
34. See Nicholas Bala et al., *The Competency of Children to Testify: Psychological Research Informing Canadian Law Reform*, 18 INT’L J. CHILD.’S RTS. 53 (2010).  
35. See Talwar & Crossman, *supra* note 22.  
36. See MICHAEL E. LAMB ET AL., *TELL ME WHAT HAPPENED: QUESTIONING CHILDREN ABOUT ABUSE* (2018).  
37. See Lamb et al., *supra* note 3.

not recommended.<sup>38</sup> Research has shown they increase memory errors<sup>39</sup> and decrease accurate recalls.<sup>40</sup> This, in turn, questions the usefulness of cross-examining children for the discovery of truth. More than 100 years ago, John Henry Wigmore wrote that cross-examination is “beyond any doubt the greatest legal engine ever invented for the discovery of truth.”<sup>41</sup> But as Rachel Zajac, Sarah O’Neill, and Harlene Hayne point out, “the style of questioning typically used during this process directly contravenes almost every principle scientifically established over the past 30 years for obtaining complete and accurate evidence from any witness, particularly a child.”<sup>42</sup> During cross-examination, lawyers typically use closed-ended questions, usually in a leading format. This adds to poorly worded, ambiguous, and multifaceted questions and leads to inconsistencies, especially in peripheral details. These inconsistencies do not occur because children are lying; rather, they tend to remember the peripheral details less than the central details,<sup>43</sup> and the questions are often beyond their cognitive maturity.<sup>44</sup> The inconsistencies are then used to discredit the children, when in fact, “[e]xperimental studies have shown that some inconsistency in testimony is a common occurrence that is only weakly associated, if at all, with overall account accuracy.”<sup>45</sup>

#### THE NEXT STEPS FOR JUSTICE PRACTITIONERS

Even if their usefulness in discovering the truth is subject to severe criticism, long-standing court practices, such as cross-examination, will keep on existing. According to the Supreme Court of Canada, “[e]ffective cross-examination is integral to the conduct of a fair trial and a meaningful application of the presumption of innocence.”<sup>46</sup> This position is in keeping with that of the U.S. Supreme Court.<sup>47</sup> According to John Henry Wigmore:

The main and essential purpose of confrontation is to secure the opportunity of cross-examination. The oppo-

nent demands confrontation, not for the idle purpose of gazing upon the witness, or of being gazed upon by him, but for the purpose of cross-examination, which cannot be had except by the direct and personal putting of questions and obtaining immediate answers.<sup>48</sup>

**“These inconsistencies do not occur because children are lying...”**

However, for children, vulnerable individuals who may be the only witnesses of horrific crimes, research results cannot be ignored, and long-standing court practices should be adapted. Just as an accused may be ordered not to personally cross-examine a witness, for example, when the witness is under 18,<sup>49</sup> because this “can result in further victimization and affect the child’s ability to testify,”<sup>50</sup> lawyers should be instructed not to question children in a suggestive manner because this can interfere with the search for truth. This is the only possible outcome, because children are vulnerable to suggestibility,<sup>51</sup> and “[n]one of the trial’s functions are more central to its legitimacy than the search for truth.”<sup>52</sup>

Before expecting long-standing court practices to be adapted, however, it would first be necessary to ensure that justice practitioners, including lawyers and judges, who interact daily with children, have access to courses or training on children’s social and cognitive development. This should not be relegated to continuing legal education alone. While learning about stereotypes and prejudices, and being aware of their potential impact is good first step,<sup>53</sup> “[w]aiting for lawyers to become members of the judiciary to introduce them to these subjects, expecting them to change their years old habits overnight, is irresponsible, if not delusional.”<sup>54</sup> Research shows that, even in the face of mounting evidence, information known to be false still has influence,<sup>55</sup>

38. See Deirdre A. Brown & Michael E. Lamb, *Can Children be Useful Witnesses? It Depends How They Are Questioned*, 9 CHILD DEV. PERSPECTIVES 250 (2015).

