Volume 2, Issue 3

Editorial Board

Editor-in-Chief

Myles Frederick McLellan
Chair: Canadian Criminal Justice Assoc.: Policy Review Comm. Ottawa, Canada

Editorial Board

Ira Belkin
NYU School of Law, New York University, United States

Stephen Bindman
Faculty of Law, University of Ottawa, Canada

Gary Botting
Barrister, Vancouver, Canada

Kathryn M. Campbell
Department of Criminology, University of Ottawa, Canada

Kimberly Cook
Department of Sociology and Criminology, University of North Carolina Wilmington, United States

Rachel Dioso-Villa
Griffith Criminology Institute & School of Criminology & Criminal Justice, Griffith University, Australia

Keith Findley
University of Wisconsin Law School, University of Wisconsin-Madison, United States

Jonathan Freedman
Psychology Department, University of Toronto, Canada

Maryanne Garry
School of Psychology, New Zealand Institute for Security and Crime Science
The University of Waikato, New Zealand

Gwladys Gilliéron
Faculty of Law, University of Zurich, Switzerland

Adam Gorski
Faculty of Law and Administration, Jagiellonian University, Poland

Jon Gould
School of Criminology and Criminal Justice and Sandra Day O'Connor College of Law
Arizona State University, United States

Stephanie Roberts Hartung
Northeastern University School of Law, Northeastern University, United States

Anat Horovitz
Faculty of Law, The Hebrew University of Jerusalem, Israel

Matthew Barry Johnson
John Jay College of Criminal Justice, City University of New York, United States

Luca Lupária
Department of Law, University of Rome III, Italy

Richard Leo
Law and Psychology, University of San Francisco, United States

Bruce MacFarlane
Barrister & Attorney, Winnipeg, Canada and Phoenix, United States

Carole McCartney
School of Law, Northumbria University, United Kingdom

Daniel Medwed
School of Law and School of Criminology and Criminal Justice Northeastern University, United States

Robert Norris
Department of Criminology, Law and Society, George Mason University, United States

Debra Parkes
Peter A. Allard School of Law, University of British Columbia, Canada

Hannah Quirk
The Dickson Poon School of Law, King's College London, United Kingdom

Arye Rattner
Sociology, Center for the Study of Crime, Law and Society, University of Haifa, Israel

Christopher Sherrin
Faculty of Law, Western University, Canada

Allison Redlich
Department of Criminology, Law and Society, George Mason University, United States

Oriola Sallavaci
School of Law, University of Essex, United Kingdom

Clive Walker
School of Law, University of Leeds, United Kingdom

Marvin Zalman
Criminal Justice Department, Wayne State University, United States

Student Editorial Board - The Lincoln Alexander School of Law at Ryerson University, Toronto, ON, Canada:

Jonathan Marun-Batista, Julia Bayne, Evan Brander, Tudor Gagea, Dylan Gervais, Lisa Kiraly, Safia Thompson

Volume 2, Issue 3 **Cited as (2021) 2:3 Wrongful Conv L Rev**

Table of Contents

Introduction

Learning Across Borders: An Introduction to the 2021 Innocence Network Conference Scholarship Panel Articles
Vanessa Meterko 171 - 172

Articles

How Trauma May Magnify Risk of Involuntary and False Confessions Among Adolescents
Hayley M. D. Cleary, Lucy A. Guarnera, Jeffrey Aaron, Megan Crane 173 - 204

The Language of Criminal Confessions: A Corpus Analysis of Confessions Presumed True vs. Proven False
Lucrezia Rizzelli, Saul M. Kassin, Tammy Gales 205 - 225

Still standing: Innocence work in England and Wales
Louise Hewitt, Claire McGourlay 226 - 239

"But I Wasn't There!" The Alibis of DNA Exonerees
Wendy P. Heath, Joshua R. Stein, Sabreen Afiouni 240 - 276

Student Papers

Innocent in the Dark: Toward a Duty to Preserve Biological Evidence in Chilean Criminal Justice
Víctor Beltrán-Román 277 - 304

A Critical Analysis of Post-Conviction Review in New South Wales, Australia
Rhanee Rego 305 - 347

Book Review

Wrongful Conviction in Sexual Assault: Stranger rape, acquaintance rape, and intra-familial child sexual assaults
(Mathew Barry Johnson)
Gethin Rees 348 - 351

Announcement: 2022 Student Awards

Esti Azizi, Víctor Beltrán-Román, Rhanee Rego 352

Learning Across Borders:
An Introduction to the 2021 Innocence Network Conference Scholarship Panel Articles

Vanessa Meterko
Interim Director of Science & Research
Innocence Project
New York, NY
U.S.A.

"Without community there is no liberation"
By Audre Lorde
.

This compelling issue of the *Wrongful Conviction Law Review* features a series of articles accepted as part of the Innocence Network's 2021 call for "innocence scholarship." The Innocence Network is a coalition of organizations dedicated to righting individual cases of wrongful conviction, supporting freed people in rebuilding their lives, and addressing systemic flaws in the criminal legal system to prevent future injustices. The Network also hosts an annual conference bringing together a diverse group of exonerated and freed people, their supporters, attorneys, and other stakeholders — including policy experts, researchers, journalists, and students. The innocence scholarship session provides an opportunity for academic experts and the Network community to connect, thereby encouraging practical research and informing data-driven legal, policy, and social work. Although the ongoing threat of Covid-19 prevented gathering in person this year, the work continues.

The coronavirus pandemic has impacted everyone, simultaneously highlighting our interconnectedness and exacerbating long-standing societal inequities. Successfully addressing this unprecedented global health and economic crisis requires dynamic scientific and public policy collaboration, and care for one another. The past twenty months have shown us the ways in which our fates are intertwined and how necessary it is to correct disparities in access to resources and fair treatment. The path forward is not unfamiliar to those who work to address and prevent wrongful convictions.

Each individual wrongful conviction reveals structural flaws in the criminal legal system. These flaws have the potential to impact us all but disproportionately harm already-marginalized groups, particularly Black people, Indigenous people, and communities of color more broadly. We can only approach true justice by recognizing our shared humanity, crafting solutions that center the people most affected and cooperating across geographic, political, and sectoral borders to achieve structural transformation.

With critical analyses from multiple international authors and research featuring interdisciplinary collaboration, these papers showcase interconnectedness at its best. Perspectives

from Australia, Chile, England, Wales, and the United States demonstrate the global reach of the innocence movement, while insights from the fields of criminal justice, law, linguistics, neuroscience, psychology, and public policy reveal the strength in collaboration.

As we in the Innocence Network have heard from client after client, it truly takes a village to pursue justice and find the truth. When advocates and scholars come together, led by the perseverance and perspectives of the wrongly convicted, we succeed. The number of people freed, laws passed, people educated and engaged is growing. The articles below are an invitation to learn across borders and disciplines and keep up the momentum of the movement.

How Trauma May Magnify Risk of Involuntary and False Confessions Among Adolescents

Hayley M. D. Cleary
Associate Professor of Criminal Justice and Public Policy
Wilder School of Government and Public Affairs
Virginia Commonwealth University
U.S.A

Lucy A. Guarnera
Assistant Professor of Psychiatry and Neurobehavioral Sciences
Institute of Law, Psychiatry, and Public Policy
University of Virginia School of Medicine
U.S.A

Jeffrey Aaron
Juvenile Justice & Behavioral Health Program Manager
Virginia Department of Behavioral Health and Developmental Services
Assistant Professor, University of Virginia School of Medicine
U.S.A

Megan Crane
Co-Director, Roderick & Solange MacArthur Justice Center, Missouri Office
Director, Wrongful Conviction Project
U.S.A

Empirical research on police interrogation has identified both personal and situational factors that increase criminal suspects' vulnerability to involuntary, unreliable, or false confessions. Although trauma exposure is a widely documented phenomenon known to affect adolescents' perceptions, judgments, and behaviors in a wide array of contexts (especially stressful contexts), trauma history remains largely unexamined by interrogation researchers and virtually ignored by the courts when analyzing a confession. This article argues that trauma may operate as an additional personal risk factor for involuntary and false confessions among adolescents by generating both additive and interactive effects beyond youths' general, developmentally driven vulnerabilities in police interrogations. First, we briefly review adolescent trauma symptomatology, emphasizing the heterogeneity of adolescents' responses to trauma. Next, using Leo and Drizin's (2010) "Three Errors" framework of police-induced false confessions, we systematically apply clinical findings to each of the three police errors—misclassification, coercion, and contamination—to outline the psychological mechanisms through which adolescents with trauma histories may be at increased risk for making involuntary or unreliable statements to police. Finally, we offer considerations for interrogation research, clinical forensic practice, police practices, and courtroom procedures that could deepen our understanding of

trauma's role in the interrogation room, improve the integrity of investigative and adjudicatory processes, and ultimately promote justice for adolescent suspects with trauma exposure.

I. Introduction
II. Purpose and Scope of the Present Article
III. An Overview of Adolescent Trauma Responses
IV. The "Three Errors" as Framework for Adolescents' Trauma-Related Vulnerabilities in Police Interrogations
A. How Trauma Can Magnify Adolescent Suspects' Vulnerability to (Mis)classification
B. How Trauma Can Magnify Adolescent Suspects' Vulnerability to Coercion
C. How Trauma Can Magnify Adolescent Suspects' Vulnerability to Contamination
V. Trauma Symptomatology: Another Dispositional Risk Factor?
VI. Implications for Psychological Research
VII. Considerations for Law, Policy, and Practice
A. Courtroom Considerations
B. Forensic Evaluation Considerations
C. Law Enforcement Considerations
D. Interrogation Policy Considerations
VIII. Conclusion

I Introduction

Trauma exposure and posttraumatic symptomatology are tragically common among youth involved in the U.S. juvenile justice system. Surveys of justice-involved youth demonstrate that more than 90% are exposed to at least one traumatic event[1] in their life and that exposure to multiple lifetime traumas is the norm (Abram et al., 2013; Dierkhising et al., 2013). About two-thirds of justice-involved youth report early trauma exposure (within the first five years of their lives), with about one-third reporting exposure to multiple, varied types of trauma each year into adolescence (Dierkhising et al., 2013). While justice-involved youth report exposure to many different types of traumas, exposure to violence is particularly common among these youth as compared to community samples (Abram et al., 2013; Dierkhising et al., 2013). For example, in a sample of 100 justice-involved girls, 70 had witnessed a violent crime, 51 had witnessed domestic violence, 50 had experienced sexual abuse, 49 had experienced physical abuse, and 32 had been the victim of a violent crime (Dixon et al., 2005). The likelihood of trauma-related disorders such as posttraumatic stress disorder (PTSD) increases with repeated trauma exposure, and interpersonal traumas such as violent victimization have the highest contingent risk of PTSD (Kilpatrick et al., 2003). Thus, it is unsurprising that justice-involved youth demonstrate elevated

[1] While "traumatic event" has been defined differently at different times and by different groups, the current definition according to the DSM-5 limits trauma to "exposure to actual or threatened death, serious injury, or sexual violence." This exposure can include directly experiencing the event, witnessing the event, learning about the event occurring to a close family member or close friend, or experiencing repeated or extreme exposure to aversive details of traumatic events. See Dalenberg et al. (2017) for more information on defining trauma.

rates of trauma symptomatology. While estimates vary based on population and methodology, most research indicates that about 10% to 50% of justice-involved youth meet criteria for current or recent PTSD, with PTSD rates higher among females than males (Abrantes et al., 2005; Abram et al., 2013; Cauffman et al., 1998; Dierkhising et al., 2013; Dixon et al., 2005; Wood et al., 2002). This is compared to a 3-6% prevalence rate of current or recent PTSD in community samples of youth (Kilpatrick et al., 2003).

Given near-universal trauma exposure and elevated PTSD rates among justice-involved youth, the juvenile justice system has become increasingly aware that understanding trauma history and symptomatology is critical to understanding system-involved youths' behaviors, and that failing to do so can lead to potentially catastrophic missteps. Trauma-informed approaches now represent expected or emerging practice standards in the juvenile justice system (Jennings, 2008) and related domains such as juvenile courts (Stoffel et al., 2019), legal representation (American Bar Association, 2018), and pediatric medicine (Marsac et al., 2016). Trauma exposure is recognized not only as a cause of mental health problems but also as an influence on physical health outcomes (Holman et al., 2016), likelihood of victimization (Whitfield et al., 2003), and behavior generally (Felitti et al., 1998). Further, neuroscience research continues to reveal the impact of trauma on brain development and functioning (DeBellis & Zisk, 2014).

At the same time, the problem of coerced, unreliable, and false[2] confessions has pervaded both the scholarly literature and the national consciousness. Survey research conducted in Europe indicates that up to 14% of interrogated youth report making a false confession and that the risk of false confession increases the more often the youth has been interrogated by police (Gudjonsson et al., 2009b). Multiplying this figure by the approximately 700,000 juveniles arrested annually in the U.S. (Puzzanchera, 2021) illustrates the potential scope of the problem. Further, interrogation research has explicated both dispositional and situational factors that heighten criminal suspects' vulnerability to police coercion; in particular, adolescents as a class are more vulnerable to coerced and false confessions due to their developmental immaturity (Kassin et al., 2010; Owen-Kostelnik et al., 2006). Despite this well-supported and widely agreed-upon scientific finding (Kassin et al., 2018), American police continue to use interrogation tactics designed for adults with adolescent suspects (Cleary & Warner, 2016). Moreover, laypeople tend to view adolescence as a comparatively weak contributing factor to false confessions and underestimate the reliability of the scientific evidence in this area (Alceste et al., 2020; Mindthoff et al., 2018). Thus, the scientific realities of juvenile false confessions have yet to fully permeate real-world interrogation practice or the broader public consciousness, which partially explains stagnant policies in this area and poses serious implications for adolescents facing criminal adjudication.

Some correlational research suggests that these two seemingly disparate issues of widespread trauma exposure among justice-involved youth and false or involuntary juvenile

[2] Numerous conceptually overlapping terms appear in the literature. This article uses the term *coerced* or *involuntary* confession to mean incriminating statements made in response to external pressures instead of a suspect's own free will. We refer to *false* confessions as a suspect confessing to a crime they did not actually commit, which may happen for a variety of reasons (Kassin, 2008). We use the term *unreliable* confession to mean a confession that may contain erroneous details and is not completely accurate or trustworthy.

confessions may in fact be related. To date, studies by two research groups have begun to investigate a potential association between (a) trauma exposure or its correlates and (b) false or coerced confessions or related constructs, such as interrogative suggestibility and compliance. First, Gudjonsson and colleagues have repeatedly found associations between self-reported negative life events and self-reported false confessions among large community samples of European (primarily Icelandic) adolescents. For example, Gudjonsson et al. (2009a) found that a history of sexual abuse, witnessing violence, and death of a parent or sibling was associated with self-reported false confession, as did (2009b) self-reported history of having been attacked and bullied (boys and girls) and sexually abused (boys only). Second, Drake and colleagues (e.g., 2008, 2015) have repeatedly found associations between negative life events and interrogative suggestibility (as measured in the laboratory by the Gudjonsson Suggestibility Scales) among community samples of British adults. These parallel lines of research suggest a connection between trauma exposure and negative interrogation outcomes, but the correlational findings are presently unable to shed light on causality or potential causal mechanisms.

II Purpose and Scope of the Present Article

This article argues that trauma history is a poorly understood, yet critically important, risk factor for involuntary and false confessions among adolescents that can generate additive and interactive effects beyond youths' general, developmentally driven vulnerabilities in police interrogations (Cleary, 2017). The article builds on foundational research examining very different aspects of this problem. For example, we know that adolescents are overrepresented in documented cases of false confessions (Drizin & Leo, 2004). We know that youths' psychosocial immaturity impairs their perceptions and decision-making during interrogations (Grisso et al., 2003). We know that childhood trauma is extremely common among the justice-involved youth population (Abram et al., 2013). We know a correlation exists between trauma exposure and self-reported false confessions in youth (Gudjonsson et al., 2009a). Finally, we know that trauma exposure can influence individuals' self-regulatory skills, social judgment and interactions, and information processing abilities (MacDonald et al., 2011)—skills that are essential to navigating a stressful interrogation interaction (Davis & Leo, 2012). Our goal in this article is to integrate these existing disparate findings from clinical psychology, developmental neuroscience, interrogation science, and legal practice to propose specific psychological mechanisms by which trauma responses—on their own and via interaction with other developmental vulnerabilities—may increase youths' susceptibility to coercion, decrease the reliability of statements made during a high-pressure interrogation, and ultimately increase the risk of both involuntary and false confessions. As Madon et al. (2012) observed, there is abundant scholarship on interrogation practices, but "theoretical understanding of the underlying psychological processes that operate during police interrogation has not progressed at the same rate" (p. 13). A deeper understanding of the role of trauma symptomatology in the juvenile interrogation room could expand interrogation research, inform police practice, and support legal professionals who litigate juvenile confessions in the courtroom.

Before proceeding further, we pause here to define the scope of this article. Our goal is to expand on existing correlational findings by proposing specific causal mechanisms by which trauma symptomatology might manifest in the interrogation room and heighten the risk of an involuntary or false confession from an adolescent. Although the ideas presented in this paper are

grounded in the broader research literature, the mechanisms we propose are currently untested in the context of juvenile interrogations. Second, although false confessions and subsequent wrongful convictions are an undeniable legal system failure, we do not confine our discussion to the singular outcome of false confessions; we consider broadly the ways in which trauma responses can generally decrease the voluntariness of youths' statements in the interrogation room. U.S. courts require that confessions be given freely and voluntarily in order to be admissible in court (*Brown v. Mississippi*, 1936). Thus, even youths' true confessions are concerning if they are a product of coercion. While not all interrogations are coercive, American approaches to interrogation typically involve confrontation and manipulation (Cleary & Warner, 2016; Kassin et al., 2010) which have clear implications for voluntariness of youth suspects' statements. In addition, we consider trauma's impact on the reliability of youths' confessions, in recognition that unreliable confessions have limited or no evidentiary value, even if a court does not conclude they are false. Finally, we limit our discussion to trauma responses among *adolescent* suspects subjected to police interrogation. Though we acknowledge that trauma symptomatology is relevant to adult suspects as well, trauma can exacerbate developmentally driven vulnerabilities in unique ways (Fairbank et al., 2014). In short, adolescents are already among the most vulnerable populations to face police interrogation, and trauma effects may weaken those defenses even further. In the next section, we provide a brief clinical overview of trauma symptomatology in adolescents as a foundation for this discussion.

III An Overview of Adolescent Trauma Responses

Adolescent responses to trauma vary greatly and can range from the absence of mental health symptoms and even personal growth to overwhelming distress and incapacitation (Levine et al., 2008). When psychological symptoms are present, they may take many forms, including seemingly contradictory ones (e.g., emotional numbing versus emotional reactivity). Thus, to describe the "trauma response" is to acknowledge a broad array of possible behavioral, cognitive, emotional, and physiological reactions. Given this diversity, the Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM–5; American Psychiatric Association, 2013) formulation of PTSD is a useful conceptual starting place, as its four symptom clusters describe common responses to traumatic stressors in many cultures and across many trauma types, even among adolescents who do not manifest diagnosable PTSD (Copeland et al., 2007; Hinton & Lewis-Fernández, 2011). Those symptom clusters include (a) intrusions, (b) avoidance, (c) negative alterations in cognition and mood, and (d) alterations in arousal or reactivity.

A posttraumatic response commonly includes fluctuation between re-experiencing the event (intrusions) and efforts to distance oneself from the event (avoidance). An adolescent with trauma exposure may experience intrusive memories of the traumatic event, psychological distress, and physiological activation (e.g., heart palpitations, sweating, dizziness) when remembering or encountering reminders of the event. Thus, the adolescent may strive to forestall this distress by avoiding memories or external reminders of the trauma (i.e., people, places, objects, smells). In a relatively adaptive response to trauma, these disparate reactions resolve with time as the individual recovers (Cook et al., 2005). However, in persons with maladaptive trauma responses, that resolution does not occur and posttraumatic symptoms—which can include intense, dramatic expressions such as nightmares or flashbacks—may persist for years (Kessler et al., 1995).

Negative alterations in cognition and mood, the next symptom cluster, include significantly distorted perceptions, heightened distress, and negative emotional states that may be difficult for others to understand. For example, an adolescent may come to think others are untrustworthy, believe they are responsible for the traumatic event, and maintain that their future is hopeless – reactions that may seem logical but can lead to significant distress and functional impairment when severe and long-lasting. Shame can be particularly debilitating for adolescents given their preoccupation with others' perceptions of them (Habib & Labruna, 2011).

The final symptom cluster involves alterations in arousal or reactivity. Because affected adolescents have encountered horrifying or life-threatening situations in the past, they may experience a persistent perception of heightened threat (Hayes et al., 2012). Overactive physiological reactivity to threat can result in generalized symptoms such as poor sleep, irritability, or difficulty concentrating. Other symptoms (e.g., hypervigilance, recklessness) are particularly common during an emotionally activating circumstance – perhaps an interrogation – in which the adolescent perceives an acute threat. In adolescents, this symptom cluster may present as inattention and hyperactivity that impairs cognitive abilities and decreases capacity to attend to and effectively process information (Habib & Labruna, 2011).

In general, many youth experience these kinds of symptoms in the immediate aftermath (days or weeks) after a traumatic stressor – a response known as an acute stress reaction – while only a minority go on to experience a prolonged, impairing mental health reaction like PTSD (Copeland et al., 2007). Different types of traumatic events carry different conditional risks of trauma-related psychiatric problems (Luthra et al., 2009), but as one example, Zatzick et al. (2006) found that 42% of a sample of adolescents hospitalized with a traumatic injury screened positive for PTSD during the baseline interview (an average of about 12 days post-injury), while only 19% screened positive for PTSD at the 12-month follow-up. Nonetheless, even for the majority of youth who do not develop PTSD and for whom trauma responses abate to some degree over time, the effects of trauma exposure may linger and impact functioning even in the absence of a full-blown clinical syndrome (Cook et al., 2005; Giaconia et al., 1995).

In some cases, the crime being investigated may qualify as a traumatic event for the juvenile, meaning the youth may be particularly likely to experience posttraumatic symptoms during an interrogation conducted just hours to days after the event (Bryant et al., 2011). For example, 14-year-old Michael Crowe was interrogated as suspect shortly after his younger sister had been found stabbed to death in their home (Drizin & Colgan, 2004). In other cases, youth experiencing ongoing abuse or exposure to domestic violence (for example) may have very recently been exposed to a traumatic event prior to an interrogation, prompting an acute stress reaction. However, as PTSD or other severe trauma reactions among adolescents frequently persist for years following the event (Walsh et al., 2012), even youth for whom the traumatic event(s) in question are more distal may still be experiencing posttraumatic symptoms at the time of an interrogation. Finally, the interrogation experience itself may be traumatic and trigger PTSD symptoms. For example, one study found that youth who were stopped by police more frequently were more likely to report posttraumatic stress symptoms (Jackson et al., 2019).

While we argue that the PTSD symptom clusters offer a useful framework for evaluating trauma in the interrogation context, we underscore here that we are not limiting our application of

trauma impact to only those adolescents formally diagnosed with PTSD, for multiple reasons. First, many youth in the juvenile justice who would meet criteria for a trauma-related psychiatric disorder have never been properly assessed and diagnosed. Second, subsyndromal PTSD – that is, posttraumatic symptomatology that falls below the threshold required for a PTSD diagnosis – is still associated with significant impairment (Giaconia et al., 1995). Third, many adolescents with trauma exposure experience functional impairments not captured by a diagnostic category, including behavioral and affective dysregulation, school problems, somatic complaints, identity problems, and disruptions of important relationships (Cook et al., 2005). Finally, most PTSD research has been conducted with North American and European populations, and while there is considerable overlap in symptomatology across cultures (Hinton & Lewis-Fernández, 2011), research with global populations reveals different symptom patterns and idioms of distress (e.g., predominance of depression, somatic complaints, and anxious distress; Michalopoulos et al., 2020; Rasmussen et al., 2014). Thus, limiting discussions of posttraumatic reactions solely to adolescents with formal PTSD diagnoses is likely to exclude many adolescents, particularly the immigrant youth who comprise a growing subset of the system-involved youth population (Abram, 2013).

In sum, youth with posttraumatic reactions do not check their symptomology at the interrogation room door; these diverse cognitive, physiological, and behavioral responses to trauma are likely to follow many adolescent suspects into the interrogation room. In the following sections, we employ Leo and Drizin's (2010) "Three Errors" framework of police-induced false confessions to illustrate how adolescent trauma can manifest at each stage of the interrogation process and could exacerbate the likelihood of an involuntary or false confession.

IV The "Three Errors" as a Framework for Adolescents' Trauma-Related Vulnerabilities in Police Interrogations

Leo and Drizin (2010) offer a framework for understanding the processes by which police-induced false confessions occur. They outline "three sequential errors that occur in the social production of every false confession" (p. 13): (a) the *misclassification error*, in which police incorrectly decide that an innocent suspect is guilty; (b) the *coercion error,* in which police apply accusatory, psychologically manipulative interrogation tactics to coerce suspects into confessing; and (c) the *contamination error*, in which police (inadvertently or intentionally) feed crime-specific details to the suspect that become incorporated into the suspect's confession. In the sections that follow, we explain each error and outline the psychological mechanisms through which trauma can exacerbate youths' risk of falling victim to that error.

The Three Errors framework is useful for several reasons. First, it characterizes the process of coerced and false confessions in a chronological fashion. All accusatorial interrogations (in their most basic form) have a beginning, middle, and end; they begin with the interrogators' presumption of the suspect's guilt, next involve various methods of psychological pressure to obtain a confession, then conclude – post-confession – with constructing a detailed narrative of the suspect's criminal acts and motives. The Three Errors framework highlights the police interrogation tactics that are most concerning, from a trauma response perspective, at each stage of the interrogation. This framework is also useful in its generality; it is not specific to any one school of interrogation. Instead, it characterizes at a high level the mistaken assumptions, trickery,

and psychological manipulation involved in all police-induced false confessions. Finally, this framework reflects – in our experience, and the extensive experience of the scholars who developed it – what coercive interrogations actually look like. We have seen remarkably similar patterns of misclassification, coercion, and contamination in our psychological and legal studies and practices. Irrespective of any single training modality, we are concerned with what happens in actual interrogations and how juveniles with trauma exposure are at heightened risk for unjust outcomes. With these considerations in mind, this article addresses the ways in which trauma symptomatology can exacerbate the vulnerabilities youth suspects already bring into accusatorial interrogations (Cleary, 2017; Crane, 2017).

A. Trauma Can Magnify Adolescent Suspect's Vulnerability to (Mis)classification

The misclassification error occurs when police incorrectly attribute guilt to an innocent person. Leo and Drizin (2010) consider misclassification "both the first and the most consequential error police will make…because misclassifying innocent suspects is a necessary condition for all false confessions and wrongful convictions" (p. 13). Deciding a suspect is guilty represents a critical turning point in the investigative process because it signals a shift away from non-accusatory, factfinding questioning toward accusatory questioning designed to elicit incriminating evidence. That is, police do not intentionally "interrogate" innocent people; rather, they interrogate suspects whom they reasonably believe (via witness identification, crime scene investigation, etc.) are involved in the crime. The ultimate goal of an interrogation, then, is not to obtain investigative information but to elicit a confession (Kassin et al., 2010).

The central psychological miscalculation underlying this error is that interrogators believe they can differentiate innocent suspects from guilty ones by analyzing suspects' verbal responses, nonverbal and paralinguistic behaviors, and dispositions. Interrogation training programs explicitly teach this behavioral approach to lie detection (Leo & Drizin, 2010) and emphatically defend its efficacy (Horvath et al., 2008). Examples include Reid and Associates' Behavioral Analysis Interview (BAI; Inbau et al., 2013), the Forensic Assessment Interview (FAINT; Gordon & Fleisher, 2019), and kinesic interviewing (Walters, 2019). The general idea is that interrogators first ask neutral, irrelevant questions (e.g., demographic information, hobbies) to establish suspects' baseline response patterns. Then interrogators alternate between "investigative" (factfinding) and "behavior provoking" (accusatory) questions. According to behavioral analysis, if suspects' behaviors differ from the former to latter, they are being deceptive, which implies guilt. Although proponents of behavioral lie detection generally concede that no single behavior is diagnostic of truthfulness or deception, they maintain that analyzing behavioral patterns can reveal liars (Horvath at al., 2008; Inbau et al., 2013). Despite some evidence of training benefits, a robust scientific literature reveals large error rates in behavioral lie detection (Driskell, 2012; Hartwig & Bond, 2014).

Behavioral lie detection teaches that nonverbal behaviors such as slouching, gaze aversion, fidgeting, hand wringing, or repetitive head, foot, or leg movements can be indicators of deception (Inbau et al., 2013; Horvath et al., 2008). For example, the Reid Technique training manual asserts that "when a person lies, their fear of detection increases and they have a heightened awareness of how the investigator views them. Consequently, the suspect may inappropriately feel the need to improve their appearance by engaging in grooming behaviors such as picking at clothing or

inspecting fingernails (Inbau et al., 2013, pp. 130-131). "Deceptive" verbal and paralinguistic behaviors include vague or evasive responses, qualifying statements (e.g., *as far as I know*, *not really*), response latency, or terse responses. The Reid Technique asserts that liars "may mumble during a response or talk so quietly that the investigator has difficulty hearing the response" (Inbau et al., 2013, p. 119). Suspect attitudes are also purportedly diagnostic of deception; training programs claim that criminally involved suspects are more likely to appear guarded, defensive, uncooperative, or apathetic (Horvath et al., 2008).

Developmental psychologists have countered that adolescents readily demonstrate behaviors police may consider indicative of guilt, such as slouching or avoiding eye contact, particularly during an uncomfortable or unfamiliar situation like an interrogation by an adult authority figure (Cleary, 2017; Meyer & Reppucci, 2007). These tendencies may be exacerbated in adolescents with trauma symptoms. A disordered stress response system resulting from trauma may render adolescents prone to *overreact* or *underreact* to the stresses of the interrogation environment. Either of these contradictory trauma-related responses could create the appearance of guilt to interrogating officers. While it may seem confusing that trauma can produce such seemingly contradictory behavioral consequences, trauma-related symptomatology is diverse and factor analyses have consistently shown that different clusters of symptoms may predominate in different individuals depending on a variety of personal and contextual factors (Armour et al., 2012; Galatzer-Levy & Bryant, 2013).

Regarding *overreaction*, because adolescents with trauma symptoms are primed to expect danger, they may respond to perceived threats with heightened emotional and physiological responses that could make them appear guilty (Zhu et al., 2020). Adolescents with trauma symptoms may experience persistent negative emotional states such as fear, horror, or anger that are intensified in stressful environments (APA, 2013). In this state of heightened tension, an adolescent with trauma symptoms may display hypervigilance (e.g., constantly swiveling their head in the interrogation room to scan for perceived danger) or demonstrate an exaggerated startle response (e.g., jumping when an officer suddenly closes the door or raises their voice; APA, 2013). For an adolescent with trauma symptoms, such hypervigilance and hyperarousal are attempts at self-protection in what they perceive as an extremely dangerous world and may relate to psychophysiological responses not under their conscious control (Pole, 2007). To police, however, these actions may appear as overly jumpy behavior arising from a guilty conscience. "Tension reduction" activities intended to soothe or distract from this intense anxiety – such as foot-tapping or nail-picking (Briere et al., 2010) – may also be interpreted by police as suspicious self-grooming behaviors.

