

**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

UNITED STATES OF AMERICA,)
)
 v.) No. 1:22-cr-392 (DLF)
)
 ABU AGILA MOHAMMAD)
 MAS'UD KHEIR AL-MARIMI,)
 Defendant.)

**MR. AL-MARIMI'S SUPPLEMENT REGARDING THE
TESTIMONY OF DEFENSE EXPERT DR. BRIAN CUTLER**

At the May 27, 2026, *Daubert* hearing the Court found that Dr. Cutler was “extremely well-qualified in the field of social psychology”. 5/27/26 Tr. at 117. The Court ordered the defense to identify pinpointed citations in the literature supporting Dr. Cutler’s proposed testimony to “determine whether there’s an adequate scientific basis to allow him to testify”. *Id.* at 118. In the defense’s supplemental expert notice, Mr. Al-Marimi identified six opinions Dr. Cutler would offer regarding factors known to increase the risk of false confession and as well as contamination errors. As discussed at the May 27, 2026, Mr. Al-Marimi continues to ask the Court to withhold relevance findings on any particular opinion from Dr. Cutler until trial when a more full factual record is before the Court. Mr. Al-Marimi below provides pinpointed citations from the scientific literature for each opinion.

I. Situational risk factor of isolation:

a. ***Inbau 2013***: Unless otherwise noted, all references to Inbau et al., 2013 come from the training manual for interrogators using the “Reid Technique of Interviewing”. John Reid was a lawyer turned Chicago Police Department officer and

Fred Inbau was a law professor at Northwestern Law School. Fred E. Inbau et al., *Essentials of the Reid technique* vii (2d ed. 2013). With citations to and discussion of actual cases, Supreme Court cases, and empirical studies, Chapter 3 of the manual informs interrogators that the “principal psychological factor contributing to a successful interview or interrogation is privacy—being alone with the person during questioning.” *Id.* at 19. The manual describes as a “legal impediment” procedures allowing a suspect to have someone else present in the room during the interrogation, citing for example the National Labor Relations Act which provides a suspected employee the right to have a union representative or fellow union employee present during questioning. *Id.* at 20.

b. ***Kassin 2010***: In 2010, Dr. Kassin et al., in a peer-reviewed journal, published a consensus-based statement about wrongful convictions based on false confessions, drawing “on core psychological principles of influence as well as relevant forensic psychology studies involving an array of methodologies.” Saul M. Kassin et al., *Police-induced confessions: Risk factors and recommendations*, 34 L. & Human Behavior 3, 4 (2010).

Dr. Kassin et al., reported :

Designed to overcome the anticipated resistance of individual suspects who are presumed guilty, police interrogation is said to be stress-inducing by design—structured to promote a sense of isolation and increase the anxiety and despair associated with denial relative to confession. To achieve these goals, police employ a number of tactics. As described in Inbau et al.’s (2001) *Criminal Interrogation and Confessions*, the most influential approach is the so-called Reid technique (named after John E. Reid who, along with Fred Inbau, developed this approach in the 1940s and published the first edition of their manual in 1962). First, investigators are advised to isolate the

suspect in a small private room, which increases his or her anxiety and incentive to escape.

Id. at 7. Dr. Kassin et al., further reported:

To ensure privacy and control, and to increase the stress associated with denial in an incommunicado setting, interrogators are trained to remove suspects from their familiar surroundings and question them in the police station—often in a special interrogation room. Consistent with guidelines articulated by Inbau et al. (2001), most interrogations are brief. Observational studies in the U.S. and Britain have consistently shown that the vast majority of interrogations last approximately from 30 minutes up to 2 hours (Baldwin, 1993; Irving, 1980; Leo, 1996b; Wald et al., 1967). In a recent self-report survey, 631 North American police investigators estimated from their experience that the mean length of a typical interrogation is 1.60 hours. Consistent with cautionary advice from Inbau et al. (2001) against exceeding 4 hours in a single session, these same respondents estimated on average that their longest interrogations lasted 4.21 hours (Kassin et al., 2007). Suggesting that time is a concern among practitioners, one former Reid technique investigator has defined interrogations that exceed 6 hours as “coercive” (Blair, 2005). In their study of 125 proven false confessions, Drizin and Leo (2004) thus found, in cases in which interrogation time was recorded, that 34% lasted 6–12 hours, that 39% lasted 12–24 hours, and that the mean was 16.3 hours.

It is not particularly surprising that false confessions tend to occur after long periods of time—which indicates a dogged persistence in the face of denial. The human needs for belonging, affiliation, and social support, especially in times of stress, are a fundamental human motive (Baumeister & Leary, 1996). People under stress seek desperately to affiliate with others for the psychological, physiological, and health benefits that social support provides (Rofe, 1984; Schachter, 1959; Uchino, Cacioppo, & Kiecolt-Glaser, 1996). Hence, prolonged isolation from significant others in this situation constitutes a form of deprivation that can heighten a suspect’s distress and incentive to remove himself or herself from the situation.

Id. at 16.

c. ***Holt-Lunstad 2015:*** In 2015 in a peer-reviewed journal, Dr. Holt-Lunstad et al., conducted a meta-analytic review of 70 studies from 1980 to 2014 that

“measured one’s objective or subjective social isolation at the study initiation and then followed participants over time (typically several years) to determine who remained alive and who was dead at the follow-up”. Julianne Holt-Lunstad et al., *Loneliness and social isolation as risk factors for mortality: a meta-analytic review*, 10:2 Perspectives on Psychological Science 227, 228 (2015). The authors concluded: “Social isolation results in higher likelihood of mortality, whether measured objectively or subjectively.” *Id.* at 233. “Cumulative data from 70 independent prospective studies, with 3,407,134 participants followed for an average of 7 years, revealed a significant effect of social isolation, loneliness, and living alone on odds of mortality.” *Id.* The authors found no substantive differences in effect sizes across world regions. *Id.* at 232.

d. ***Kassin & Gudjonsson 2004***: In 2004 in a peer-reviewed journal, Drs. Kassin and Gudjonsson drew on individual case studies, archival reports, correlational studies, and laboratory and field experiments to examine, among other things, “the modern police interrogation, a guilt-presumptive process of social influence during which trained police use strong, psychologically oriented techniques involving isolation, confrontation, and minimization of blame to elicit confessions” and how isolation, among other things, “can substantially increase the risk that ordinary people will confess to crimes they did not commit”. Saul M. Kassin & Gisli H. Gudjonsson, *The psychology of confessions: A review of the literature and issues*, 5:2 Psychology Sci. in the Pub. Interest 33, 33 (2004).

Drs. Kassin and Gudjonsson observed that Inbau et al. advised:

interrogators to conduct the questioning in a small, barely furnished, soundproof room housed within the police station. The purpose of this setup is to remove the suspect from familiar surroundings and isolate him or her, denying access to known people and settings, in order to increase the suspect's anxiety and incentive to extricate himself or herself from the situation. To further heighten discomfort, Inbau et al. advise, the interrogator should seat the suspect in a hard, armless, straight-backed chair; keep light switches, thermostats, and other control devices out of reach; and encroach upon the suspect's personal space over the course of interrogation. If possible, the room should be equipped with a one-way mirror so that other detectives can watch for signs of anxiety, fatigue, and withdrawal

Id. at 42. “Conceptually, this procedure is designed to get suspects to incriminate themselves by increasing the anxiety associated with denial, plunging them into a state of despair, and minimizing the perceived consequences of confession.” *Id.* at 43.

Specifically, as it related to “physical custody and isolation”, Drs. Kassin and Gudjonsson found:

By design, interrogators are trained to remove suspects from their familiar surroundings and question them in the police station, ideally in the type of specially constructed interrogation room described earlier. Looking at police interrogations, Zimbardo (1967) observed that such isolation heightens the anxiety associated with custodial interrogation and, over extended periods of time, increases a suspect's incentive to escape. Controlled laboratory experiments show that fatigue and sleep deprivation, which accompany prolonged periods of isolation, can heighten susceptibility to influence and impair decision-making abilities in complex tasks (Blagrove, 1996; Harrison & Horne, 2000). As prolonged detention causes fatigue, uncertainty, and despair, it comes as little surprise that whereas police interrogations routinely last for less than 2 hours (Leo, 1996b), a study of documented false-confession cases in which interrogation time was recorded showed that 34% lasted 6 to 12 hours and 39% lasted 12 to 24 hours, and that the mean was 16.3 hours (Drizin & Leo, 2004).

Irving and Hilgendorf (1980) identified three kinds of stressors associated with the custodial environment that can adversely affect the detainee's mental state and decision making: (a) certain physical characteristics of the environment, (b) social isolation from peers, and

(c) submission to authority. Studying 171 suspects who had been detained for questioning in run-of-the-mill cases at two English police stations, Gudjonsson et al. (1993) observed that these stressors were accompanied by a strong sense of uncertainty about the future, lack of control, and lack of autonomy. Uncertainty about the near-term future was a particularly acute source of distress. Clinical and psychological testing revealed that 35% of the detainees in this sample were in an “abnormal” mental state, with 20% suffering from exceptionally high levels of anxiety. In short, these findings suggest that the custodial environment is highly stressful to those who are accused, even in minor cases, a problem that is exacerbated by the fact that people detained for questioning are as a group particularly vulnerable because of relatively poor intellectual functioning and mental health problems (see Gudjonsson, 2003b, for a detailed review).

Id. at 53-54. Drs. Kassin and Gudjonsson further found:

Prolonged isolation from significant others thus constitutes a form of deprivation that can heighten a suspect’s distress and incentive to remove himself or herself from the situation. Excessive time in custody is also likely to be accompanied by fatigue and feelings of helplessness, as well as the deprivation of sleep, food, and other biological needs. Yet although most interrogations last for less than 2 hours (Leo, 1996b), and although Inbau et al. (2001) suggested that 3 or 4 hours is generally sufficient, research shows that in proven false-confession cases in which records were available, the interrogations lasted for an average of 16.3 hours (Drizin & Leo, 2004).

Id. at 60.

e. ***Ofshe 1997:*** In 1997, in a peer-reviewed journal, Dr. Ofshe reported his study of Paul Ingram, who confessed to raping his daughters, and determined: “Mr. Ingram’s social isolation set up conditions under which he was particularly vulnerable to influence from authority figures, from person’s [sic] appearing to him to be certain of their position, and persons relying on alleged facts he could not independently evaluate. Mr. Ingram lacked contact with anyone who was in a position to help him distinguish between what was reliable about the evidence that

was said to demonstrate his guilt and what was unreliable about it.” Richard J. Ofshe, *Inadvertent Hypnosis During Interrogation: False Confession Due to Dissociative State; Mis-Identified Multiple Personality and the Satanic Cult Hypothesis*, 40:3 Int’l J. Clinical & Experimental Hypnosis 125, 139 (1992). Dr. Ofshe reached this conclusion after analyzing all of Mr. Ingram’s interrogation transcripts, recordings of witness interviews, all of the police reports in the case, and conducting a number of interviews with Mr. Ingram, Mr. Ingram’s wife and children, Mr. Ingram’s pastor, two psychologists who met with and analyzed Mr. Ingram, detectives, and several other people. *Id.* at 134.