39. See Claudia M. Roebbers & Wolfgang Schneider, *The Impact of Misleading Questions on Eyewitness Memory in Children and Adults*, 14 APPLIED COGNITIVE PSYCH. 509 (2000).

40. See Maggie Bruck & Stephen J. Ceci, *The Suggestibility of Children’s Memory*, 50 ANN. REV. PSYCH. 419 (1999).

41. JOHN HENRY WIGMORE, A TREATISE ON THE SYSTEM OF EVIDENCE IN TRIALS AT COMMON LAW, INCLUDING THE STATUTES AND JUDICIAL DECISIONS OF ALL JURISDICTIONS OF THE UNITED STATES 1697 (1904).

42. Rachel Zajac et al., *Disorder in the Courtroom? Child Witnesses Under Cross-Examination*, 32 DEVELOPMENTAL REV. 181, 199 (2012).

43. MARK L. HOWE ET AL., STRESS, TRAUMA, AND CHILDREN’S MEMORY DEVELOPMENT: NEUROBIOLOGICAL, COGNITIVE, CLINICAL, AND LEGAL PERSPECTIVES (2008).

44. See Rachel Zajac & Harlene Hayne, *I Don’t Think That’s What Really Happened: The Effect of Cross-Examination on the Accuracy of Children’s Reports*, 9 J. EXPERIMENTAL PSYCH.: APPLIED 187 (2003); Rachel Zajac et al., *The “Good Old Days” of Courtroom Questioning: Changes in the Format of Child Cross-Examination Questions Over 60 years*, 23 CHILD MALTREATMENT 186 (2018).

45. Anne Sophie Pichler et al., *Inconsistencies in Complainant’s Accounts of Child Sexual Abuse Arising in Their Cross-Examination*, 27 PSYCH.,

CRIME & L. 341, 342 (2021).

46. R. v. N.S., 2012 SCC 72, at para. 24 (Can.) (citations omitted).

47. See *Davis v. Alaska*, 415 U.S. 308, 316 (1974); see also *Delaware v. Van Arsdall*, 475 U.S. 673, 680 (1986).

48. WIGMORE, *supra* note 41, at 1749–50 (emphasis omitted).

49. Canada Criminal Code, R.S.C. 1985, § 486.3(1).

50. MARY T. AINSLIE, TESTIMONIAL SUPPORT FOR VULNERABLE ADULTS (BILL C-2): CASE LAW REVIEW (2009-2012), at 9 (2013), [https://www.justice.gc.ca/eng/rp-pr/cj-jp/victim/tr13\\_15b/tr13\\_15b.pdf](https://www.justice.gc.ca/eng/rp-pr/cj-jp/victim/tr13_15b/tr13_15b.pdf).

51. See Klemfuss & Ceci, *supra* note 20.

52. Franklin Strier, *Making Jury Trials More Truthful*, 30 U.C. DAVIS L. REV. 95, 99 (1996).

53. Isabelle Charbonneau et al., *Perception des Visages : Effet de Lethnie, Racisme, Préjugés et Déshumanisation*, in 2 LA SCIENCE AU SERVICE DE LA PRATIQUE 139 (Vincent Denault ed., 2022).

54. Denault, *supra* note 1, at 3; see Ullrich K. H. Ecker et al., *The Psychological Drivers of Misinformation Belief and Its Resistance to Correction*, 1 NATURE REVS. PSYCH. 13 (2022); Stephan Lewandowsky et al., *Misinformation and Its Correction: Continued Influence and Successful Debiasing*, 13 PSYCH. SCI. PUB. INT. 106 (2012).

55. See Stephan Lewandowsky et al., *Beyond Misinformation: Understanding and Coping with the “Post-Truth” Era*, 6 J. APPLIED RESEARCH MEMORY & COGNITION 353 (2017).