Distorted cognitions arising from trauma exposure may also prompt adolescents to overreact in the interrogation room in a manner seemingly indicative of guilt. Trauma exposure may lead to a lack of trust toward others as well global expectations of negative outcomes (Cox et al., 2014). These negative, distrustful cognitive appraisals could prompt particularly antagonistic responses to police (e.g., refusing offered snacks or other "friendly" overtures by officers) that may be viewed as suspicious. Further, adolescents with trauma symptoms tend to place excessive blame on themselves for their perceived role in negative events (i.e., "If only I had done X, Y wouldn't have happened"; Cox et al., 2014), which could create a highly emotional response to interrogative pressures that police interpret as a guilty demeanor. As one example, police

investigating the rape and murder of a 15-year-old in 1989 narrowed in on Jeffrey Deskovic, the girl's classmate, in part because 16-year-old Deskovic seemed "overly distraught" at the victim's death, even though he was not involved (Innocence Project, 2021).

These kinds of overreactions may be intensified if an adolescent perceives a trauma cue during the interrogation. A trauma cue is a reminder of a past trauma, including situations, places, people, conversations, sounds, smells, or even internal body states (like fear or tension) that bring to mind a prior traumatic event (Pineles et al., 2013). It is not difficult to imagine myriad ways in which trauma cues may manifest in the interrogation context. For an adolescent who experienced physical or sexual abuse by an adult male, being in close proximity to aggressive male police officers may be a trauma cue. For an adolescent who was confined to a cramped box truck during the immigration process, the small, closed interrogation room may be a trauma cue. For an adolescent whose family or community has experienced police mistreatment, simply being in a police station and interacting with police may be a trauma cue. Further, trauma cues need not be obviously connected to the traumatic event. For an adolescent with a history of violence exposure in any context, a loud noise, a photograph of a crime scene, or any perception of a threat to safety might be trauma cue. When confronted with trauma cues like these, adolescents may experience psychological distress, physiological reactions (such as shaking or nausea), intrusive memories, or even flashbacks[3] and may respond with dramatic, unexpected behaviors (Briere et al., 2005; Pole, 2007). Given that the interrogating officer is likely unaware of the youth's trauma history and the environmental factors serving as trauma cues, these anxious or erratic responses may have no easily discernible explanation besides guilt.

On the other side of the trauma response spectrum, adolescents with trauma histories may *underreact* to the threat of the interrogation room and thus be viewed as indifferent, apathetic, or insincere – which police may also perceive as indicating guilt. Emotional numbing is a common response to traumatic stress; in an attempt to dampen overwhelming negative feelings of fear or horror, the individual becomes unable to express the normal range of emotions, including positive emotions (Kerig et al., 2012). Likewise, adolescents with trauma exposure may experience feelings of detachment or estrangement from others, particularly following traumas with an interpersonal component, such as sexual assault, violence, or sudden death of a loved one (Kelley et al., 2009). Such adolescents may have difficulty forming typical emotional connections with others, including during the social situation comprising an interrogation. A detached, emotionally numb adolescent may be as equally unreactive to the interrogating officer's lighthearted banter as they are to descriptions of the violent crime being investigated, and police officers may view this perceived coldness with suspicion.

Adolescents with trauma histories may also display conditioned immobilization reactions ("freezing") in stressful situations, given that their physiological and hormonal reactions to threat have become ineffective and disorganized (Volchan et al., 2017). For example, an adolescent who has experienced chronic physical or sexual abuse may have learned that "fight" and "flight" are

[3] Flashbacks are dissociative reactions during which a person feels or acts as if the traumatic event were recurring (APA, 2013). For example, a youth experiencing a flashback of prior abuse may be observed to freeze, shake, cry out, or attempt to flee.

not possible, and so has learned to respond to threat by freezing to avoid injury (Thompson et al., 2014), which may come across as suspicious indifference.

Finally, adolescents with trauma symptoms may cope with the stressful interrogation situation via dissociation, an experience of disconnection from themselves or their surroundings (Carrion & Steiner, 2000). For example, an adolescent who is dissociating may feel like the interrogation is not real or feel like they are watching the interrogation happen to another person, as if they were watching a movie. Thus, dissociation can also produce blunted reactivity and disaffected behavior that may lead police to view the adolescent as guilty. While dissociation is relatively rare in adults with PTSD diagnoses, adolescents in the juvenile justice system report dissociation at extremely high rates, likely because they are frequently exposed to the kinds of longstanding interpersonal violence (e.g., sexual or physical abuse by a caregiver) most likely to result in dissociation (Kerig et al., 2016).

B. Trauma Can Magnify Adolescent Suspects' Vulnerability to Coercion

The goal of an interrogation is to secure a confession, and police use many different tactics to achieve that goal. Interrogation is stressful by design; the presumption is that creating a sufficient degree of psychological discomfort will overcome the suspect's resistance and they will eventually admit guilt. Virtually all interrogations that do not involve spontaneous confession will involve some form of active persuasion, even coercion. The courts' challenge lies in determining when active persuasion or coercion becomes so great that it has effectively overborn the will of the suspect, rendering the resultant confession involuntary.

Modern accusatory police interrogation is often described as a two-step process that first involves creating feelings of hopelessness and dejection in the suspect. Interrogators use psychologically manipulative techniques to convince suspects that their guilt is certain and their fate is all but sealed. Then, interrogators offer confession "as an expedient means of escape" from intolerable psychological pressures (Kassin et al., 2010, p. 7). As detailed below, adolescent suspects with trauma symptoms are likely to have decreased resiliency in the interrogation room; thus, their "breaking point" – the point at which they have become so hopeless that they will accept any escape offered by police – may come sooner and be achieved more easily by law enforcement.

Researchers have identified maximization, minimization, and police deception as especially powerful persuasion techniques (Kassin et al. 2010). Maximization techniques are designed to heighten suspects' anxiety, undermine their confidence that they can convince the interrogator they are not guilty, and simply "stress them out." Examples of maximization include accusing the suspect of lying, interrupting or dismissing their denials, emphasizing the severity of the alleged offense or its potential consequences, and invading the suspect's personal space. Minimization, by contrast, involves attempts to build suspects' trust and downplay the seriousness of the situation. Interrogators may offer moral justifications for the crime, blame the victim, or express sympathy with the suspect in the hopes of eliciting a confession.

Moreover, lying to suspects is a standard tactic in American police interrogation practice (Leo, 2008), and some police organizations vehemently maintain that it is a necessary, effective, and legally protected tool in their arsenal (Inbau et al., 2013), even as others are changing laws to

preclude such actions with youth (e.g., Illinois and Oregon recently banned police use of deception with juveniles). Deception can take many forms, the most serious of which is the false evidence ploy, in which interrogators present suspects with supposedly indisputable, but fabricated, evidence of their guilt (e.g., physical evidence such as blood or fingerprints; eyewitness evidence that someone identified them as the perpetrator; "scientific" evidence such as a failed polygraph) as a means to induce confession. In a similar approach called the "bluff tactic," investigators claim to have testable evidence without directly implicating the suspect (Perillo & Kassin, 2011).

Finally, environmental manipulation strategies are highly relevant to suspects with trauma. Modern police interrogation is built on the premise of custodial isolation; police are taught to remove suspects from familiar settings and separate them from support persons (Cleary & Warner, 2016; Inbau et al., 2013). These strategies are carefully orchestrated; for example, police may place juvenile suspects in the corner or against a wall (Cleary, 2014). Police may intentionally leave a suspect sitting alone in the interrogation room in order to heighten their anxiety before questioning even begins. Periods of prolonged detention can involve deprivation of food and sleep by virtue of their length alone, regardless of whether interrogators intentionally withhold these physical comforts as an interrogation strategy. Such physical and mental depletions can impair even psychologically healthy persons' capacities for self-regulation (Davis & Leo, 2012).

In sum, interrogators can coerce suspects to confess with a one-two punch: the intentional production of fear and stress, followed by the promotion of confession as the most expedient solution to end that fear and stress. Trauma responses may magnify suspects' vulnerability to each of these tactics, rendering them more likely to confess either falsely or involuntarily. While any suspect might reasonably be frightened at the prospect of being isolated and accused of a crime, we argue that for a traumatized youth, the experience of fear in a purposefully isolative and oppressive environment would likely be intensified, particularly when compounded by separation from sources of emotional support.

A normative fear response involves a cascade of physiological changes in the face of an acute threat, including activation of the sympathetic nervous system (i.e., "fight or flight" response) and the hypothalamic-pituitary-adrenal (HPA) axis, resulting in a sequence of hormonal and metabolic changes intended to promote survival (McLaughlin et al., 2014). For example, when facing what we appraise as a dangerous stressor, our heart rate, blood pressure, and respiration increase to facilitate explosive action intended to evade or neutralize the threat. Normally, these fear-induced physiological changes reverse after the acute threat has subsided, and the body returns to homeostasis. However, for youth with trauma exposure – particularly chronic exposure to abuse, violence, or other threats – these systems can become chronically activated, resulting in chronic physiological depletion and oversensitivity to environmental stressors (McLaughlin et al., 2014). For example, sympathetic nervous system activation can make the body feel excessively cold or overheated, rendering an adolescent suspect more disturbed by temperature manipulation in the interrogation room. Similarly, heightened physiological arousal after trauma frequently causes sleep disturbance (Charuvastra & Cloitre, 2009), such that youthful suspects with trauma exposure may be more affected by lengthy interrogations without rest.

Beyond an already heightened baseline level of arousal, trauma-related deregulation of the HPA axis can also cause exaggerated reactions to perceived threat – such as an interrogating officer

shouting at them, suggesting they will face years in prison, or presenting (false) evidence that they committed a heinous crime. These exaggerated reactions could render adolescents with trauma symptoms more susceptible to coercive police tactics like maximization and false evidence ploys. For example, children with trauma exposure identify angry faces more quickly and easily and demonstrate amplified neural responses to those angry faces (Pollak & Sinha, 2002). Translated to the courtroom context, a judge or jury viewing a videotaped confession may perceive interrogating officers as relatively benign, while the trauma-exposed adolescent may have perceived those officers as intensely angry and threatening. Additionally, this excessive fear response also degrades a youth's critical thinking abilities (DePrince et al., 2009) – Davis and Leo (2012) compare the effect to well-documented decrements in simple and complex cognition during military combat conditions – rendering youth less able to reason through false evidence ploys.

In general, the heightened fear and stress that youth with trauma symptoms likely experience in the interrogation room may also prime them to accede to minimization tactics, in which officers imply "this could all be over" if only they admit guilt. Beyond this, several specific posttraumatic responses may also render youth more vulnerable to minimization and thus more likely to confess, either falsely or involuntarily. First, avoidance is a hallmark response to traumatic events, since general stress reactivity and trauma cues can create distressing intrusive memories and physiological responses that an individual will take great lengths to avoid (APA, 2013). Thus, while the interrogation context is designed to be uncomfortable for all suspects in order to induce a confession, adolescents with a drive for avoidance may find the situation particularly intolerable and seek relief via confession.

Second, due to a chronically deregulated HPA axis, many youth with chronic trauma histories demonstrate excessively low levels of the stress hormone cortisol, and low cortisol is associated with impulsivity, carelessness, low harm avoidance, and insensitivity to punishment (Nader & Weems, 2011). This may help explain why recklessness is a common posttraumatic symptom that may be particularly relevant among adolescent trauma survivors (Pynoos et al., 2009). Although most prior research has demonstrated a link between adolescent trauma and reckless or delinquent behaviors such as unsafe sexual activity, self-injury, substance use, or risky driving (e.g., Layne et al., 2014), we argue that trauma-affected youth may also display recklessness that results in legal jeopardy – that is, reckless decisions that land them *in* the interrogation room (via *Miranda* waiver) or get them *out* of the interrogation room (via coerced or false confessions). Adolescents with trauma symptoms may respond to interrogative pressure by making reckless admissions (whether true or false) due to impaired abilities to detect risk, attempts to distract from upsetting thoughts and feelings, or desires to re-assert feelings of control and self-efficacy (see, generally, Kerig, 2019).

Finally, adolescents with trauma symptoms may be more susceptible to coercion due to increased compliance. Compliance, or the tendency to accede to requests or demands, is certainly relevant to interrogations because typical maximization techniques involve police repeatedly demanding that the suspect "tell the truth" and interrupting all denials or explanations. In correlational research with community adults, both Drake (2010) and Gudjonsson et al. (2011) reported associations between a history of negative life events and increased compliance. Gudjonsson et al. (2011) proposed that the association is mediated by an insecure attachment style, which is correlated with childhood maltreatment. Insecurely attached individuals may engage in

desperate attempts to win or retain approval of a respected other, leading them "to prioritize relationship preservation over self-protection" (Noll & Grych, 2011, p. 206) – including, perhaps, by confessing to an interrogating officer in order to win approval or avoid disapproval. A more straightforward explanation of the posited link between juvenile trauma impact and compliance may be that chronically abused children may have learned to respond to threat with "mechanistic compliance or resigned submission," absent other effective options to help them escape past abuse (Van Der Kolk, 2006, p. 7).

C. How Trauma Can Magnify Adolescent Suspects' Vulnerability to Contamination

Interrogations do not end the moment a suspect confesses. Once a suspect admits guilt, the interrogator endeavors to elicit a detailed narrative explaining the suspect's motives and actions. Police are trained that a mere "I did it" admission has less evidentiary value than one accompanied by a post-admission narrative that includes detailed information about where, when, how, and why the suspect committed the crime (Inbau et al., 2013). Confession contamination occurs when non-public information about the crime – details known only to police and the true perpetrator – are provided to the suspect and then become incorporated into the suspect's eventual confession. Scholars and police officials universally agree that confession contamination is a negative investigative outcome that should be avoided (Garrett, 2015; Inbau et al., 2013).

Contamination can occur if the suspect has consciously or unconsciously consumed details about the case from local media, community gossip, or interrogators themselves (Leo & Drizin, 2010). For example, police may present suspects with anything from basic facts of the incident (e.g., location, time of day) to crime scene photos, murder weapons, or surveillance footage. An interrogator may share such information as part of an effort to assure a suspect that police already know about and can prove the suspect's involvement in the crime. When the suspect is actually innocent, however, it has the unintended effect of feeding them crime-specific details, which may be later incorporated into a false narrative. In their eagerness to document a thorough confession narrative, interrogators may inadvertently communicate case information as they attempt to elicit missing details from a suspect's account or document what they believe will yield a narrative most likely to lead to a finding of guilt (Leo, 2013). Interrogators often adopt a question-and-answer format for the confession narrative, especially if they are using a recording device to document the confession. As during the interrogation itself, interrogators eliciting the confession narrative may use leading or suggestive questions and/or negative feedback in their attempt to elicit a story that is consistent with their expectations of the suspect's guilt (Leo & Drizin, 2010). As part of minimization strategies earlier in the interrogation, police may have already suggested motives or explanations for the crime – often ones that are somewhat morally palatable or relatable – that cognitively depleted suspects may readily adopt, even if they are inaccurate.

All of the potential trauma-related mechanisms discussed in relation to coercion also apply to contamination if an adolescent knowingly makes false statements about crime details in an attempt to accelerate their release or please interrogators. These mechanisms may become increasingly powerful by the time interrogators press the juvenile suspect for a post-admission narrative, which typically occurs at the end of an active interrogation or custodial detention period that could span many hours or even days. Davis and Leo (2012) argue that a suspect's abilities to resist the powerful pressures of the interrogation context decrease over time as the individual's

self-regulatory abilities deteriorate, a process they term "interrogation-related regulatory decline." Cognitively-depleted suspects become less able to persevere in the interrogation context over time as they gradually lose the abilities to focus on relevant information, ignore irrelevant information, access information from long-term memory, and hold information in working memory (Davis & Leo, 2012).

These domains overlap with the cognitive deficits commonly experienced by adolescents impacted by trauma, suggesting that these youth may be particularly vulnerable to interrogation-related regulatory decline. Available evidence indicates that adolescents impacted by trauma experience impairments in attention, abstract reasoning, working memory, processing speed, inhibitory control, and academic abilities (MacDonald et al., 2011). Individuals with depleted self-regulatory abilities become more passive and likely to acquiesce to the "default" option rather than exert the mental effort necessary to actively challenge that default (Baumeister et al., 2008). Thus, by the end of an exhausting, emotionally fraught interrogation, adolescents with trauma symptoms may become even more likely to acquiesce to details suggested by interrogators during the post-confession narrative (e.g., "And then you grabbed the knife?" "Yes." "And then you stabbed her three times?" "Yes.").

Confession contamination can also operate outside an adolescent suspect's conscious awareness or volition via interrogative suggestibility, the extent to which individuals "come to accept messages communicated during formal questioning" (Gudjonsson & Clark, 1986, p. 84). If an adolescent comes to believe, to some degree, the offense details suggested by the interrogator or other external sources, they may offer what is known as an internalized or persuaded false confession (Kassin et al., 2010). While internalized false confessions are probably far less common than compliant false confessions (Sigurdsson & Gudjonsson, 1996), adolescents with trauma symptoms may be at particular risk of this type of false admission. Correlational laboratory studies show that the more traumatic events a youth has experienced, the more likely they are to alter the details of their recalled account in response to the experimenter's leading questions and negative feedback (e.g., Drake et al., 2008).

Cognitive deficits associated with trauma exposure may explain the link between adolescents' trauma symptoms and interrogative suggestibility, whether youth are offering a fully internalized false confession or incorporating false details into a true confession (i.e., an unreliable confession). When an adolescent suspect has poor memory or doubts their own memory, they may be more prone to yield to leading questions and negative feedback (Gudjonsson & Clark, 1986). This may be particularly true of adolescents with trauma symptoms, who may experience ongoing deficits in autobiographical and prospective memory (Dalgleish et al., 2005). Indeed, if the event under investigation was itself traumatic for the adolescent (e.g., death of a family member; exposure to an armed robbery, shooting, or fatal accident), dissociative amnesia can render the youth unable to remember important aspects of the incident (Choi et al., 2017). Other research has linked ongoing dissociative symptoms – which are common among system-involved adolescents, and which can also disrupt memory – to suggestibility (Chae et al., 2011; Eisen et al., 2007). Unsurprisingly, memory impairment worsens when an individual is experiencing dysfunctional, trauma-related cognitions (Schweizer & Dalgleish, 2011), which may be particularly likely to occur in a threatening interrogation context replete with potential trauma cues. Further, trauma-related failures in attention, memory, and inhibition of automatic responses may impair adolescents' ability to actively monitor the source of crime details to which they have been

exposed, thus rendering them more likely to offer contaminated details as their own (Henkel & Coffman, 2004).

V Trauma Symptomatology: Another Dispositional Risk Factor?

Thus far, we have theorized mechanisms by which adolescents' trauma responses can render them vulnerable to involuntary or false confessions via "three errors" of police interrogation: misclassification, coercion, and contamination. We also argue that trauma impact can introduce additive or interactive effects on interrogation vulnerability when combined with other dispositional risk factors for coerced or false confessions that have already been identified in the literature. Here, we briefly hypothesize how trauma symptomatology could feasibly interact with three of the most well-known dispositional risk factors – adolescence, cognitive impairment, and psychopathology[4] – in hopes of inspiring new research in this area. The high likelihood of overlapping dispositional risk factors (including potential trauma symptomatology) among system-involved youth renders additional investigation extremely important.

Regarding adolescence, abundant scholarship has linked adolescents' psychosocial immaturity to their poor legal decision making, including interrogation decision making (Cleary, 2017; Goldstein et al., 2018). While a detailed discussion of developmental immaturity is beyond the scope of this article, we note here that, generally, adolescents exhibit a broad array of developmentally based differences from adults in term of their functioning in challenging circumstances. This includes comparatively poor judgment, problem-solving, and logical reasoning under emotional stress; impulsivity in thinking and behavior; immaturity and lack of real-world experience; vulnerability to pressures from peers or authority figures; and limited appreciation of long-term consequences despite the cognitive capacity to understand (National Academies of Sciences, Engineering, and Medicine, 2019). Although individual differences in psychosocial maturity exist, an extraordinary body of developmental science demonstrates that psychosocial immaturity is the norm during adolescence and that immaturity manifests in legally relevant ways (see, generally, Steinberg, 2017). Specifically, large-scale research with serious juvenile offenders shows that psychosocial immaturity in this population persists to the mid-twenties and that youth who continued engaging in antisocial behavior throughout this developmental period were less psychosocially mature than youth who desisted from antisocial behavior (Monahan et al., 2013). Thus, an adolescent suspect impacted by trauma may then be additionally challenged, as both developmental status and trauma-related emotions and cognitions create vulnerabilities in the interrogation room. This compounded vulnerability may well be the rule rather than the exception; more than 90% of system-involved youth have histories of trauma exposure and up to half of these youth demonstrate posttraumatic symptoms that are severe enough to meet formal diagnostic criteria for PTSD (Dierkhising et al., 2013).

Trauma symptomatology may also interact with intellectual disability or cognitive impairment to increase adolescents' vulnerability to involuntary and false confessions. Suspects

[4] While dispositional risk factors such as adolescence, cognitive impairment, and psychopathology are perhaps the best understood at the moment (Kassin et al., 2010), emerging work identifies other individual correlates of false confessions (Gudjonsson, 2021; Gudjonsson, 2018).

with limited intellectual capacity are already less able to meet the cognitive demands of the interrogation context, recognize the underlying motivation of an investigator, reason effectively when emotionally activated, critically evaluate false evidence ploys, or consider future consequences of immediate decision-making. Given that youth with intellectual disability are at high risk for physical abuse, sexual abuse, and other kinds of maltreatment (McDonnell et al., 2019), adolescents with cognitive impairment may be particularly likely to experience trauma and its consequences. Youth with intellectual disability are also overrepresented in the juvenile justice system (Foley, 2001). For youth with both intellectual disability and trauma symptomatology, the trauma-related cognitive deficits reviewed above may overlap with existing cognitive limitations, thus amplifying the vulnerability of these youth in the interrogation room.

Finally, a variety of forms of psychopathology have been linked to false confession (Kassin et al., 2010). Some of the same cognitive and behavioral challenges that characterize many psychiatric disorders generally – such as perceptual distortions, poor impulse control, impaired self-regulation, and reactivity to stress – are the same challenges that impair interrogation decision making (Kassin et al., 2010). As discussed, trauma symptomatology can result in impairment in these same domains, creating compounded risk of false or involuntary confessions for youth with comorbid trauma symptoms and other psychiatric disorders. Again, the likelihood of overlapping vulnerabilities is high, as system-involved youth have elevated rates of mental disorder generally (Fazel et al., 2008), and the vast majority of youth with trauma symptoms also qualify for another psychiatric diagnosis (Copeland et al., 2007; Kilpatrick et al., 2003).

VI Implications for Psychological Research

The hypotheses advanced in this article suggest multiple avenues of research to elucidate the role of adolescent trauma symptomatology during interrogations. At the very least, trauma history and symptomatology can be incorporated into existing confession research paradigms. Archival studies can code for indicators of trauma history and symptoms as they already have for intellectual disabilities (Schatz, 2018) and psychopathology (Garrett, 2015). Self-report studies with adolescents can incorporate trauma history and symptoms in questionnaires or interviews, as can lab studies examining self-regulatory abilities during interrogations (e.g., Guyll et al., 2013). Additionally, following the pioneering work of Gudjonsson and colleagues, population-based research could be conducted with American adolescents to explore associations between confession experiences and trauma exposure or impact, given known differences between interrogation practices and system-involvement rates between Europe and the U.S. (Miller et al., 2018; Muncie & Goldson, 2006). Finally, interrogation research can – in a compassionate and ethical manner – purposively sample youth seeking treatment for traumatic stress to conduct vignette or self-report studies of police interrogation, including qualitative studies that can help clarify the nascent concepts proposed in this paper.

Research should also move beyond a dichotomous conceptualization of trauma as "present" or "absent" to explore the specific mechanisms by which trauma may create interrogation vulnerabilities, as well as specific types or elements of trauma and posttraumatic symptomatology most likely to increase vulnerability. Checklists of negative life events are sometimes blunt instruments to measure trauma, given that even youth exposed to many traumatic

events may have no symptoms (Copeland et al., 2007) and that posttraumatic reactions, when they do occur, are highly heterogeneous (Galatzer-Levy & Bryant, 2013). Reducing trauma measurement to counts of events can create misleading results by conflating diverse and potentially contradictory trauma responses (e.g., predominant recklessness vs. predominant avoidance) in the same variable. Thus, life event checklists, while an important foundation, do not permit fine-grained analysis of which specific posttraumatic changes might explain increased vulnerability to involuntary or false confessions. Future research on interrogation vulnerability could incorporate more sophisticated trauma symptom inventories for youth (e.g., UCLA Child/Adolescent PTSD Reaction Index for DSM–5; Clinician-Administered PTSD scale for DSM-5 – Child/Adolescent Version; Trauma Symptom Checklist for Children) to assess differential patterns of symptomatology, as well as different types of trauma, chronicity of trauma, and recency of trauma. Such research should pay particular attention to whether the offense under investigation qualifies as a traumatic event for the youth, as this situation could create unique dynamics in the interrogation room (Welfare & Hollin, 2012). Research on these issues should also consider cultural differences in trauma expression and choose assessment instruments accordingly (Hinton & Lewis-Fernández, 2011).

VII Considerations for Law, Policy, and Practice

Thus far, this article has delineated adolescents' clinical responses to trauma exposure and used the Three Errors framework of police-induced false confessions to propose mechanisms through which trauma symptomatology could exacerbate youths' vulnerability to misclassification, coercion, and/or contamination during police interrogations. It offers numerous empirically informed hypotheses in need of rigorous empirical testing. We acknowledge that specific policy or practice recommendations are premature in the absence of strong scientific support. However, while we wait for researchers to answer the call, it seems imprudent to ignore the theoretical link between trauma symptomatology and false or involuntary juvenile confessions given existing correlational findings that trauma symptoms can impact youths' behavior during interrogations, as well as basic science indicating that known trauma responses are akin to those characteristics already known to increase interrogative vulnerability. Accordingly, we conclude by discussing potential implications of the proposed trauma-confession link for the various actors and systems with decision-making authority and the potential to reduce further harm.

A. Courtroom Considerations

If emerging research supports a link between trauma symptomatology and adolescents' confession decision-making, the law regarding interrogation and confessions could more directly address the role of trauma in the interrogation room. First, trauma could be a factor considered by judges in the totality of the circumstances analysis applied when evaluating the voluntariness of a confession (Crane, 2017). Totality of the circumstances tests require courts to weigh factors relating to police conduct against traits of the individual suspect (*Schneckloth v. Bustamonte*, 1973). Courts already consider age, experience with law enforcement, education, background, and intelligence; trauma history and symptoms could be included in the list of suspect factors that all courts must consider in the totality analysis for juveniles' confession voluntariness.

Second, in the few cases where courts are known to have considered trauma in voluntariness analyses and related suppression motions, the analysis has been narrowly confined to cases where the suspect had a formal diagnosis of PTSD or was clearly exhibiting the most dramatic and widely recognized symptoms of PTSD (e.g., flashbacks) during the interrogation (Crane, 2017). This approach is too narrow because, as explained above, many adolescents experiencing impacts from their trauma histories may not formally qualify for a PTSD diagnosis, or even if they do, they may not have been diagnosed with PTSD at the time of the interrogation. Reliance on formal PTSD diagnoses also oversimplifies the consequences of trauma and thus fails to recognize the diverse and often more subtle ways that trauma and its sequalae are highly relevant to juvenile interrogations. Many of the hallmark trauma responses detailed above will not be as visible as, for example, a flashback, but can still be extremely impairing to a juvenile suspect.

Finally, defense attorneys can investigate and account for trauma history and symptoms in their case work-up of juvenile clients who confessed (Crane, 2017). Attorneys can retain experts to evaluate the adolescent defendant for trauma symptoms and testify regarding how the defendant's trauma is specifically relevant to their behavior in the interrogation room and their susceptibility to giving a false or involuntary confession. Ideally, a defense attorney will cohere a compelling history of the juvenile's trauma and a digestible explanation of how that trauma impacts the juvenile's cognition and behavior (Denno, 2019).

B. Forensic Evaluation Considerations

Forensic mental health professionals evaluating confession reliability and voluntariness should consider the possibility that trauma symptoms contributed to an adolescent's vulnerability to coercive interrogation tactics. The analysis could include consideration of trauma both as an independent dispositional variable and in interaction with other risk factors, particularly developmental immaturity. History of exposure to trauma and trauma responses should each be considered. Consideration of trauma exposure should go beyond simply identifying whether the individual has been exposed to potentially traumatic events and include the nature, frequency, and developmental context and consequences of such events, individually and in the aggregate. Attention should be given to the degree to which supports that might have moderated the effects of the exposure were provided, as well as the degree to which the individual's responses suggest that the event(s) continued to exert an influence of emotions, perceptions, and behavior at the time of the interrogation.

As discussed, trauma responses may be associated with clinical diagnoses including PTSD, but they may also be present in ways that are not directly associated with a clinical diagnosis, in which case describing their impact on functioning may be especially important. However, regardless of whether trauma responses are linked to a diagnosis, describing how those responses appear to have created vulnerability, and any ways that such vulnerability was exploited in an interrogation, may be especially important.

Trauma history and symptomatology should thus be routinely assessed during the evaluation process, and to the extent it is relevant in a particular case, discussed with the attorney who sought the evaluation. That means discussing the potential role of trauma early in the process to ensure that sufficient efforts are made to obtain relevant information. It also requires analyzing

any contribution of trauma to the individual's interrogative vulnerability generally and in the course of the interrogation itself. As noted above, forensic mental health clinicians are well-situated to educate the legal community about the implications of trauma exposure for evaluation of confession evidence.

C. Law Enforcement Considerations

Police have authority to implement interrogation reforms that could substantially reduce coerced or false confessions from trauma-exposed youth. Given what we know about how trauma symptomatology affects youths' perceptions and decision-making, police departments could consider prohibiting the use of manipulative interrogation techniques, especially deception about evidence or potential consequences (given trauma's comorbidity with intellectual disability and cognitive and memory sequelae), maximization (given trauma-exposed youths' recklessness and hyperresponsiveness to threats), and minimization and implied leniency (given their drive for avoidance and impaired ability to detect risk). Police departments should also consider eliminating behavioral analysis with juvenile suspects, given that trauma-exposed youths' unique response patterns can yield misleading information. Police departments could also adopt elements of trauma-informed investigative interviewing approaches already in use for child victims and witnesses, such as the NICHD Investigative Interview Protocol (Lamb et al., 2007). Such protocols were developed with the understanding that vulnerable populations are more likely to provide inaccurate or incomplete information, and the same principle applies for trauma-exposed juvenile suspects. After all, it is ultimately in law enforcement's best interest to elicit accurate information from suspects. Finally, as explicated by many other psychologists and legal scholars (e.g., Kassin et al., 2010), videorecording interrogations in their entirety would permit attorneys and expert-witness psychologists to conduct a thorough review of interrogation practices and suspect responses, assisting triers of fact with their evaluations of the interrogation and confession. This may be of particular importance for youth with specific vulnerabilities such as trauma impact. All of these law enforcement reforms would not only protect vulnerable youth but would also improve the integrity and success of the investigative process. Importantly, police departments are empowered to enact these reforms on their own, irrespective of state legislative mandates.