Dr. Ofshe had been hired by the prosecutor’s office to assist law enforcement in building a case against Mr. Ingram. *Id.* at 146 n.20. Having developed suspicions about Mr. Ingram’s confessions, Dr. Ofshe conducted a field experiment to test Mr. Ingram’s suggestibility. *Id.* at 146. Dr. Ofshe invented a false allegation, told Mr. Ingram the “facts” of this false allegation, and then asked if Mr. Ingram could remember the event. *Id.* at 147. After Mr. Ingram falsely confessed to the invented allegation, Dr. Ofshe conducted a second phase of the experiment to test for Mr. Ingram’s confidence in his memories, out-right fabrication, and awareness of disassociation and influence causing what Mr. Ingram reported in his false confession. *Id.* Dr. Ofshe reported that his work on Mr. Ingram’s case was to “explain how the combined effects of certain social trends, interrogation techniques, and improperly introduced dissociative techniques influenced Mr. Ingram’s beliefs and verbalizations”. *Id.* at 151-52.

II. Situational risk factor of excessive length of interrogation¹:

a. ***Drizin and Leo 2004***: In a 2004 case study of 125 cases of proven interrogation-induced false confessions, Professor Drizin and Dr. Leo examined the length of reported interrogation in this sample. Steven A. Drizin & Richard A. Leo, *The problem of false confessions in the post-DNA world*, 82 N. C. L. Rev. 891, 948 (2004). Because the police did not report the length of interrogation or record the interrogations themselves in 65% of the sample size, the authors excluded those false confessions from length of interrogation analysis. *Id.* An analysis of the remaining 44 cases demonstrated the following:

Of the cases in which the length of interrogation was either reported or could be determined, 16% lasted less than six hours; 34% between six and twelve hours; 39% between twelve and twenty-four hours; 7% between twenty-four to forty-eight hours; 2% between forty-eight and seventy-two hours; and 2% between seventy-two and ninety-six hours. These numbers are staggering. More than 80% of the false confessors were interrogated for more than six hours, and 50% of the false confessors were interrogated for more than twelve hours. The average length of interrogation was 16.3 hours, and the median length of interrogation was twelve hours. These figures are especially striking when they are compared to studies of routine police interrogations in America, which suggest that more than 90% of normal interrogations last less than two hours. These figures supports [sic] the observations of many researchers that interrogation-induced false confessions tend to be correlated with lengthy interrogations in which the innocent suspect's resistance is worn down, coercive techniques are used, and the suspect is made to feel hopeless, regardless of his innocence.

Id. (citing Richard A. Leo, *Inside the Interrogation Room*, 86 J. Crim. L. & Criminology 300 (1996) (peer-reviewed journal); Richard J. Ofshe & Richard A. Leo,

¹ Dr. Cutler's notice also cites to Wicklander-Zulawski & Associates, *Interviewing techniques: Practical advanced workshop*, Aurora, IL: Wicklander-Zulawski & Associates (2020) in this section. The defense does not have a copy of this source material in order to be able to provide pinpoint citations to it.

The Decision to Confess Falsely: Rational Choice and Irrational Action, 74 Den. L. Rev. 979 (1997); Gail Johnson, *False Confessions and Fundamental Fairness: The Need for Electronic Recording of Custodial Interrogations*, 6 B.U. Pub. Int. L.J. 719, 741-43 (1997); and Welsh S. White, *False Confessions and the Constitution: Safeguards Against Untrustworthy Confessions*, 32 Harv. C.R.C.L. Rev. 105, 108 (1997)).

b. **Kassin 2007:** In a 2007 survey method study, Dr. Kassin et al., analyzed the survey responses of 631 police investigators in sixteen different police departments in five different states as well as customs officials from two Canadian provinces. The authors found that the “mean length of interrogation is 1.60 hours, which is consistent with the amount of time deemed necessary by those who train interrogators (Inbau et al., 2001) and somewhat higher than the average reported in observational studies (Cassell & Hayman, 1996; Leo, 1996a; Wald et al., 1967).” Saul M. Kassin et al., *Police interviewing and false confessions interrogation: A self-report survey of police practices and beliefs*, 31 L. & Human Behavior 381, 395 (2007). “Investigators also estimated that their longest interrogation lasted an average of 4.21 hours—which is far shorter than the 16.3 hour average found in the population of false confession cases studied by Drizin and Leo (2004).” *Id.* “Taken together, these normative data provide a critical anchor point for evaluating individual cases involving confessions taken after many hours of interrogation—as seen in the investigations of the Central Park jogger defendants, the Phoenix Temple Four defendants, Michael Crowe, Joshua Treadway, Tom Sawyer, Gary Gauger, Corey

Beale and other exonerated false confessors.” *Id.* “Quite clearly, the lengthy sessions in these cases were extraordinary, not normative or common practice.” *Id.*

c. **Leo 1996:** In a peer-reviewed journal in 1996, Dr. Leo reported the results of an observational study of 122 interrogations from forty-five different detectives in major, urban police department. Richard A. Leo, *Inside the interrogation room*, 86 Journal of Criminal Law and Criminology 266, 268 (1996). Dr. Leo also reviewed a total of 60 additional interrogations from two separate police departments. *Id.* The interrogations in Dr. Leo’s sample ranged “from literally seconds” to “four and one-half hours”. *Id.* at 279. 70% of the interrogations lasted less than one hour, and only 8% lasted more than two hours. *Id.* Dr. Leo found that “the length of the interrogation is also significantly related to its success ($p < .000$): successful interrogations were six times more likely to last more than one hour than unsuccessful ones (36% vs. 6%); conversely, unsuccessful interrogations were more than twice as likely to be under thirty minutes than successful ones (58% vs. 27%).” *Id.* at 297.

d. **Buckley 2017:** This article is written by the then-president of John E. Reid and Associates, the company that trains interrogators to use the Reid interrogation technique. The article advises “if the suspect is still adamantly maintaining his innocence and has not made any incriminating statements or admissions after three to four hours of interrogation, the interrogation should be re-assessed and most likely terminated”. Joseph Buckley, *There are good interrogations*

and there are bad interrogations, The Reid Association (2017), *available at* <http://reid.com/pdfs/GoodInterrogArticle.pdf>.

e. ***Inbau 2013***: Inbau et al.'s training manual advises interrogators in Chapter 19, which discusses legal issues for interrogations and confessions, not to conduct excessively long interrogations. Fred E. Inbau et al., *Essentials of the Reid technique* 194-95 (2d ed. 2013).

Inbau et al. wrote another book in 2013, *see* Inbau et al., *Criminal Interrogations and Confessions* (5th ed. 2013). In that book, the authors recommend: "After three or four hours, unless the suspect is showing clear potential for telling the truth (changing his story, admitting knowledge but not principal involvement in a crime, stating that the cannot tell the truth because of some outside fear, etc.), the investigator should consider terminating the interrogation session and perhaps re-interrogating the suspect at a later time using a different technique." *Id.* at 206. Further, the authors identify the following guideline in response to a claim of duress: "Can the excessive length of interrogation be explained by the suspect's behavior? For example, did the suspect offer a series of different versions of events, before offering the first incriminating statement? A suspect who has maintained his innocence and made no incriminating statements for 8 or 10 hours has not offered any behavior to account for this lengthy period of interrogation." *Id.* at 347-48.

f. ***Blair 2005***: In 2005, Dr. Blair conducted a case study of the first 110 DNA exoneration cases report by the Innocence Project of which 23 cases involved false confessions or statements. J. Pete Blair, *A test of the unusual false confession*

perspective using cases of proven false confessions, 41:2 Criminal Law Bulletin 127, 132-33 (2005). Dr. Blair coded any interrogation that exceeded six hours as coercive (of which 3 met that criteria in the sample size) and ultimately failed to “find a single false confession of a cognitively normal individual that did not also include the use of coercive tactics by the interrogator”. *Id.* at 136-37.

g. ***Davis and Leo 2012***: In a 2012 peer-reviewed journal, Drs. Davis and Leo reviewed literature “evidence of factors that induce ‘acute situational suggestibility’ in police interrogation, namely, acute situational forces preceding and during interrogation that compromise the ability to resist police pressures toward self-incrimination. Specifically, we focus on interrogation-related factors that impair self-regulation: that is, causes of ‘interrogation-related regulatory decline’ (IRRD) underlying impairments of rational decision making and exertion of one’s will.” Deborah Davis & Richard A. Leo, *Interrogation-related regulatory decline: Ego depletion, failures of self-regulation, and the decision to confess*, 18 Psychology, Public Policy, and Law 673, 675 (2012).

The authors found, “If the suspect fails to exert his or her rights to avoid or terminate the interrogation, this may go on for many hours, or days. Even if the suspect is offered food or rest, he or she may be too anxious to take advantage of those opportunities.” *Id.* at 680. “Among the circumstances posing what should be the most obvious of interrogation-related factors undermining these capabilities are extreme preexisting stress, fatigue or sleep-deprivation, or extremely lengthy and/or stressful interrogations. Self-regulatory resources can be depleted through use, and through

efforts to cope with distress, as described in preceding sections, but may also be compromised through simple physical deprivations associated with long and aversive interrogations, including glucose depletion, fatigue, and sleep deprivation.” *Id.* at 691. “Suspects may be deprived of replenishing resources for hours, and, if offered food or sugary drinks, may decline due to dampening effects of psychological or physiological distress on appetite. Even if glucose is consumed sporadically, it may be insufficiently frequent relative to the demands imposed by the situation for replenishment, thereby exacerbating the already depleting effects of fatigue and other forces of the interrogation.” *Id.* at 692.

h. ***Leo and Davis 2010***: In a 2010 peer-reviewed journal, Drs. Davis and Leo reviewed literature “examining seven psychological processes linking false confession to wrongful conviction and failures of post-conviction relief”. Richard A. Leo & Deborah Davis, *From false confession to wrongful conviction: Seven psychological processes*, 38:1-2 J. of Psychiatry & L. 9, 9 (2010). In a specific case study of the Norfolk Four, the police coerced four false confessions after lengthy interrogations despite significant evidence of innocence. *Id.* at 13-15, 21-22. The authors described evidence indicating that the length of the interrogation caused the innocent suspects to give in. *Id.* One suspect “later reported that he was exhausted, confused, not feeling well, and finally just couldn’t take the pressure anymore as he came to believe that he might have actually committed the crime—so he told the detectives what they wanted to hear because he just wanted the questioning to end.” *Id.* at 14.