D. Interrogation Policy Considerations

If trauma impact is indeed a dispositional risk factor for involuntary or false juvenile confessions, there are myriad implications for the juvenile and criminal justice systems, including police interrogators, defense attorneys representing juvenile confessors, prosecutors deliberating whether and/or how to charge a case, and judges deciding cases involving juvenile confessions. From a purely probabilistic perspective, it can be assumed that the majority of youth who find themselves in the interrogation room both exhibit psychosocial immaturity and have experienced trauma. In other words, given the overrepresentation of trauma exposure, cognitive impairment, and psychiatric disorders among system-involved adolescents, the statistical likelihood of an adolescent suspect having *at least* two of these known (or suspected) dispositional risk factors for false confessions is all but assured, and a great many will have more than that. Moreover, given that trauma exposure is not readily discernible – you cannot "see" trauma – any recommendations for police to interrogate suspects differently purely based on identified trauma history would be misguided. Given these realities, blanket policies relevant to all adolescent suspects may be needed

to reduce the risk of false, involuntary, or unreliable confessions from youth with trauma impact. For example, implementing a nonwaivable right to counsel prior to interrogation may be advisable to protect trauma-exposed youth. Such measures have already been implemented in at least two states. In 2016, Illinois amended its Juvenile Court Act to require that children under the age of 15 accused of sex crimes and homicides must be represented by counsel during custodial interrogations (Illinois Public Act 99-0882). In 2017, California's Senate Bill 395 stipulated that "prior to a custodial interrogation, and before the waiver of any Miranda rights, a youth 15 years of age or younger shall consult with legal counsel in person, by telephone, or by video conference. The consultation may not be waived" (California Welfare & Institutions Code, 2017). In September 2020, California's governor signed into law an amended statute raising the age of mandatory consultation with counsel from 15 to 18, such that all juveniles in California now have a non-waivable right to counsel prior to custodial interrogation.

Finally, no discussion of adolescents, interrogation, and trauma could be complete without considering the potential of the interrogation itself to traumatize or re-traumatize adolescents. The interrogation interaction can be a source of extreme stress, so numerous advocacy organizations focused on the "do no harm" principle have emerged to bridge the gap between the criminal justice and public health systems, recognizing that justice system contact exacerbates mental health problems (Jackson et al., 2019; Sugie & Turney, 2017). Curtailing whether, how, and for how long juvenile interrogations occur may therefore be advisable not only from a harm reduction perspective but even a cost reduction perspective, given the extraordinary financial and social costs of wrongful convictions stemming from false confessions (Gutman, 2017).

VIII Conclusion

Many psychological constructs struggle to obtain legitimacy in legal settings, often relegated to "buzzwords" or trends that do not permeate system decision making in a sustained manner, despite robust empirical support. Trauma has certainly gained traction in other domains of the criminal justice process, from juvenile diversion to trauma-informed correctional programming. But with respect to police interrogation – a gateway to the criminal justice system – trauma symptomatology has received short shrift at best and complete disregard at worst. It is time for courts, defense attorneys, prosecutors, forensic psychologists, interrogation researchers, and police departments to reckon with the reality that most adolescents who experience police interrogation have trauma histories as well as the emerging possibility that resulting trauma symptoms can play a critical role in the interrogation room and beyond. We cannot expect fairness for adolescent suspects or accurate confession information for police if, as proposed here, trauma symptomatology increases vulnerability to false or involuntary confessions but remains unaddressed by legal stakeholders.

References

Abram, Karen M., Teplin, Linda A., King, Devon C., Longworth, Sandra L., …Olson, Nichole D. (2013). PTSD, trauma, and comorbid psychiatric disorders in detained youth. *U. S.*

Department of Justice: Office of Juvenile Justice and Delinquency Prevention, online: https://www.ojjdp.gov/pubs/239603.pdf.

Abrantes, Ana M., Hoffmann, Norman G., & Anton, Ronald. (2005). Prevalence of co-occurring disorders among juveniles committed to detention centers. *International Journal of Offender Therapy and Comparative Criminology*, *49*(2), 179-193, online: https://doi.org/10.1177%2F0306624X04269673.

Alceste, Fabiana, Luke, Timothy J., Redlich, Allison D., Hellgren, Johanna, Amrom, Aria D., & Kassin, Saul M. (2020). The psychology of confessions: A comparison of expert and lay opinions. *Applied Cognitive Psychology,* 1-13, online: https://doi.org/10.1002/acp.3735.

American Bar Association (2018). ABA Commission on Youth At Risk report to the House of Delegates, online: https://www.americanbar.org/groups/public_interest/child_law/resources/.

American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Publisher.

Armour, Cherie, Elhai, Jon D., Richardson, Don, Ractliffe, Kendra, Wang, Li, & Elklit, Ask. (2012). Assessing a five factor model of PTSD: Is dysphoric arousal a unique PTSD construct showing differential relationships with anxiety and depression? *Journal of Anxiety Disorders*, *26*(2), 368-376, online: https://doi.org/10.1016/j.janxdis.2011.12.002.

Baumeister, Roy F., Sparks, Erin A., Stillman, Tyler F., & Vohs, Kathleen D. (2008). Free will in consumer behavior: Self-control, ego depletion, and choice. *Journal of Consumer Psychology*, *18*(1), 4–13, online: https://doi.org/10.1016/j.jcps.2007.10.002.

Briere, John, Hodges, Monica, & Godbout, Natacha. (2010). Traumatic stress, affect dysregulation, and dysfunctional avoidance: A structural equation model. *Journal of Traumatic Stress*, *23*(6), 767–774, online: https://doi.org/10.1002/jts.20578.

Briere, John, Scott, Catherine, & Weathers, Frank. (2005). Peritraumatic and persistent dissociation in the presumed etiology of PTSD. *American Journal of Psychiatry*, *162*(12), 2295–2301, online: https://doi.org/10.1176/appi.ajp.162.12.2295.

Brown v. Mississippi, 297 U.S. 278 (1936).

Bryant, Richard A., Friedman, Matthew J., Spiegel, David, Ursano, Robert, & Strain, James. (2011). A review of acute stress disorder in DSM-5. *Focus*, *9*(3), 335-350, online: https://doi.org/10.1176/foc.9.3.foc335.

California Welfare & Institutions Code, Ca. Stat. § 625.6 (2017), online: https://leginfo.legislature.ca.gov/faces/billStatusClient.xhtml?bill_id=201720180SB395.

Carrion, Victor G., & Steiner, Hans. (2000). Trauma and dissociation in delinquent adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry*, *39*(3), 353–359, online: https://doi.org/10.1097/00004583-200003000-00018.

Cauffman, Elizabethi, Feldman, Shirley, Watherman, Jaime, & Steiner, Hans. (1998). Posttraumatic stress disorder among female juvenile offenders. *Journal of the American Academy of Child & Adolescent Psychiatry*, *37*(11), 1209-1216, online: https://doi.org/10.1097/00004583-199811000-00022.

Chae, Yoojin, Goodman, Gail S., Eisen, Mitchell L., & Qin, Jianjian. (2011). Event memory and suggestibility in abused and neglected children: Trauma-related psychopathology and cognitive functioning. *Journal of Experimental Child Psychology*, *110*(4), 520–538, online: https://doi.org/10.1016/j.jecp.2011.05.006.

Charuvastra, Anthony, & Cloitre, Marylene. (2009). Safe enough to sleep: Sleep disruptions associated with trauma, posttraumatic stress, and anxiety in children and adolescents. *Child and Adolescent Psychiatric Clinics of North America*, *18*(4), 877–891, online: https://doi.org/10.1016/j.chc.2009.04.002.

Choi, Kristen R., Seng, Julia S., Briggs, Ernestine C., Munro-Kramer, Michelle L., Graham-Bermann, Sandra A., Lee, Robert C., & Ford, Julian D. (2017). The dissociative subtype of posttraumatic stress disorder (PTSD) among adolescents: Co-occurring PTSD, depersonalization/derealization, and other dissociation symptoms. *Journal of the American Academy of Child & Adolescent Psychiatry*, *56*(12), 1062-1072, online: https://doi.org/10.1016/j.jaac.2017.09.425.

Cleary, Hayley. (2017). Applying the lessons of developmental psychology to the study of juvenile interrogations: New directions for research, policy, and practice. *Psychology, Public Policy, and Law, 23*(1), 118-130, online: https://doi.org/10.1037/law0000120.

Cleary, Hayley. (2014). Police interviewing and interrogation of juvenile suspects: A descriptive examination of actual cases. *Law and Human Behavior, 38*(3), 271-282, online: https://doi.org/10.1037/lhb0000070.

Cleary, Hayley & Warner, Todd C. (2016). Police training in interviewing and interrogation methods: A comparison of techniques used with adult and juvenile suspects. *Law and Human Behavior, 40*(3), 270-284, online: https://doi.org/10.1037/lhb0000175.

Cook, Alexandra, Spinazzola, Joseph, Ford, Julian, Lanktree, Cheryl, Blaustein, Margaret, Cloitre, Marylene, DeRosa, Ruth, Hubbard, Rebecca, Kagan, Richard, & Liautaud, Joan. (2005). Complex trauma in children and adolescents. *Psychiatric Annals*, *35*(5), 390–398, online: https://doi.org/10.3928/00485713-20050501-05.

Copeland, William E., Keeler, Gordon, Angold, Adrian, & Costello, E. J. (2007). Traumatic events and posttraumatic stress in childhood. *Archives of General Psychiatry*, *64*(5), 577-584, online: http://dx.doi.org/10.1001/archpsyc.64.5.577.

Cox, Keith S., Resnick, Heidi S., & Kilpatrick, Dean G. (2014). Prevalence and correlates of posttrauma distorted beliefs: Evaluating DSM-5 PTSD expanded cognitive symptoms in a national sample. *Journal of Traumatic Stress*, *27*(3), 299–306, online: https://doi.org/10.1002/jts.21925.

Crane, Megan G., (2017). Childhood trauma's lurking presence in the juvenile interrogation room and the need for a trauma-informed voluntariness test for juvenile confessions. *South Dakota Law Review, 62*, 626-672.

Dalenberg, Constance J., Straus, Elizabeth, & Carlson, Eve B. (2017). Defining trauma. In S. N. Gold (Ed.), *APA Handbook of Trauma Psychology: Volume 1. Foundations in Knowledge.* (pp. 15-33). American Psychological Association.

Dalgleish, Tim, Meiser-Stedman, Richard, & Smith, Patrick. (2005). Cognitive aspects of posttraumatic stress reactions and their treatment in children and adolescents: An empirical review and some recommendations. *Behavioural and Cognitive Psychotherapy*, *33*(4), 459–486, online: https://doi.org/10.1017/S1352465805002389.

Davis, Deborah, & Leo, Richard A. (2012). Interrogation-related regulatory decline: Ego depletion, failures of self-regulation, and the decision to confess. *Psychology, Public Policy, and Law*, *18*(4), 673–704, online: https://doi.org/10.1037/a0027367.

DeBellis, Michael D., & Zisk, Abigail. (2014). The biological effects of childhood trauma. *Child & Adolescent Psychiatric Clinics of North America, 23*, 185-222, online: https://doi.org/10.1016/j.chc.2014.01.002.

Denno, Deborah W. (2019). How courts in criminal cases respond to childhood trauma. *Marquette Law Review, 103*(2), 301-363.

DePrince, Anne P., Weinzierl, Kristin M., & Combs, Melody D. (2009). Executive function performance and trauma exposure in a community sample of children. *Child Abuse & Neglect*, *33*(6), 353–361, online: https://doi.org/10.1016/j.chiabu.2008.08.002.

Dierkhising, Carly B., Ko, Susan J., Woods-Jaeger, Briana, Briggs, Ernestine C., Lee, Robert, & Pynoos, Robert S. (2013). Trauma histories among justice-involved youth: Findings from the National Child Traumatic Stress Network. *European Journal of Psychotraumatology*, *4*(1), 20274, online: https://doi.org/10.3402/ejpt.v4i0.20274.

Dixon, Angela, Howie, Pauline, & Starling, Jean. (2005). Trauma exposure, posttraumatic stress, and psychiatric comorbidity in female juvenile offenders. *Journal of the American Academy of Child & Adolescent Psychiatry*, *44*(8), 798-806, online: https://doi.org/10.1097/01.chi.0000164590.48318.9c.

Drake, Kim E. (2010). Interrogative suggestibility: Life adversity, neuroticism, and compliance. *Personality and Individual Differences*, *48*(4), 493–498, online: https://doi.org/10.1016/j.paid.2009.11.030.

Drake, Kim E., Bull, Ray, & Boon, Julian C. W. (2008). Interrogative suggestibility, self-esteem, and the influence of negative life-events. *Legal and Criminological Psychology*, *13*(2), 299–307, online: https://doi.org/10.1348/135532507X209981.

Drake, Kim E., Gudjonsson, Gisli H., Sigfusdottir, Inga D., & Sigurdsson, Jon F. (2015). An investigation into the relationship between the reported experience of negative life events, trait stress-sensitivity and false confessions among further education students in Iceland. *Personality and Individual Differences*, *81*, 135–140, online: https://doi.org/10.1016/j.paid.2014.09.007.

Driskell, James E. (2012). Effectiveness of deception detection training: A meta-analysis. *Psychology, Crime & Law*, *18*, 713–731, online: https://doi.org/10.1080/1068316X.2010.535820.

Drizin, Steven A., & Colgan, Beth A. (2004). Tales from the juvenile confession front: A guide to how standard police interrogation tactics can produce coerced and false confessions from

juvenile suspects. In G. D. Lassiter (Ed.), *Interrogations, confessions, and entrapment*, 127–162, Kluwer.

Drizin, Steven A., & Leo, Richard A. (2004). The problem of false confessions in the post-DNA world. *North Carolina Law Review, 82*, 891-1007.

Eisen, Mitchel L., Goodman, Gail S., Qin, Jianjian, Davis, Suzanne, & Crayton, John. (2007). Maltreated children's memory: Accuracy, suggestibility, and psychopathology. *Developmental Psychology*, *43*(6), 1275, online: https://doi.org/10.1037/0012-1649.43.6.1275.

Fairbank, John A., Putnam, Frank W., & Harris, William W. (2014). Child traumatic stress: Prevalence, trends, risk, and impact. In *Handbook of PTSD: Science and practice, 2nd ed* 121–145, The Guilford Press.

Fazel, Seena, Doll, Helen, & Långström, Niklas. (2008). Mental disorders among adolescents in juvenile detention and correctional facilities: A systematic review and metaregression analysis of 25 surveys. *Journal of the American Academy of Child & Adolescent Psychiatry*, *47*(9), 1010–1019, online: https://doi.org/10.1097/CHI.ObO13e31817eecf3.

Felitti, Vincent J., Anda, Robert F., Nordenberg, Dale, Williamson, David F., Spitz, Alison M., Edwards, Valerie, Koss, Mary P., & Marks, James S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine*, *14,* 245–258, online: https://doi.org/10.1016/S0749-3797(98)00017-8.

Foley, Regina M. (2001). Academic characteristics of incarcerated youth and correctional educational programs: A literature review. *Journal of Emotional and Behavioral Disorders*, *9*(4), 248–259, online: https://doi.org/10.1177/106342660100900405.

Galatzer-Levy, Isaac R., & Bryant, Richard A. (2013). 636,120 ways to have posttraumatic stress disorder. *Perspectives on Psychological Science*, *8*(6), 651–662, online: https://doi.org/10.1177/1745691613504115.

Garrett, Brandon L. (2015). Contaminated confessions revisited. *Virginia Law Review*, *101*, 395–454.

Giaconia, Rose M., Reinherz, Helen Z., Silverman, Amy B., Pakiz, Bilge, Frost, Abbie K., & Cohen, Elaine. (1995). Traumas and posttraumatic stress disorder in a community population of older adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry*, *34*(10), 1369-1380, online: https://doi.org/10.1097/00004583-199510000-00023.

Goldstein, Naomi E., Haney-Caron, Emily, Levick, Marsha, & Whiteman, Danielle. (2018). Waving good-bye to waiver: A developmental argument against youths' waiver of Miranda rights. *N.Y.U. Journal of Legislation & Public Policy, 21*, 1-67.

Gordon, Nathan, & Fleisher, William. (2019). *Effective interviewing techniques* (4th ed.) London: Elsevier.

Grisso, Thomas, Steinberg, Lawrence, Woolard, Jennifer, Cauffman, Elizabeth, Scott, Elizabeth S., Graham, Sandra, Lexcen, Fran, Reppucci, N. D., & Schwartz, Robert. (2003). Juveniles'

competence to stand trial: A comparison of adolescents' and adults' capacities as trial defendants. *Law and Human Behavior, 27*, 333-363, online: https://doi.org/10.1023/A:1024065015717.

Gudjonsson, Gisli H., & Clark, Noel K. (1986). Suggestibility in police interrogation: A social psychological model. *Social Behaviour*, *1*(2), 83–104.

Gudjonsson, Gisli H., Sigurdsson, Jon F., & Tryggvadóttir, Hjordis B. (2011). The relationship of compliance with a background of childhood neglect and physical and sexual abuse. *The Journal of Forensic Psychiatry & Psychology*, *22*(1), 87–98, online: https://doi.org/10.1080/14789949.2010.524707.

Gudjonsson, Gisli, Sigurdsson, Jon F., & Sigfusdottir, Inga D. (2009a). False confessions among 15- and 16-year-olds in compulsory education and the relationship with adverse life events. *The Journal of Forensic Psychiatry & Psychology, 20*(6), 950-963.

Gudjonsson, Gisli H., Sigurdsson, Jon F., & Sigfusdottir, Inga D. (2009b). Interrogation and false confessions among adolescents in seven European countries. *Psychology, Crime & Law, 15*(8), 711-728, online: https://doi.org/10.1080/10683160802516257.

Gutman, Jeffrey S. (2017). An Empirical Reexamination of State Statutory Compensation for the Wrongly Convicted, 82 MO. L. REV. (2017), online: https://scholarship.law.missouri.edu/mlr/vol82/iss2/7.

Guyll, Max, Madon, Stephanie, Yang, Yueran, Lannin, Daniel G., Scherr, Kyle, & Greathouse, Sarah. (2013). Innocence and resisting confession during interrogation: Effects on physiologic activity. *Law and Human Behavior, 37*(5), 366–375, online: https://doi.org/10.1037/lhb0000044.

Habib, Mandy, & Labruna, Victor. (2011). Clinical considerations in assessing trauma and PTSD in adolescents. *Journal of Child & Adolescent Trauma*, *4*(3), 198–216, online: https://doi.org/10.1080/19361521.2011.597684.

Hartwig, Maria, & Bond, Charles F. (2014). Lie detection from multiple cues: A meta-analysis. *Applied Cognitive Psychology*, *28*(5), 661–676, online: https://doi.org/10.1002/acp.3052.

Hayes, Jasmeet P., VanElzakker, Michael B., & Shin, Lisa M. (2012). Emotion and cognition interactions in PTSD: A review of neurocognitive and neuroimaging studies. *Frontiers in Integrative Neuroscience*, *6*, online: https://doi.org/10.3389/fnint.2012.00089.

Henkel, Linda A., & Coffman, Kimberly J. (2004). Memory distortions in coerced false confessions: A source monitoring framework analysis. *Applied Cognitive Psychology*, *18*(5), 567-588, online: https://doi.org/10.1002/acp.1026.

Hinton, Devon E., & Lewis-Fernández, Roberto. (2011). The cross-cultural validity of posttraumatic stress disorder: Implications for DSM-5. *Depression and Anxiety*, *28*(9), 783–801, online: https://doi.org/10.1002/da.20753.

Holman, Dawn M., Ports, Katie A., Buchanan, Natasha, Hawkins, Nikki, Merrick Melissa T., Metzler, Marilyn, & Trivers, Katrina. (2016). The association between adverse childhood experiences and risk for cancer in adulthood: A systematic review of the literature. *Pediatrics, 138,* S81-S91, online: https://doi.org/10.1542/peds.2015-4268L.

Horvath, Frank, Blair, J. P., & Buckley, Joseph P. (2008). The behavioural analysis interview: Clarifying the practice, theory and understanding of its use and effectiveness. *International Journal of Police Science & Management, 10*, 101-118, online: https://doi.org/10.1350/ijps.2008.10.1.101.

Illinois Public Act 99-0882 (2016), online: https://www.ilga.gov/legislation/publicacts/fulltext.asp?Name=099-0882.

Inbau, Fred E., Reid, John E., Buckley, Joseph P., & Jayne, Brian C. (2013). *Criminal interrogation and confessions* (5th ed.). Burlington, MA: Jones & Bartlett Learning.

Innocence Project (2021), online: https://www.innocenceproject.org/cases/jeff-deskovic/.

Jackson, Dylan B., Fahmy, Chantal, Vaughn, Michael G., & Testa, Alexander. (2019). Police stops among at-risk youth: Repercussions for mental health. *Journal of Adolescent Health 65*(5), 627-632, online: https://doi.org/10.1016/j.jadohealth.2019.05.027.

Jennings, Ann. (2008). Models for developing trauma-informed behavioral health systems and trauma-specific services, online: http://www.theannainstitute.org/Models%20for%20Developing%20Traums-Report%201-09-09%20_FINAL_.pdf.

Kassin, Saul. M. (2008). False confessions: Causes, consequences, and implications for reform. *Current Directions in Psychological Science*, *17*(4), 249-253, online: https://doi.org/10.1111%2Fj.1467-8721.2008.00584.x.

Kassin, Saul. M., Drizin, Steven. A., Grisso, Thomas., Gudjonsson, Gisli. H., Leo, Richard A., & Redlich, Allison D. (2010). Police-induced confessions: Risk factors and recommendations. *Law and Human Behavior, 34*(1), 3-38, online: https://doi.org/10.1007/s10979-009-9188-6.

Kassin, Saul M., Redlich, Allison D., Alceste, Fabiana, & Luke, Timothy J. (2018). On the general acceptance of confessions research: Opinions of the scientific community. *American Psychologist, 73*(1), 63–80, online: https://doi.org/10.1037/amp0000141.

Kelley, Lance P., Weathers, Frank W., McDevitt-Murphy, Meghan E., Eakin, David E., & Flood, Amanda M. (2009). A comparison of PTSD symptom patterns in three types of civilian trauma. *Journal of Traumatic Stress*, *22*(3), 227–235, online: https://doi.org/10.1002/jts.20406.

Kerig, Patricia K. (2019). Linking childhood trauma exposure to adolescent justice involvement: The concept of posttraumatic risk-seeking. *Clinical Psychology: Science and Practice*, *26*(3), e12280, online: https://doi.org/10.1111/cpsp.12280.

Kerig, Patricia K., Bennett, Diana C., Thompson, Mamie, & Becker, Steven P. (2012). "Nothing really matters": Emotional numbing as a link between trauma exposure and callousness in delinquent youth. *Journal of Traumatic Stress*, *25*(3), 272–279, online: https://doi.org/10.1002/jts.21700.

Kerig, Patricia K., Charak, Ruby, Chaplo, Shannon D., Bennett, Diana C., Armour, Cherie, Modrowski, Crosby A., & McGee, Andrew B. (2016). Validation of the factor structure of the adolescent dissociative experiences scale in a sample of trauma-exposed detained

youth. *Psychological Trauma: Theory, Research, Practice, and Policy*, *8*(5), 592-600, online: https://psycnet.apa.org/doi/10.1037/tra0000140.

Kessler, Ronald C., Sonnega, Amanda, Bromet, Evelyn, Hughes, Michael, & Nelson, Christopher B. (1995). Posttraumatic stress disorder in the National Comorbidity Survey. *Archives of General Psychiatry*, *52*(12), 1048-1060, online: https://doi.org/10.1001/archpsyc.1995.03950240066012.

Kilpatrick, Dean G., Ruggiero, Kenneth J., Acierno, Ron, Saunders, Benjamin E., Resnick, Heidi S., & Best, Connie L. (2003). Violence and risk of PTSD, major depression, substance abuse/dependence, and comorbidity: Results from the National Survey of Adolescents. *Journal of Consulting and Clinical Psychology, 71*(4), 692–700, online: https://doi.org/10.1037/0022-006X.71.4.692.

Lamb, Michael E., Orbach, Yael, Hershkowitz, Irit, Esplin, Phillip, & Horowitz, Dvora. (2007). A structured forensic interview protocol improves the quality and informativeness of investigative interviews with children: A review of research using the NICHD Investigative Interview Protocol. *Child Abuse & Neglect, 11*, 1201-1231, online: https://doi.org/10.1016/j.chiabu.2007.03.021.

Layne, Christopher M., Greeson, Johanna K. P., Ostrowski, Sarah A., Kim, Soeun, Reading, Stephanie, Vivrette, Rebecca L., Briggs, Ernestine C., Fairbank, John A., & Pynoos, Robert S. (2014). Cumulative trauma exposure and high risk behavior in adolescence: Findings from the National Child Traumatic Stress Network Core Data Set. *Psychological Trauma: Theory, Research, Practice, and Policy*, *6*, S40–S49, online: https://doi.org/10.1037/a0037799.

Leo, Richard A. (2013). Why interrogation contamination occurs. University of San Francisco Law Research Paper No. 2013-25.

Leo, Richard A. (2008). *Police interrogation and American justice*. Boston: Harvard University Press.

Leo, Richard A., & Drizin, Steven A. (2010). The three errors: Pathways to false confession and wrongful conviction. In G. D. Lassiter & C. A. Meissner (Eds.), *Police interrogations and false confessions: Current research, practice, and policy recommendations*. American Psychological Association.

Levine, Steven Z., Laufer, Avital, Hamama-Raz, Yaira, Stein, Einat, & Solomon, Zahava. (2008). Posttraumatic growth in adolescence: Examining its components and relationship with PTSD. *Journal of Traumatic Stress*, *21*(5), 492–496, online: https://doi.org/10.1002/jts.20361.

Luthra, Rohini, Abramovitz, Robert, Greenberg, Rick, Schoor, Alan, Newcorn, Jeffrey, Schmeidler, James, ... & Chemtob, Claude M. (2009). Relationship between type of trauma exposure and posttraumatic stress disorder among urban children and adolescents. *Journal of Interpersonal Violence*, *24*(11), 1919-1927, online: https://doi.org/10.1177%2F0886260508325494.

MacDonald, Helen Z., Vasterling, Jennifer J., & Rasmusson, Ann. (2011). Neuropsychological underpinnings of PTSD in children and adolescents. In M. J. Friedman, T. M. Keane, & P. A. Resick (Eds.). *Post-traumatic syndromes in childhood and adolescence: A handbook of research and practice* (2nd ed., pp. 113–133). Wiley Blackwell.

Madon, Stephanie, Guyll, Max, Scherr, Kyle C., Greathouse, Sarah, & Wells, Gary L. (2012). Temporal discounting: The differential effect of proximal and distal consequences on confession decisions. *Law and Human Behavior, 36*(1), 13-20, online: https://doi.org/10.1037/h0093962.

Marsac, Megan L., Kassam-Adams, Nancy, Hildenbrand, Aimee K., Nicholls, Elizabeth, …. Fein, Joel. (2016). Implementing a trauma-informed approach in pediatric health care networks. *JAMA Pediatrics, 170*(1), 70-77, online: https://doi.org/10.1001/jamapediatrics.2015.2206.

McDonnell, Christine G., Boan, Andrea D., Bradley, Catherine C., Seay, Kristin D., Charles, Jane M., & Carpenter, Laura A. (2019). Child maltreatment in autism spectrum disorder and intellectual disability: Results from a population-based sample. *Journal of Child Psychology and Psychiatry*, *60*(5), 576–584, online: https://doi.org/10.1111/jcpp.12993.

McLaughlin, Katie A., Sheridan, Margaret A., & Lambert, Hilary K. (2014). Childhood adversity and neural development: Deprivation and threat as distinct dimensions of early experience. *Neuroscience & Biobehavioral Reviews*, *47*, 578–591, online: https://doi.org/10.1016/j.neubiorev.2014.10.012.

Meyer, Jessica R., & Reppucci, N. D. (2007). Police practices and perceptions regarding juvenile interrogation and interrogative suggestibility. *Behavioral Sciences & the Law, 25,* 757–780, online: https://doi.org/10.1002/bsl.774.

Michalopoulos, Lynn M., Meinhart, Melissa, Yung, Justina, Barton, Samuel M., Wang, Xinyi, Chakrabarti, Urmi, Ritchey, Megan, Haroz, Emily, Joseph, Nakita, Bass, Judath, & Bolton, Paul. (2020). Global posttrauma symptoms: A systematic review of qualitative literature. *Trauma, Violence, & Abuse*, *21*(2), 406–420, online: https://doi.org/10.1177/1524838018772293.

Miller, Jeanee C., Redlich, Allison D., & Kelly, Christopher E. (2018). Accusatorial and information-gathering interview and interrogation methods: A multi-country comparison. *Psychology, Crime & Law*, *24*(9), 935–956, online: https://doi.org/10.1080/1068316X.2018.1467909.

Mindthoff, Amelia, Evans, Jacqueline R., Perez, Giselle, Woestehoff, Skye A., Olaguez, Alma P., Klemfuss, Joe Z., Normile, Christopher J., Scherr, Kyle C., Carlucci, Marianna E., Carol, Rolando N., Meissner, Christopher A., Michael, Steven W., Russano, Melissa B., Stocks, Eric L., Vallano, Jonathan P., & Woody, William D. (2018). A survey of potential jurors' perceptions of interrogations and confessions. *Psychology, Public Policy, and Law, 24*(4), 430–448, online: https://doi.org/10.1037/law0000182.

Monahan, Kathryn, Steinberg, Lawrence, Cauffman, Elizabeth, & Mulvey, Edward. (2013). Psychosocial (im)maturity from adolescence to early adulthood: Distinguishing between adolescence-limited and persisting antisocial behavior. *Development and Psychopathology, 25*(4pt1), 1093-1105, online: https://doi.org/10.1017/s0954579413000394.

Muncie, John, & Goldson, Barry. (2006). *Comparative Youth Justice*. SAGE.

Nader, Kathleen, & Weems, Carl F. (2011). Understanding and assessing cortisol levels in children and adolescents. *Journal of Child & Adolescent Trauma*, *4*(4), 318–338, online: https://doi.org/10.1080/19361521.2011.624059.

National Academies of Sciences, Engineering, and Medicine. (2019). *The Promise of Adolescence: Realizing Opportunity for All Youth*. Washington, DC: The National Academies Press, online: https://doi.org/10.17226/25388.

Noll, Jennie G., & Grych, John H. (2011). Read-react-respond: An integrative model for understanding sexual revictimization. *Psychology of Violence*, *1*, 202, online: https://doi.org/10.1037/a0023962.

Owen-Kostelnik, Jessica, Reppucci, N. D., & Meyer, Jessica R. (2006). Testimony and interrogation of minors: Assumptions about maturity and morality. *American Psychologist, 61*(4), 286-304, online: http://dx.doi.org/10.1037/0003-066X.61.4.286.

Perillo, Jennifer T., & Kassin, Saul M. (2011). Inside interrogation: The lie, the bluff, and false confessions. *Law and Human Behavior, 35*(4), 327–337, online: https://doi.org/10.1007/s10979-010-9244-2.

Pineles, Suzanne L., Suvak, Michael K., Liverant, Gabrielle I., Gregor, Kristin, Wisco, Blaire E., Pitman, Roger K., & Orr, Scott P. (2013). Psychophysiologic reactivity, subjective distress, and their associations with PTSD diagnosis. *Journal of Abnormal Psychology*, *122*(3), 635–644, online: https://doi.org/10.1037/a0033942.

Pole, Nnamdi. (2007). The psychophysiology of posttraumatic stress disorder: A meta-analysis. *Psychological Bulletin*, *133*(5), 725–746, online: https://doi.org/10.1037/0033-2909.133.5.725

Pollak, Seth D., & Sinha, Pawan. (2002). Effects of early experience on children's recognition of facial displays of emotion. *Developmental Psychology*, *38*(5), 784–791, online: https://doi.org/10.1037/0012-1649.38.5.784.

Puzzanchera, Charles. (2021). Juvenile arrests, 2019. U.S. Department of Justice: Office of Justice Programs. Available at https://ojjdp.ojp.gov/publications/juvenile-arrests-2019.pdf.