III. Situational risk factor of using accusatory tactics²:

a. **Inbau 2013**: Inbau et al.'s training manual cites as a "good example of the misleading nature of behavior produced by accusatory questioning" a "laboratory study in which college students were 'interviewed' concerning their alibi during a mock crime. See Kassin, S. & Fong, C., *I'm Innocent!: Effects of Training on Judgments of Truth and Deception in the Interrogation Room*, Law and Human Behavior, 1999, Vol 23 No 5." Fred E. Inbau et al., *Essentials of the Reid technique* 62 (2d ed. 2013).

b. **Kassin 2003**: In a 2003 peer-reviewed journal, Dr. Kassin et al. reported the results of a two-phase experiment testing whether the presumption of guilt that underlies police interrogations activates a process of behavioral confirmation. Saul M. Kassin et al., *Behavioral confirmation in the interrogation room: On the dangers of presuming guilt*, 27 L. & Human Behavior 187, 187 (2003). In the first phase, 52 interrogators interrogated 52 subjects. Interrogators who were told to assume that 4 out of 5 suspects had committed the crime "chose more guilt-presumptive questions, used more techniques at the outset of interrogation and, in the end, judged the suspects guilty. While actual guilt and innocence did not affect the judgments that interrogators ultimately made, it did affect their behavior. Specifically, both sets of participants said that interrogators exerted more pressure to confess on suspects

² Dr. Cutler's notice also cites to Wicklander-Zulawski & Associates, *Interviewing techniques: Practical advanced workshop*, Aurora, IL: Wicklander-Zulawski & Associates (2020) and D. Carr, *The RCMP Phased Interview Model for Suspects: Generating information through dialogue*, Ottawa, ON: Royal Canadian Mounted Police (2015) in this section. The defense does not have a copy of these source materials in order to be able to provide pinpoint citations to them.

who, unbeknownst to them, were truly innocent than on those who were guilty.” *Id.* at 195-96. In the experiment’s second phase, independent observers listened to one side of the taped interrogations to determine whether the suspect was guilty or innocent and to rate their confidence in that assessment. *Id.* at 196. “They judged as guilty 42 % of truly guilty suspects, compared to only 28% of those who were innocent”. *Id.* at 197. “[T]hey also judged as guilty 40% of suspects in the guilty expectations condition, compared to only 30% in the innocent expectations condition”. *Id.*

The authors concluded:

Interrogators with guilty expectations chose more guilt-presumptive questions, used more techniques in their interrogation (including the presentation of false evidence and promises of leniency), and were more likely to see suspects in incriminating terms, exhibiting a 23 % increase in guilty judgments relative to those with innocent expectations. The suspect’s actual guilt or innocence had a paradoxical and particularly disturbing effect on interrogators, leading them to exert the most pressure on innocent suspects. In short, a presumption of guilt triggered aggressive interrogations, which constrained the behavior of suspects and led others to infer their guilt-thus confirming the initial presumption.”

Id. at 199.

c. ***Liden 2018***: In a 2018 peer-reviewed journal, two law professors and Dr. Juslin studied “whether a police officer’s decision to apprehend a suspect triggers confirmation bias during an interrogation”. Moa Lidén et al., *The presumption of guilt in suspect interrogations: Apprehension as a trigger of confirmation bias and debiasing techniques*, 42 L. & Human Behavior 336, 336 (2018). After reviewing the applicable literature, the authors reported on three experiments “that investigate[d]

the role of confirmation bias in suspect interrogations and evaluate[d] two possible debiasing techniques”. *Id.* The three experiments tested whether “confirmation bias might be a self-enhancing bias, a general cognitive phenomenon, or both motivate testing of several different types of debiasing techniques”. *Id.* at 338.

The first study was conducted with 60 Swedish police officers in both urban and rural districts who were given 12 scenarios concerning 12 different crimes where apprehension was possible. *Id.* at 339. “Suspects who had previously been apprehended were asked significantly more guilt presumptive questions than suspects who had not been apprehended”. *Id.* at 342. When interrogators chose questions using an interrogation questions checklist, however, whether the suspect had been apprehended did not clearly point to confirmation bias. *Id.* at 343.

The second study repeated the first experiment, but this time used 30 law students and 30 psychology students. *Id.* at 345. “The results in Experiment 2 largely replicate the results in Experiment 1.” *Id.* at 348. “Overall, both experiments support the notion of apprehension as a trigger of confirmation bias but the potential of changing decision maker as a debiasing technique is more uncertain since the effect of the decision maker variable was not significant for all measures.” *Id.*

The third study involved 60 psychology students where “half of the participants freely self-generated six questions, whereas the other half chose six questions from the” interrogation questions checklist. *Id.* at 349. “There was a significant main effect of questioning mode on the level of guilt presumption in interrogation questions indicating a higher level of guilt presumption among participants who freely

generated questions than among participants who chose questions from the” interrogation questions checklist. *Id.*

Overall, “[p]olice officers’ freely generated questions to apprehended suspects were more guilt presumptive and these findings were replicated with a larger effect size in the student sample in Experiment 2. Similarly, police officers’ perceived that apprehended suspects were less trustworthy, which was also found in Experiment 2. Furthermore, in both experiments, there were significant differences in trustworthiness ratings between own decisions to apprehend and not apprehend, whereas no such differences were found for the other decision makers.” *Id.* at 350.

d. ***Kassin 2005***: In a 2005 peer-reviewed journal, Dr. Kassin et al. reviewed other studies testing for accuracy of distinguishing between false and true confessions and then reported on their own experiment as well. Saul M. Kassin et al., *“I’d know a false confession if I saw one”: A comparative study of college students and police investigators*, 29 Law and Human Behavior, 211, 212 (2005). The authors reviewed Kassin and Fong’s 1999 experiment examining:

whether people can distinguish true and false denials—and whether police training in the use of verbal and nonverbal deception cues would increase the accuracy of such judgments. In Phase 1, participants committed one of four mock crimes and then denied their involvement in an interview. In Phase 2, observers were either trained in the Reid technique approach to deception detection or not trained before judging these taped interviews. As in other research, the results of this study indicated that observers could not significantly distinguish between the truthful and deceptive suspects. In fact, those who underwent the training were both less accurate and more confident than naïve controls. In a follow-up study, Meissner and Kassin (2002) showed these interviews to experienced detectives and found that although they were not more accurate than students, they were more confident—and more likely to make false positive errors, illustrating an “investigator bias”

toward perceiving deception. The pivotal decision of whether or not to interrogate a suspect is thus based on prejudgments of guilt that are confidently made but biased toward guilt and often in error.

Id. at 212-13.

The authors' own first experiment involved recruiting ten male prison inmates to participate in two videotaped confessions each: in one, "they gave a full confession related to the crime for which they were incarcerated," and in the other, they fabricated a false confession to a crime described by the experimenter. *Id.* at 213. The authors created both audiotape and videotape versions of the confessions. *Id.* Student and police observers then watched either a videotape or audiotape in group sessions where they were told that some of the confessions would be true and others false. *Id.* at 216. Students and officers then provided their assessments of the confessor's guilt for the alleged crime and their confidence in their judgment. *Id.*

The authors found that the overall accuracy rate for all participants was 53.9%, where true confessions were correctly identified 63.6% of the time and false confessions were wrongly detected as true 56.1% of the time. *Id.* Further, students were more accurate than officers, but officers were more confident in their judgment. *Id.* "[I]nvestigators were not more accurate than students, only more confident and more biased." *Id.* at 218.

To control for the possibility that police officers and investigators are more sensitive to the general reality that true confessions are far more common than false confessions, the authors' second experiment specifically told participants that half the tapes presented would true confessions and half would be false. *Id.* at 219. Doing

so caused police officers and students to judge similar amounts of statements as true and false, but the overall accuracy rate stayed low at 51.2%, which did not exceed chance level expectations, meaning their identifications were equivalent to mere guesses. *Id.* at 220. Following both experiments, the authors concluded that the assumption that police officers or even the general population would be effective at identifying false confessions is empirically untenable. *Id.* at 221.

Further, the authors generally found:

In Experiment 1, police were not only less accurate than laypeople at judging whether confessions were true or false, they were also biased toward perceiving true confessions and overconfident despite a lack of accuracy. This pattern of results closely parallels studies of investigators asked to judge true and false denials (Meissner & Kassin, 2002; Garrido et al., 2004). In addition to suggesting the fallacy of the belief that people can readily distinguish true and false confessions in the absence of other evidence, this research makes three new and important contributions. First, the results clarify the nature of the investigator response bias. Reanalyzing past studies from a signal detection framework, Meissner and Kassin (2002) discovered and then replicated a significant investigator response bias, a tendency for police to see deception in suspects. Using a standardized self-report instrument, Masip et al. (in press) found that police harbor a “generalized communicative suspicion” compared to others. . . .

Relative to students, investigators erred by accepting false confessions, not by rejecting true confessions. Hence, the bias is not to see lies per se, but to presume guilt. This result helps to explain another finding—that real life interviews were seen by police officers as more skillfully conducted when they elicited confessions than when they did not (Bull & Milne, 2004). A second important contribution is in the finding that investigators continued to exhibit a performance pattern of low accuracy and high confidence even when this guilt bias was neutralized.

Id. at 221-22.

IV. Situational risk factor of using rapport-building in the context of interrogation³:

a. ***Kaplan 2019***: In their 2019 book, Drs. Kaplan and Cutler et al. discussed the creation of their psychometric instrument to detect and quantify coercion in videotaped confessions. Jeffrey Kaplan et al., *Evaluating coercion in suspect interviews and interrogations* (In B. H. Bornstein & M. K. Miller, Eds), *Advances in Psychology and Law*, Volume 4 at 26-27 (2019). They reviewed interrogation manuals, surveys of police officers, observational studies, caselaw, metaanalyses, literature on vulnerable groups, and research on known personal risk factors in false confession cases. *Id.* They identified 192 interrogation items that informed the development of their psychometric instrument. *Id.* After filtering for items deemed innocuous and unnecessary, the list of items was reduced to 39 interrogation tactics, 13 suspect behaviors and demeanors, 11 suspect risk factors, and 10 environmental and contextual factors. *Id.* at 28.

The authors then organized the interrogation tactics across five domains earlier identified by Kelly et al. in 2013. One of these five domains was rapport-building. *Id.* Regarding rapport-building, the authors described rapport-building as “establishing a social connection between investigator and suspect”. *Id.* Through their work, the authors deemed four items necessary for the assessment of coercion: 1)

³ Dr. Cutler’s notice also cites to Wicklander-Zulawski & Associates, *Interviewing techniques: Practical advanced workshop*, Aurora, IL: Wicklander-Zulawski & Associates (2020); D. Carr, *The RCMP Phased Interview Model for Suspects: Generating information through dialogue*, Ottawa, ON: Royal Canadian Mounted Police (2015); and Robert B. Cialdini, *Influence: Science and Influence* (2001) in this section. The defense does not have a copy of these source materials in order to be able to provide pinpoint citations to them.

sympathizing with the suspect, 2) the investigator minimizing their role as a law enforcement officer, 3) engaging the suspect in conversation unrelated to the investigation, and 4) using proper listening skills such as not interrupting or talking over the suspect, not asking leading questions, and not asking multiple questions at once. *Id.* The instrument was developed as an “incremental step in the scientific understanding of coercion”. *Id.* at 34.

b. ***Burger 2006***: In a 2006 peer-reviewed journal, Dr. Burger et al. reported about three experiments designed to test whether by “returning the favor in some appropriate way, can people reduce their susceptibility to additional requests”. Jerry M. Burger et al., *Reciprocal favor exchange and compliance*, 1:3 Social Influence 169, 170 (2006). In the first study, 105 undergraduate students “either did or did not exchange favors with a confederate, and each session ended with a target request from the confederate.” *Id.* at 172-73. “The findings replicate[d] the basic norm of reciprocity effect. That is, participants were more likely to comply with the target request after receiving an unexpected favor from the confederate than when receiving no favor. However, reciprocating the confederate’s favor did not reduce the participants’ likelihood of complying with the target request.” *Id.* at 176.