Pynoos, Robert S., Steinberg, Alan M., Layne, Christopher M., Briggs, Ernestine C., Ostrowski, Sarah A., & Fairbank, John A. (2009). DSM-V PTSD diagnostic criteria for children and adolescents: A developmental perspective and recommendations. *Journal of Traumatic Stress*, *22*(5), 391–398, online: https://doi.org/10.1002/jts.20450.

Rasmussen, Andrew, Keatley, Eva, & Joscelyne, Amy. (2014). Posttraumatic stress in emergency settings outside North America and Europe: a review of the emic literature. *Social Science & Medicine*, *109*, 44-54, online: https://doi.org/10.1016/j.socscimed.2014.03.015.

Schatz, Samson J. (2018). Interrogated with intellectual disabilities: The risk of false confession. *Stanford Law Review, 70*, 643-690.

Schneckloth v. Bustamonte, 412 U.S. 218 (1973).

Schweizer, Susanne, & Dalgleish, Tim. (2011). Emotional working memory capacity in posttraumatic stress disorder (PTSD). *Behaviour Research and Therapy*, *49*(8), 498–504, online: https://doi.org/10.1016/j.brat.2011.05.007.

Sigurdsson, Jon F., & Gudjonsson, Gisli H. (1996). The psychological characteristics of 'false confessors': A study among Icelandic prison inmates and juvenile offenders. *Personality and Individual Differences*, *20*(3), 321–329, online: https://doi.org/10.1016/0191-8869(95)00184-0.

Snook, Brent, Eastwood, Joseph, & Barron, Todd. (2014). The next stage in the evolution of interrogations: The PEACE model. *Canadian Criminal Law Review*, *18*(2), 219-239.

Steinberg, Lawrence. (2017). Adolescent brain science and juvenile justice policymaking. *Psychology, Public Policy, and Law, 23*(4), 410–420, online: https://doi.org/10.1037/law0000128.

Stoffel, Elizabeth, Korthase, Adrea, & Gueller, Melissa. (2019). Assessing trauma for juvenile and family court judges: From development to implementation, 2013-2017, online: https://www.ncjfcj.org/publications/assessing-trauma-for-juvenile-and-family-court-judges-from-development-to-implementation-2013-2017/.

Sugie, Naomi F., & Turney, Kristin. (2017). Beyond incarceration: Criminal justice contact and mental health. *American Sociological Review, 82*(4), 719-743, online: https://doi.org/10.1177%2F0003122417713188.

Thompson, Kristen L., Hannan, Susan M., & Miron, Lynsey R. (2014). Fight, flight, and freeze: Threat sensitivity and emotion dysregulation in survivors of chronic childhood maltreatment. *Personality and Individual Differences*, *69*, 28-32, online: https://doi.org/10.1016/j.paid.2014.05.005.

Van der Kolk, Bessel A. (2006). Clinical implications of neuroscience research in PTSD. *Annals of the New York Academy of Sciences*, *1071*(1), 277–293, online: https://doi.org/10.1196/annals.1364.022.

Volchan, Eliane, Rocha-Rego, Vanessa, Bastos, Aline F., Oliveira, Jose M., Souza, Gabriela, Oliveria, Leticia, David, Isabel, Erthal, Fatima, Pereira, Mirtes, & Figueria, Ivan. (2017). Immobility reactions under threat: A contribution to human defensive cascade and PTSD. *Neuroscience & Biobehavioral Reviews*, *76*, 29–38, online: https://doi.org/10.1016/j.neubiorev.2017.01.025.

Walsh, Kate, Danielson, Carla K., McCauley, Jenna, Hanson, Rochelle F., Smith, Daniel W., Resnick, Heidi S., ... Kilpatrick, Dean G. (2012). Longitudinal trajectories of posttraumatic stress disorder symptoms and binge drinking among adolescent girls: the role of sexual victimization. *Journal of Adolescent Health*, *50*(1), 54-59, online: https://doi.org/10.1016/j.jadohealth.2011.05.017.

Walters, Stan B. (2019). *Principles of kinesic interview and interrogation* (2nd ed.). Boca Raton, FL: CRC press.

Welfare, Heather, & Hollin, Clive R. (2012). Involvement in extreme violence and violence-related trauma: A review with relevance to young people in custody. *Legal and Criminological Psychology*, *17*(1), 89-104, online: https://doi.org/10.1111/j.2044-8333.2010.02002.x.

Whitfield, Charles L., Anda, Robert F., Dube, Shanta R., & Felitti, Vincent J. (2003). Violent childhood experiences and the risk of intimate partner violence in adults: assessment in a large health maintenance organization. *Journal of Interpersonal Violence, 18,* 166–185, online: https://doi.org/10.1177/0886260502238733.

Wood, Jennifer, Foy, David W., Goguen, Carol A., Pynoos, Robert, & James, C. B. (2002). Violence exposure and PTSD among delinquent girls. *Journal of Aggression, Maltreatment & Trauma*, *6*(1), 109-126, online: https://doi.org/10.1300/J146v06n01_06.

Zatzick, Douglas F., Grossman, David C., Russo, Joan, Pynoos, Robert, Berliner, Lucy, Jurkovich, Gregory, ... & Rivara, Frederick P. (2006). Predicting posttraumatic stress symptoms longitudinally in a representative sample of hospitalized injured adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry*, *45*(10), 1188-1195, online: https://doi.org/10.1097/01.chi.0000231975.21096.45.

Zhu, Wenfeng, Chen, Yunli, & Xia, Ling-Xiang (2020). Childhood maltreatment and aggression: The mediating roles of hostile attribution bias and anger rumination. *Personality and Individual Differences*, *162*, 110007, online: https://doi.org/10.1016/j.paid.2020.110007.

The Language of Criminal Confessions:

A Corpus Analysis of Confessions Presumed True vs. Proven False

Lucrezia Rizzelli
DPhil Candidate, University of Oxford, Centre for Criminology
Oxford, U.K.

Saul M. Kassin
Distinguished Professor, Department of Psychology
John Jay College of Criminal Justice
New York, U.S.A.

Tammy Gales
Associate Professor of Forensic Linguistics
Hofstra University
Hempstead, New York, U.S.A.

Confession evidence is powerfully persuasive, and yet many wrongful convictions involving false confessions have surfaced in recent years (Innocence Project, 2021; National Registry of Exonerations, 2021). Although police are trained to corroborate admissions of guilt, research shows that most false confessions contain accurate details and other content cues suggesting credibility as well as extrinsic evidence of guilt. Hence, a method is needed to help distinguish true and false confessions. In this study, we utilized a corpus-based approach to outline the linguistic features of two sets of confessions: those that are presumed true (n = 98) and those that have been proven false (n = 37). After analyzing the two corpora in LIWC (Linguistic Inquiry and Word Count) to identify significant categories, we created a logistic regression model that distinguished the two corpora based on three identified predictors: personal pronouns, impersonal pronouns, and conjunctions. In a first sample comprised of 25 statements per set, the model correctly categorized 37 out of 50 confessions (74%); in a second out-of-model sample, the predictors accurately classified 20 of 24 confessions (83.3%). A high frequency of impersonal pronouns was associated with confessions proven false, while a high frequency of conjunctions and personal pronouns were associated with confessions presumed to be true. Several patterns were observed in the corpora. In the latter set of confessions, for example, "I" was often followed by a lexical verb, a pattern less frequent in false confessions. Although these data are preliminary and not to be used for practical diagnostic purposes, the findings suggest that additional research is warranted.

I. Introduction and Literature Review
II. Method
    A. Data
    B. Procedure
III. Results

A. Baseline Characteristics of the Corpora
B. Differences Between the Corpora
C. Predictors: Linguistic Function and Context
IV. Discussion
A. Limitations and Future Research

I Introduction

For decades, false confessions have been concealed by the mistaken "common sense" assumption that innocent people do not confess to crimes they did not commit (Kassin, 2017). Yet, the National Registry of Exonerations has reported that out of the approximate 2,400 exonerees in their database, 291 had falsely confessed, amounting to 15% of all cases (National Registry of Exoneration, 2019). Even more glaring are the figures reported by the Innocence Project, which has helped exonerate 375 individuals incarcerated exclusively for murders and rapes through postconviction DNA testing. In their sample, 28% of cases contained a false confession as a contributing factor (Innocence Project, 2021).

Consisting of an admission of guilt and a narrative chronological statement of who, what, when, how, and why, confessions are powerfully persuasive in court (*Bruton v United States*, 1968; Wigmore, 1985). Records show when false confessors reject a guilty plea and opt for trial, the odds of conviction range from 73% to 81% (Leo & Ofshe, 1998; Drizin & Leo, 2004). Over the years, mock jury research has shown that confession evidence increases the conviction rate more than eyewitness identifications and other forms of evidence (Kassin & Neumann, 1997). In fact, this research has shown that confession evidence is potent even when the interrogation was coercive (e.g., Kassin & Sukel, 1997), even when the participants were trial judges (Wallace & Kassin, 2012), even when the confessor was a juvenile (e.g., Redlich et al., 2008), even when the confession was contradicted by DNA or other evidence (e.g., Appleby & Kassin, 2016), and even when the confession was reported secondhand by a motivated informant (e.g., Neuschatz et al., 2008).

As suggested by numerous wrongful convictions that have hinged on false confessions, research also shows that people are unable to distinguish between true and false confessions. In a two-part study, Kassin, Meissner, and Norwick (2005) recruited male prison inmates for a pair of videotaped interviews. In one, each inmate was instructed to give a full confession to the crime for which he was incarcerated; in the other, they were asked to come up with a false confession to a specific crime they did not commit. In Part 2, observers watched ten of these confessions. Results showed that neither college students nor police investigators exhibited significant levels of accuracy, though police were more confident in their judgments. This anemic level of discrimination accuracy was later replicated in studies involving true and false confessions made by juvenile detainees (Honts et al., 2014; Honts et al., 2019).

Although it is not possible to assert a prevalence rate to the problem of false confessions, it is clear that modern police interrogation techniques are psychologically potent, that false confessions are elicited with some regularity, and that the risk is increased by certain factors inherent in the suspect as well as the processes of interrogation. It is also clear that there are

different types of false confessions (Kassin, 1997; Kassin & Wrightsman, 1985; Wrightsman & Kassin, 1993): *Voluntary* (when innocent people offer confessions without pressure from police), *compliant* (when innocent suspects acquiesce to the demand for a confession to escape a stressful situation, avoid a perceived threat, or gain a perceived reward), and *internalized* (when innocent suspects, exposed to highly suggestive interrogation tactics, come not only to capitulate but also to believe they committed the crime in question).

Inspired by the 1992 founding of the Innocence Project, and later the National Registry of Exonerations, both of which uncovered surprising numbers of false confessions within the database of wrongful convictions, researchers have identified both dispositional and situational risk factors that can lead innocent people to confess. This research has produced a useful body of knowledge. In 2010, Division 41 of the American Psychological Association (APA), also known as the American Psychology–Law Society (AP-LS), published a scientific review or "white paper" titled "Police-Induced Confessions: Risk Factors and Recommendations" (Kassin et al., 2010). The APA has also cited the science reviewed in the white paper in several amicus curiae briefs it has submitted on the topic.[1] The essential points in these briefs were reiterated in APA's (2014) Resolution on Interrogations of Criminal Suspects. In addition, a recent survey of confession researchers worldwide revealed a strong consensus within the scientific community that several findings in this literature are sufficiently reliable to present in court (Kassin et al., 2018).

In addition to examining the circumstances surrounding a confession, studies have also examined the contents of false confessions, mainly through qualitative analyses focusing on specific elements of the narrative. Garrett (2010) examined 38 confessions taken from DNA exonerees in the Innocence Project database and found that 36 contained facts about the crime that were accurate and yet not in the public domain, the kinds of facts that "only the perpetrator could have known." In a follow-up analysis, Garrett (2015) found that 62 out of 66 false confessions (94%) were similarly contaminated with inside information communicated, purposefully or inadvertently, through suggestive questions, photographs, and other aspects of interrogation.[2]

False confession narratives contain other cues that signal credibility as well. Appleby, Hasel, and Kassin (2013) content-analyzed 20 known false confessions and found that they all contained visual and auditory details about the crime, the crime scene, time, and location. Many of these confessions recounted what the victim allegedly said; described the victim's alleged mental or emotional state ("She was scared, she could hear me coming"); asserted the voluntariness of their statement; described their motivation; and expressed sorrow, remorse, and apologies for the crime they did not commit. "This was my first rape," said Korey Wise of the Central Park Five, who was innocent, "and it's going to be my last."

Given the weighty nature of confessions, one wonders if there are patterns of features that can be used to differentiate between true and false confessions. In a comparative follow up of the aforementioned content analysis, for example, Appleby and Perillo (2015) examined 20 confessions from police files that were not in dispute and observed a marked similarity between

---

[1] For a list of APA amicus curiae briefs see American Psychological Association, 2009.

[2] For a discussion, see Nirider, Tepfer, & Drizin, 2012; for a first-hand law enforcement account of how this can occur, see Trainum, 2008; for an experimental demonstration, see Alceste, Jones, & Kassin, 2020.

the two samples in regard to the amount of detail and the presence of such credibility cues as assertions of voluntariness, statements of motivation, apologies, and expressions of remorse.

Verbal content notwithstanding, perhaps confessors betray first-hand guilty knowledge in their physiological responses to a description of the crime. In a first test of this hypothesis, Geven et al. (2020) recruited 83 pairs of participants for a laboratory experiment on problem-solving. Within each pair, one team-member was a confederate who tempted some participants but not the others to break the experimenter's rule that they work alone. Afterward, participants were separated, accused of cheating, and interrogated. All guilty participants confessed in this situation compared to 61% of those who were innocent. Afterward, they were physiologically monitored (heart rate, respiration, skin conductance) as they were read multiple-choice questions in which only one alternative answer matched the instance in which cheating was alleged. Results showed that true confessors, but not false confessors exhibited "recognition" as measured by larger physiological responses to the correct answer relative to plausible but incorrect answers. This result offers a promising possibility. In light of the fact that most false confessors obtain guilty knowledge of crime facts through police contamination, more research is needed to determine if these "informed" innocent confessors can be distinguished from those whose guilty knowledge is acquired by their firsthand involvement.

Most closely related to the current study is a call for research on the linguistic style of confession statements (Shuy, 1998). One of the rare studies in this area is one in which false and true confession statements of past social transgressions were elicited from 85 participants; the study showed that false confessions possessed fewer adjectives than confessions defined as true, but no differences were found for verbs as indicators of deception (Villar et al., 2013).

Therefore, as content cues lack diagnostic value, as physiological data are typically not available, and as studies focusing on the linguistic aspects of confessions are very limited, the present study was designed to explore the language of confessions more explicitly. First, we created a baseline of linguistic features that appear in confessions presumed to be true by analyzing 98 law enforcement case files from a national sample. This was followed by creating a baseline of features in 37 confessions proven to be false that were drawn from the Innocence Project and other sources. Finally, we compared two sub-corpora composed of 25 randomly selected confessions for each condition in order to reveal any patterns that may differentiate between the two data sets; additionally, we tested the resulting model on a separate out-of-model sample consisting of 12 false confessions and 12 presumed true confessions.

II Method

The present study analyzed the language of confessions from a corpus-based perspective, which allows for the discovery of systematic patterns of features across a large number of texts (Biber, 2010). Corpus analysis also allows for both quantitative and qualitative analyses, the first of which reduces potential bias associated with more subjective forms of coding; the second of which highlights the need to interpret meaning in context (Baker 2006).

As described in the following sections, two corpora were created: Confessions Presumed True (CPT) and Confessions Proven False (CPF). The first task was to analyze each corpus for features shared by the confessions within that corpus. The second task was to compare those features to determine if any differentiated the two corpora. The third task was to examine significant features in a qualitative manner to reveal additional patterns of use in each corpus.

A. Data

The texts for the Confessions Proven False (CPF) corpus were compiled from several resources, the first of which was the Innocence Project. The confessors from the Innocence Project had all confessed to rape and/or murder and had spent an average of 14 years in prison before being DNA exonerated. Additional texts for the CPF were gathered from Dr. Brandon Garrett's online database (DNA Exoneration Database, 2019), from the second author's research and consulting files, and from the third author's previous studies in the field. In all cases, the confessor was exonerated. All texts that were not electronic were retyped into individual TXT files. All typos and non-standard grammatical usages were kept intact, but glosses with corrections and standard usages were included so that the analytic software would more easily recognize the errors and non-standard forms. Finally, because many confessions were embedded within police interviews or interrogations, the language of the police was separated from the language of the suspect in order to capture only the suspect's language.[3] In total, the CPF corpus consisted of 27 Question and Answer (Q&A) and 10 first-person confessions for a total of 37 false inculpatory statements.[4]

The texts for the Confessions Presumed True (CPT) corpus were compiled from FBI files housed at John Jay College of Criminal Justice. The data for this research were taken from closed, fully adjudicated state and local cases that were contributed by law enforcement agencies from around the country for the purpose of research. Since the files for the CPT corpus were all typed or handwritten paper copies, we manually retyped the shorter texts and scanned the longer ones using Adobe Reader's optical character recognition (OCR) program to transform them into machine readable texts. We hand-checked all OCR texts for accuracy and used the same protocol noted above regarding typos and non-standard language use. Finally, all identifiers, including the names of victims, suspects, offenders, officers, departments, and correctional agencies were removed.

[3] The data being mostly in Q&A format provides an interesting avenue of further research using Conversation Analysis to examine the exchanges between the police and the suspects in cases that led to CPT vs. CPF.

[4] The majority of our data consisted of written transcriptions of spoken confessions. However, given the archival nature of some of these data, some caveats are in order. Of the ten first-person statements in the CPF corpus, there was one handwritten confession and nine statements that had been read into the record in court and/or typed up by law enforcement officers. In the CPT corpus, the first-person statements were composed of 37 confessions typed or handwritten by officers; six confessions handwritten or typed by suspects; two handwritten confessions the authorship of which was not clear; and one confession that was prepared from memory and typed by an officer after the interview. While both corpora are based on the written transcripts in each case, most confessions were originally spoken in nature. At this point, more work is needed to determine if there are differences between spoken and written confessions, especially when the register of origin is unclear.

In order to avoid the influence of features based on content (e.g., related to crime type), a strong homogeneity between the corpora was a prerequisite (Granger & Leech, 2014). Thus, since the Innocence Project data consisted of rape and murder cases, we gathered only confessions of such crimes for the CPT corpus. Confessions from this national sample included the following criminal categories: single victim homicide, serial homicide, multiple homicide, single rape, serial rape, domestic homicide, and serial sexual homicide. This total sample consisted of 98 confessions divided into the two subgroups: Q&A (n = 31) and first-person statements (n = 65).[5] A summary of the two corpora is presented in Table 1.

Table 1. Summary of the Corpora

	Q&A	1st Person	Total Texts	Total Words
CPT	31	65	96	113,187
CPF	27	10	37	162,284

B. Procedure

The first software we used is a psychological language analysis program called Linguistic Inquiry and Word Count (LIWC) (Pennebaker, Booth, et al., 2015). LIWC was created to identify spoken and written features present within a variety of psychological, social, and linguistic categories (Pennebaker, Boyd, et al., 2015). LIWC operates by comparing the words in a corpus (called target words) to a list of words that are part of its internal dictionary of approximately 6,400 words.[6] Every target word present in the dictionary is sorted into one or more of the 95 specific dimensions representing different psychological constructs (e.g., positive and negative emotions, cognitive processes such as causation words), social concepts (e.g., family, health, occupation), and linguistic categories (e.g., adverbs, pronouns, articles) (Pennebaker et al., 2003). The final output summarizes the percentage of the overall corpus that falls under a specific category. After running both corpora through LIWC, we converted the percentages into raw counts and conducted bivariate correlational analysis to examine which of the 95 categories had a higher likelihood of being predictive of either the CPT or CPF corpus. Categories were considered as significantly correlated only if they met threshold values of $p < 0.05$ and $r > 0.2$.

To compare the types of confessions, we then created a random sample of 25 CPT and 25 CPF, controlling for format by including the same proportion of Q&A and first-person statements in both sub-samples. As with the full data sets, we analyzed each sample through LIWC, converted the percentages of each category into raw counts, and screened the 95 variables by selecting those that presented a significant correlation. As some of the resulting categories contained many overlapping items and were umbrella categories (e.g., affect also included the separate categories of positive emotion and negative emotion), we conducted an additional screening process by analyzing collinearity and eliminating the broader variables (e.g., negative emotion) that highly correlated with more specific ones (e.g., anxiety, anger, sadness). In the end, three linguistic

[5] Due to time constraints, we included in the CPT corpus only interview transcripts or statements that were less than 40 pages long. Also excluded were third-person statements, secondhand summaries of confessions within police reports, and confessions given in a language other than English.
[6] This estimated word count is from the third LIWC dictionary released in 2015.

categories were identified as predictors: personal pronouns (e.g., “I”, “he”), impersonal pronouns (e.g., “it”, “that”), and conjunctions (e.g., “and”, “otherwise”). We then ran a logistic regression to analyze whether a model could be delineated that would distinguish the corpora (CPT or CPF) using the three identified predictors which explained the greatest amount of variance without overfitting the model. In order to cross-validate our results, we created a second random sample of 12 CPT and 12 CPF with the same format proportions, and the predictors identified in the first sample were tested on this out-of-model sample.[7] In order to reveal which specific words provided the most weight within each multi-word predictor category, a word list was run on the confessions as a whole and the ten most frequent terms within each predictor category were identified for further research. Figures 1-3 in the analysis provide frequency and distribution information for each set of terms. Log-likelihood tests were run to determine which terms differed significantly between the two corpora, the results of which are included in the Figures.

The next part of the analysis investigated the linguistic contexts in which the top ten terms were found, as corpus analyses have long demonstrated that “[y]ou shall know a word by the company it keeps” (Firth, 1957, p. 11). For this stage of the analysis, we used the freeware corpus analysis program AntConc (Anthony, 2014), which is a concordancing software that allows for in-depth qualitative analysis of the context and function of the words identified by the quantitative results described above.

For terms that were significant and the most frequent in each of the predictive categories, key word in context (KWIC) searches were run using the concordance feature. This allows the analyst to reveal frequent linguistic patterns surrounding the term of interest (i.e., the node word) by sorting words alphabetically to the right and/or left of the node word. For example, when examining the collocates of “I,” frequent terms immediately to the right were verbs such as “went,” “know,” and “will.” Subsequent searches were then performed to identify clusters that contained the node and its frequent collocates (e.g., negative forms such as “I didn’t kill” and “I didn’t know”), as well as related lemma forms, which include all forms in which a word can appear, as in different verb tenses (e.g., present tense “kill” and past tense “killed”) and in agreement with different pronoun use (e.g., first person “know” and third person “knows”). In order to ensure the patterns were represented across the set of texts within each corpus (and thus were not just the product of a single or a few speakers), we also used the concordance plot tool, which reports in how many texts within the corpus such a pattern is present. Finally, collocated terms for each node word were grouped into grammatical and functional categories such as modal verbs, lexical verbs, cognitive verbs, etc. (Biber et al., 1999). Since the total number of words differed between the two corpora, the raw counts were normed prior to performing the comparative analyses (Biber et al., 1998).

III Results

A. Baseline Characteristics of the Corpora

We conducted a bivariate correlation analysis on the output generated by LIWC after converting the percentages into raw counts. Table 2 below reports the categories that showed a

[7] Thanks goes to Professor Sean Murphy for guidance on the statistical analyses.

significant degree of correlation ($p < 0.05$, $r > 0.2$) with either CPT (if they had a positive r coefficient, as we coded CPT as "1"), or CPT (if they had a negative r coefficient, as we coded CPF as "0").

Table 2. Correlations between LIWC categories and the CPT/CPF corpora

LIWC Category	r	p	CPT	CPF
Analytic	- .336	< .001		x
Clout	-.219	.011		x
Words of six letters or more	.203	.019	x	
Function words	.365	< .001	x	
Impersonal pronouns	-.307	< .001		x
Personal pronouns	.207	.016	x	
I	.278	.001	x	
They	-.377	< .001		x
Conjunctions	.220	.011	x	
Adjectives	.323	.007	x	
Auxiliary verbs	.241	.005	x	
Words of assent	-.208	.016		x
Non-fluency	-.266	.002		x
Words representing drives	.210	.015	x	

The CPF corpus was correlated with the *analytic* category[8] ($r = -.366$, $p < .001$), suggesting that the speech is more formal, logical, and hierarchical, as opposed to informal and narrative. It was also correlated with the *clout* category ($r = -.219$, $p = .011$), pointing toward a confident speaker who perceives a high level of expertise regarding the topic being discussed, possibly indicating higher social status, confidence, and leadership (Kacewicz et al., 2013). Other categories that defined the CPF corpus were *they* ($r = -.377$, $p < .001$) which is characterized by words related to the third person plural such as "them" or "their", *ipron* ($r = -.307$, $p < .001$), consisting of impersonal pronouns like "it" and demonstrative pronouns like "this" or "those", *assent* ($r = -208$, $p = .016$), which includes terms of agreement such as "okay" or "yeah", and *nonflu* ($r = -266$, $p = .002$), which is characterized by discourse markers such as "hm", "oh", and "ahh". In summary, the speech in false confessions seems to be characterized by the use of impersonal pronouns, terms of agreement, discourse markers, a high level of confidence, and formal, logical language.

The CPT corpus was instead correlated with the category named *Sixltr* ($r = .203$, $p = .019$) consisting of words longer than six letters and used as a proxy for word complexity. The strongest correlation was found with the category *function* ($r = .365$, $p <.001$), which is comprised of many subdimensions, including personal pronouns, articles, and auxiliary verbs. As personal pronouns (*ppron*) and auxiliary verbs (*auxverb*) also stood out as single categories (respectively $r = .207$, p

[8] New to the 2015 version of LIWC were four summary variables: analytic thinking, clout, authenticity, and emotional tone. These variables were derived from previous studies that examined correlations between existing variables and their general functions. It should be noted that "the summary variables are the only non-transparent dimensions in the LIWC2015 output" (Pennebaker, Boyd et al., 2015, p. 6), so our discussions here are based on the functional understanding of each relevant summary category.

= .016; r = .241, p = .005), the significance of *function* was in turn influenced by these two categories. The category *I* was also found relevant (r = .278, p = .001) and since it is contained within *ppron* and therefore *function*, it suggests that in CPT speakers have a higher use of the first-person pronoun, along with its possessive forms and declinations (e.g., mine, me). CPT also correlated with the categories *conj* (r = .220, p = .011) representing conjunctions such as "and", "but", and "because", *adj* (r = .232, p = .007) consisting of adjectives, and *drives* (r = .210, p = .015), which is a general category including words associated with subcategories: *affiliation*, *achievement*, *power*, *risk,* and *reward*. It is important to note that none of these subcategories turned out to be significant, although *risk* reached a p-value of .055, and could partly explain the significance of the broader *drives*. Considering this, it is not surprising to find *risk* words associated with confession statements in general, as its vocabular includes words conveying loss and danger that would be expected in such high stakes situations. Yet, its correlation with CPT as opposed to CPF suggests further research should explore this pattern. Finally, while also non-significant, the LIWC category labeled *tone*, which corresponds to the emotional state of the speaker, varied between conditions. With lower scores indicating more negative emotions, speakers of the CPT scored 10 percentage points lower (20.70) than CPF speakers (30.88), possibly indicating the turmoil caused by the knowledge of having indeed committed the crime of the former.

B. Differences Between the Corpora

To test whether any variables or combination of variables would discriminate between the two types of confessions, we conducted logistic regression on a random sample of CPT (n = 25) and CPF (n = 25) containing the same proportion of first-person statements and Q&A to control for discourse format. As LIWC's output offers 95 variables, we ran a bivariate correlation analysis to identify variables which showed a significant degree of correlation with CPF and/or CPT ($p <$ 0.05 and $r > 0.2$), and obtained the following predictors: *analytic*, *clout*, *function*, *pronoun*, *ppron*, *I*, *they*, *ipron*, *conj*, *female*, *comma*. As noted above, since some of LIWC's categories contain overlapping words, we generated a correlation table of these predictors to assess collinearity. If two or more categories showed a high degree of collinearity, we chose the variable with the highest level of specificity over the broader one.

Through this process, we eliminated the variables *analytic, clout, function* and *pronoun*, as they are umbrella variables containing the others. We then tested the remaining seven categories in different combinations to find out which ones would explain the most variance without overfitting the model. We found that *comma* and *female* did not add predictive power to the model, and hence we eliminated them. Lastly, as *I* and *they* belong to the *ipron* and *ppron* categories, and we found the latter categories to be more predictive than the individual two pronouns, we chose to keep the categories *ipron* and *ppron* over *I* and *they*. In summary, the three variables presented in Table 3 which account for the most variance without overfitting the model were: impersonal pronouns, personal pronouns, and conjunctions.

Table 3. Logistic regression of impersonal pronouns, personal pronouns, and conjunctions on CPT and CPF

Variables	Model 1 (n = 50)		Model 2 (n = 24)	
	B	Odds Ratio	*B*	Odds Ratio
Impersonal pronouns	-44.974	.000	-.529	0.589

Personal pronouns	.448	1.566	1.383	3.9787
Conjunctions	8.508	4958.482	1.006	2.734
Nagelkerke pseudo r-square	.482		.807	
Chi-square	22.439, $df = 3$, $p < .001$		22.309, $df = 3$, $p < .001$	

Notes: CPF was assigned a value of 0, while CPT was assigned a value of 1.

The overall model was predictive of the dependent variables of CPT or CPF ($\chi^2 = 22.439$, $df = 3$, $p <. 001$), and the three variables were able to correctly classify 37 of the 50 confessions (Table 4). Impersonal pronouns had a significant association with CPF ($B = -44.974$, $e^B < .001$), coded as 0, while CPT were coded as 1, therefore explaining the negative coefficient accompanying this variable. CPT, instead, presented an association with personal pronouns ($B = .448$, $e^B = 1.566$) and conjunctions ($B = 8.508$, $e^B = 4958.482$). These results suggest that CPF are characterized by a higher degree of impersonal pronouns while CPT contain more conjunctions and personal pronouns. In short, this model was able to discriminate between the confessions that were proven false vs. those presumed to be true with an overall accuracy rate of 74% (Table 4).

Table 4. Classification table for Model 1 (n = 50)

Observed	Predicted		
	CPF	CPT	% correct
CPF	19	06	76%
CPT	07	18	72%
Overall percentage			74%

We further tested our predictors on an out-of-model sample composed of 12 CPT and 12 CPF containing the same proportion of Q&A and first-person statements as Model 1. Model 2 was also predictive ($\chi^2 = 22.309$, df = 3, p < .001) and the direction of the variables replicated our previous results, associating impersonal pronouns with CPF, and personal pronouns and conjunctions with CPT (Table 5). Importantly, this model correctly classified 20 out of 24 confessions (83.3%; see Table 5). In summary, it appears that false confessions contain more impersonal pronouns, such as “it”, “that”, “what”, etc., and fewer personal pronouns, such as “I”, “he,” and “me;” the latter are more likely to be more found in confessions presumed to be true. Conjunctions such as “and”, “then”, “but”, etc., were also more frequently used in CPT.