The second experiment “was designed to replicate the findings from the first experiment using different favors and a different request.” *Id.* Using 131 participants, “[t]he findings replicate[d] exactly those from the first experiment. In both investigations, regardless of who went first, participants who exchanged favors with the requester were more likely to agree with a subsequent request from that

individual than participants who received no favor.” *Id.* at 178.

The third experiment was designed to test whether altruism or mood affected the results of the experiment. *Id.* at 179. Using 105 undergraduates, the authors found that “[t]he exchange of favors led to an increase in compliance only when the person who had engaged in that exchange was the one who presented the final request.” *Id.* at 181. “In all three experiments, these processes were powerful enough to increase compliance even after participants paid off their socially prescribed debt.” *Id.* at 182. “Although psychologists often identify unsolicited favors as an effective technique for salespeople, recruiters, and the like, our results suggest we may have fewer defenses against this tactic than we realize.” *Id.* at 182-83.

c. ***Saurland 2018***: In a 2018 peer-reviewed journal, Dr. Saurland et al. tested whether “more intense rapport building [would] generally have a positive effect on report quantity and accuracy” on eyewitness interviews. Melanie Sauerland et al., *Rapport: Little effect on children’s, adolescents’, and adults’ statement quantity, accuracy, and suggestibility*, 15 J. of Child Custody 268, 272 (2018). Using 220 child, adolescent, and adult German participants, the authors showed each participant a video depicting three scenes. *Id.* at 273. One scene depicted no rapport building, one scene depicted minimal rapport building, and the third scene depicted extensive rapport building. *Id.* at 273-74. “Adolescents profited more from extensive rapport building, compared to no rapport.” *Id.* at 280. “[T]he adult study reporting the largest effect sizes (Collins et al., 2002) used an abrupt interviewer attitude condition in which the interviewer would display a harsh tone and lack of interest.” *Id.*

d. **Vallano 2015:** In a 2015 peer-reviewed journal, Drs. Vallano and Compo reviewed empirical literature on the role and effectiveness of rapport building in investigative interviews. Jonathan P. Vallano & Nadja S. Compo, *Rapport-Building With Cooperative Witnesses and Criminal Suspects: A Theoretical and Empirical Review*, 21:1 Psychology, Pub. Pol. & L. 85, 85 (2015). The authors observed:

Rapport-building and its associated techniques are also recommended by popular interrogation manuals, albeit for different, and in some cases pernicious, reasons. Generally speaking, these manuals advocate building rapport with criminal suspects by encouraging interviewers to use a more professional and less friendly approach, particularly at the outset of the interrogation. For example, the Army Field Manual implies that rapport should initially be built by establishing a professional relationship with the suspect, possibly by providing him or her with the name and rank of the interviewer. . . .

The Reid Technique, a popular suspect interviewing approach used by police departments throughout the United States, recommends that investigators establish rapport during a preliminary interview that occurs before the actual interrogation (Inbau et al., 2013). The Reid Technique more explicitly endorses the notion of rapport-building as a coercive tactic to enhance suspect cooperation in an effort to ultimately procure a confession. Other than suggesting that interrogators build rapport by obtaining background information about the suspect—such as the suspect’s name, phone number, address, or social security number—and using small talk to establish common ground (which the authors caution could “backfire” if the interviewee perceives nongenuine ulterior motives), few specific rapport-building techniques are provided to train investigators in how to actually build rapport.

Id. at 88-89.

In survey research, law enforcement officers in the United States and Norway reported nearly always using rapport-building techniques to obtain “successful” outcomes when interviewing suspects:

Rapport-building also appears to be used during suspect interrogations. Vallano et al. (2014) surveyed U.S. law enforcement about their attitudes and usage of rapport-building in the field and found that all respondents endorsed the importance of building rapport during an investigative interview, further rating rapport as highly important to achieving a successful interview outcome ($M = 6$; 1 = not important, 7 = very important). Similarly, Kassin et al. (2007) surveyed over 500 state and federal law enforcement across the United States regarding their use of interrogation techniques and discovered that rapport-building was the fourth most commonly used technique within criminal interrogations ($M = 4.08$; 1 = never, 5 = always). Further, approximately one-third of law enforcement reported that they always build rapport with criminal suspects. Even stronger evidence regarding the frequent use of rapport-building was provided by a survey of Norwegian military interrogators' use of interrogation techniques (Semel, 2013). Interrogators reported using rapport-building more than any other technique ($M = 4.74$; 1 = never used, 5 = always used).

Id. at 89.

In a 2012 observational study of 142 fraud interviews in the United Kingdom, researchers determined that the following rapport-building techniques were used:

provide an introduction; explain the course and reason for the interview, including that it is the opportunity to give an account; intermittently summarize the suspect's statements; explore and probe information provided by the suspect; display active listening, such as head nodding and verbal encouragement; maintain conversational turn-taking to ensure that both parties actively participate in the conversation; provide a final summary of the interview; inform suspects what happens next; show equality signs by matching the suspect's style and staying on their level by not emphasizing their status as a member of law enforcement; display calmness; and display empathy.

Id. at 90.

A 2014 survey study of United States police officers determined that police officers spent "significantly more time building rapport with suspects" than witnesses and found similar results in terms of rapport-building techniques interrogators actually used and:

Display understanding, portray a friendly demeanor or attitude, use an open or friendly body language, treat the interviewee with respect, provide the interviewee with an item (e.g., cigarette, drink), make good eye contact, build trust with interviewee, maintain a comfortable interview proximity or distance, obtain a comfortable interview location, use a pleasant tone of voice, and make appropriate physical contact with the interviewee. . . . discuss common interests, engage in self-disclosure, be direct about the interview, provide an explanation of the case, be honest with the interviewee, nicely address the interviewee, be courteous, and thank the interviewee. . . . finding common ground via small talk, engaging in self-disclosure, and displaying understanding via sympathy or empathy.

Id. at 90.

In terms of rapport-building's effects on the accuracy of suspect interrogations, while some studies indicated that rapport-building had the potential to increase the accuracy of confessions, other studies pointed to the opposite—particularly when rapport-building was used in conjunction with other interrogation techniques known to increase the risk of false confessions.

It remains possible that rapport-building may increase false confessions by serving as a form of entryway for other techniques along the lines of social influence (Abbe & Brandon, 2013; Cialdini & Goldstein, 2004) that enhance a suspect's desire to please the interviewer by providing information, some (if not all) of which may be inaccurate or misleading. In addition, rapport, when built in conjunction with other coercive techniques, may amplify the negative effects of these misleading techniques by making the suspect more susceptible to accepting false information presented by law enforcement. For example, rapport may serve to "butter up" a suspect to put their guard down and fall prey to coercive techniques such as the introduction of false evidence or maximization, particularly in the case of vulnerable suspects. Further, rapport could reduce true confessions by creating such a safe and comfortable environment that suspects do not realize the gravity of their situation or feel the pressure necessary to confess.

Id. at 94.

e. **Wright 2015:** In a 2015 peer-reviewed journal, Dr. Wright et al. conducted an experiment to determine “whether basic rapport-building has the potential to encourage witnesses to improperly corroborate accusations when it is used alongside suggestive interview techniques”. Deborah S. Wright et al., *Encouraging eyewitnesses to falsely corroborate allegations: Effects of rapport-building and incriminating evidence*, 21 Psychology, Crime & L. 648-650 (2015). The study put 72 adult students and staff into rapport-building and no-rapport building groups. *Id.* at 651. Over two video-taped sessions, participants in a structured gambling experiment where a confederate was ultimately accused of cheating. “[W]hen there was only verbal evidence, rapport more than doubled the percentage rate of false accusations in comparison to no rapport. Second, this effect of adding rapport was comparable in size to the effect of adding visual incriminating evidence to the verbal claim.” *Id.* at 655-56. “This finding is consistent with the idea that rapport-building and visual evidence promoted compliance via a similar mechanism, and we know from prior research that source credibility is responsible for much of the persuasive power of false visual evidence (Nash et al., 2009).” *Id.* at 656.

f. **Crough 2021:** In 2021, Professor Crough and other researchers examined literature regarding rapport-building in suspect interviews. Quintan Crough et al., *Reflections on the nature of rapport within suspect interviews*, 34:2 Current Issues in Crim. Justice 219 (2022). The authors observed, “Some interviewing guides acknowledge explicitly the disconnect between interviewers’ true feelings and their expressed behaviours. For example, as stated in a European

policing interview guide, ‘Your personal feelings should not affect your approach or stand in the way of building rapport....Do not confuse ‘rapport’ as meaning that you in any way condone the offences under investigation or that you have a personal liking for the person being questioned’ (Boyle & Vullierme, 2018, p. 21, emphasis added). Interrogative rapport can therefore be viewed as a deceptive and strategic approach designed to increase compliance, independent of—or even contrary to—the true feelings of the interviewer.” *Id.* at 223.

g. **Kaplan 2022:** In a 2022 peer-reviewed journal, Drs. Kaplan and Cutler conducted an observational study of 50 North American video-taped interrogations. Jeffery Kaplan & Brian L. Cutler, *Co-occurrences among interrogation tactics in actual police investigations*, 28 *Psychology, Crime, & L.* 1, 5 (2022). The research team coded the interrogations for interrogation tactics. *Id.* at 6-7. Rapport-building techniques appeared in 64% of the interrogations analyzed. *Id.* at 7. The authors observed investigators frequently portraying themselves as trying to help the suspect if the suspect confessed:

The third component, Advocate, was composed of investigators emphasizing the seriousness of the crime, minimizing their law enforcement role, and appealing to suspects’ self-interest. Two of the three co-occurred 27 times in 14 interrogations, all three co-occurred 10 times across five interrogations. When all three occurred, investigators usually first emphasized the seriousness of the crime, then presented themselves as the suspects’ advocates there to help them through the situation, and finally urged suspects to help themselves by confessing. In one of the occasions in which this component arose, the investigator informed the suspect that the prosecutor would want to charge him with a number of serious offences. The investigator then told the suspect that he wanted to help him mitigate the fallout, but that the suspect had to be cooperative before the investigator could assist him.

Id. at 11.

h. ***Inbau 2013***: “Before asking questions directly relating to the issue under investigation, the investigator should establish a rapport with the suspect. Rapport has different meanings under different circumstances. It can mean establishing a level of comfort or trust, or it may connote a common ground or similarity between two people. During the interview of a person suspected of committing a crime, the definition of rapport that most accurately fits is ‘a relationship marked by conformity.’” Fred E. Inbau et al., *Essentials of the Reid technique* 42 (2d ed. 2013).

Further, Inbau et al.’s manual provides: “Efforts to establish rapport should appear natural and unassuming. One of the easiest ways to do this is to begin the interview by establishing background information about the suspect, starting with the spelling of his last name. Further clerical information can be developed, such as the suspect’s address, Social Security number, and phone number. The investigator may then ask about the suspect’s present or past employment or, if the suspect is a student, ask questions about classes or school activities. When obtaining background information from the suspect, the investigator should make a written note following each response. This will establish a pattern for the remainder of the interview.” *Id.* at 43.

i. ***Kassin 2010***: To support his assertion that recordings are the best record of interrogations, Dr. Cutler cited Dr. Kassin et al.’s 2010 consensus-based statement in a peer-reviewed journal about wrongful convictions based on false

confessions, drawing “on core psychological principles of influence as well as relevant forensic psychology studies involving an array of methodologies.” Saul M. Kassin et al., *Police-induced confessions: Risk factors and recommendations*, 34 L. & Human Behavior 3, 4 (2010). The authors observed, “Without equivocation, our most essential recommendation is to lift the veil of secrecy from the interrogation process in favor of the principle of transparency. Specifically, all custodial interviews and interrogations of felony suspects should be videotaped in their entirety and with a camera angle that focuses equally on the suspect and interrogator.” *Id.* at 25.

Further emphasizing the need for objective and accurate evidence of interrogations, the authors observed:

There are numerous advantages to a videotaping policy. To begin, the presence of a camera may deter interrogators from using the most egregious, psychologically coercive tactics—and deter frivolous defense claims of coercion where none existed. Second, a videotaped record provides trial judges (ruling on voluntariness) and juries (determining guilt) an objective and accurate record of the process by which a statement was taken—a common source of dispute that results from ordinary forgetting and self-serving distortions in memory. In a study that demonstrates the problem, Lamb, Orbach, Sternberg, Hershkowitz, and Horowitz (2000) compared interviewers’ verbatim contemporaneous accounts of 20 forensic interviews with alleged child sex abuse victims with tape recordings of these same sessions. Results showed that more than half of the interviewers’ utterances and one quarter of the details that the children provided did not appear in their verbatim notes. Even more troubling was that interviewers made frequent and serious source attribution errors—for example, often citing the children, not their own prompting questions, as the source of details. This latter danger was inadvertently realized by D.C. Detective James Trainum (2007) who—in an article entitled “I took a false confession – so don’t tell me it doesn’t happen!”—recounted a case in which a suspect who had confessed to him was later exonerated: “Years later, during a review of the videotapes, we discovered our mistake. We had fallen into a classic trap. We believed so much in our suspect’s guilt that we ignored all evidence to the contrary. To demonstrate the strength of our case, we showed the suspect our

evidence, and unintentionally fed her details that she was able to parrot back to us at a later time. It was a classic false confession case and without the video we would never have known” (see also Trainum, 2008). Similarly, Police Commander Neil Nelson, of St. Paul, Minnesota, said that he too once elicited a false confession, which he came to doubt by reviewing the interrogation tape: “You realize maybe you gave too much detail as you tried to encourage him and he just regurgitated it back”(Wills, 2005; quoted online by Neil Nelson & Associates; <http://www.neilnelson.com/pressroom.html>).

To further complicate matters of recollection, police interrogations are not prototypical social interactions but, rather, extraordinarily stressful events for those who stand accused. In a study that illustrates the risk to accurate retrieval, Morgan et al. (2004) randomly assigned trainees in a military survival school to undergo a realistic high-stress or low-stress mock interrogation. Twenty-four hours later, he found that those in the high-stress condition had difficulty even identifying their interrogators in a lineup. In real criminal cases, questions constantly arise about whether rights were administered and waived, whether the suspect was cooperative or evasive, whether detectives physically intimidated the suspect, whether promises or threats were made or implied, and whether the details in a confession emanated from the police or suspect, are among the many issues that become resolvable (in Great Britain, as well, taping virtually eliminated the concern that police officers were attributing to suspects admissions that would later be disputed; see Roberts, 2007).

Id. at 26-27.

j. **Gregory 2011:** Dr. Cutler cited a 2011 peer-reviewed journal by Dr. Gregory et al., which conducted a study of thirteen interviewers’ notes and how accurately those notes were transferred later to their reports, to emphasize that relying on an officer’s notes as an accurate record of an interrogation is not supported by evidence. The participants were thirteen police officers of various ranks with a mean experience of 16 years from south Florida police departments. Amy H. Gregory et al., *A comparison of U.S. police interview notes with their subsequent reports*, 8 J. of Investigative Psychology & Offender Profiling 203, 207 (2011). “The police officers

interviewed a mock witness about a staged crime (a robbery) while taking notes.” *Id.* The police officers were instructed to take notes how they normally would. *Id.* All interrogations were videotaped. *Id.* The officers were then instructed to generate a report of the interrogation based on their notes. *Id.* “Our data indicate that the content of police officers’ notes is primarily accurate but incomplete. Specifically, the police officers’ notes in our sample fail to account for a significant portion of witness information (68%) and any interviewer questions or utterances.” *Id.* at 212.

k. ***Lamb 2000***: Similarly, Dr. Cutler cited Dr. Lamb et al.’s 2000 study results published in a peer-reviewed journal to underscore the inaccuracy and incompleteness of an officer’s verbatim interview notes from the actual interview. Michael E. Lamb et al., *Accuracy of investigators’ verbatim notes of their forensic interviews with alleged child abuse victims*, 24 L. & Human Behavior 699-707 (2000). The authors “compared the audiotaped recordings of 20 forensic interviews of alleged sexual abuse victims (5 male and 15 female 4- to 14-year-olds; $M = 9.72$ years old; $SD = 2.57$; the age of 1 child was unclear) with the investigators’ verbatim contemporaneous accounts (‘notes’) of the same interviews.” *Id.* at 701.

The authors found:

As predicted, the investigators failed to report in their notes many of the details provided by the children and many of the utterances used to elicit them. They also misrepresented the structure of the interviews. Specifically, first of all, the investigators’ notes recorded significantly fewer informative details provided by the children than the audio recordings did when compared using paired *t* tests. The notes reported a total of 3,993 informative details ($M = 199.65$, $SD = 125.05$), compared with 5,301 details in the audio recordings ($M = 265.05$, $SD = 152.39$; $t_{19} = 4.56$, $p < .001$). Thus 1,308 (25%) of the substantive (i.e., forensically relevant) details provided by the children were not represented in the

investigators' notes. Of the 2,544 ($M = 127.20$, $SD = 91.11$) substantive details in the audio recordings that were deemed central, 453 (17.8%) were ignored. Only 26 of the details (0.004%) noted by the investigators were contradicted by the audio recordings, however, suggesting that errors of commission were rare, although errors of omission were very frequent.

Second, the investigators' notes reflected a total of 806 substantive interviewer utterances ($M = 40.30$; $SD = 25.02$), whereas the audio recordings of the same interviews included 1,889 utterances ($M = 94.45$; $SD = 43.97$; $t_{19} = 6.17$, $p < .001$), leaving 1083 utterances (57.3%) not accounted for in the investigators' supposedly verbatim notes.

Id. at 703.

1. **Warren 1999:** Dr. Cutler cited Drs. Warren and Woodall's 1999 study results published in a peer-reviewed journal to underscore the inaccuracy and incompleteness of an interviewers verbatim interview notes from the actual interview. Amye R. Warren & Cara E. Woodall, *The reliability of hearsay testimony: How well do interviewers recall their interviews with children?*, 5 Psychology, Pub. Policy & L. 355 (1999). Drs. Warren and Woodall used 27 experienced interviewers attending a two-week training on forensic child interviews to interview 27 children. The interviews were audiotaped. *Id.* at *6. "The participants were instructed to elicit as much information as they could about the target event using their usual interviewing style and techniques." *Id.* The experimenter then questioned in free-flow form the interviewer about the content of the interview. *Id.* The interviewer then created a written analysis of the interview. *Id.*

"[I]n comparison to the amount of information children related during their interviews, the interviewers' hearsay accounts were degraded. Of the event information that the children initially had reported to them, interviewers recounted

approximately 80% of the primary activities and 60 to 70% of the details and errors.” *Id.* at *10. “Even immediately after an interview, important content was omitted from hearsay accounts, and the majority of the verbatim information (specific wording and content of questions and answers) was lost. Our results also suggest that interviewers are unlikely to be able to accurately reconstruct verbatim information later.” *Id.* at *13. Further, “Not only did interviewers fail to report all the errors that children had made during the interviews, sometimes interviewers made new errors during their attempts to recall the children’s reports—errors that had not been made by the children.” *Id.* at *7.

In terms of the interviewer’s recall of the questioning style, Drs. Warren and Woodall found:

Most answered that they had asked primarily open-ended questions, whereas few stated that they had asked closed-ended or specific questions, and only one reported asking any leading questions. In another analysis of these interviews (Warren et al., 1999), however, we found that the most (over 80%) of the questions asked by these interviewers were specific or closed-ended (and 16% were leading). Thus, it is clear that interviewers are incorrectly remembering their actual questioning styles.

Id. at *10.

V. Relevant psychological principles:

a. ***Blass 2009***: In 2009, Dr. Blass reviewed the history of obedience experiments that used Stanley Milgram’s paradigm and the underlying principles Milgram identified from his experiments. Thomas Blass, *From New Haven to Santa Clara: A historical perspective on the Milgram obedience experiments*, 64 *Am. Psychologist* 37-45 (2009). Dr. Blass observed, “People generally assume that there is

a direct line between the kind of individual a person is and the nature of his or her actions, but Milgram showed that it does not take evil or aberrant persons to carry out actions that are reprehensible and cruel.” *Id.* at 40. In terms of the mechanisms that made this behavior possible, the first mechanism “is accepting the authority’s definition of the situation” and the second mechanism is “entry into the ‘agentic state,’ the main feature of which is a shift in responsibility from the follower to the leader”. *Id.* at 40-41.

b. ***Burger 2009:*** In a 2009 peer-reviewed journal, Dr. Burger reported the results of his replication of Milgram’s fifth experiment. Jerry M. Burger, *Replicating Milgram: Would people still obey today?*, 64 Am. Psychologist 1-11 (2009). First, Dr. Burger observed that Milgram “argued that people follow an authority figure’s commands when that person’s authority is seen as legitimate”. *Id.* at 3. Dr. Burger’s experiment involved 70 participants and made some procedural changes from Milgram’s study to make it easier for participants to resist authority. Dr. Burger reported:

Although changes in societal attitudes can affect behavior, my findings indicate that the same situational factors that affected obedience in Milgram’s participants still operate today. The similarity between my results and Milgram’s is also noteworthy because of a few procedural changes I implemented that should have made it easier for the participants to resist authority. The participants were told explicitly and repeatedly that they could leave the study at any time and still keep their \$50. In addition, participants were aware that the experimenter had given this same to the confederate. Indeed, several of the participants who stopped the procedure after hearing the learner’s protests pointed out that the confederate had been promised he could stop when he wanted to.