Table 5. Classification table for Model 2 (n = 24)

Observed	Predicted		
	CPF	CPT	% correct
CPF	10	02	83.3%
CPT	02	10	83.3%
Overall percentage			83.3%

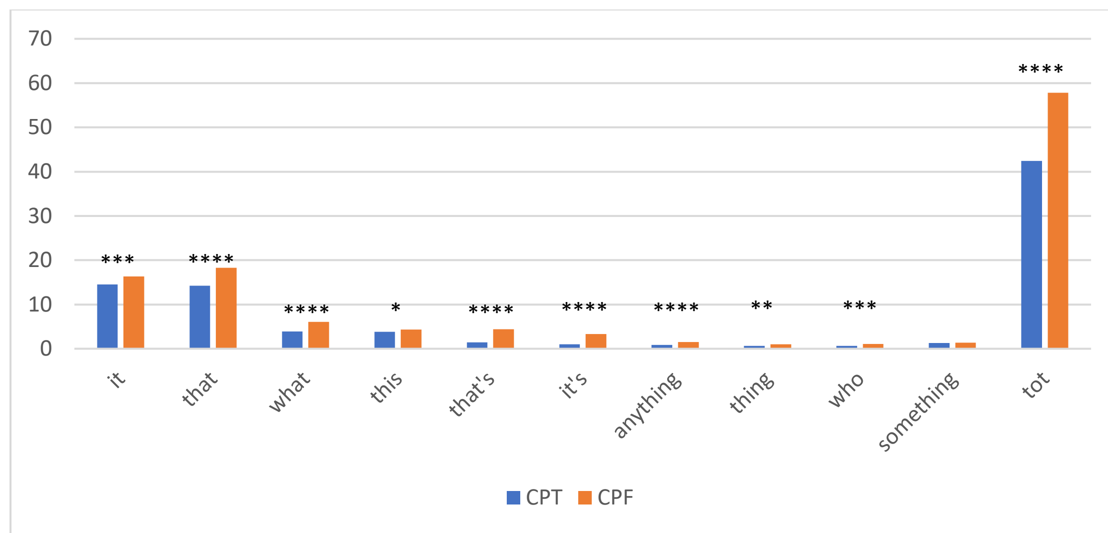
C. Predictors: Linguistic Function and Context

Impersonal pronouns, personal pronouns, and conjunctions represent three linguistic categories containing a multitude of lemmas that, during the development of LIWC, were

associated with each category by independent raters. In order to understand which words within the three categories influenced our results, we ran a word list of both corpora together in order to identify the top 10 words from each predictive category. Results were subsequently organized by their frequencies in the CPT vs. CPF (Figures 1-3 below), and log-likelihood tests were then run to determine if any of the features significantly distinguished between the two corpora (Rayson, 2021). Because counts for most common grammatical features "are relatively stable across 1000-word samples" (Biber et al., 1998, p. 249), frequencies are reported at a norming rate of X per 1000 words. Raw counts of each item are reported in Appendix A.

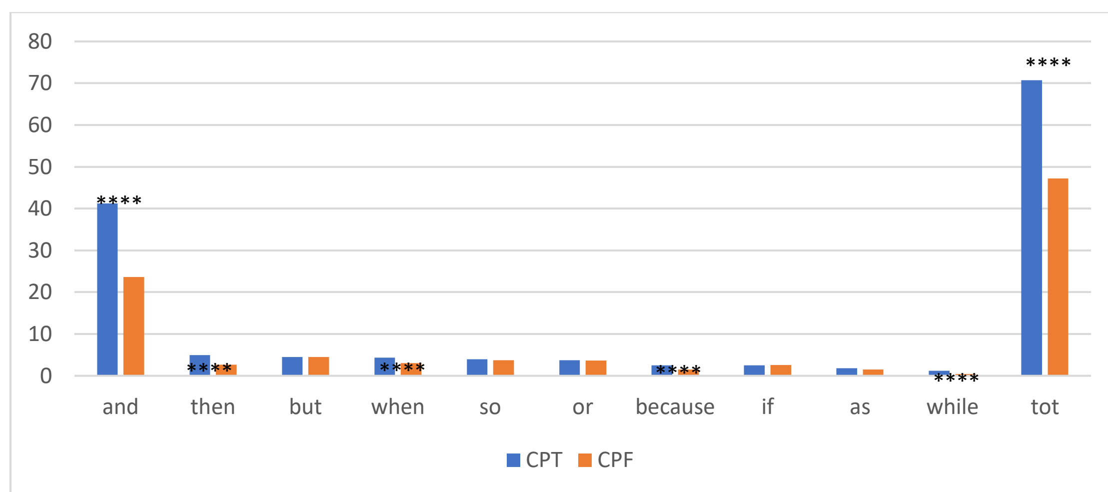
Starting with the impersonal pronoun category, "it" and "that" were the most frequent impersonal pronouns used in the CPF corpus (Figure 1). Because of the infrequent use of some of the weightier terms, this category was not explored further.

Figure 1. Frequency distribution of impersonal pronouns (per 1000 words)



* p < .05, ** p < .01, *** p < .001, **** p < .0001

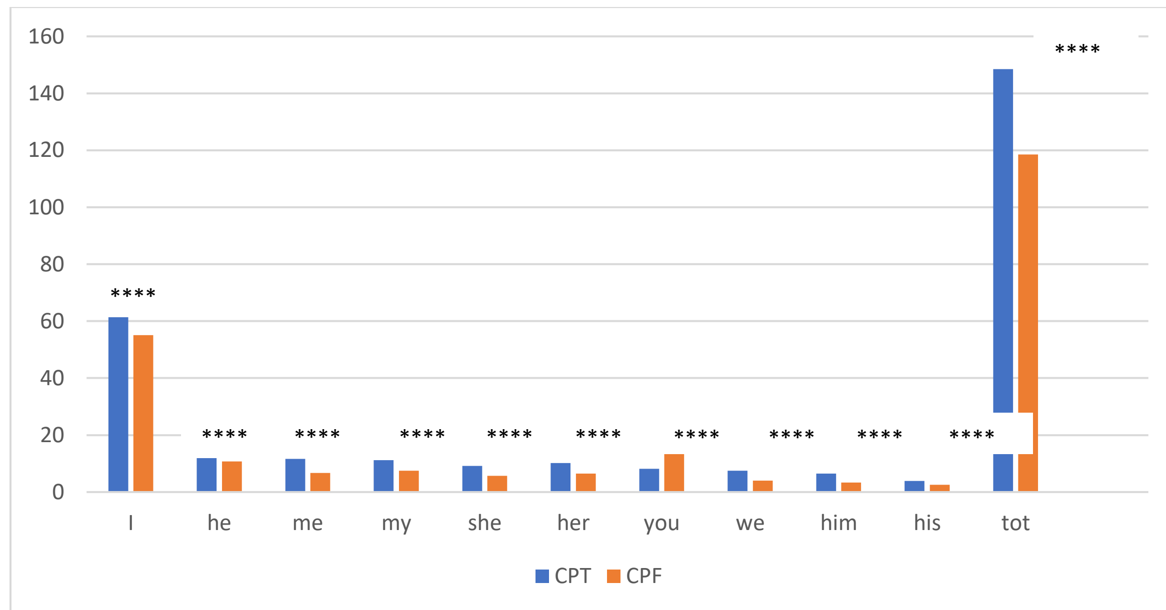
Figure 2. Frequency distribution of conjunctions (per 1000 words)



* p < .05, ** p < .01, *** p < .001, **** p < .0001

As displayed in Figure 2, the word "and" was responsible for the majority of the hits within the conjunctions category, Occurring more frequently in the CPT corpus, at a little over 4.1% while only 2.4% within CPF. Chafe (1993) analyzed the frequency of the most commonly occurring conjunctions in English and found that the word "and" comprises approximately 4.4% of all spoken English, while being only 1% of written language. Comparing these descriptive statistics to the ones that emerged from our sample, the frequency of "and" within CPT appears to fall within what is expected for spoken language, while its rate in CPF, the majority of which were also transcriptions of spoken first-person narratives and Q&A interrogations, suggests a closer proximity to written language.

Figure 3. Frequency distribution of personal pronouns (per 1000 words)



* p < .05, ** p < .01, *** p < .001, **** p < .0001

Finally, we conducted a more in-depth qualitative analysis in AntConc to understand the functions and context of "I," as it was the most commonly occurring pronoun in both corpora. The KWIC analysis revealed that the pronoun "I" in CPT collocated more often with lexical verbs, which express action and state (e.g., "go", "walk", "pick", "push", "find"), and include all verbs but auxiliary ones (Biber et al., 1999).

Given the topical nature of the confessions (i.e., violent crimes of murder and assault), a subset of lexical verbs concerning physical violence was further analyzed. Words like "hit", "cut", "killed", "raped", "shot", etc. were found to be on average 4.6 times more prominent in CPT than in CPF.

Another collocation category we identified with "I" were mental verbs, which express cognition (e.g., "know", "guess", "believe") (Biber et al., 1999). The lemmas "know" and "think" were the most frequently used in both CPT and CPF, but when comparing their usage between corpora, results showed that CPT contained slightly more "think" lemmas than CPF, and the latter contained more "know" lemmas than CPT. Interestingly, while the elevated frequency of the

lemma "know" in CPF initially suggested a higher level of knowledge of the facts of the crime, when we expanded our search to examine larger clusters using our collocates, a the proportion of negative instances (e.g., "I don't know", "I didn't know") represented 68% in CPF as compared to 56% in CPT. Thus, CPF speakers used the verb "to know" more often to express their lack of knowledge than CPT speakers.

Lastly, as a difference was observed in the frequency with which CPT and CPF used the sentence "I do not/don't remember/recall," the context surrounding it was examined. The sentence appeared 57 times in CPF across 13 confessions (35% of total CPF confessions), while in the CPT corpus it was uttered 86 times across 36 confessions (37.5% of total CPT confessions). When the words preceding and following it were inspected, a pattern emerged: in CPF, 49% of the total utterances ended the sentence and the speaker did not expand on what was not remembered, while in CPT, only 19% of the time the words terminated the sentence, and in the remaining 81% the speaker explained what was not remembered (e.g. "I don't remember what he was saying", "I don't remember if I had blood on them").

IV Discussion

This study compared the linguistic differences between presumed true and proven false confessions taking into account the contexts in which the grammatical and lexical patterns were found. First, we delineated the linguistic characteristics of both types of statements, with the language of CPF in our sample being characterized by impersonal pronouns, formality, and logical language suggesting a confident speaker, as well as a higher number of discourse markers and terms of agreement.[9] In contrast, CPT were characterized by more words longer than six letters, suggesting greater language complexity; more personal pronouns, especially "I", and auxiliary verbs, as well as conjunctions, adjectives, and possibly words regarding risk.[10]

Three linguistic predictors (impersonal pronouns, personal pronouns, and conjunctions) discriminated between CPT and CPF with an accuracy rate of 74% to 83.3%: Frequent use of impersonal pronouns was associated with proven false confessions, while personal pronouns and conjunctions were associated more with confessions presumed to be true. The lesser usage of first person singular by false confessors is consistent with research on language that has been linked to deception. For example, a 2008 study by Hancock et al. found that both participants who lied and were lied to use fewer first-person singular pronouns. It has been suggested that this reduced use of first-person singular pronouns may be an attempt to distance oneself from a negative event or context (Newman et al., 2003).

---

[9] These last two categories (non-fluency and terms of assent) were not considered significant, as the transcriptions of the confessions did not always include discourse markers (e.g., "ahh," "mmh," or ellipses), and the high frequency of terms of agreement depended on the preponderance of the Q&A format in the CPF.

[10] The prevalence of words longer than six letters in CPT, and therefore the corresponding lack thereof in CPF, could be linked to demographics and cognitive variables. In fact, we know that juveniles and individuals affected by a mental illness are more susceptible to producing a false confession (Drizin & Leo, 2004; Redlich et al., 2004; Redlich et al., 2008) and this could explain the lower lexical variety.

A qualitative analysis of collocations with "I" also revealed a pattern of association with lexical verbs (e.g., "put", "took", "killed", "hit", etc.) in CPT (e.g., "… and then eventually **I put** everything in the closet;" "**I hit** her in the side of the neck with my right forearm and she fell off the bed;" "**I raped** her, it was all a drug induced cloud"), and a lack thereof in CPF.

Moreover, the most frequent mental verb following "I" in CPF was found to be "I know/knew", while for CPT it was "I think/I thought", further raising the question of authorship, as it also ties to the higher level of confidence found in CPF by LIWC. However, both "I guess" and "I mean" were more frequently used in CPF (e.g. "I **guess** I was, yeah, I was kind of drunk by then, drinking pretty much;" "And **I mean** so I... that's why I got that gun for that purpose. But I don't... **I mean** I don't need no gun you know what **I mean**;" "So, **I guess** (name) her in the bedroom, in his bedroom, and started, I don't know, he beat her up, **I guess**. He knocked her out of something like that; he said in order to make love to her; she started yelling against and started fighting him, **I guess** he beat her up real bad and (name) got pissed about it."), adding a tentative aspect to the narrative and contrasting the previous finding, perhaps suggesting partial authorship.

Lastly, a close examination of the variations of the sentence "I don't remember" revealed that in CPF, the phrase tended to complete the sentence in approximately half of the cases (e.g., "**I don't remember**, I don't think, I don't know nothing;" "Not that I remember, **I don't remember** nothing, **I don't remember** nothing;" "**I** was – **don't** – **don't remember.** I was drinking that night;" "**I don't remember** exactly.") In contrast, in CPT, the sentence was followed in the majority of the cases by an explanation of what was not remembered (e.g. "**I don't remember** how many times I stabbed him; "I guess, **I don't remember** if it was on the bed or the floor;" "**I don't remember** the exact words I used, but I told him what happened and where it was;" "**I don't remember** if she was in or out of the car when she asked.").

This discrepancy could be due to the actual lack of knowledge of CPF in regard to the facts of the crime, therefore their "I don't remember" would symbolize a more general absence of memory caused by absence of the facts, while for CPT the context shifts toward a forgetfulness of specific details of the crime. This difference could also be tied to the cognitive processes involved in the production of images rather than false memories when it comes to CPF. These cognitive processes are in turn tightly connected to the concept of suggestibility, which has been found to be a crucial factor in the production of false confessions (Otgaar, 2021). False memories involve the actual belief of having experienced the remembered event, while images are conceptualized as associated with the suggested event but not experienced as memories of the event (Lindsay et al., 2004; Desjardins & Scoboria, 2007; Hessen-Kayfitz & Scoboria, 2012). Another study further distinguished the two by stating that people generating false memories "claimed to remember the event and reported at least two specific details about it," while individuals who experience images only "speculated about at least three different aspects of the event" (Strange et al., 2008, p. 479). Thus, false confessors may be generating images rather than false memories in the majority of the cases, and that could be the reason behind the lack of detail following the unremembered events.

Knowing how pronouns are used in different types of confessions is an important factor in the determination of the nature of a confession, and this model could be used in the future to help assess the possible veracity of a confession, within some probabilistic level of certainty (Adams, 1996). However, it is yet unknown why the speech of CPF turned out to be different from that of

CPT. A possible explanation could consist of different speech patterns between innocent confessors and guilty confessors, or it could be due to the different types of pressure these two populations find themselves under.

Another plausible explanation instead involves differences in the authorship of the confession. History presents all too many instances in which police appeared to write an innocent person's confession. In 1963, New York City detectives questioned George Whitmore, a 19-year-old African American man for 26 hours, which produced a detailed 61-page confession to two high-profile murders. Whitmore was ultimately exonerated. His false confession, however, plainly authored by the police, was so troubling that in *Miranda v. Arizona* (1966), the U.S. Supreme Court cited Whitmore as a "conspicuous" example of police coercion in the interrogation room (Kassin, 2017; English, 2011; Shapiro, 1969).

With 95% of false confessions containing accurate crime facts known to police that the innocent suspect could not have known, it is possible that in the case of CPF there may have been a heavier contamination of police speech into the suspect's speech, or even more directly, some of the confessions may have been authored by the officers. Yet, it is to be noted that also among the sample of CPT some confessions were transcribed by police officers upon request of the suspect, or because of departmental regulations on confession evidence, therefore a base level of contamination was to be expected in both samples. However, the different degree in which such contamination happened in CPT vs. CPF may be responsible for the observed linguistic differences between them.

A. Limitations and Future Research

Although current software programs can quantify and categorize psychological, social, and linguistic features in a text or corpus of texts, they are not without limitations. LIWC, for instance, does not consider context when categorizing language into its pre-determined dictionary categories, which means that some of the categories may have included terms whose contextual meanings had been misinterpreted (e.g., the sentence "I am crying of laughter" would increase the percentages under both the positive and negative emotions categories). While we aimed to partially obviate this shortcoming by examining the context of the top words in each predictor category using AntConc, more qualitative analysis can be done to further flesh out functional patterns produced by language in context.

Another limitation of this study lies in the archival nature of the data, which results in our inability to know the circumstances under which each confession was taken and the level of accuracy of the transcriptions where video or audio recordings were not present in the files. Interrogations and the process leading to a confession are currently largely a black box, unknown to both the public and the judicial system. Historically, the final confession has oftentimes been the only evidence revealed during legal proceedings, with little or no record of what preceded it. Because of the incredible weight that confession evidence holds, it is of paramount importance for the interrogation process to be video and audio recorded—from start to finish. Fortunately, with more states requiring recordings of interrogations, especially of more serious crimes that result in lengthier sentences (Bang et al., 2018) more research can be performed in the future on these previously under-documented processes.

In addition to further exploration of the patterns with "I" discussed above, future research should also follow up on the context and functions of "it", as we found this word to be the most frequent within the impersonal pronouns category. Similarly, further investigation of variations in the contexts in which "and" occurs, as it was the most common conjunction in our corpora, may also provide fruitful results.

Finally, future research should also investigate the language in confessions that have been contaminated during the interrogation process, including the effect of interjected law enforcement speech on the suspect's narrative, and of possible police authorship on the final statement. This would also help isolate whether there is a stylistic difference inherent to innocent and guilty speech beyond the contamination.

In conclusion, this study outlined the linguistic baselines of confessions proven false and confessions presumed true and demonstrated which classes of features and individual terms and their collocates provided avenues of further research to help distinguish between the two. While the results of this research do not presume to suggest a clear-cut way of distinguishing between true and false confession statements, they highlight the potential of corpus linguistics as an analytical tool for future research in the field and raise interesting questions on the possible causes of the stylistic differences.

References

American Psychological Association. (2009). *APA Amicus Briefs by Issue*, online: http://www.apa.org/about/offices/ogc/amicus/index-issues.aspx

Adams, Susan H. (1996). Statement analysis: What do suspects' words really reveal. *FBI Law Enforcement Bulletin*, *65*, 12.

Alceste, Fabiana, Jones, Kristyn A., & Kassin, Saul M. (2020). Facts only the perpetrator could have known? A study of contamination in mock crime interrogations. *Law and Human Behavior, 44*(2), 128–142, online: https://web.williams.edu/Psychology/Faculty/Kassin/files/Alceste%20Jones%20Kassin%20(2020)%20-%20Contamination.pdf

Anthony, Laurence. (2014) AntConc (Version 3.4.3) [Computer Software]. Tokyo, Japan: Waseda University.

Appleby, Sara C., & Perillo, Jennifer T. (2015). *Confessions as Hollywood Productions: A Content Analysis Comparison of Corroborated and False Confessions.* Paper presented at the Meeting of the American Psychology-Law Society, San Diego.

Appleby, Sara C., Hasel, Lisa E., & Kassin, Saul M. (2013). Police-induced confessions: An empirical analysis of their content and impact. *Psychology, Crime & Law*, *19*(2), 111-128, online: https://doi.org/10.1080/1068316X.2011.613389

Appleby, Sara C., & Kassin, Saul M. (2016). When self-report trumps science: Effects of confessions, DNA, and prosecutorial theories on perceptions of guilt. *Psychology, Public Policy, and Law, 22*(2), 127–140.

Baker, Paul (2006). *Using corpora in discourse analysis*. A&C Black.

Bang, Brandon L., Stanton, Duane, Hemmens, Craig, & Stohr, Mary K. (2018). Police recording of custodial interrogations: A state-by-state legal inquiry. *International Journal of Police Science & Management*, *20*(1), 3-18, online: https://journals.sagepub.com/doi/pdf/10.1177/1461355717750172

Biber, Douglas (2010). Corpus-based and corpus-driven analyses of language variation and use. In *The Oxford Handbook of Linguistic Analysis.* Oxford: Oxford University Press.

Biber, Douglas, Conrad, Susan, and Reppen, Randi (1998). *Corpus linguistics: Investigating language structure and use.* Cambridge: Cambridge University Press.

Biber, Douglas, Johansson, Stieg, Leech, Geoffrey, Conrad, Susan, & Finegan, Edward (1999). *Longman grammar of spoken and written English* (Vol. 2). London: Longman.

Chafe, Wallace (1993). Integration and involvement in speaking, writing, and oral literature. In: Deborah Tannen (ed.), *Spoken and Written Language: Exploring Orality and Literacy,* 35-53. Norwood, N.J.: Ablex.

Desjardins, Tracy, & Scoboria, Alan (2007). "You and your best friend Suzy put Slime in Ms. Smollett's desk": Producing false memories with self-relevant details. *Psychonomic Bulletin & Review*, *14*(6), 1090-1095, online: https://link.springer.com/content/pdf/10.3758/BF03193096.pdf

Drizin, Steven A., & Leo, Richard A. (2004). The problem of false confessions in the post-DNA world. *North Carolina Law Review*, *82*, 891-1007.

DNA Exoneration Database (2021). Accessed 10 June 2021, online: https://www.convictingtheinnocent.com

English, Thomas J. (2011). *The Savage City: Race, Murder, and a Generation on the Edge*. New York: Morrow.

Firth, John R. (1957). *Papers in Linguistics, 1934-1951.* London: Oxford University Press.

Garrett, Brendon. L. (2010). The substance of false confessions. *Stanford Law Review*, *62*, 1051-1118.

Garrett, Brendon L. (2015). Contaminated confessions revisited. *Virginia Law Review*, *101*, 395.

Geven, Linda M., Ben-Shakhar, Gershon, Kassin, Saul M., & Verschuere, Bruno (2020). Distinguishing true from false confessions using physiological patterns of concealed information recognition: A proof of concept study. *Biological Psychology, 154*, 107902, online:https://www.sciencedirect.com/science/article/pii/S0301051120300624

Granger, Sylviane, & Leech, Geoffrey (2014). *Learner English on computer*. Routledge.

Hancock, Jeffrey T., Curry, Lauren E., Goorha, Saurabh, & Woodworth, Michael (2008). On lying and being lied to: A linguistic analysis of deception in computer-mediated communication. *Discourse Processes*, *45*(1), 1-23, online: https://www.tandfonline.com/doi/pdf/10.1080/01638530701739181

Hessen-Kayfitz, Joanna K., & Scoboria, Alan (2012). False memory is in the details: Photographic details differentially predict memory formation. *Applied Cognitive Psychology*, *26*(3), 333-341, online:

https://onlinelibrary.wiley.com/doi/pdf/10.1002/acp.1839

Honts, Charles R., Kassin, Saul M., & Craig, Ronald A. (2014). 'I'd know a false confession if I saw one': a constructive replication with juveniles. *Psychology, Crime & Law*, *20*(7), 695-704, online: https://www.tandfonline.com/doi/pdf/10.1080/1068316X.2013.854792

Honts, Charles R., Forrest, Krista, & Stepanescu, Adela (2019). Polygraph examiners unable to discriminate true and false juvenile confessions. Polygraph and Forensic Credibility Assessment: *Journal of Science and Field Practice, 48*(1), 1-9.

Innocence Records. Retrieved on 14 May 2018, online: www.innocencerecord.org

Kacewicz, Ewa, Pennebaker, James W., Davis, Matthew, Jeon, Moongee, & Graesser, Arthur C. (2014). Pronoun use reflects standings in social hierarchies. *Journal of Language and Social Psychology*, *33*(2), 125-143, online: https://journals.sagepub.com/doi/pdf/10.1177/0261927X13502654

Kassin, Saul M. (1997). The psychology of confession evidence. *American Psychologist*, *52*(3), 221, online: https://web.williams.edu/Psychology/Faculty/Kassin/files/Kassin1997.pdf

Kassin, Saul M. (2012). Why confessions trump innocence. *American Psychologist, 67*, 431-445, online: https://doi.org/10.1037/a0028212

Kassin, Saul M. (2017). False confessions: How can psychology so basic be so counterintuitive? *American Psychologist, 72*, 951-964.

Kassin, Saul M., Drizin, Steven A., Grisso, Thomas, Gudjonsson, Gisli H., Leo, Richard A., & Redlich, Allison D. (2010). Police-induced confessions: Risk factors and recommendations. *Law and human behavior*, *34*(1), 3-38, online: https://idp.springer.com/authorize/casa?redirect_uri=https://link.springer.com/article/10.1007/s10979-009-9188-6

Kassin, Saul M., Meissner, Christian A., & Norwick, Rebecca J. (2005). "I'd know a false confession if I saw one": A comparative study of college students and police investigators. *Law and Human Behavior*, *29*(2), 211-227, online: https://link.springer.com/content/pdf/10.1007/s10979-005-2416-9.pdf

Kassin, Saul M., & Neumann, Katherine (1997). On the power of confession evidence: An experimental test of the "fundamental difference" hypothesis. *Law and Human Behavior, 21*, 469-484.

Kassin, Saul M., Redlich, Allison D., Alceste, Fabiana, & Luke, Timothy J. (2018). On the general acceptance of confessions research: Opinions of the scientific community. *American Psychologist, 73,* 63-80, online: https://web.williams.edu/Psychology/Faculty/Kassin/files/Kassin%20et%20al.%20(2018)%20-%20AP%20Frye.pdf

Kassin, Saul M., & Sukel, Holly (1997). Coerced confessions and the jury: An experimental test of the "harmless error" rule. *Law and Human Behavior, 21,* 27-46, online: https://link.springer.com/content/pdf/10.1023/A:1024814009769.pdf

Kassin, Saul M., & Wrightsman, Lawrence S. (1985). Confession evidence. In S. Kassin & L. Wrightsman (Eds.). *The psychology of evidence and trial procedure*, (pp. 67-94). Beverly Hills, CA: Sage Books.

Leo, Richard, & Drizin, Steven A. (2010). *The three errors: Pathways to false confession and wrongful conviction.* Washington: American Psychological Association, 2010.

Leo, Richard A., & Ofshe, Richard J. (1998). The consequences of false confessions: Deprivations of liberty and miscarriages of justice in the age of psychological interrogation. *Journal of Criminal Law and Criminology*, *88*, 429-496, online: https://doi.org/10.2307/1144288

Lindsay, Stephen D., Hagen, Lisa, Read, Don J., Wade, Kimberley, & Garry, Maryanne. (2004). True photographs and false memories. *Psychological Science*, *15*, 149–154, online: https://journals.sagepub.com/doi/pdf/10.1111/j.0956-7976.2004.01503002.x

National Institute of Justice, Office of Justice Programs, *Crime Scene Investigation: A Guide for Law Enforcement* 42 (Department of Justice 2000), online: https://www.ojp.gov/pdffiles1/nij/178280.pdf

National Registry of Exonerations. *The National Registry of Exonerations*. Retrieved on 10 April 2019, online: www.law.umich.edu/special/exoneration/Pages/False-Confessions.aspx

Neuschatz, Jeffrey S., Lawson, Deah S., Swanner, Jessica K., Meissner, Christian A., & Neuschatz, Joseph S. (2008). The effects of accomplice witnesses and jailhouse informants on jury decision making. *Law and Human Behavior, 32*, 137–149, online: https://link.springer.com/article/10.1007/s10979-007-9100-1

Newman, Matthew L., Pennebaker, James W., Berry, Diane S., & Richards, Jane M. (2003). Lying words: Predicting deception from linguistic styles. *Personality and Social Psychology Bulletin*, *29*(5), 665-675, online: https://journals.sagepub.com/doi/pdf/10.1177/0146167203029005010

Nirider, Laura H., Tepfer, Jonshua A., & Drizin, Steven A. (2012). Combating Contamination in Confession Cases (reviewing Convicting the Innocent: Where Criminal Prosecutions Go Wrong by Brandon L. Garrett). *University of Chicago Law Review*, *79*(2), 7.

Otgaar, Henry, Schell-Leugers, Jennifer M., Howe, Mark L., Vilar, Alejandra De La Fuente, Houben, Sanne T., & Merckelbach, Harald (2021). The link between suggestibility, compliance, and false confessions: A review using experimental and field studies. *Applied Cognitive Psychology*, *35*(2), 445-455, online: https://onlinelibrary.wiley.com/doi/pdf/10.1002/acp.3788

Pennebaker, James W., Booth, Roger J., & Francis, Martha E. (2015). Linguistic inquiry and word count: LIWC [Computer software]. *Austin, TX: liwc.net*, *135*.

Pennebaker, James W., Boyd, Ryan L., Jordan, Kayla, & Blackburn, Kate. (2015). *The development and psychometric properties of LIWC2015*, online: https://repositories.lib.utexas.edu/bitstream/handle/2152/31333/LIWC2015_LanguageManual.pdf

Pennebaker, J. W., Mehl, Matthias R., & Niederhoffer, Kate G. (2003). Psychological Aspects of Natural Language Use: Our Words, Our Selves. *Annual Review of Psychology, 54,* 547-577, online: https://www.annualreviews.org/doi/full/10.1146/annurev.psych.54.101601.145041

Rayson, Paul. Log-likelihood and effect size calculator. (2021, August 10), online: http://ucrel.lancs.ac.uk/llwizard.html

Redlich, Allison D., Quas, Jodi A., & Ghetti, Simona (2008). Perceptions of children during a police interrogation: Guilt, confessions, and interview fairness. *Psychology, Crime & Law, 14*, 201–223, online: https://www.tandfonline.com/doi/pdf/10.1080/10683160701652542

Redlich, Allison D., Silverman, Melissa, Chen, Julie, & Steiner, Hans (2004). The police interrogation of children and adolescents. In *Interrogations, confessions, and entrapment* (pp. 107-125). Springer, Boston, MA, online: https://www.researchgate.net/profile/Allison-Redlich/publication/290469506

Shapiro, Fred C. (1969). *Whitmore*. New York: Bobbs-Merrill.

Shuy, Robert W. (1998). *The language of confession, interrogation, and deception*. Thousand Oaks, CA: Sage.

Strange, Deryn, Wade, Kimberley, & Hayne, Harlene (2008). Creating false memories for events that occurred before versus after the offset of childhood amnesia. *Memory*, *16*, 475–484, online: https://doi.org/10.1080/09658210802059049

Trainum, James L. (2008, October 24). The case for videotaping interrogations: A suspect's false confession to a murder opened an officer's eyes. *The Los Angeles Times*.

Villar, Gina, Arciuli, Joanne, & Paterson, Helen (2013). Linguistic indicators of a false confession. *Psychiatry, Psychology and Law*, *20*(4), 504-518, online: https://www.tandfonline.com/doi/pdf/10.1080/13218719.2012.712834

Wallace, Brian D., & Kassin, Saul M. (2012). Harmless error analysis: How do judges respond to confession errors? *Law and Human Behavior*, *36*(2), 151.

Wigmore, John H. (1985). *Wigmore on evidence* (4th ed.). Boston, MA: Little, Brown. (Original work published 1904)

Wrightsman, Lawrence S., & Kassin, Saul M. (1993). *Confessions in the courtroom*. Newbury Park, CA: Sage.