Id. at 9. Further, although participants observed another person refuse to continue

with the experiment with no apparent negative consequences, “seeing another person model refusal had no apparent effect on obedience levels in the present study. I interpret this high rate of obedience in the modeled refusal condition as a demonstration of the power of the situational forces leading participants to go along with the experimenter’s instructions.” *Id.* at 10.

c. ***Baumeister 2007***: In a 2007 peer-reviewed journal, Dr. Baumeister et al. reviewed the scientific literature studying self-control. Roy F. Baumeister et al., *The strength model of self-control*, 16 *Current directions in psychological science* 351-355 (2007). Describing a 1994 experiment, Dr. Baumeister et al. observed that “self-control appeared vulnerable to deterioration over time from repeated exertions, resembling a muscle that gets tired. The implication was that effortful self-regulation depends on a limited resource that becomes depleted by any acts of self-control, causing subsequent performance even on other self-control tasks to become worse.” *Id.* at 351. Describing additional 1998 experiments, Dr. Baumeister et al. reported that “the first self-control task consumed and depleted some kind of psychological resource that was therefore less available to help performance on the second self-control task.” *Id.* at 352.

Dr. Baumeister et al. described how a 2007 study analyzed the relationship between glucose levels in the blood and the exertion of self-control. *Id.* The study revealed that “[a]cts of self-control cause reductions in blood-glucose levels, which in turn predict poor self-control on behavioral tasks.” *Id.* “The analogy between self-control and a muscle was suggested by the early findings that self-control

performance deteriorates after initial exertions, just as a muscle gets tired from exertion.”. *Id.* “Recent studies indicate that the same energy is used for effortful decision making, as well as for active rather than passive responses (e.g., Vohs et al., 2007).” *Id.* at 354.

d. ***Davis and Leo 2013***: In their 2013 book chapter, Drs. Davis and Leo described a case study and conducted literature reviews regarding how social influence intersects with criminal interrogations. Deborah Davis & Richard A. Leo, *Acute suggestibility in police interrogation: Self-regulation failure as a primary mechanism of vulnerability*, *Suggestibility in legal contexts: Psychological research and forensic implications* (pp. 171–195) (In A. M. Ridley, F. Gabbert, and D. J. La Rooy Eds.) (2013).

They observed:

Evidence suggests, however, that unless the defendant can be shown to suffer mental defects such as retardation or mental illness (and sometimes even then), the prejudicial impact of a confession is sufficient to assure that it will be judged as voluntary and admitted into trial evidence, judged as valid and provoke a conviction, and judged as sufficiently voluntary and credible to support appellate decisions to uphold these admissibility decisions and trial outcomes (Davis & Leo, 2010, 2011; Kassin et al., 2010; Leo, 2008). In part, this overwhelming prejudicial impact is the result of failure at all levels to recognize the magnitude of the influences facing a criminal suspect in interrogation, including both the direct power of the persuasion brought to bear, and the indirect power of interrogative pressure to increase suggestibility and render the suspect more susceptible to the interrogator’s attempts to influence.

Id. at 174.

Further, “[t]wo major sources of resistance to influence - motivation and ability have been identified by theories of persuasion (Knowles & Riner, 2007; Petty,

Cacioppo, Strathman, & Priester, 2005), each applicable to causes of false confession identified by interrogation scholars.” *Id.* at 176. “The likelihood of stress-induced confession should therefore be increased by chronic personal characteristics or acute situational influences that either increase distress (e.g. high dispositional anxiety, lengthy and aversive interrogation), reduce the suspect’s ability to tolerate distress (e.g. chronic distress intolerance, acute fatigue and discomfort), or reduce the ability to control acute, potentially dysfunctional, impulses in favour of optimal long-term outcomes (e.g. youth, mental illness, fatigue).” *Id.* at 177.

the interrogator attempts to undermine reactance to himself as a potentially malevolent enemy working against the suspect’s legal interests. He does this by casting himself as a benevolent ally instead. In part, this is accomplished through a tactic dubbed the ‘sympathetic detective with a times limited offer’ in which the detective flatters the suspect, suggests that the suspect is not a bad person (but rather one who got caught up in a bad situation), states his desire to help, but notes that he can only help if the suspect ‘tells the truth’ during the interrogation, before the case is sent up the line to others who will be less sympathetic (Davis et al., 2010).

If the suspect is still resistant to confession, the detective may threaten to withdraw his help. This has the effect of taking attention from the more complicated - and in some ways more remote - goals of defending innocence and avoiding legal consequences and redirecting it to the immediate goal of keeping the beneficent help of the interrogator. The only way to defend one’s access to the detective’s help is to comply with his demands to ‘tell the suspect’s side of the story’. . .

they recast the interrogation as a negotiation in which the interrogator has the authority to affect what, if any, charges are filed against the suspect, and the beneficent motivation to help the suspect achieve the best legal outcomes (see Davis et al., 2010, for demonstrations of the effects of these tactics on the perceptions of authority and beneficence).

Id. at 178-79. In terms of self-regulation, Drs. Davis and Leo observed:

acute interrogative suggestibility essentially entails acute failures of

‘self-regulation’: that is, the ability to control emotions, cognition and behaviour in service the of one or more specific goals (Baumeister, Schmeichel, & Vohs, 2007; MacDonald, 2008). One may have sufficient chronic assets of knowledge, intelligence, personal will, or self-regulatory control to resist interrogative influences under ideal circumstances, yet possess insufficient acute self-regulatory capacity to marshal or use them effectively under the circumstances at hand.

Id. at 180. “Substantial research supports these propositions, showing that prior use of self-regulatory resources does indeed impair performance on subsequent tasks, particularly those placing significant demands upon self-regulatory resources (see Hagger, Wood, Stiff, & Chatzisarantis, 2010; Vohs & Baumeister, 2011, for reviews).”

Id.

The authors further found:

Tests of the importance of self-regulatory resources for the above functions have largely been conducted using a dual-task depletion paradigm in which participants are first subjected to an ‘ego-depleting’ task presumed to consume self-regulatory resources, and subsequently to perform a second unrelated task that is also presumed to demand such resources. The general finding of such studies is that prior use of self-regulatory resources impairs performance on subsequent resource-demanding tasks, but does so less or not at all for less demanding tasks. Other studies have shown that poor physical or emotional condition promotes self-regulation failures. Generally, these studies have indicated that all self-regulation functions are interdependent, such that the depletion of resources through deployment of self-regulatory control in any domain affects the performance in any other domain that also requires self-regulatory control. Accordingly, demanding cognitive tasks, emotion regulation and impulse control become more difficult through prior or contemporaneous depletion, regardless of the mechanism of depletion. Of particular relevance to interrogative suggestibility, ego-depletion promotes greater susceptibility to immediate impulses, to persuasion/suggestibility and to failures of rational decision making (see Davis & Leo, in press; Hagger et al., 2010; Hofmann, Friese, Schmeichel, & Baddeley, 2011; Kahneman, 2011; Otgaar, Alberts, & Cuppens, 2012; Vohs & Baumeister, 2011, for reviews).

Id. at 181.

As it relates to false confessions, the authors observed, citing case studies, that “many proven false confessions have been elicited” in “the aftermath of emotionally devastating events involving the death of close friends or family, exposure to horrific violence and mayhem and other significant personal or financial losses”. *Id.* at 182. “These pre-existing stresses are supplemented by stressors inherent to the interrogation, such as: the fear and shame associated with being suspected and interrogated; confinement; social isolation; physical discomfort; the sense of powerlessness, helplessness and lack of control; the aversive nature of interrogation tactics; self-esteem and identity threat; and others (Davis & Leo, in press; Davis & O'Donohue, 2004; Najdowski, 2011).” *Id.*

In this chapter, the authors thoroughly review and discuss case studies, literature, and experiments finding that emotional distress, discomfort, fatigue, sleep deprivation, and glucose depletion (*particularly in those suspects with chronic impairments in glucose tolerance like diabetes*) separately can cause interrogation-related regulatory failure. *Id.* at 182-88.

e. ***Blagrove 1996***: In a 1996 peer-reviewed journal, Dr. Blagrove reported the results of his study of the effects of sleep deprivation on interrogative suggestibility. Mark Blagrove, *Effects of length of sleep deprivation on interrogative suggestibility*, 2 J. of Experimental Psychology: Applied 48-59 (1996). Dr. Blagrove conducted three experiments with between 13 and 15 participants each. The first two studies deprived the participants of one night of sleep. The third study deprived the

participants of two nights of sleep. *Id.* at 50. Before the sleep deprivation began, participants were exposed to suggestible stories and later questioned about them both before and after sleep deprivation. *Id.* at 51. The results showed “that in each of the studies, the sleep-deprived group after loss of sleep had a higher second suggestibility scale initial yield score than did the corresponding control group. A more significant initial yield occurred after two nights’ sleep loss”. *Id.* at 53. Further, “[s]leep-deprived participants after two nights had a greater tendency than controls to shift answers when questioned again, indicating a lack of reliability in answering.” *Id.* at 55.

In terms of false confessions and suggestibility, Dr. Blagrove discussed a 1992 case study of two members of the Birmingham 6 who resisted police pressure to falsely confess. *Id.* at 57. Both of the suspects who resisted police pressure to falsely confess had lower suggestibility scores (meaning that they were less vulnerable to suggestibility) than the other four members who made false confessions. *Id.* A 1991 series of studies of false and true confessions found similar levels of suggestibility observed in Dr. Blagrove’s study, causing Dr. Blagrove to recommend “that police interviewing should not occur if the interviewee has been deprived of sleep.” *Id.* at 57.

f. ***Guyll 2019***: In a 2019 peer-reviewed journal, Dr. Guyll et al. reported about a study of 296 undergraduate participants designed to test how participants responded to threats during a police interrogation. Max Guyll et al., *Mobilization and resistance in response to interrogation threat*, 43 L. & Human Behavior 307–318 (2019). Dr. Guyll et al.’s results demonstrated that “participants exhibited acute

physiologic reactivity in response to an accusation of misconduct, and the degree to which they did so was greater when the accusation was characterized by high versus low threat.” *Id.* at 315. These responses affected the participants’ blood pressure and heart rate, “supporting the idea that greater threat triggers greater mobilization.” *Id.* at 312.

g. ***Arnsten 2009***: In a 2009 peer-reviewed journal, Dr. Arnsten reviewed literature and scientific study results discussing how the prefrontal cortex is particularly sensitive to the detrimental effects of stress exposure. Amy F.T. Arnsten, *Stress signalling pathways that impair prefrontal cortex structure and function*, 10 Nature Reviews Neuroscience 410-422 (2009). The prefrontal cortex is “particularly sensitive to architectural changes induced by chronic stress compared with other brain regions”, with studies showing structural changes in the prefrontal cortex after only one week of stress or possibly “even a single exposure”. *Id.* at *9. Experiments have demonstrated that exposure to emotionally upsetting stimuli and stressful events such as public speaking impair cognitive flexibility and working memory. *Id.* at *2.

h. ***Davis and Leo 2012***: In a 2012 peer-reviewed journal, Drs. Davis and Leo reviewed case studies and scientific literature addressing “causes of ‘interrogation-related regulatory decline’ (IRRD) underlying impairments of rational decision making and exertion of one’s will”. Deborah Davis & Richard A. Leo, *Interrogation-related regulatory decline: Ego depletion, failures of self-regulation, and the decision to confess*, 18 Psychology, Public Policy, and Law 673-704 (2012). Citing

survey research, Drs. Davis and Leo reported that “[p]olice investigators estimate from their own experience that roughly 5% of the confessions they obtain are false (Kassin et al., 2007), suggesting that they elicit thousands of false confessions every year”. *Id.* at 675. Focusing on acute situational suggestibility, Drs. Davis and Leo discussed a number of experiments studying “apparently minor manipulations of depletion, and their surprising power to affect crucial underlying cognitive processes and the resulting self-regulatory failures (for a vast array of additional examples, see Vohs & Baumeister, 2011).” *Id.* at 685-86 (discussing experiments manipulating executive control functions, dual-task method effects on executive depletion, ego-depleting impact of making a choice among alternatives).

“The depleting effects of choice are greater, however, when under circumstances characteristic of police interrogation, where the decision is more difficult, or the person feels pressured, coerced, or seduced into action, compared with circumstances in which the person more easily or freely chooses among naturally interesting or desirable alternatives (Baumeister, Sparks, Stillman, & Vohs, 2008; Moller, Deci, & Ryan, 2006).” *Id.* at 685.

The authors cited a number of factors causing self-regulatory failure. “Among the many emotions likely to arise in the interrogation room, perhaps the most common is fear. Among the most powerful sources of such fears is the specter of prison or death.” *Id.* at 687. “[M]ost effective of all is to maintain a state of strong anxiety or fear that will have the additional effects of impairing cognition and promoting the need to escape”. *Id.* at 680. Citing Gailliot and Baumeister (2007), the authors

observed “substantial evidence that self-regulatory resources rely on glucose, which itself is depleted by the many self-control activities studied in the self-regulation literature. They presented evidence of reciprocal influence between the two, such that acts of self-control reduce blood glucose levels and depleted glucose levels impair the many acts of self-control reviewed earlier.” *Id.* at 692. “Decrements in performance due to sleep deprivation of as little as 24–36 hrs have been reported for cognitive tasks entailing attention, working memory, long-term memory, visuomotor performance, decision making, verbal fluency, logical reasoning, creative thinking, response inhibition, error detection and correction, updating decisions in light of new information, planning, prioritization, and emotion regulation, though effects can vary among the specific tasks assessed (see Alhola & Polo-Kantola, 2007; Harrison & Horne, 2000; Walker & van der Helm, 2009; Wesensten & Balkin, 2010 for reviews).” *Id.*

Discussing results from military researchers who routinely study performance deficits under stress, Drs. Davis and Leo concluded: “While glucose depletion, stress, fatigue, and sleep deprivation separately impair executive functions of cognition and control, together they pose the specter of much more profound impairment.” *Id.* at 694.

i. ***Leo and Davis 2010:*** In a 2010 peer-reviewed journal, Drs. Davis and Leo reviewed literature “examining seven psychological processes linking false confession to wrongful conviction and failures of post-conviction relief”. Richard A. Leo & Deborah Davis, *From false confession to wrongful conviction: Seven*

psychological processes, 38:1-2 J. of Psychiatry & L. 9, 9 (2010). Relying on a case study, interrogation training manuals, and literature from interrogation scholars, Drs. Leo and Davis report that interrogation scholars “have identified stress induced confession as those in which the suspect has become so distressed (tired, fearful, anxious, or distressed by the aversiveness of the interrogation) that he becomes willing to do or say anything—including giving a false confession—to escape the interrogation (Ofshe & Leo, 1997a, 1997b; Davis & O’Donohue, 2004).” *Id.* at 39. “Studies of decision making under stress have shown, for example, that stress can promote a form of tunnel vision, in which attention narrows and the person relies on less and less relevant information when making the decision (see Easterbrook, 1959; Deffenbacher, Bornstein, Penrod, & McGorty, 2004; Hammond, 2000)”. *Id.* “[W]hen stress and arousal continue to increase, the further narrowing of attention begins to result in the exclusion of relevant information, and decisions become poorer.” *Id.*

j. **Leo 2008:** In 2008, Dr. Leo wrote a comprehensive study of police interrogation in America. Richard A. Leo, *Police interrogation and American justice* 5 (2008). Citing two recent case studies and literature review, Dr. Leo observed that innocent suspects have been known to falsely confess in order to end the interrogation. *Id.* at 201-210.

“Compliant false confessions occur as a result of the sequenced influence process through which detectives seek to persuade a suspect that he is indisputably caught and that the most viable way to mitigate his punishment and escape his situation is by confessing (Ofshe and Leo, 1997a; Davis and O’Donahue, 2003).” *Id.*

at 201. “The interrogation may span over hours—as often occurs with compliant false confessions—weakening a suspect’s resistance, inducing fatigue, and heightening suggestibility. The combined effect of these multiple stressors may overwhelm the suspect’s cognitive capacities such that he confesses simply to terminate what has become an intolerably stressful experience. Facing overbearing interrogators who refuse to take no for an answer, he may reason that telling interrogators what they want to hear is the only way to escape (Ofshe and Leo, 1997b).” *Id.* at 203.

k. ***Madon 2012***: In a 2012 peer-reviewed journal, Dr. Madon et al. tested the hypothesis that criminal suspects exhibit short-sightedness during police interrogation, which increases their risk for confessing, in two experiments. Stephanie Madon et al., *Temporal discounting: The differential effect of proximal and distal consequences on confession decisions*, 36 L. & Human Behavior 13-20 (2012). In the first experiment, 81 participants were tested to see how frequently they admitted conduct in relation to proximal or distal consequences. *Id.* In the second experiment, 143 participants tested the same measures but in reverse order. *Id.* “The findings of Experiment 2 replicated the pattern observed in Experiment 1: Participants shifted their admissions to avoid the proximal consequence and, by so doing, increased their risk of incurring the distal consequence.” *Id.* at 18. The authors observed:

Our findings may also help explain compliant false confessions whereby innocent suspects confess to crimes when pressured by police (Kassin, 2005; Kassin & Wrightsman, 1985). Part of the psychology underlying this phenomenon may be that innocent suspects exhibit an exaggerated tendency to discount distal consequences (Kassin et al., 2010; Kassin & Gudjonsson, 2004). Because innocent suspects strongly believe that

their innocence will be apparent to interrogators and that the truth of their innocence will eventually be borne out (Kassin & Norwick, 2004), they may (wrongly) perceive the distal consequences facing them as remote and unlikely to materialize. As such, they may believe that they can falsely confess to a crime as a way to escape from an interrogation and yet not have to worry about the distal consequences associated with the crime due to the misperception that their innocence will protect them.

Id. at 19.

1. ***Kassin 2010***: In 2010, Dr. Kassin et al., in a peer-reviewed journal, published a consensus-based statement about wrongful convictions based on false confessions, drawing “on core psychological principles of influence as well as relevant forensic psychology studies involving an array of methodologies.” Saul M. Kassin et al., *Police-induced confessions: Risk factors and recommendations*, 34 Law and Human Behavior, 3, 4 (2010).

Regarding compliant confessions, the authors observed:

Demonstrating the form of influence observed in classic studies of social influence (e.g., Asch, 1956; Milgram, 1974), this type of confession is an act of mere public compliance by a suspect who knows that he or she is innocent but bows to social pressure, often coming to believe that the short-term benefits of confession relative to denial outweigh the long-term costs. Based on a review of a number of cases, Gudjonsson (2003) identified some very specific incentives for this type of compliance—such as being allowed to sleep, eat, make a phone call, go home, or, in the case of drug addicts, feed a drug habit. The desire to bring the interview to an end and avoid additional confinement may be particularly pressing for people who are young, desperate, socially dependent, or phobic of being locked up in a police station. The pages of legal history are filled with stories of compliant false confessions.

Id. at 14 (citing as an example, the 1989 Central Park jogger case).

Describing the core processes of psychology applicable to false confessions as “familiar to generations of behavioral scientists” long “before the first empirical

studies of confessions were conducted”, the authors report that scientists have long known that “behavior is influenced more by perceptions of short-term than long-term consequences”. *Id.* at 15. Further,

[r]ooted in the observation that people are inherently social beings, a second set of core principles is that individuals are highly vulnerable to influence from change agents who seek their compliance. Of direct relevance to an analysis of interrogation are the extensive literatures on attitudes and persuasion (Petty & Cacioppo, 1986), informational and normative influences (e.g., Asch, 1956; Sherif, 1936), the use of sequential request strategies, as in the foot-in-the-door effect (Cialdini, 2001), and the gradual escalation of commands, issued by figures of authority, to effectively obtain self- and other-defeating acts of obedience (Milgram, 1974). Conceptually, Latane’s (1981) social impact theory provides a predictive mathematical model that can account for the influence of police interrogators—who bring power, proximity, and number to bear on their exchange with suspects (for a range of social psychological perspectives on interrogation, see Bem 1966; Davis & O’Donahue, 2004; Zimbardo, 1967).

Id.

m. **Yang 2015:** In a 2015 peer-reviewed journal, Professor (now Dr.) Yang et al. conducted an experiment with 209 participants to test whether perceived uncertainty affected participants’ propensity to focus on short-term consequences. Yueran Yang et al., *Short-sighted confession decisions: The role of uncertain and delayed consequences*, 39 L. & Human Behavior 44-52 (2015). “[P]articipants more readily admitted guilt to avoid the proximal consequence when the distal consequence was uncertain versus certain, and when the distal consequence was one month away versus one week away. The data did not support an interaction effect. Instead, the data indicated that the tendency for participants to discount the distal consequence more strongly in the one-month than in the one-week condition did not significantly

differ across the low and high certainty conditions.” *Id.* at 48. “[O]ur research demonstrated that a proximal consequence more greatly influenced participants’ admission decisions as the distal consequence became less certain and more temporally remote. These findings suggest that suspects may be willing to risk punishments that they perceive as uncertain, or far in the future, to achieve the short-term gains that a confession can provide.” *Id.* at 49.

VI. Contamination errors:

a. ***Garrett 2010***: Law professor Garrett contrasts early assumptions that false confessions were “scarcely conceivable” and “of the rarest occurrence” with contemporary evidence that forty-two of the 252 people exonerated by DNA testing had falsely confessed to rapes and murders they did not commit. Brandon Garrett, *The Substance of False Confessions*, 62 Stanford L. Rev. 1051, 1052 (2010) (quoting John Wigmore, *A Treatise on the Anglo-American System of Evidence in Trials at Common Law* §§ 835, 867 (2d ed. 1923)) (quotation marks omitted). Though he acknowledges the psychological pressures that interrogated suspects face play a role in coercing confessions, Garrett investigates the process by which police, “intentionally or not, prompt the suspect on how the crime happened so that the suspect can then parrot back an accurate-sounding narrative.” *Id.* at 1053. Examining forty cases, Garrett finds that false confessions “are carefully constructed during an interrogation and then reconstructed during any criminal trial that follows.” *Id.* at 1056, 1062.