Appendix A

Raw counts of top ten impersonal pronouns

	CPT	CPF
it	1642	2654
that	1608	2968
what	444	989
this	430	705

that's	162	714
it's	118	542
anything	99	251
thing	75	167
who	76	176
something	147	217
tot	4801	9383

Raw counts of top ten conjunctions

	CPT	CPF
and	4666	3836
then	560	428
but	508	725
when	495	496
so	448	606
or	424	586
because	286	249
if	281	414
as	201	249
while	136	76
tot	8005	7665

Raw counts of top ten personal pronouns

	CPT	CPF
I	7339	8934
he	1742	1751
me	1314	1097
my	1263	1223
she	1043	934
her	1153	1052
you	920	2637
we	853	656
him	738	545
his	443	410
tot	16808	19239

Still standing: Innocence work in England and Wales

Dr. Louise Hewitt
Director Innocence Project London,
Senior Lecturer University of Greenwich

Professor Claire McGourlay
Director Manchester Innocence Project,
University of Manchester

This article examines the two categories that have evolved in the literature concerning Innocence Projects; the pedagogical value of innocence work and the problems with associating the term innocence with the English criminal justice process. This research draws upon a study undertaken in 2017 by the Innocence Project London (unpublished) and another in 2020. Both studies sought to understand the extent to which organisations are undertaking innocence work in England and Wales. This research is written from the perspective of the Directors of both the Innocence Project London and Manchester Innocence Project, and as a result, the projects are discussed at length in various sections. An effort has been made however, to discuss other organisations that undertake similar work in various parts of this article.

I. Introduction
II. Method
III. Running an Innocence organisation in England and Wales
IV. The Innocence Project London
V. Manchester Innocence Project
VI. Innocence work and its pedagogical value
VII. Associating the term 'innocence' with the English criminal justice process
VIII. Conclusion

I Introduction

The concept of innocence work in England and Wales was formally introduced in 2004 when it was explored in the context of establishing innocence projects in UK universities. This was when the Innocence Network UK (INUK) was set up to "facilitate academic study of wrongful convictions and miscarriages of justice, providing identifiable, accessible expertise, and a repository of evidence-based research to exploit in efforts to influence criminal justice system reform and government policy".[1] The INUK, acting as an umbrella organisation encouraged the

[1] Michael Naughton & Carole McCartney, Legal Ethics "The Innocence Network UK The Innocence Network UK" (2004) 7:2 Legal Ethics 150, online: <https://www.tandfonline.com/doi/abs/10.1080/1460728X.2004.11424206>

establishment of innocence projects at universities in the UK to "formalise, and augment *ad hoc* investigations undertaken by students in academic settings, and other individuals (i.e. investigative journalists, pressure groups)". [2] The main two objectives of the Network were to assist convicted individuals who have exhausted the appeals process whilst at the same time providing accessible clinical legal education that touches upon all aspects of the criminal justice process. The INUK operated until July 2015 having successfully supported the development of over 30 innocence projects around the country. This success was also cited as one of the reasons it ceased operating. The former INUK website identifies the reasons for its cessation as: the failure of some projects to work to the relevant protocols; the disproportionate amount of time spent supporting innocence projects; and the need to work on the quality of assistance provided to wrongfully convicted individuals, in particular reducing the number of students who used the innocence project as a CV collector's item. From experience as Directors of the Innocence Project London and Manchester Innocence Project, we know these are issues still relevant today, and that they contribute to why the number of innocence projects has reduced drastically from 35 in 2015 to 23 in 2017 and now 12 in 2020.

This article examines the pedagogical value of innocence work, offering potential explanations for the significant reduction in the number of organisations working in the country. It also considers the issues raised in associating the term innocence with the English criminal justice process. The contents draw upon research undertaken in 2017 and 2020 by the Innocence Project London (unpublished), which sought to understand the extent to which organisations are undertaking innocence work England and Wales. Written from the perspective of the Director of the Innocence Project London, and the Director of the Manchester Innocence Project, this article draws upon their experiences running both organisations.

II Method

It is a reality that the number of innocence organisations in England and Wales has dramatically reduced, but little research has been carried out on just how many are still operating. In 2017, the Director of the Innocence Project London, Dr Louise Hewitt developed and circulated a questionnaire to the innocence organisations that attended the Cardiff Innocence Ten conference in April 2016. Seeing as these were the last known innocence organisations to be active, this seemed like a good starting point. Most of the organisations were predominantly based in universities supported by academics although some were described as "student-led criminal appeal projects";[3] however, one was an independent charity not based in a higher education setting. The questionnaire comprised of ten questions split into two parts. Part one is relevant to this article in that the questions sought to determine the background and structure of organisations undertaking innocence work:

1. Are you still operating a criminal appeals project, and if so what do you call it?
2. Is the project entirely student led or supported by an academic?

[2] *Naughton and McCartney, supra* note 1

[3] Holly Greenwood & Dennis Eady, "Re-Evaluating Post-Conviction Disclosure: A Case for 'Better Late than Never'" (2019) 59 Int'l JL Crime & Just, online: https://doi.org/10.1016/j.ijlcj.2019.05.001>

3. How many students and staff are currently involved?
4. How many cases are you working on?
5. How do you source your cases?
6. Is it a pro bono/extra-curricular project or an assessed module?
7. Is the project supported in any way by practising solicitors or barristers – if yes, could you please briefly outline how this works?

In 2020, Dr Louise Hewitt repeated the questionnaire sending it to the organisations that had responded positively to being active in the 2017 study using the same two-part template. Part one repeated questions one to five and question seven, but varied question six as follows:

(a) Is it a pro bono/extra-curricular project or an assessed module?
(b) What training/information is provided to the students to inform them of what the work entails?
(c) Does your project allow students to correspond directly with the client, and if so to what extent, e.g., letter/phone call correspondence/visiting client (please specify which)?

The results from both questionnaires are discussed in this article.

The obvious limitation to the questionnaires concerns additional information which would have been useful to know in the context of considering why innocence organisations were not still operating. For the purpose of both questionnaires, "entirely student-led" was taken to mean the work was carried out in the absence of an academic, whilst "supported by an academic" means the work was overseen and supported in this way. Another question could have asked how many organisations have made submissions to the CCRC and with what result. These questions were not included in the 2020 questionnaire, because the results of the 2017 questionnaire made it clear that the organisations undertaking innocence work were rapidly reducing. There was a danger that such work was becoming less significant and may disappear, therefore the necessity was to identify organisations that were still running and to see whether there was an opportunity to develop a more cohesive innocence work environment.

III Running an innocence organisation in England and Wales

In England and Wales, if you plead not guilty to a serious criminal charge your case is heard in front of a jury at a Crown Court.[4] If an individual is convicted at Crown Court, they have 28 days to appeal their conviction, requesting leave to appeal initially, and if granted this is followed by a hearing in the Court of Appeal.[5] Individuals must demonstrate a serious error in law or procedure or some fresh evidence which has the potential to render their conviction "unsafe."[6]

[4] Courts and Tribunals Judiciary, "What is the Crown Court", online: <https://www.judiciary.uk/you-and-the-judiciary/going-to-court/crown-court/>.

[5] Part 36 Criminal Procedure Rules and Practice Directions (2020), online: <https://www.gov.uk/guidance/rules-and-practice-directions-2020>.

[6] *Criminal Appeal Act, 1995* (UK), s 2(1)(a), online: <https://www.legislation.gov.uk/ukpga/1995/35>.

If leave to appeal is denied or a full appeal dismissed, the only option for individuals maintaining their innocence to get their case back to the Court of Appeal is to make an application to the Criminal Cases Review Commission (CCRC). It is at this point that the work of the majority of innocence organisations in England and Wales starts.[7] Whilst an application to the CCRC is free, the experience of the authors is that without assistance, convicted individuals struggle to articulate with clarity what amounts to fresh evidence or a new legal argument. Applicants to the Innocence Project London (IPL) that have already made an application to the CCRC have often not demonstrated fresh evidence or a new legal argument but have reiterated the case put forward by their defence team at trial. Research has supported this, suggesting that where individuals had legal representation or assistance they had "a significantly better chance" of their case being referred by the CCRC back to the Court of Appeal.[8]

The CCRC is an independent body which reviews possible miscarriages of justice in the United Kingdom, with the ability to decide whether a conviction or sentence should be referred back to the Court of Appeal. The CCRC conducts the "real possibility" test identified in s.13 of the *Criminal Appeal Act* 1995:

> 13. (1) A reference of a conviction … shall not be made under any of sections 9 to 12B unless—
> (a) the Commission consider that there is a real possibility that the conviction … would not be upheld were the reference to be made,
> (b) the Commission so consider— (i) in the case of a conviction … because of an argument … not raised in the proceedings which led to it or on any appeal or application for leave to appeal against it…

This emphasis on "real possibility" in the statutory test has led to criticism that the CCRC has to second guess what decision the Court of Appeal will make.[9] The Court of Appeal has made it clear that it does not have the advantage of the jury in hearing all the evidence, and that the assessment they need to make is whether the fresh evidence they have heard, if given at trial, might reasonably have affected the decision of the jury to convict.[10] On this basis, the Court of Appeal has been accused of becoming increasingly resistant to legal challenges.[11] The difficulty in defining "real possibility" has not helped provide a tangible threshold for applicants to meet:

---

[7] The Cardiff Innocence Project also provides assistance to individuals who are making a first appeal or out of time appeal.

[8] Jacqueline Hodgson & Juliet Horne, "The extent and impact of legal representation on applications to the Criminal Cases Review Commission (CCRC)" (2009) SSRN, online: <http://doi.org/10.2139/ssrn.1483721>.

[9] Michael Naughton & Gabe Tan, "The right to access DNA testing by alleged innocent victims of wrongful convictions in the United Kingdom (2010) 14:4 Int'l J Evidence & Proof 326, online: <http://www.innocencenetwork.org.uk/wp-content/uploads/2011/11/Naughton-and-Tan-IJEP-Nov-2010.pdf>.

[10] *R v Pendleton*, [2001] UKHL 66, [2002] 1 All ER 524 (on appeal from the Court of Appeal).

[11] Sir Anthony Hooper, who retired in 2012 after eight years on the court of appeal, told a Panorama documentary aired in June 2018 see Matrix Chambers, A Change in approach from the CCRC online: https://www.matrixlaw.co.uk/resource/a-change-in-approach-from-the-ccrc-by-anita-davies/

> The 'real possibility' test prescribed in section 13(1)(a) of the 1995 Act as the threshold which the Commission must judge to be crossed before a conviction may be referred to the Court of Appeal is imprecise but plainly denotes a contingency which, in the Commission's judgment, is more than an outside chance or a bare possibility, but which may be less than a probability or a likelihood or a racing certainty.[12]

Not having a definitive explanation of what amounts to a real possibility is to enable the CCRC to apply the test on a case-by-case basis, however the exercise of the its judgment has been said to be overly cautious. The Westminster Commission on Miscarriages of Justice report in March 2021[13] said that the test put the CCRC in a position to be *too* deferential to the Court of Appeal, thereby limiting its ability to reach an independent judgment. It recommended developing a different test. A similar recommendation was made in 2015 by the Justice Select Committee.[14] There have been no changes made to the test yet. Students working in an innocence organisation learn about these issues first-hand and develop a critical perspective on the effect the test has on their work when they are putting together an application for their client.

Learning and teaching in an innocence organisation is derived from clinical legal education where students work in small groups to review and investigate cases of convicted individuals who have maintained their innocence but have exhausted the criminal appeals process. Rather than being taught in a passive style through a dissemination of information from the lecturer to the student, learning is a result of direct involvement with the case. The cases place emphasis on the importance of facts, and of being sceptical and detailed throughout.[15] Working at the end of the criminal justice process means that students deconstruct criminal cases, through an extensive investigation of fact alongside research into substantive law, to understand how and why their client was convicted. Students review all of the evidence and documentation available to them in an attempt to identify new evidence or a new legal argument that was not put forward at the initial trial or appeal stage. Each case is unique as to the substantive and sometimes procedural law students have to research and learn, and the legal issues which will often go beyond the law undergraduate curriculum.[16] For example, students may have to consider a number of issues that go beyond the offence for which their client had been convicted, ranging from reviewing medical evidence concerning the injuries of the victim and the medical history of the client to considering expert evidence which means researching how an expert is defined by the law and the parameters in which they can give evidence.

---

[12] *R v Criminal Cases Review Commission, ex parte Pearson*, [1999] 3 All ER 498, [2000] 1 Cr App R 141 at 149F-150A.

[13] "Westminster Commission on Miscarriages of Justice report" (8 March 2021), online: <https://www.gcnchambers.co.uk/westminster-commission-on-miscarriages-of-justice-report-publication/>.

[14] Justice Committee, Criminal Cases Review Commission (Twelfth Report, Session 2013-14, HC 850) at para 20.

[15] Keith A Findley, "The Pedagogy of Innocence: Reflections on the Role of Innocence Projects in Clinical Legal Education" (2006) 13:1 Clinical L Rev 1111 [*Findley*].

[16] Daniel S Medwed, "Actual Innocents: Considerations in Selecting Cases for a New Innocence Project" (2003) 81 Neb L Rev 1097 [*Medwed*], online: <https://core.ac.uk/download/pdf/188093935.pdf>.

IV The Innocence Project London

The IPL is based in the School of Law and Criminology at the University of Greenwich, a post-92 teaching focussed institution with a department of approximately 400 undergraduate law students. The name innocence project is trade-marked[17] and therefore is limited to use by those who are members of the Innocence Network or who have been granted a licence to use the name by the Network. The Innocence Project London was the first English organisation to join the USA based Innocence Network in 2016, the Cardiff Law School Innocence Project uses the name under licence from the Innocence Network and the Manchester Innocence Project became the second English organisation to join Innocence Network in late 2020.

As an innocence project, the IPL accepts applications from individuals who have exhausted the appeals process, although it receives a number of applications from individuals who have yet to appeal, often facing appeals out of time. Unlike some innocence organisations run by practising lawyers,[18] the IPL it is not set up to work on live cases that produce appeals (to the Court of Appeal). *R* v *Conaghan*[19] is a cautionary reminder for students and supervisors alike when assisting live cases, not only to the timeliness of making appeals, a point reiterated by the court as a clear and established principle, but also to compliance with the relevant procedures particularly where there is criticism of trial counsel.[20] That said, the Cardiff Innocence Project, with the support of lawyers, has been successful in contributing to two appeals against conviction where one conviction was quashed,[21] in addition to three referrals from the CCRC to the Court of Appeal, where one conviction was quashed.[22]

The work starts by ensuring each IPL applicants case is properly assessed to determine the possibility of making an application to the CCRC. Case assessments are carried out pro bono by lawyers working for London based law firm Weil and Gotshal. Using a case assessment template, groups of lawyers consider applications seeking to identify the possibility of a new legal argument or fresh evidence, in line with the requirements of the CCRC. The documents used for this process are normally the trial Judge's summing-up, grounds of appeal and any decision of the Court of Appeal or single judge depending on whether leave to appeal was allowed or denied. Sometimes applicants are able to provide other documents, such as witness statements or jury bundles.

The IPL does not request all their documentation at the assessment stage on the basis that not every case will be deemed eligible. Documentation for clients maintaining their innocence can best be described as their currency, especially the Judges summing-up from the trial. Moving between prisons and sending documents to various organisations to seek assistance means that case files can and do get lost. Innocence organisations often investigate cases that have incomplete paperwork which requires time to contact previous lawyers and/or organisations that have supported the individual to see if they have originals or copies of files. Losing case files can be

[17] Innocence Project® is the registered trademark of Innocence Project Inc. and is used under licence.
[18] The Cardiff Innocence Project are able to accept appeal cases.
[19] [2017] EWCA Crim 597, [2017] 2 Cr App R 19.
[20] *R* v *McCook,* [2014] EWCA Crim 734, [2016] 2 Cr App R 30.
[21] *R* v *Jones,* [2018] EWCA Crim 2816, [2019] WLR(D) 16.
[22] *R* v *George,* [2014] EWCA Crim 2507, [2015] 1 Cr App R 15.

costly, for example replacing a copy of the Judges summing-up requires paying a transcription service, and many applicants do not have the funds to do so. Therefore, full case files are only requested once a case is deemed eligible and accepted. The documents are reviewed and further questions asked of the applicant to determine whether there is the possibility of a new legal argument or fresh evidence. The reason for this is: firstly, so that the applicant is not given false hope that an application to the CCRC will definitely be made on their behalf by the IPL. All applications made to the CCRC by the IPL are done so by consent, in terms of the client agreeing the contents of the application. Lawyers who work pro bono with the IPL alongside the students, provide guidance on aspects of the application, but the IPL does not provide legal advice *per se*. Secondly, the students need to have something tangible to work on. The IPL operates mainly during term time, so as to ensure that most work can be carried out during that time, the case assessment process identifies the likely areas of investigation. The students themselves will deconstruct the case to find gaps in the evidence that led to the conviction, and thus they will determine the content of each area of investigation.

V Manchester Innocence Project

The Manchester Innocence Project (MIP) operates under the umbrella of the University of Manchester Justice Hub. The university is research focused with a law department of approximately 1000 undergraduate students. In January 2016, the then School of Law commissioned an external review of clinical legal education provision and, following the provision of the external reviewer's report in 2016[23] it was decided by the Head of School, Toby Seddon, that clinical legal education would become a core integral part of the Law School. Claire McGourlay was recruited as a Professor in Legal Education in 2017 to lead this process and to embed clinical legal education into the curriculum and to set up the MIP.[24] The Justice Hub was created in 2017 and since then, two members of staff have been recruited to take on clinical legal educational teaching roles and to complement the existing team of two clinical leads and three professional services staff. Together the team at Manchester have worked towards both expanding and increasing the quality of the clinical legal education work and embedding this work into the curriculum and expanding what we do. The Justice Hub now provides a wide range of free legal services to the public and the Hub team works collaboratively with students and lawyers locally, nationally, and globally. It systemizes a diverse variety of components including the Legal Advice Centre; Manchester Free Legal Help; Dementia Law Clinic; Legal Tech and Access to Justice; Student Pro Bono Society; an International Project on Human Rights and a Vacation Scheme and of course, the MIP. The work of the MIP mostly mirrors the process of the IPL, and only accepts applications from individuals who have exhausted the appeals process. The main difference with the IPL is that the MIP has criminal lawyers working specifically for it and occasionally barristers help students with cases. The MIP also has at any one time, one or two post graduate research

[23] Vicky Kemp, Tine Munk & Suzanne Gower, "Clinical Legal Education and Experiential Learning: Looking to the Future" (2016) U Man Sch L, online: <https://hummedia.manchester.ac.uk/schools/law/main/news/Clinical-Legal-Education-Final-Report28.09.2016.pdf>.

[24] Prior to this Professor McGourlay set up and ran the Sheffield Innocence Project, which later became the Miscarriages of Justice Review Centre when INUK disbanded.

students working on cases, where these students are carrying out research into miscarriages of justice.

VI Innocence work and its Pedagogical Value

The value derived from students working in an innocence organisation in England and Wales has been misjudged and misunderstood, predominantly because of the distinct innocence project model of learning initially developed in the United States of America (USA).[25] The assumption was made as far back as 2007[26] that the discourse of innocence used in the USA would be imported into the English criminal justice system by innocence organisations operating in this country. However, this has not been the case. Both authors agree, from their own experiences of setting up and running innocence organisations it is not possible to take the innocence model in its American form and simply start using it with the English legal system because it is not a neat fit. The model, whilst a good template for student engagement and enquiry, requires modification in order to not only fit within higher education in England and Wales but also to fit with the requirements of the CCRC.

There are some distinct differences in how innocence organisations work in both countries. For example, student caseworkers on the IPL and MIP are predominantly undergraduate students, with only one or two postgraduate students. The majority of Innocence Projects in the USA work with students who are at Law School and are closer to becoming qualified lawyers. These students investigate the cases by talking to witnesses, finding evidence and arranging for the testing of that evidence if required. In England and Wales, undergraduate students require more supervision from the lead academic. Students do not interview witnesses, to avoid any issues surrounding contaminating evidence.[27] Students identify evidence that they find missing from the case file for example CCTV, or rulings from the trial. They only attempt to recover that evidence however, under supervision from the lead academic, and with support from the lawyer working pro bono alongside them. Innocence Projects in the USA are able to litigate directly for their clients, where faculty members are qualified lawyers. For students in Innocence Projects in the USA, litigation involves mostly motions and briefs which they are encouraged to take ownership of.[28] In contrast, innocence work in England and Wales does not involve students litigating for their clients. The focus is to make an application to the CCRC, which is the start of a "rule governed process"[29] where our innocence organisation needs to ensure that the evidence is new and significant and can satisfy the real possibility test.[30]

---

[25] *Findley, supra* at note 15.

[26] Hannah Quirk, (2007) "Identifying miscarriages of justice: why innocence in the UK is not the answer" (2007) 70:5 Mod L Rev 759 at 762 [*Quirk 1*].

[27] Kevin McMahon, founder of Merseyside Against Injustice, was convicted of perverting the course of justice for attempting to convince a prosecution witness to make a retraction statement shortly before the appeal hearing ('Former detective escapes prison' Daily Post 23 June 2004) online: https://www.dailypost.co.uk/news/local-news/witness-was-pressurised-2928068

[28] *Findley, supra* at note 15.

[29] Jon Robins, "What makes a strong application to the CCRC?" (2013) The Justice Gap.

[30] *Ibid.*

The pedagogical value of innocence work has been globally recognised in existing literature. Jan Stiglitz, Justin Brooks and Tara Shulman[31] identified innocence projects as providing practical legal education or put more simply, "learning through doing." Identifying the innocence model of clinical legal education, Stiglitz, Brooks and Shulman set out the value of this type of work in law schools. In 2003, Daniel Medwed[32] drew attention to opportunities derived from the innocence model ranging from fact investigation, interviewing and creative problem solving in complex cases. Keith Findlay[33] expanded on this, setting out a pedagogy of innocence which provides unique opportunities for learning that are derived from the work of innocence organisations. The hands-on experience of innocence work is discussed in detail by Stephanie Roberts and Lynne Weathered [34] in the context of the benefit that thus type of clinical legal education provides. Students acquire not only new skills but the ability to think critically about the criminal justice system and how it operates.[35] Carole McCartney goes further and highlights the effect of innocence work on the lawyers of tomorrow, how it helps them to develop their ethics and responsibility for their practice, in addition to a lifetime commitment to pro bono work.[36] This has been expanded to transferrable skills such as time management, team working, written and oral presentation skills and problem solving.[37] Louise Hewitt recently sought to evidence the impact of innocence work by drawing together a collection of students stories about their experience of working on the IPL.[38] The collection used a model of autobiography to encourage students to reflect on their learning and tell their very personal stories about the effect of innocence work on their lives.[39]

The pedagogy used by the Innocence Project London evolved over time, combining experiential learning and elements of work-based learning (WBL) to produce a positive

---

[31] Jan Stiglitz, Justin Brooks & Tara Shulman, "The Hurricane Meets the Paper Chase: Innocence Projects New Emerging Role in Clinical Legal Education" (2002) 38:2 Cal WL Rev, online: <https://scholarlycommons.law.cwsl.edu/cwlr/vol38/iss2/5/?utm_source=scholarlycommons.law.cwsl.edu%2Fcwlr%2Fvol38%2Fiss2%2F5&utm_medium=PDF&utm_campaign=PDFCoverPages>.

[32] *Medwed*, *supra* at note 16.

[33] Keith Findley, "The Pedagogy of Innocence: Reflection on the Role of Innocence Projects in Clinical Legal Education New York Law School Clinical Research Institute" (2006) 13:1 Clinical L Rev, online: <https://media.law.wisc.edu/m/jytyw/pegagogy-of-innocence_final_proofs.pdf>.

[34] Stephanie Roberts & Lynne Weathered "Assisting the factually innocent: the contradictions and computability of innocence projects and the Criminal Cases Review Commission" (2009) 29:1 Oxford J Leg Stud 43 [*Weathered*].

[35] *Ibid*.

[36] Carole McCartney, "Liberating Legal Education? Innocence Projects in the US and Australia" (2006) 3 Web J CLI.

[37] Michael Naughton & Julie Price, "Innocence projects: a perfect solution for clinical legal education?" (2006) Directions: UK Centre for Legal Education at 13.

[38] Innocence Project London, "Autobiographical reflections of students undertaking innocence work" (2021), online under Resources: <https://www.iplondon.org>.

[39] It is available to view online: www.IPLondon.org

employer/employee environment.[40] The employer/employee relationship starts with the application process so students know the standard expected from those who work on the project. The two-stage process consists of a written report that requires independent research, with successful students invited for an interview, which helps filter out those students who only want to use the IPL as another activity to add to their CV. Beyond those skills already identified as being of value, significant learning opportunities on the IPL include visiting the client in prison and seeing the impact that being in custody can have. To then be able to interview the client and reflect on how their answers impacts their investigation into the case provides an experience that an undergraduate curriculum cannot give. Being able to encourage students to reflect on the skills and experience they have learnt supports the prospect of translating the learning into legal practice as well as other areas of work.

Maintaining the learning experience takes a lot of time, and is one of the reasons why the number of organisations undertaking innocence work in England and Wales has reduced over the past few years. In 2017, the 46 organisations that attended the Innocence Ten conference, (hosted by Cardiff Law School Innocence Project to mark its tenth anniversary) were contacted to see whether they were still actively undertaking any innocence/criminal appeals work. Only 23 organisations responded positively. The majority of the responding organisations were based in universities and were overseen by an academic. Only two organisations said they were predominantly student led taken to mean no support from an academic (see Part II – Method), which in the experience of the authors, indicates very limited oversight from an academic. This in turn can lead to ineffective case management, and a lack of understanding about to deconstruct a claim of innocence. Of the organisations based in universities, five operated on a pro bono basis using student volunteers, eight operated as part of an assessed module and also on a pro bono basis, and two operated solely as part of an assessed module.

In 2020, the 23 organisations that had told the IPL they were still active in 2017, were again contacted and sent the second questionnaire (see Part II – Method). A response was received from each one, but only 12 organisations were still active, 11 of which were university-based and one, a charity, operated outside of higher education. Out of these, nine organisations were managed/overseen by an academic, whilst the remaining three were student-led. This time the majority of the organisations were supported by practising lawyers that work pro bono alongside the organisation. Of the organisations that were based in universities, seven operated on a pro bono basis using student volunteers, two of the organisations ran as part of an assessed module, and two operated both as a module and on a pro bono basis.

Between 2017 and 2020, there has been a reduction of just under 50% in organisations undertaking innocence work. Since 2015, when the INUK ceased to exist there has been a reduction of 66% in organisations undertaking innocence work. In this short space of time this is a significant number. Innocence work is time consuming. Research carried out by Holly Greenwood[41] highlighted the difficulty faced by academics finding sufficient time to manage

[40] Louise Hewitt, "Learning by Experience on the Innocence Project in London: The Employer/Employee Environment" (2018) 25:1 Int J Clin Leg Educ 73, DOI online: <https://doi.org/10.19164/ijcle.v25i1.697>.

[41] Holly Greenwood, "Rethinking Innocence Projects in England and Wales: Lessons for the future" (2021) How J Crim Justice 1 at 26 [*Greenwood*].

running an innocence organisation alongside their lecturing responsibilities.[42] The administration of the IPL takes a considerable amount of time each week with tasks that include but are not limited to: sending out new applicants packs,[43] responding to new applicants alongside requesting the relevant documents for the case assessment process, managing the case assessment process including asking further questions of the applicant via letter, recruiting students through the two-stage recruitment process, managing casework and students teams, responding to lawyers who want to work pro bono with the IPL, managing lawyers who work pro bono with the IPL, in addition to fund raising (the IPL became a registered charity in August 2020), and working with other organisations both for activism and changes in policy. Of course, some of these activities have processes already in place such as the application pack which has a GDPR compliant[44] questionnaire, privacy policy and guidance document.[45] Letters to applicants however are written on an individual basis depending on what they ask for and also what they send in, which can be time consuming. Similarly, administering the MIP is equally as time consuming and rigorous, mirroring the enormous effort put in by staff and students on the IPL. The only difference is that the MIP is not a registered charity but operates with charitable status within Manchester University. The MIP works closely with the external relations team in the School of Social Sciences to help promote its work and to carry out fund raising.

Responses to Greenwood's research suggests that academic leadership of innocence work was potentially problematic unless they had practiced criminal law.[46] Hewitt's study revealed that in 2017 nine organisations said they did not have any support from a practising lawyer, whilst the remaining organisations utilised either qualified staff working in the university legal advice centre, or lawyers that were employed directly by the university. Greenwood's research suggested a lack of practitioner involved was because many lawyers were under the strain of their own workloads.[47] However, the results from the 2020 questionnaire indicate that more lawyers were working with innocence organisations pro bono, which has been the experience of both the IPL and MIP.

The results from the 2020 questionnaire show that the majority of organisations operate using student volunteers, and only two operate on both a pro bono and assessed module basis compared to eight back in 2017. From the perspective of the IPL, engaging law students on a voluntary basis has been very successful. Both law and criminology students can apply to work on the IPL at the end of their first year of study. Both sets of students can volunteer on the IPL, but criminology students can apply to work on the IPL as a placement in their third year. The IPL stopped being offered to law students as a placement on an assessed module because it became evident that this attracted students who were not invested in innocence work but perceived it to be less work than a more traditional optional module. In addition, completing the assessment distracted the students from their work on a case, making it more of a means to an end, rather than students being invested in the outcome for their client. Offering the IPL as a placement to

---

[42] Greenwood above note 41 at 12-13.

[43] See IPLondon.org: online: <https://www.iplondon.org>.

[44] General Data Protection Regulation 2016/679 online: https://www.legislation.gov.uk/eur/2016/679/contents

[45] IPLondon, *supra* at note 42.

[46] Greenwood, *supra* note 41 at 13.

[47] Greenwood, *supra* note at 41.

criminology students has had the opposite effect. Students are keen to learn aspects of the law and become invested in how they can improve the criminal justice system. Having limited knowledge of the law means they realise form the start that working on the IPL can be hard and that they are very unlikely to be able to get their client out of prison in the year of their placement, but they are already engaged in wanting to learn about how the criminal justice system works and how it can be improved from the moment they apply.

From the perspective of the MIP students are also engaged on a voluntary basis with equal success. The organisation receives around 150 applications each year from first and second-year students in the School of Social Sciences.[48] The students who tend to apply are studying Law and Criminology. There is no linked assessed module, but Claire McGourlay runs a stand-alone optional assessed module focusing on Miscarriages of Justice for second and third-year undergraduate students which has an intake of approximately 200 each year.

VII Associating the Term Innocence with the English Criminal Justice Process

The work of innocence organisations has been defined by the use of the term innocence. Hannah Quirk in 2007 identified the necessity to progress the debate beyond the simplistic "dichotomy of guilt and innocence"[49] highlighting the difficulty with establishing clear-cut factual innocence.[50] This issue however, stems more from the Court of Appeals difficulty in deciding appeals on factual grounds such as fresh evidence.[51] The Court of Appeal does not declare people innocent on the basis that the *Criminal Appeal Act* 1995 gives the court the power to quash a conviction if it thinks it is "unsafe."[52] The Court of Appeals focus therefore, has been on procedural irregularity where it is noted they show too much deference to the decision of the jury,[53] in addition to not wanting to risk opening the floodgates to a vast number of appeal applications.[54] Roberts and Weathered have suggested that this means fresh evidence is often saved for an application to the CCRC placing innocence organisations in the best position to be able to assist clients who are claiming factual innocence.[55] Innocence organisations do not, as has been suggested, usurp the role of the CCRC.[56] Rather than trying to take the place of the CCRC, innocence organisations try

[48] This includes Criminology, Politics, Economics, Sociology, Anthropology, Social Statistics and Law students.

[49] *Quirk 1, supra* note 26 at 762.

[50] *Quirk, supra* note 26 at 768.

[51] *Weathered, supra* at note 34.

[52] *Criminal Appeals Act* 1995 s 13.