Such careful construction was evidenced by the fact that, in thirty-eight of the

false confessions he studied, only two lacked specific information concerning the crime. *Id.* at 1057. Although police interrogations manuals strongly impress that officers are not supposed to feed or leak crucial facts and officers often deny that they ever disclosed details, the presence of details the suspects could not have known in many of the cases Garrett studied leaves no other conclusion than that police frequently do provide such information throughout the interrogation process. *Id.* at 1066-79. Garrett notes that courts have not always treated confessions with the kind of deference that permitted many of these contaminated confessions to result in erroneous convictions: “Beginning in the 1960s, . . . [t]he Court abandoned its decades-long focus on reliability of confessions” instead adopting “a deferential voluntariness test examining the ‘totality of the circumstances’ of a confession.” *Id.* at 1058 (quoting *Missouri v. Seibert*, 542 U.S. 600, 609 (2004) (plurality opinion)). One of Garrett’s proposals for reform is the requirement of recording, as the lack of recording creates substantial risk that “courts may not detect contamination of facts, especially when no DNA testing can be performed.” *Id.* at 1059.

b. ***Garrett 2015***: Developing his prior research, law professor Garrett noted a rise in the number of DNA exonerations from 2009 to 2014 and described it as a “second wave.” Brandon Garrett, *Contaminated Confessions Revisited*, 101 Va. L. Rev. 395, 396. Analyzing both groups of the forty false confession exonerations from 1989 to 2009 and the twenty-six false confession exonerations from 2009-2014, Garrett found that 94% of them were “contaminated with inside information,” strongly suggesting that leakage occurred during interrogation. *Id.* at 404. Rather

than maintaining the present system in which custodial interrogations produce erroneous convictions, Garrett noted that “[a] framework for better regulating confessions in the courtroom could instead begin with an evidence law analysis.” *Id.* at 398.

Better evidence practices would prevent the criminalization of vulnerable populations because “[o]ver one-third of all sixty-six false confessions [Garrett studied] involved juveniles, and similarly, one-third involved individuals who were mentally ill or had an intellectual disability.” *Id.* at 400. In some cases, judges recognized that confessions were involuntary, but prosecutor claims that charges would have to be dropped in the absence of the confession led to rulings that the confessions were voluntary despite strong evidence to the contrary. *Id.* at 405-06 (referencing Steve Mills, *U.S. Looking at Englewood 4 Case*, Chi. Trib., Dec. 9, 2012, § 1, at 13). To avoid such outcomes, Garrett argued that pre-trial evidentiary screening is critical. *Cf. id.* at 420-21.

c. ***Trainum 2006***: Jim Trainum, a detective for Washington, D.C.’s metropolitan police department, recounted in a *Los Angeles Times* piece how he unintentionally extracted a false confession. He described how, despite using “standard, approved interrogation techniques,” the “solid confession” he thought he had turned out to be the innocent suspect regurgitating details he had accidentally provided through his questioning. Jim Trainum, *Get it on Tape*, L.A. Times, Oct. 24, 2008, at 1, <https://www.latimes.com/archives/la-xpm-2008-oct-24-oe-trainum24-story.html>. Only realizing his mistakes when he reviewed the interrogation tapes

years after the investigators had verified the suspect's alibi and charges were dropped, Trainum dedicated his later career to preventing such false confessions from occurring. *Id.* at 2. He cautioned, "Threats and coercion sometimes lead innocent people to confess, but even the calmest, most standardized interrogations can lead to a false confession or admission" and argues that the most important thing interrogators can do is record the interrogation effectively to preserve the record of what was said. *Id.* at 3.

d. ***Appleby 2013***: Dr. Appleby et al. published a study in 2013 in a peer-reviewed journal finding that false confessions can contain specific sensory details concerning the crime and their thoughts while committing it, but mock jurors found that confessions containing such details in elaborate narratives more convincing of the defendant's guilt. The authors designed two studies demonstrating these conclusions. In the first, the authors created a program that analyzed twenty false confessions resulting from the process of police interrogation where the confessor's factual innocence of a major crime had been established to a high degree of certainty and found that *all* of the confessions cited the time, location, visual details from the crime scene, and the victim's behavior. Sara Appleby et al., *Police-Induced Confessions: an Empirical Analysis of their Content and Impact*, 19 Psych. Crime & L. (No. 2) 111, 113-15 (2013). When the facts found in the confessor's false confession were verifiable, they were usually provided by the interrogators either purposefully or inadvertently. *Id.* at 118. Additionally, the vast majority identified co-perpetrators, witnesses, and other actors; described what the victim said, their appearance, and

mental state; and discussed their own reflections and motives. *Id.* at 115-16. The authors also found that 40% expressed remorse, and 25% even apologized for the crime they did not commit. *Id.* at 116.

The second study gave participants a summary of a criminal case and asked them to evaluate the evidence against the defendant by answering a series of questions. *Id.* at 120. The authors then gave participants confessions with the presence or absence of details, the presence or absence of an explanation for their motivations, and the presence or absence of an apology. *Id.* at 119. While 30% of the control group that did not receive a confession decided to convict based on the facts, the rest of the groups who received a confession convicted the defendant at a 95% rate and felt much more confident in their decision, especially when details were included. *Id.* at 121. The authors of the studies summarized their conclusions, saying “[a]lthough false confessions are drawn from innocent suspects lacking guilty knowledge, Study 1 showed that most are . . . rich and textured narratives that contain a broad range of details about how the crime was committed as well as an explanatory motive. Study 2 showed that these aspects of narrative confessions increase perceptions of their credibility and of the confessor’s guilt.” *Id.* at 124.

e. ***Hasel 2009***: In a 2009 peer-reviewed journal, Drs. Hasel and Kassin conducted an experiment to determine if a confession would alter eyewitness identification decisions. Lisa E. Hasel & Saul M. Kassin, *On the presumption of evidentiary independence: Can confessions corrupt eyewitness identifications?*, 20 Psychological Science 122-126 (2009). In the first phase of the experiment, 260

participants observed a purported theft. *Id.* at *2. The participants were then asked to view a photo lineup and report their confidence in any choice they made. *Id.* In the second phase of the experiment, participants who had made an identification in the first phase were told either that “(a) the person identified by the participant had confessed, (b) all suspects had adamantly denied involvement, (c) the suspect identified by the participant had adamantly denied involvement, or (d) a particular suspect—but not the one identified by the participant—had confessed”. *Id.* If the participant had not made an identification in the experiment’s first phase, the participant was told “(a) all suspects had adamantly denied involvement, (b) an unspecified suspect from the lineup had confessed, or (c) a specified suspect from the lineup had confessed”. *Id.* Ultimately 206 participants completed the second phase of the experiment. *Id.* at 3.

The results showed that “witnesses became most confident when the person they selected was said to have confessed and least confident when someone else confessed.” *Id.* at 3. For participants who had not initially identified a suspect from the line-up, “44.67% and 50% of those in the unspecified- and specified-confessor conditions, respectively, changed their decision and misidentified an innocent suspect In the specified-confessor condition, all of the new identifications were of the suspect who had allegedly confessed.” *Id.* at 4. The authors concluded, “As mock-jury studies demonstrate, the most obvious problem is that confessions corrupt decision makers through an array of cognitive confirmation biases. The research reported in this article points to an invisible and pernicious second possibility—that confessions

can corrupt the evidence itself.” *Id.*

f. ***Elaad 1994***: In a 1994 peer-reviewed journal, Dr. Elaad et al. published the results of two experiments demonstrating that polygraph examiners’ prior expectations had statistically significant effects on their professional judgment. Eitan Elaad et al., *The Effects of Prior Expectations and Outcome Knowledge on Polygraph Examiners’ Decisions*, 7 J. Behav. Decision Making 279, 282-83 (1994). The first experiment involved providing fourteen real-life criminal polygraph records that had yielded inconclusive data to ten experienced polygraph examiners. Before providing the records, the study’s authors divided the records into two groups of seven such that the experts received the first group of records with accompanying information that the examinee ultimately confessed to the crime, while they received the second group with accompanying information that someone other than the examinee had confessed. *Id.* at 283. The authors found that “outcome knowledge affected the examiners in their scoring”; examiners evaluating examinees they believed were guilty consistently found greater deception than the examiners believing each that same individual record was for an innocent examinee. *Id.* at 284-85. “Moreover, prior expectations affected both experienced and inexperienced examiners.” *Id.* at 285.

The second experiment was similar in every respect except that it used conclusive instead of inconclusive polygraph records. The authors found no meaningful outcome bias effect, implying that outside knowledge has a stronger effect in difficult cases. *Id.* at 287-88. The authors explicitly note that “effects of prior expectations on human judgment may extend to other situations where experts are

required to make judgments and predictions on the basis of various tools.” *Id.* at 290.

g. **Dror 2006:** In a 2006 peer-reviewed journal, Drs. Dror and Charlton found that fingerprint examiners that are aware of biasing contextual information are more likely to make inaccurate assessments of whether latent prints match known prints. Itiel Dror & David Charlton, *Why Experts Make Errors*, 56:2 J. Forensic Identification 600, 608 (2006). In their experiment, the authors presented six expert latent fingerprint examiners from an international pool of experts with fingerprints taken from real criminal cases, half of which had been previously judged as matches (individualizations) and half of which had been judged as not matches (exclusions). “Each of the expert participants was not only highly experienced, but was highly trained, certified by a nationally recognized independent authority, and had successfully completed proficiency testing.” *Id.* at 606. Each expert was asked to conduct 8 examinations for a total of 48 examinations. *Id.* at 610.

After each expert made their first conclusion about whether the latent fingerprint was an individualization or exclusion, the same experts were re-presented with the same prints as well as biasing contextual information. The kinds of biasing information that were given to the experts included “that the ‘suspect confessed to the crime,’” suggesting that the prints were an individualization despite having been judged by that same expert to be an exclusion. The study found that two-thirds of the experts made inconsistent decisions. *Id.* at 610. Such inconsistencies were spread evenly among the participants, and they were more common when experts were making difficult comparisons. *Id.* at 610-611. The authors concluded, “Our data

demonstrate that fingerprint experts were vulnerable to biasing information when they were presented within relatively routine day-to-day contexts, such as corroborative (or conflicting) evidence of confession to the crime. Thus, contextual information does not need to be extreme and unique to influence experts in their fingerprint examination and judgement.” *Id.* at 612.

CONCLUSION

For the foregoing reasons, the Court should find that Dr. Cutler’s proposed testimony is based on sufficient facts or data, is the product of reliable principles and methods, and reflects a reliable application of the principles and methods to the facts of the case. *See* Fed. R. Evid. 702(b-d). Mr. Al-Marimi further asks the Court to withhold a finding under Fed. R. Evid. 702(a) that Dr. Cutler’s testimony “will help the trier of fact to understand the evidence or to determine a fact in issue” until a more detailed factual record is laid at trial.

Respectfully submitted,
ABU AGILA MOHAMMAD
MAS’UD KHEIR AL-MARIMI

By: _____/s/_____
 Whitney E.C. Minter
 Va. Bar # 47193
 Brooke Sealy Rupert
 Va. Bar #79729
 Assistant Federal Public Defender
 Attorney for Mr. Al-Marimi
 1650 King Street, Suite 500
 Alexandria, Virginia 22314
 (703) 600-0855 (telephone)
 (703) 600-0880 (facsimile)
 Whitney_Minter@fd.org (email)

Laura Koenig

Va. Bar #86840
Assistant Federal Public Defender
Attorney for Mr. Al-Marimi
701 E. Broad Street, Suite 3600
Richmond, Virginia 23219
(804) 343-0800 (telephone)
(804) 648-5033 (facsimile)
Laura_Koenig@fd.org (email)