[53] Joshua Rozenberg, "Are too few convictions overturned?" *BBC News* (27 March 2015), online: <https://www.bbc.co.uk/news/uk-32053901>; see also Stephanie Roberts, "Fresh Evidence and Factual Innocence in the Criminal Division of the Court of Appeal" (2017) 81:4 J Crim L 30.

[54] *Weathered, supra* at note 34.

[55] *Ibid*.

[56] Hannah Quirk, "Uncovering disclosure errors: appeals, innocence projects and the Criminal Cases Review Commission" in Ed Johnson and Tom Smith (eds), "The Law of Disclosure: A Perennial Problem in Criminal Justice", Abington: Routledge, online: < https://ebin.pub/the-law-of-disclosure-a-perennial-problem-in-criminal-justice-2020037336-2020037337-9780367420147-9780367817411.html>.

to work with it, although there can be tensions in the relationship; both authors are part of the CCRC stakeholder group helping to support the CCRC in feeding back on systemic issues in the criminal justice system.[57] Both authors have invited representatives from the CCRC to speak to students at their respective universities and also at seminars held to raise awareness of the work of innocence organisations.

Factual innocence was part of the INUK case selection criteria,[58] which excluded individuals looking to overturn their conviction on grounds of procedural irregularities in the criminal justice process. Innocence organisations have moved on since the INUK with those still running suggesting they have broadened their focus.[59] Both the IPL and MIP are members of the global Innocence Network, the mission statement of which is to provide, "…pro bono legal and investigative services to individuals seeking to prove innocence of crimes for which they have been convicted, working to redress the causes of wrongful convictions, and supporting the exonerated after they are freed."[60] The IPL's guidance sets out three criteria for new applicants, the first of which is:

> You must be claiming to be factually innocent of the crime you have been convicted of. We will only assist in cases where an individual is claiming to have absolutely no involvement in the crime at all, including claims that no crime has occurred at all (e.g. where deaths are accidental or resultant of natural causes as opposed to criminal homicides).[61]

Both the IPL and the MIP uses factual innocence in the context that the applicant must be maintaining their innocence. Fulfilling the eligibility criteria does not guarantee that the case will be accepted. During the eligibility assessment process, consideration is given to the merits of the case, overall strength of the evidence that led to the conviction, and whether there are viable lines of enquiry to investigate. We make it clear to applicants that cases are assessed to determine the prospect of new evidence or a new legal argument and that a decision of eligibility is not a judgment as to the validity of their claim of innocence.

The complexity of how factual innocence fits into the criminal justice process is evident in some of the existing literature. Tracing back the issues to the Court of Appeal demonstrates the difficulty in determining the relevance of factual innocence in the context of fresh evidence. Potentially the previous focus on factual innocence by the INUK may have led member innocence organisations to perceive that they no choice but to exclude cases based on procedural irregularities. However, the focus of the appeal process on an unsafe conviction forces innocence organisations and lawyers alike to find a route that the Court of Appeal will accept, and more often than not, that is new legal arguments in the form of procedural irregularities.

---

[57] Terms of reference

[58] Michael Naughton, "Confronting and uncomfortable truth: not all victims of alleged false accusations will be innocent" (2007) FACTion, November 8-12, online: <https://www.fbga.redguitars.co.uk/michaelNaughtonNov07.pdf>.

[59] *Greenwood*, *supra* note 40 at 26.

[60] Innocence Network https://innocencenetwork.org/subcategory/our-work

[61] IPL guidance document available on IPLondon.org: online: <https://www.iplondon.org>.

Convicted individuals who apply to innocence organisations in England and Wales are often part of complex cases, which is why assessing them is so important to ascertain the potential to meet the criteria for the CCRC, which means looking for the potential for both fresh evidence and a new legal argument. Innocence has to be a feature of our work, not least because we support individuals who are claiming they did not commit the crime for which they have been convicted.

VIII Conclusion

The deconstruction of a claim to innocence and the investigation of facts underpins the unique way in which students learn whilst undertaking this type of clinical legal education. It helps students acquire new skills and embed existing ones, but more importantly it enables them to develop a critical perspective of the criminal justice system in England and Wales. These students are future employees that will go on to work in the system and their commitment to improving it, and not repeating the mistakes of the past is vital.

Innocence work in England and Wales has been misunderstood, predominantly because the work has been defined merely by the use of the term innocence in our organisation's titles. The innocence project model from the USA has been adapted to work with the English legal system and the requirements of the CCRC, to the benefit of not only the clients who get support to access justice but also to the higher education establishments that support us through the provision of innovative learning through doing. One significant reason for the reduction in the number of innocence organisations is because maintaining this work is time consuming. As academics, we lecture and have other responsibilities within our respective departments. Delivering a clinical experience in innocence work on top of the day job is not easy but it is rewarding when students develop a commitment to pro bono activities that goes beyond their studies. The request for applicants to claim factual innocence does not preclude the possibility of a new legal argument, or does it mean we solely focus on finding fresh evidence. It is a selection criterion that manages the expectation of those who apply to our organisations for assistance, because we will only consider cases from convicted individual who claim to have no involvement in the crime for which they have been convicted. Our thorough and time- consuming investigations of fact will consider the possibility of both a new legal argument and fresh evidence, as we do not prioritise one over the other. Innocence organisations in England and Wales do not try to replace the CCRC, we provide support to the many individuals who want help making an application to them. The work of innocence organisations in England and Wales is a part of the criminal justice system, it may not be the same movement as our colleagues in the USA, but it should not be underestimated.

"But I Wasn't There!" The Alibis of DNA Exonerees[1]

Wendy P. Heath, Joshua R. Stein, and Sabreen Afiouni
Rider University, New Jersey
U.S.A.

Using the exoneree summaries in the Innocence Project and the documentation in the Innocence Record, we analyze the content of the alibis of those who have been wrongly convicted and exonerated with the use of DNA. Sixty-five percent of the 377 DNA exonerees had an alibi. Fifty-one percent reported that their alibi corroborators were friends and/or family members, while only about 10% presented physical evidence to support their alibi. Those with an alibi were significantly less likely to falsely confess than those without an alibi. Eyewitnesses were significantly more likely to be a contributing cause of conviction for those with an alibi than for those without an alibi, and 27% of the exonerees with an alibi had only eyewitness evidence to implicate them. Those that had an alibi were also more likely to claim that they had an inadequate defense than those that did not have an alibi. We conclude this paper with recommendations for reforms and future research.

I. Introduction
  A. Alibis: A Review of the Literature
    a. Person Evidence and Physical Evidence
    b. Generating Alibis in Laboratory Settings
  B. Contributing Causes of Conviction
    a. Eyewitness Misidentification
    b. False Confessions
    c. Unvalidated or Improper Forensic Science
    d. Informants
    e. Inadequate Defense
    f. Government Misconduct
II. Previous Reviews of Alibis in the Innocence Project Database
III. The Current Plan
  A. Hypotheses
IV. Method
  A. Sample of Exonerees
  B. Analysis of Alibi Information within the Innocence Project Database
  C. Analysis of Alibi Information within the Innocence Record Database
  D. Demographics of Exonerees
V. Results

[1] Thank you to Michael Carlin, Susan O'Sullivan-Gavin, and Maryfaith Chimera for their help with this paper. The opinions, findings, and conclusions or recommendations expressed in this paper are those of the authors and do not reflect the views of the Innocence Project or Winston and Strawn, who provided case documentation.

A. Person Evidence
B. Number of Corroborators
C. Physical Evidence
D. Contributing Causes of Conviction
a. Eyewitness Misidentification
b. False Confessions
c. Unvalidated or Improper Forensic Science
d. Informants
e. Inadequate Defense
f. Government Misconduct
E. A Consideration of all Contributing Causes for Those With Alibis
VI. Discussion
A. Why weren't the Alibis Believed?
B. Contributing Causes of Conviction
C. Recommendations for Reform
D. Future Research
E. Limitations
F. Conclusion

I Introduction

In 1992, a 17-year-old female was raped after working a nighttime shift at McDonald's. She gave a description of her attacker to police, and she said she recognized the man as a McDonald's customer from three weeks earlier. Three days after the attack, she called the police saying that she saw her attacker in the McDonald's parking lot, and 22-year-old Dion Harrell was subsequently arrested.

Harrell said he was a frequent customer at McDonald's as he lived across the street. He insisted he was innocent, and he presented an alibi. He said that at the time of the offense, he was playing basketball with friends, including a police detective. Several of these people, including the detective, testified at his trial. But Harrell was found guilty of second degree sexual assault and spent four years in prison and two decades on the sex offender registry before he was exonerated with the use of DNA (Innocence Project, n.d.). Dion Harrell did not commit this crime, and he provided an alibi as evidence that he was somewhere else when the crime occurred. Yet the police investigators, as well as the jury, did not see his alibi as credible. Why not?

With this paper, we will explore the presentation of alibis for those in the Innocence Project database. After a review of research relevant to alibis, we will use the exoneree summaries in the Innocence Project and the documentation in the Innocence Record to indicate how many DNA exonerees presented an alibi. We will also analyze the content of those alibis and reveal what other evidence was present (e.g., eyewitnesses, confessions) that was seemingly more compelling. We will conclude this paper with recommendations for reforms and future research.

A. Alibis: A Review of the Literature

a. Person Evidence and Physical Evidence

An alibi is a claim that one was elsewhere when the crime in question was committed (Merriam-Webster Online Dictionary, n.d.). The provision of the alibi is only the first step in the process. Alibis should also be evaluated; evidence should be gathered in an effort to determine if the alibi can be validated. This brings us to the question: what influences the strength (i.e., believability) of an alibi?

There has been a surge of research in the last two decades that has investigated the question of what makes an alibi more believable. Olson and Wells (2004) was one of the first teams to consider this question. According to Olson and Wells' alibi taxonomy, an alibi is validated using "person evidence" and "physical evidence" (p. 157). A stronger alibi is corroborated by those perceived as less motivated to lie (strangers versus friends and family) and by physical evidence that is more versus less difficult to fabricate.

Researchers have considered how the details of "person evidence" influence the believability of an alibi, and they have generally found support for Olson and Wells' (2004) taxonomy. For example, Culhane and Hosch (2004) found that the relationship between the defendant and the alibi witness was important; jury-eligible students were less likely to render a guilty verdict when a neighbor versus the defendant's girlfriend testified. Hosch et al. (2011) found that participants were more likely to believe an alibi witness when that witness was unrelated versus related to the defendant (also see Eastwood et al., 2016; 2020). Furthermore, Marion and Burke (2017) found evidence that alibi witnesses were more willing to corroborate a known false alibi for a friend than for a stranger, offering further support for Olson and Wells' taxonomy.

Thus, research suggests that the relationship between the suspect/defendant and the alibi corroborator is important to the decision of whether to believe the alibi. In the present study, we will use Olson and Wells' (2004) taxonomy to document the type of relationships between DNA exonerees and their alibi corroborators.

Another aspect of person evidence to consider is the number of alibi corroborators. Some have suggested that the number of corroborators can be influential in decisions made by those evaluating alibis (although note that this feature was not included in Olson and Wells' (2004) taxonomy). For example, Eastwood et al. (2016) found that for samples of university students, law enforcement students and police officers asked to judge alibi believability, having "several" corroborators (versus only one) was the most important factor (p. 262). Despite this finding, there have been individuals who have been wrongly convicted even though they had multiple corroborators. For example, Steven Avery had 18 alibi witnesses (local and out-of-town family members, store clerks, neighbors and business associates) who testified that he was elsewhere at the time of the crime, yet he was still convicted (*Wisconsin v. Avery,* n.d.). In the present study, we will document the number of alibi corroborators for DNA exonerees in the Innocence Project database.

As mentioned above, Olson and Wells (2004) also considered physical evidence as part of their taxonomy. They found that physical evidence that was seen as difficult to fabricate (e.g., video footage) or even easy to fabricate (e.g., a cash receipt) was considered more believable than alibis that were not supported by such evidence, but more surprisingly, they found that alibis supported by *any* kind of physical evidence were more believable than alibis supported by person evidence. Congruent with Olson and Wells' findings, when Dysart and Strange (2012) asked law

enforcement officers to "describe the most believable alibi story a suspect could give," the officers were far more likely to describe a form of physical evidence rather than that provided by witnesses (p. 15). In the present study we will use both Olson and Wells' taxonomy and Olson and Charman's (2012) modifications to document the physical evidence supporting an alibi in each DNA exoneree's case.

b. Generating Alibis in Laboratory Settings

In a further effort to understand alibis, researchers have also considered how people generate alibis in a laboratory setting. Researchers have determined that those asked to provide an alibi typically give what Olson and Wells (2004) consider weak person evidence, the word of friends and family. Physical evidence is usually much more difficult to obtain. For example, Culhane et al. (2008) discovered that 88% of their sample of undergraduates reported having at least one alibi witness to corroborate where they were two nights earlier (for non-Hispanic White participants, most witnesses were friends, and for Hispanic participants, most were family members), but only 29% claimed to have physical evidence to support their statements. Similarly, Culhane et al. (2013) found that when they asked undergraduates to provide a true or false alibi regarding where they were 5 or 12 days earlier at 9:30 p.m., and then return two days later with evidence to support that alibi, most reported that they had friends or family members who could support their claim; far fewer produced physical evidence. Nieuwkamp et al. (2017) found that when community members were asked for a true alibi, almost all provided details regarding where they had been. Most presented person evidence (65% reported that their alibi witness was a friend or family member), while only about 25% presented physical evidence, mostly weak evidence by Olson and Wells' standards.

We will analyze the content of the person evidence and physical evidence for alibis for those within the Innocence Project database and compare it to the results obtained from lab research.

B. Contributing Causes of Conviction

In every Innocence Project case there is evidence offered that contributed to a conviction. In most cases, each of the Innocence Project summaries includes a list of the contributing causes of conviction for that exoneree (i.e., eyewitness misidentification, false confessions, improper forensic science, informants, inadequate defense, and government misconduct). We will briefly review these contributing causes here.

a. Eyewitness Misidentification

In an early review of alibis in the Innocence Project, Connors et al. (1996) indicated that alibis "apparently were not of sufficient weight to the juries to counter the strength of the eyewitness testimony" (p. 15). Consider a statement made at the trial of Alejandro Dominguez: "It is well settled that identification of the accused by a single eyewitness is sufficient to sustain a conviction, provided the witness viewed the accused under circumstances permitting a positive identification…This is true even when that identification testimony is contradicted by alibi testimony." (*In re Dominguez*, 2004, p. 14).

Eyewitness misidentification is the top contributor to wrongful conviction. In a recent analysis, West and Meterko (2015/2016) reported that 72% of 325 DNA exoneree cases involved eyewitness misidentification. An emerging line of research considers how the conflicting evidence of an alibi and the word of an eyewitness together can influence decisions regarding a case. For example, Dahl et al. (2009) found that when an eyewitness identified a suspect who had a strong alibi, the evidence that was presented last was more influential (i.e., a recency effect—see e.g., Murdock, 1962). Price and Dahl (2014) also considered the relative influence of alibi witness evidence and eyewitness evidence on judgments made by students acting as mock investigators. They found recency effects on both guilt judgments and evidence credibility ratings, especially when the more recent evidence was strong and when it contradicted earlier strong evidence. In other words, despite what some have suggested (e.g., see the above statement from Alejandro Dominguez's trial), Price and Dahl did not find eyewitnesses to be consistently more persuasive than alibi witnesses; the presentation order and evidence strength (alibi or eyewitness) mattered.

Pozzulo et al. (2012) were also interested in how decisions are made when both eyewitness and alibi witness evidence are available. In a study in which eyewitness age and the relationship between the defendant and the alibi witness were manipulated, Pozzulo et al. found that when a non-related alibi witness (i.e., a store clerk) contradicted the testimony of a four-year-old eyewitness (but not a 12 or a 20 year-old witness) jurors were more likely to render a not guilty verdict. In this case, only the young child was discredited as an eyewitness when the defendant had a strong alibi. But other research suggests that not all young children are as easily disregarded. Bruer et al. (2017) found that participants were sensitive to the age of an *alibi* witness when conflicting evidence was present. When an adult eyewitness provided testimony that conflicted with the testimony of a six-year-old alibi witness, participants were more likely to believe the child. On the other hand, when an adult eyewitness testified and the alibi witness was an adult, participants were more convinced of the suspect's guilt. These results collectively suggest that the characteristics of those providing evidence (i.e., eyewitnesses, alibi witnesses) may be important to fact finders.

How often are alibis offered in cases with one or more eyewitnesses? We will document the number of cases in which the presence of one or more eyewitnesses was a contributing cause of conviction and an alibi was offered. We will also determine if those with alibis were equally likely to have mistaken eyewitnesses as part of their cases as those without alibis.

b. False Confessions

False confessions have also been documented as playing a role in wrongful convictions. West and Meterko (2015/2016) recently found that 27% of those within the Innocence Project database falsely confessed.

According to Kassin et al. (2012) "confession evidence is so powerful that once a suspect is induced to confess, additional investigation often stops, and the suspect is almost invariably prosecuted and convicted" (p. 41). This can mean that once a suspect confesses, an offered alibi may not be investigated. In addition, once a suspect confesses, the willingness of alibi witnesses to support an alibi may be affected. Research exists that is relevant to this latter point. For example, Marion et al. (2016) set up a situation in which a participant was paired with a confederate who is later falsely accused of a crime. If participants initially corroborated the confederate's alibi (i.e.,

the confederate said that she never left the room), 95% of participants continued to support the confederate's alibi as she denied involvement. In a second condition, participants were told that the confederate confessed. In this case, only 45% continued to support the confederate's alibi when questioned a second time. In a third condition, the participants were told that the confederate had confessed, but then recanted, and that corroborating this person's alibi suggested that the two worked together to steal the money. In this case, corroboration dropped to 20% (the latter two conditions yielded means that were not significantly different).

We will document the number of DNA exoneree cases in which a confession was a contributing cause of conviction and an alibi was offered. We will also determine if defendants with alibis were equally likely to have false confessions as part of their cases as those without alibis.

c. Unvalidated or Improper Forensic Science

Meterko (2017) found that the "misapplication of forensic science" was a contributing factor in 46% of the wrongful convictions of DNA exonerees, with serology and hair analysis most often implicated (p. 640).

In 2009, the National Academy of Sciences (NAS) provided an important review of problems with a variety of forensic techniques. In short, "with the exception of nuclear DNA analysis, … no forensic method has been rigorously shown to have the capacity to consistently, and with a high degree of certainty, demonstrate a connection between evidence and a specific individual or source" (p. 7). The NAS report reviewed the use of a variety of forensic analyses such as bite mark analysis, microscopic hair analysis, and fingerprint examinations, noting that many forensic techniques had not undergone the needed scientific scrutiny.

The NAS report (2009) also cited additional problems with forensic evidence, problems that go beyond reliability and validity. Regardless of the type of forensic analysis used, the available evidence must be interpreted and reported in an appropriate manner. Not surprisingly, these interpretations are typically subjective and can be influenced by bias (e.g., Dror & Hampikian, 2011; Dror et al., 2005). In some cases, for example, experts provided misleading testimony such as exaggerating the findings, suggesting that there was more of a match between the evidence and the defendant than there actually was. There is also evidence that some forensic experts have not just exaggerated, but have completely falsified their data (see e.g., Giannelli, 2006).

Researchers have begun to consider the interplay of an alibi and forensic evidence. For example, Ribeiro et al. (2020) investigated how mock jurors would view DNA evidence (present, absent) in light of six varying alibi strengths; Ribeiro et al. also varied the strength of the DNA evidence across two experiments. Knowing that DNA evidence (i.e., likelihood ratios) can be difficult to understand, Ribeiro et al. wondered the following: When DNA evidence is presented, would participants be convinced by the DNA evidence regardless of the strength of the alibi? When the alibi is strong, would they consider the possibility that there was an error in the DNA evidence (e.g., contamination such as that which occurred in Dwayne Jackson's case: The National Registry of Exonerations, n.d.). Although participants did have trouble interpreting the DNA evidence, they were sensitive to the strength of the alibi. Participants were more likely to conclude that an error

was possible in the DNA analysis as the strength of the alibi increased (this effect was mainly driven by the strongest alibi condition in which there was strong physical evidence indicating the defendant was out of the country at the time of the crime).

We will provide the number of DNA exonerees who presented an alibi in a case that included the misapplication of forensic evidence as categorized by the Innocence Project. We will also determine if those with alibis were equally likely to have unvalidated or improper forensics as part of their cases as those without alibis.

d. Informants

Informants have also played a role in wrongful conviction. There are three kinds of informants: 1) a jailhouse informant (provides information about a crime obtained while incarcerated), 2) an informant that is a member of the community (e.g., one who calls an anonymous tip line), and 3) a co-conspirator informant (also known as an accomplice witness). Informants offer information about crimes to authorities, typically in exchange for incentives such as money or a reduced sentence. The credibility of informants, especially jailhouse informants, has often been questioned among legal scholars (e.g., Natapoff, 2018) because their lies are incentivized.

West and Meterko (2015/2016) reported that 15% of the 325 DNA exonerations they analyzed included information from at least one informant. According to Garrett (2011), who reviewed the first 250 DNA exoneree cases, informants often provided testimony that was consistent with the arguments made by the prosecution, arguments that the prosecution was unable to prove in any other way. In some cases that meant undermining the word of alibi witnesses.

As far as we know, research has not been conducted that considers how an informant's testimony and a defendant's alibi might together influence evaluators. We will document the number of cases in which an alibi was offered and the case included a jailhouse informant or an informant that was a member of the community.[2] We will also seek to determine if those with alibis were equally likely to have informants as a contributing cause of conviction as those without alibis.

e. Inadequate Defense

An inadequate defense has been classified by the Innocence Project as another contributing cause of conviction. In his review of the postconviction proceedings of 165 DNA exonerees, Garrett (2011) found that 32% of the exonerees claimed they had an inadequate defense. West (2010) found that 21% of the first 255 DNA exoneration cases claimed an inadequate assistance of counsel in their post-conviction appeals. Pertinent to the current study, one of the possible reasons that a defense attorney can be labeled inadequate is when that attorney fails to investigate alibis or call alibi witnesses.

---

[2] The Innocence Project only includes jailhouse informants and informants who are community members in their data summaries; they do not include co-conspirator informants, thus we did not either.

We do not know of any research that has considered perceptions of an alibi in conjunction with claims of an inadequate defense. We will examine the documentation for the DNA exonerees in an effort to identify the number of cases in which an alibi was offered and the defendant claimed that counsel provided an inadequate defense. We will also consider the number of cases in which the inadequate defense was tied to a failure to investigate alibis or call alibi witnesses. We will determine if those with alibis were equally likely to claim that they had an inadequate defense as those without alibis.

f. Government Misconduct

According to the Innocence Project, government misconduct refers to both police misconduct and prosecutorial misconduct. In both categories, one form of government misconduct is the suppression of exculpatory evidence (Great North Innocence Project, n.d.), and one form of exculpatory evidence that has been suppressed is evidence supporting a defendant's alibi (see Zack, 2020). West and Meterko (2015/2016) found official misconduct in 30% of DNA exonerations (they extracted this information from the *National Registry of Exonerations*, a database of all known exonerations, not just those exonerated with DNA).

As far as we know, researchers have not yet considered perceptions of government misconduct specifically as it relates to alibis. We will document the number of cases in which an alibi is offered and a claim of government misconduct has been recorded. We will determine if those with alibis were equally likely to cite government misconduct as part of their cases as those without alibis.

II Previous Reviews of Alibis in the Innocence Project Database

The Innocence Project was created in 1992 to exonerate wrongly convicted individuals using DNA evidence. Researchers have considered the prevalence of alibis from the early days of the database formation. For example, Connors et al. (1996) found that in a review of 28 cases within the Innocence Project, 57% of the defendants provided an alibi. Interestingly, Connors et al. noted that these alibis were presented as incriminating evidence because they were either not corroborated at all or were corroborated by friends and/or family. Wells et al. (1998) also did a review of early Innocence Project cases, analyzing the first 40 cases in which DNA was used to exonerate wrongly convicted individuals. In this case, the presence of "weak" alibis or no alibi was stated as "evidence producing conviction" for 20% of the sample (p. 606).[3] In their review of alibi research, Burke et al. (2007) stated that more than 25% of the 157 cases in the Innocence Project included an alibi in the exoneree summaries. More recently, Garrett (2011) considered the first 250 DNA exonerees and found that 68% of the DNA exonerees (140 out of 207) provided an

[3] Connors et al. (1996) and Wells et al. (1998) had different calculations regarding the number of alibis presented within the initial 28 cases. Among these initial 28 exonerees, Wells et al. reported that 28% had alibis, and Connors et al. reported that 57% had alibis. This difference is likely the result of consulting different sources (i.e., Connors et al. went beyond written documentation and interviewed defense counsel and prosecutors).

alibi.[4] Most (86%) of those presenting an alibi had alibi corroborators (usually family members), and almost no one had physical evidence supporting their alibis.

III The Current Plan

The current study will provide an updated and comprehensive analysis of alibis for DNA exonerees. Using both the Innocence Project database and the Innocence Record, we will document the number of exonerees with alibis and analyze the content of those alibis using Olson and Wells' (2004) alibi taxonomy and other categorizations as noted below. Finally, we will consider what other evidence was present in each case, evidence that seemingly led police investigators, prosecutors and juries to disregard the offered alibis.

A. Hypotheses

Based on previous research findings (e.g., Nieuwkamp et al., 2017), we expect that the most common type of alibi corroborator will be family and friends, and we expect that most exonerees will not have physical evidence to support their alibis. As for the number of corroborators one has, since we used a sample restricted to only those who had alibis that were not believed, we expect that each exoneree with an alibi in this sample would have few alibi corroborators.

As noted above, we will document the number of cases that included each of the contributing causes noted by the Innocence Project. In each case, we expect to find percentages comparable to what others have found. We will also extend previous research in that we will determine if those with alibis and those without alibis are equally likely to experience each contributing cause. Due to a lack of research taking this approach, we have not made any predictions for these findings.

IV Method

A. Sample of Exonerees

As of January 2020, 377 individuals were profiled on the Innocence Project website (since this website is ever-changing, we felt it was important to "freeze" the number of exonerees and the content to be considered).[5]

[4] Garrett (2011) went beyond the Innocence Project summaries. He obtained a variety of documents for the exonerees including trial transcripts for 207 of the 234 exonerees convicted at trial, and he shared these documents with the Innocence Record (Garrett, personal communication, 1/26/21). Thus, when granted access to the Innocence Record, we had access to these documents. Garrett's (2019) updated record of these documents is located at https://convictingtheinnocent.com/.

[5] Sometime in 2020, the Innocence Project removed some exonerees from their database with the explanation that "The Innocence Project did not have a role in exonerating this person." Readers looking for these exonerees are referred to the National Registry of Exonerations

B. Analysis of Alibi Information Within the Innocence Project Database

Olson and Wells (2004) make a distinction regarding the language of alibis and we adopt that position here. Their position stems from the legal system definition that an alibi is a defense that places the defendant elsewhere at the time of the crime. Thus, if a suspect/defendant says, "I was home alone," we consider this an alibi, (although it may be difficult to find evidence to support that alibi). If a suspect/defendant says, "I don't remember where I was," the suspect has not provided an alibi. If the documentation does not mention anything about where the suspect/defendant was at the time of the crime, the suspect/defendant will be coded here as not having an alibi.

Typically, each exoneree has a page at the Innocence Project website. This page usually includes a summary of the details of his or her case in a few paragraphs. As a first step, we determined whether or not an alibi was included in a case and what the content of that alibi was by reading these summaries. We found that out of 377 exonerations, as judged by the information provided in the Innocence Project summaries, 114 included information about alibis (30% of the total number of exoneeres represented at the Innocence Project website).

Alibi information within the Innocence Project summaries was coded by the first and third authors independently. Inter-rater reliability on coding alibi content was calculated at 89.5% (percent agreement: (#agree/#agree+#disagree)). Differences were resolved through discussion.

C. Analysis of Alibi Information Within the Innocence Record Database

The Innocence Project summaries are, by nature, incomplete. In order to form a more complete picture, we also reviewed information at the Innocence Record (www.innocencerecord.org), the available public records for DNA exonerees.

An Innocence Record database search in July 2020 revealed "about 1,280 records" that contained the word "alibi." Seventeen of the documents were duplicate files, thus a total of 1,263 documents were examined for information relevant to alibis. Documents were eligible for analysis only if they were relevant to the 377 exonerees profiled at the Innocence Project as of January 2020. Note that since the Innocence Record database contains the "available public records," the records may not represent the entirety of each case.

One hundred and ninety-nine of the 377 exonerees of interest had at least one document with the word "alibi" presented at least once in the Innocence Record (thus, on the face of it, this database provides more information than the Innocence Project summaries). Some exonerees (13%) had only one document with the word "alibi;" most had many, and documents ranged from one to 1,579 pages (only pages with alibi information were reviewed). Review of The Innocence Record documents revealed that four of the exonerees did not have an alibi despite having the

(https://www.law.umich.edu/special/exoneration/Pages/about.aspx). Note that despite removal from the Innocence Project site, DNA evidence still did contribute to these exonerations. The data contained in this article include these removed exonerees as described in the Method section.

word “alibi” in their documentation.[6] Therefore, after review we determined that our search of the Innocence Record website provided alibi information about an additional 117 exonerees (beyond the Innocence Project summaries). We also used Garrett’s (2019) *Convicting the Innocent: DNA Exonerations Database* (Convicting the Innocent: DNA Exonerations Database, n.d.) which presents compiled data from the first 350 DNA exonerations; this database provided information about an additional 15 exonerees with alibis that were not captured by the original search of the Innocence Record. Thus, overall, we have information about an alibi for 246 exonerees (114 from the Innocence Project, 117 from the Innocence Record and 15 from Garrett’s (2019) database of the 377 exonerees under consideration. According to this analysis, 65% of the 377 DNA exonerees presented information regarding an alibi.

D. Demographics of the Exonerees

The demographics of the overall sample, the sample who offered, and the sample who did not offer an alibi were all very similar. As of January 2020, the Innocence Project database was composed of information regarding 371 males and 6 females. Sixty-two percent were African American, 30% were White, 6% were Latinx, less than 1% were Asian or Native American, and race was not indicated for less than 1%. For the 246 with presented alibis, 62% were African American, 33% were White, 5% were Latinx, and less than 1% were Asian, while the 131 without an alibi were 64% African American, 26% White, 9% Latinx and less than 1% were Native American.[7]

The average time served for all 377 exonerees was 15.30 years. Those with an alibi served an average of 15.31 years in prison, while those without an alibi served an average of 14.77 years. Six percent of 375 exonerees had been given the death penalty (sentencing was not specified for 2 individuals); 7% of those with an alibi were given the death penalty, and 5% of those without an alibi were given the death penalty.

V Results

Using information from both the Innocence Project and Innocence Record databases, the following information was documented:

---

[6] Kennedy Brewer was babysitting his girlfriend’s child when she was abducted, thus he was not “elsewhere.” Luis Diaz offered an alibi, then withdrew it. The Innocence Project summaries also claimed that both Gerald and Dewey Davis had an alibi. In this case the victim had gone to the defendants’ apartment to do laundry (they were family friends), and the victim claimed that Gerald Davis raped her in the presence of his father, Dewey Davis. The defendants acknowledged that they were present, but disputed the rape charge. The Innocence Project characterized this as an alibi. If we use the definition of “alibi” as a defense that places the defendant elsewhere at the time of the crime, this would not be considered an alibi. Therefore, these two defendants were not included in the count as having an alibi.

[7] Note that according to the 2019 U.S. Census (https://www.census.gov/quickfacts/fact/table/US/RHI225219), African Americans are only 13.4% of the U.S. population but they are 62% of the wrongly convicted DNA exonerees (see e.g., Gross et al., 2017 for more on the topic of racial disparity and wrongful convictions).

1) Person evidence
    a. Type of corroborators
    b. Number of corroborators
2) Physical Evidence
3) Contributing causes of conviction
    a. eyewitness misidentification
    b. false confessions
    c. informants
    d. unvalidated or improper forensic science
    e. inadequate defense
    f. government misconduct

A. Person Evidence

"Person evidence" refers to the person or persons who corroborate the alibi; this was evaluated using Olson and Wells' (2004) taxonomy (p. 157). More specifically, the following categories were used in the analysis of person evidence:

- None (i.e., no one corroborated the alibi),
- motivated familiar other (e.g., family members, friends, girlfriend/boyfriend),
- non-motivated familiar other (e.g., store clerk where a person is a regular customer),
- non-motivated stranger (e.g., store clerk where a person has never before shopped).

For the purpose of this analysis, all neighbors and work colleagues were coded as "non-motivated familiar others."

Our goal was to determine the prevalence of different types of corroborators for those with information regarding an alibi (*n* = 246). Eleven percent (n = 28) of exonerees had a combination of alibi types. Of these, 9% (*n* = 22) had alibi corroboration from one or more motivated familiar other(s) and one or more non-motivated familiar other(s); 2% (*n* = 4) had corroboration from one or more motivated familiar other(s), one or more non-motivated familiar other(s) and one or more non-motivated stranger(s), and less than 1% (*n* = 2) had corroboration from one or more motivated familiar other(s) and one or more non-motivated stranger(s). We included these cases in the final count of the category that would be considered the strongest evidence in Olson and Wells' (2004) taxonomy. For example, for the 9% that had alibis corroborated by at least one motivated familiar other and at least one non-motivated familiar other, they were included in the "non-motivated familiar other" count because the non-motivated nature of these corroborators would theoretically have made the alibi stronger.

Twenty-two percent (*n* = 53) of the alibis could not be further analyzed because details regarding the alibi were not available (e.g., the documentation noted that "two alibi witnesses testified," but no further information was provided).

Thus overall, for those who had sufficiently detailed documentation regarding an alibi, we calculated the prevalence of the different types of corroborators (provided below in order of strength from least to most):

- 8% had uncorroborated alibis (e.g., home alone at the time of the crime) (*n* = 19).
- 51% offered motivated familiar others as corroborators (*n* = 126).
- 16% offered non-motivated familiar others as corroborators (*n* = 40).
- 4% offered non-motivated strangers as corroborators (*n* = 11).

Thus, most of those presenting an alibi were known to have alibi corroborators (72%), and as expected, the most common type of alibi corroborator was motivated familiar others (i.e., family and friends). These results are comparable to that found in lab-based research; for example, Nieuwkamp et al. (2017) also found family and friends to be the most common type of alibi corroborator.

B. Number of Corroborators

Whenever possible, we established the number of alibi corroborators available in each case. In some cases, an exact number was not available; the documentation just reported that "multiple" or "several" alibi witnesses testified (these cases were coded as having 3 or more corroborators). We were able to ascertain how many alibi corroborators *testified at trial* for 82% of the cases. Forty-two percent (*n* = 85) had only 1 or 2 alibi corroborators, and 43% of the exonerees (*n* = 87) had at least 3 alibi corroborators. It is also worth noting that in 5% of cases (*n* = 10) the exoneree was the only witness testifying in support of the alibi, and in 10% of cases (*n* = 20), the corroborators were not asked to testify.

C. Physical Evidence

Physical Evidence refers to items indicating the suspect was at a place other than the crime scene when the crime occurred. As expected, physical evidence was rarely offered; only 10% of the DNA exonerees with alibis (*n* = 25) offered physical evidence as corroboration. This estimate is lower than what researchers typically elicit in the lab (e.g., Culhane et al. (2008) found about 29% provided physical evidence).

Physical evidence was first categorized according to Olson and Wells' (2004) taxonomy:

- none,
- easy to fabricate (e.g., a cash receipt, items without a time or a date stamp) and
- difficult to fabricate (e.g., a photo/video footage, items with a time or date stamp)

Using Olson and Wells' (2004) classification taxonomy, 80% of the physical evidence was classified as more difficult to falsify (e.g., land-line phone records, credit card receipts, timecards from a place of employment, bus tickets, photographs, police reports/tickets, store videos, bank records) while 20% of the physical evidence was classified as easier to falsify (e.g., handwritten cash receipts, date book entries). The classification of physical evidence was coded by the first and second authors independently. Inter-rater reliability on coding alibi content was calculated at 88% (percent agreement: (#agree/#agree+#disagree)). Differences were resolved through discussion.

Physical evidence was also categorized according to Olson and Charman's (2012) taxonomy:

- no physical evidence
- weak physical evidence (evidence that has no time or place information)
- moderate physical evidence (evidence that has time or place information but could not be definitively linked to the participant such as a phone record)
- strong physical evidence (evidence that contains time and place information and could be linked to the specific participant such as a timecard from an employer)

Using Olson and Charman's (2012) classification taxonomy, 40% of the physical evidence was classified as strong evidence, 52% of the physical evidence was classified as moderate evidence, and only 8% was considered as weak evidence. The classification of this physical evidence was coded by the first and second authors independently. Inter-rater reliability on coding alibi content was calculated at 72% (percent agreement: (#agree/#agree+#disagree)). Differences were resolved through discussion.

D. Contributing Causes of Conviction

As noted above, for each of the exonerees within the Innocence Project database, there is typically a multi-paragraph summary detailing major components of the exoneree's case. In addition, for each exoneree, there is a list in the margin that provides a briefer overview of the major details of the case. These margin details include "contributing causes of conviction." According to the Innocence Project's classification system, the following items are considered contributing causes of conviction: eyewitness misidentification, false confessions, informants, unvalidated or improper forensic science, inadequate defense, and government misconduct. We will document the percentage of DNA exonerees that have each of the contributing causes of conviction, and we will determine if those with alibis and those without alibis are equally likely to experience each contributing cause.[8]

a. Eyewitness Misidentification

We first calculated the number of DNA exonerees that had eyewitness misidentification in their case as indicated within the Innocence Project summaries. We found that overall, 69**%** of the DNA exonerees (n = 259) had cases which included eyewitness misidentification. This is reasonably comparable to other statements of how often mistaken eyewitnesses are cited as a contributing cause of conviction (e.g., West & Meterko, 2015/2016).

We compared the presence of mistaken eyewitness evidence for those with an alibi (n = 185) and those without an alibi (n = 74). Eyewitnesses were significantly more likely to be a

[8] In a few cases, the paragraph summary for an exoneree indicated that a contributing cause was present, but this was not reflected accurately in the list provided in the margin. In these cases, we will include the information in our calculations (e.g., although Alejandro Hernandez' summary information provided in the margins did not include "informants," we concluded that Alejandro Hernandez' case had informants because they were described in the paragraph summary). We also included specific contributing causes when they were listed in the margin and not listed in the paragraph summaries (e.g., John Kogut's summary did not mention an "informant" in the paragraph summary, but it was listed in the margin summary. Thus, we concluded that Kogut's case had an informant).

contributing cause of conviction for those with an alibi (75%) than for those without an alibi (56%), $z = -3.73$, $p = .0001$.

Given that the combination of an alibi and eyewitness evidence was so often present in wrongful conviction cases suggests that the word of an eyewitness can be a powerful influence on decision-makers. Consider the case of Alejandro Dominguez. He was only 16 when he was charged with rape. The victim said her rapist wore a pierced earring and had a tattoo; Dominguez did not have pierced ears or tattoos. She said her rapist spoke English; Dominguez did not speak English. Dominguez was 5-6" shorter than she claimed the rapist to be. In an effort to make an identification, the detective used a show-up (a technique typically considered suggestive—see e.g., Wells et al., 2020 for a review). The detective brought the victim to an office and asked her to look through a window, and said, "Watch the one sitting on the chair. Tell me if that is the one." Despite having three alibi witnesses, Dominguez was convicted by a jury, perhaps because the victim claimed she was "absolutely positive" that he was the one who raped her; (*Illinois v. Dominguez*, n.d., p. 13). She was wrong.

To explore how often investigators used suggestive eyewitness techniques, we calculated the number of show-ups used in our sample. We found that show-ups were used in 15% of the cases ($n = 58$) overall. Interestingly, the use of show-ups was significantly more likely for those with an alibi (19%; $n = 45$) than for those without (9%; $n = 13$), $z = 2.15$, $p = .03$.

b. False Confessions

We calculated the number of DNA exonerees who had confessed as indicated within the Innocence Project summaries. We found that 27% of those within the Innocence Project database confessed ($n = 102$); this is comparable to the percentage that West and Meterko (2015/2016) recently reported.

We found that 22% of those with a documented alibi confessed ($n = 54$), while 37% of those without an alibi confessed ($n = 48$). In other words, those with an alibi were significantly less likely to confess, $z = 3.06$, $p = .002$.

Consider Angel Gonzalez's case as an example of a defendant who provided a false confession despite having an alibi. Gonzalez originally was stopped by police because his car matched the general description of a car belonging to two men who raped a woman. Gonzalez was not a good match to the description of the perpetrators, but the victim identified him in a show-up as he was standing in front of a patrol car. Gonzalez was arrested and held overnight. The police began interrogating him after he had been awake for 26 hours. Despite Gonzalez's limited use of English, he waived his *Miranda* rights and told the police about his alibi. Instead of investigating his alibi, the police asked Gonzalez to write out a statement in Spanish, and a police officer typed up an English version. The two versions were later revealed to be completely different. Gonzalez served 20 years in prison before being exonerated using DNA (Innocence Project, n.d.).

c. Unvalidated or Improper Forensic Science

According to the Innocence Project summaries, 46% of the DNA exonerees included improper or unvalidated forensics as part of their cases ($n = 173$). This is comparable to what West and Meterko (2015/2016) reported.

For those that had an alibi, 49% had cases that included improper or unvalidated forensic science ($n = 120$); this was not significantly different from the 40% who had cases with improper forensic science and did not have an alibi ($n = 53$), $z = 1.54$, $p = .12$.

The Innocence Project classifies the type of forensics that contributed to the wrongful convictions; they use the following categories: serology, hair analysis, bite mark analysis, footprint analysis, DNA Testing, fingerprint analysis, and "other." Using these categories, we found that overall, 23% of the cases involved improper serology evidence, 18% involved improper hair analysis, and 3% involved improper bite mark analysis. For cases in which an alibi was presented, serology was again the most often cited as improper (23%). Hair analysis was the second most commonly implicated improper forensic (21%), and 3% of the cases with improper forensics involved bite mark analysis. For cases in which an alibi was not presented, 22% involved serology, 11% implicated hair analysis and 2% cited improper bite mark analysis. Other types of improper forensics were much less common (each representing less than 1% of cases overall.)[9]

Overall, serology was most often implicated as the reason for a statement of improper forensics; this typically was because the analyst made inappropriate statements while testifying. For example, during Barry Laughman's trial the analyst (incorrectly) stated that "bacterial degradation could have changed type A blood to type B blood" (Innocence Project, n.d., para. 4). As for hair analysis, some analysts have inappropriately made claims of a match or finding a microscopic similarity between hair found at the crime scene and the hair of a defendant (e.g., see Clyde Charles' case: Innocence Project, n.d.).[10] Bite mark evidence is similar to hair analysis in that, according to The NAS (2009) "there is no evidence of an existing scientific basis for identifying an individual to the exclusion of all others" (p. 176). Unfortunately, in some cases a forensic odonologist had indicated that a match had been found (e.g., see Gerard Richardson's case--he served 18 years in prison; the only evidence against him was bite mark evidence—Innocence Project, n.d.).

d. Informants

When we consulted the Innocence Project summaries, we found that 20% of the DNA exonerees included an informant ($n = 74$). As noted earlier, West and Meterko (2015/2016) reported that 15% of the 325 DNA exonerations they analyzed included information from at least one informant. One possible reason for the discrepancy between the two calculations may be because in some cases (e.g., Alejandro Hernandez) the Innocence Project summaries described a case with an informant, but the margin summary did not list "informants" as a contributing cause of conviction.

In our analysis, we found that informants were equally likely to be a contributing cause of conviction for those with an alibi (20%) ($n = 48$) and those without an alibi (20%) ($n = 26$), z = -.08, p = .94.

---

[9] We used the Innocence Project's classification for an indicator of the presence of "unvalidated and improper forensic evidence" and did not examine documentation (e.g., trial transcripts) from the Innocence Record for this information. Therefore these estimates are potentially underestimates.

The case of Wilton Dedge is an example of a case in which an alibi was undermined by informant testimony. Dedge was accused of rape, but the case against him was not strong. Dedge was shorter and lighter than the witness had claimed. The other evidence was from a police dog (later discredited) who identified Dedge's scent from crime scene bed sheets. Dedge had 6 co-workers testify that he was at work all day when the crime occurred. Still, Dedge was convicted although that conviction was reversed because his attorney had not been allowed to present testimony to refute the evidence from the dog. Unfortunately, the prosecution enlisted an informant for the second trial. The informant said that Dedge claimed he had fooled his co-workers into believing he was at work the entire day. Wilton Dedge was convicted and served 22 years in prison until he was exonerated using DNA. The informant had 162 years taken off his own sentence for testifying against Dedge and against other defendants tried by the same prosecutor (Torres, 2017).

e. Inadequate Defense

An inadequate defense has been classified by The Innocence Project as another contributing cause of conviction. According to the Innocence Project margin summaries, 6% of the DNA exonerees had this classification (n = 21). We had reason to believe that this was an underestimate as West (2010) found that 21% of the DNA exoneree cases had claims of ineffective assistance of counsel when she analyzed the published appeals for the first 255 DNA exoneration cases, while Garrett (2011) found that 32% claimed their defense was inadequate. Thus, we supplemented the Innocence Project data with data gathered from the Innocence Record and from Garrett's (2019) review of the Innocence Record, and we found that 25% of the DNA exonerees had a claim of an inadequate defense (n = 94).

Using these same data, we found that for those who had an alibi, approximately 30% were said to have an inadequate defense (n = 74), and for those that did not have an alibi, 15% (n = 20) were said to have an inadequate defense; this difference was significant, $z = 3.17$, $p = .001$.

Pertinent to the current topic, a defense attorney can be labeled inadequate when that attorney fails to investigate an alibi or call alibi witnesses (Innocence Project, n.d.). Thirty percent of the 94 exonerees classified as having an inadequate defense (n = 28) included an alibi-based reason for that claim.

Take Travis Hayes' case as an example. Hayes was 17-years-old when he and a friend, Ryan Matthews, were charged with murder. When the police started questioning him, Hayes provided an alibi. However, the police did not check the validity of this statement, and after seven hours of interrogation, Hayes confessed and implicated his friend in the crime (Hayes later recanted). There were more than 10 witnesses who could have corroborated the alibi that Hayes provided. Hayes' attorney did not investigate, nor interview these witnesses, nor did they testify during the trial (*Louisiana v. Hayes*, 2006).[10] Hayes was convicted of second degree murder and was sentenced to life in prison. He spent 9 years in prison before being exonerated using DNA (Innocence Project, n.d.).

[10] Note that the Innocence Project website did not list "inadequate defense" as a contributing cause of conviction for Travis Hayes; however, Hayes' Application for Post-Conviction Relief, which is available at the Innocence Record, explicitly cited that "Mr. Hayes was denied the effective assistance of counsel at trial" (*Travis Hayes v. Burl Cain*, 2003, p. ii). (Note that this should be footnote #11)

f. Government Misconduct

Government misconduct includes both police and prosecutorial misconduct. According to our review, the Innocence Project classified 18% of the DNA exonerees overall as having experienced government misconduct (n = 68). This is low compared to the estimates that others have obtained. West and Meterko (2015/2016) found official misconduct in 30% of DNA exonerations. We had reason to believe that the Innocence Project estimate was an underestimate as West and Meterko noted that the Innocence Project doesn't methodically track this information. Thus, we supplemented the Innocence Project data with data compiled by Garrett (2019) from the Innocence Record (using "prosecutorial misconduct," "coerced confession," "suggestive eyewitness identification" and "fabrication of evidence" as search terms), and overall, we found claims for police and prosecutorial misconduct in 36% of cases (n = 135).[11] We used these data for the subsequent analyses.

We were interested in how often exonerees with alibis were faced with government misconduct. For those that had an alibi, 39% of the cases involved government misconduct (n = 96), while for those without an alibi, government misconduct was a contributing factor in the conviction of 30% of the exonerees (n = 39). This difference was only marginally significant, z = 1.78, p = .07.

Government misconduct, whether committed by police investigators or prosecutors, comes in many forms, and in some cases those actions are directed toward suppressing alibi evidence (see Zack, 2020). For example, Mark Bravo's alibi defense wasn't adequately investigated by the police (Connors et al., 1996), a form of misconduct. Bravo was accused of a rape that occurred around 12:30 p.m., yet police asked Bravo and his alibi witnesses to account for his time later that afternoon. Thus, Bravo appeared not to have an alibi for the crucial time period (*California v. Bravo*, 1991). Although his alibi was actually strong, he was convicted and served four years in prison before DNA eliminated him as the rapist (Innocence Project, n.d.).

E. A Consideration of all Contributing Causes for Those with Alibis

In this section we consider how prevalent the six different types of evidence were in the cases of DNA exonerees. Out of the 246 DNA exonerees with alibis, 34% (n = 83) had *only* one type of evidence supporting a conviction. Specifically:

- 27% (n = 66) of the exonerees with an alibi had *only* eyewitness evidence as a contributing cause of conviction
- 3% (n = 8) of the exonerees with an alibi had *only* a confession as a contributing cause of conviction

[11] Some estimates of government misconduct have been higher. For example, Garrett (2011) reviewed the available written decisions from appeals and postconviction proceedings for the first 250 DNA exonerees and determined that 47% of the 165 available decisions were, in part, based on prosecutorial misconduct. It may be difficult to determine definitively how many of the DNA exonerees' cases included prosecutorial and/or police misconduct, not only because documentation has not been made available, but also because it is possible misconduct may not have been documented at all. (Note that this should be footnote #12)

- 2% (*n* = 4) of the exonerees with an alibi had *only* an informant as a contributing cause of conviction
- 2% (*n* = 4) of the exonerees with an alibi had *only* improper forensic evidence as a contributing cause of conviction
- <1% (n = 1) had *only* government misconduct as a contributing cause of conviction.

Out of the 246 DNA exonerees with alibis, 42% (*n* = 104) had two types of evidence supporting a conviction. The most common combinations of types of evidence were as follows:

- 23% (*n* = 57) had *only* an eyewitness and improper forensic science supporting a conviction.
- 3% (*n* = 8) had *only* an eyewitness and a confession as causes of conviction.

Of the remaining exonerees most (*n* = 40) had three types of evidence supporting a conviction.

IV Discussion

Every single person represented in the Innocence Project database was wrongly convicted, and according to the present analysis, at least 65% of them had an alibi – a statement that they were not at the crime scene. Why did they end up in prison despite having an alibi? We will review possible reasons here.

A. Why Weren't the Alibis Believed?

The results of this analysis using both the Innocence Project summaries and the Innocence Record documentation suggest that most of the alibis presented were weak by Olson and Wells' (2004) standards. Specifically, 51% reported that their alibi corroborators were just friends and/or family members. Corroboration from friends and family was expected as people are most likely to be with friends and family rather than with strangers. In addition, other researchers (e.g., Nieuwkamp et al., 2017) have found that when community members are asked for an alibi, most present alibi support from friends and family.

The use of family and friends as corroborators was, at times, blatantly used against the defendant. For example, prosecutors sometimes attempted to discredit the alibi by claiming that it was *only* family members who testified. In Chester Bauer's case, the alibi was referred to as a "family alibi" (*Montana v. Bauer*, 1983, p. 4). In Alan Newton's case, the prosecutor questioned whether it was possible to trust a defendant's fiancée given that she had "an interest in the outcome of this case" (*New York v. Newton*, 1984, p. 870). While these alibis may certainly have represented the truth, these tactics likely undermined the strength of the alibis in the evaluators' eyes.

Research suggests that the alibis of these exonerees would have been more convincing if they had been corroborated by people perceived as less motivated to lie (ideally strangers) (e.g., Hosch et al., 2011). It is worth noting that some exonerees did have non-motivated alibi corroborators. Specifically, 16% had non-motivated familiar others (e.g., neighbors) and 4% had strangers as their alibi corroborators, yet they were not believed (see e.g., Wilton Dedge's case).

Having a non-motivated stranger as one's alibi witness may potentially make one's alibi more believable, but it is not without its risks. Charman et al. (2017a) found that students who interacted with strangers were overly confident that they would be recognized 24 hours later. However, only 37% of the potential alibi corroborators who were strangers accurately identified the student they interacted with, and only 7% identified the student, remembered what the student did, and remembered the time of their interaction (likely important details for an alibi corroborator to recall). We do not know of real-life instances in which a stranger was unable to corroborate the alibi of a wrongly convicted individual, but certainly overestimating the likelihood that a stranger will remember a brief interaction can potentially be damaging to the credibility of one's alibi.

Another feature that researchers have suggested can be important to alibi believability is the number of corroborators one has (Eastwood et al., 2016); was this an important factor for the DNA exonerees? Since we used a sample restricted to those who have had alibis that were not believed, one might have expected that this sample of exonerees would each have few alibi corroborators. While this was true for some (5% of the sample had no corroborators at all, and 42% had only 1 or 2 corroborators), 43% of those with an alibi had at least 3 alibi corroborators. In fact, some had many corroborators and yet they were still not believed. For example, consider the case of Timothy Durham. He was charged with a rape that had occurred in Oklahoma, but 11 alibi witnesses testified that he was in Texas at the time of the offense; his alibi did not keep him out of prison (Innocence Project, n.d.).

As for physical evidence, recall that Olson and Wells (2004) found that alibis supported by *any* kind of physical evidence were more believable than alibis supported by person evidence, a sentiment shared by Dysart and Strange's (2012) sampled law enforcement officers. Although only about 10% of the DNA exonerees with an alibi presented physical evidence (lower than what is typically found in research—see e.g., Culhane et al., 2008), the physical evidence provided by the DNA exonerees tended to be surprisingly strong as classified using Olson and Wells' and Olson and Charman's (2012) taxonomies. The relatively low percentage of exonerees with physical evidence supporting their alibi relative to that found in research speaks to the difficulties in the real world of providing physical proof of where one was, often after a lengthy delay. Twenty-nine percent of Culhane et al.'s participants had physical evidence, but they were only required to provide physical evidence of where they were two days earlier.

It should be noted that some DNA exonerees had strong physical evidence, but it wasn't enough to keep them out of prison. Consider Timothy Durham again. He had credit card receipts for the gas he and his parents bought, the dinner they ate, and the clothes they purchased. Despite having what was arguably a strong alibi, Durham was sentenced to 3,200 years in prison (Garrett, 2011).

In some cases, alibis may have been perceived as weak or were discounted completely because they were not investigated in a timely manner. As time passes, it becomes more difficult to obtain evidence relevant to an alibi; physical evidence may be discarded; alibi witnesses forget. I will refer again to the cases of Travis Hayes and Ryan Matthews as an example. Hayes and Matthews were interviewed separately by police shortly after the murder was discovered, and their accounts were quite similar, basically presenting a list of eight errands that they had been on together. According to his account of the day of the crime, Matthews visited a store which had a videotape recording of what occurred at the store. Unfortunately, that physical evidence had been

destroyed before it could be used by the defense (*Louisiana v. Hayes*, 2006). Investigators eventually determined that DNA available at the crime scene matched neither Hayes nor Matthews, and the charges were dropped, but not before legal arguments were made regarding the quality of alibi statements eight years after the day in question: "It's impossible eight years later. I mean, nobody could possibly reconstruct an alibi. It was clear if you read Ryan Matthews and Travis Hayes' statements that night, had a diligent investigation been done promptly, when everything was fresh in everybody's minds in terms of where Travis Hayes and Ryan Matthews were, it's clear that an alibi defense was available to be present, but it never was and it can't be now. It has been permanently gone" (*Louisiana v. Hayes*, 2006, p. 52).

Sometimes a person's alibi lacks credibility because investigators are not certain of the time of the offense. Take the case of murder. Although there are many indicators that a coroner can use to indicate the time of death (e.g., Shrestha et al., 2020), unless a witness takes note of the timing of a fatal wounding, a stated time of death is just an estimate. Consider the cases of John Restivo and Dennis Halstead. The defense submitted a notice of alibi to the Court but did not list specific alibi witnesses because the defense had not been given a specific date and time of death. In the defense attorney's words, "nobody, yourself, myself included, Judge, can give the whereabouts of themselves for 25 consecutive days some two years ago" (*New York v. Restivo and Halstead*, 1986, p. 25).

When alibi information was presented for consideration, attacking the alibi was commonplace. Police investigators sometimes were critical of the alibi when interrogating the suspect. According to Leo and Drizin (2010), once an investigator has a presumption of guilt, part of an investigator's plan of action could include attacking an alibi as "inconsistent, contradicted by all of the case evidence, implausible or simply impossible" (p. 18). In some cases, the police were even said to have harassed alibi witnesses. For example, in John Restivo's case, an alibi witness was said to have been harassed to such a degree that a lawsuit was initiated to stop the harassment. The witness "apparently succumbed to the police pressure" and indicated that the alibi statement he initially made was not true (*In re Restivo,* 2000, p. 46).

Prosecutors also often attacked inconsistencies in alibi testimony in an effort to discredit the corroborators, although when there was consistency, that was sometimes attacked as well—in the latter case, the testimony was claimed as planned. One of the defense attorneys in the trial for Alejandro Hernandez, Stephen Buckley, and Rolando Cruz summed up the problem well:

> "You start questioning people about little, itty, bitty details about the alibi, specifics about time, what somebody ate, what type of clothing they were wearing, little, itty, bitty things. And if the alibi witnesses recall, then the argument is, of course 'Well, ladies and gentleman, who could recall with such specificity and detail two years ago? Must be a lie.' Or if you're not quite as exact in your details about the alibi, then counsel's argument is, 'Geez, they were awfully vague about what happened on that day. Must be too vague. Can't believe them. They really don't know anything. It was just another day in their lives. They're too vague.' So, you lose. It doesn't matter. There's an argument to account for whatever position you come up with" (*Illinois v. Hernandez, Buckley and Cruz*, 1985, p. 133).

Researchers have found that alibi evaluators generally see consistent alibis as more believable than inconsistent alibis. For example, Culhane et al. (2008) found that almost 90% of their undergraduate sample agreed that defendants who change their alibis after being questioned by police are probably lying. This is congruent with what Dysart and Strange (2012) found with a sample of law enforcement personnel; they said that over 80% of suspects who change their alibi were originally lying, not just mistaken. These beliefs could explain the lie bias that law enforcement professionals frequently show, making more "lie" decisions than "truth" decisions (Masip et al., 2016; Meissner & Kassin, 2002).

Police officers, lawyers and mock jurors have been shown to share the belief that inconsistency of a statement is indicative of "inaccuracy" (Potter & Brewer, 1999, p. 97); however, there are mixed findings with regard to whether inconsistency actually does indicate deception. For example, when Culhane et al. (2013) compared inconsistencies in both true and false alibis, they did find more inconsistencies in false alibis, although there were few inconsistencies overall. On the other hand, Granhag et al. (2003) found deceptive statements by colluding pairs were more consistent than truthful statements by colluding pairs, while single liars and truth tellers were equally consistent over the course of a week. They recommended that evaluators exercise caution when using consistency as a measure of deception.

There are other possible reasons why a provided alibi did not work in a defendant's favor. In some cases, a thorough investigation of the alibi did not take place. This failure to investigate was, at times, blamed on the police (e.g., Anthony Gray's case). Dysart and Strange (2012) did find that most of the law enforcement officers sampled indicated that failure to investigate an alibi is substandard police practice, but 46% said that this inaction would not be considered police misconduct. In other cases, the defense counsel was blamed for a failure to investigate the defendant's alibi. For example, after Richard Johnson was convicted for rape and robbery, he claimed that his defense was inadequate. His defense attorney did not investigate his alibi, claiming that Johnson did not need alibi witnesses because the prints on the knife were not his (*Johnson v. Illinois*, 1994). Johnson spent four years in prison before being exonerated using DNA (Innocence Project, n.d.).

Obviously, it would be better to have an offered alibi investigated thoroughly earlier rather than later. If police investigators verify an alibi, then a trial and a wrongful conviction can possibly be averted. Sommers and Bradfield Douglas (2007) found that an alibi was perceived as stronger when it was evaluated as part of a police investigation rather than as part of a trial. They proposed that a possible reason for these perceived differences as a function of the context was because participants may have thought that if a case made it to trial, then the alibi must not have carried much weight. They caution researchers to consider context when evaluating their results.

Another reason why a provided alibi did not work in the defendant's favor is because the prosecution kept something from the defense that would support the alibi. This is prosecutorial misconduct, a deed that typically carries no punishment for the offender (e.g., Selby, 2020). For example, in Fredric Saecker's case, the State failed to turn over an ATM slip and taxi records that would support Saecker's alibi (*Wisconsin v. Saecker*, 1996).

In some cases, alibi information, although available, was not presented at the trial. In A.B. Butler's case, for example, the defense attorney decided not to allow the alibi witness to testify

because the attorney thought the testimony that was going to be provided would be inconsistent with the alibi witness' original statement (*Ex Parte A.B. Butler*, Jr., 1990).

There were also cases in which an alibi was investigated, but investigators chose not to believe the alibi. Sometimes, in hindsight, it is difficult to understand why one alibi is believed and another is not. Consider Frank Sterling's case. In 1988, a 74-year-old woman was taking a walk when she was struck in the head by BB gun pellets, and then beaten to death. Sterling was immediately a suspect because his older brother had been imprisoned for attempting a sexual assault of the same woman. Sterling had what could be considered a solid alibi; he was at work at the time the crime was said to have occurred, then he went to buy frosting for cakes he had made, and then he watched television for two hours. Every facet of his alibi was checked and confirmed (*New York v. Sterling*, n.d.).

Another suspect, Mark Christie, was questioned 10 days after the murder. Christie told police that he was at school on the day of the murder; he also said that if he had killed the victim, he would lie about it. The police indicated that they believed his alibi and did not investigate Christie any further. More than two years passed without an arrest; then a new investigative team took over. Five months later, Sterling was again brought in for questioning. After 12 hours of an interrogation in which he was hypnotized, told to imagine committing the murder, and shown the crime scene photos to "help him remember," he confessed. Many of the details in Sterling's confession were inconsistent with the facts of the case, and Sterling immediately recanted, but he was convicted. Shortly before Sterling's sentencing, the defense attorney was informed that Christie had told his friends that he had committed the murder. The defense moved for an order to set aside the verdict, but the trial judge thought there was insufficient reason to believe the statements made by Christie's friends. Sterling was sentenced to 25 years in prison. He served almost 18 years, before DNA evidence revealed that Christie was the real culprit. Christie's alibi was eventually investigated and found to be uncorroborated. He hadn't arrived at school until 1:20 p.m. on the day of the murder; his statement of being in school at the time of this crime was false. What is even worse is that while Sterling was serving time for a crime that Christie committed, Christie killed a 4-year-old girl (*New York v. Sterling*, n.d.). Why was Sterling's true alibi not believed and Christie's false alibi was? Why was Sterling's alibi investigated in a timely manner and then not trusted even when corroborated, while Christie's alibi was initially not even investigated but believed? It can be difficult to know why the investigators made the decisions they made, but in this case, one thing is clear. The investigators who believed Christie's alibi and did not believe Sterling's alibi were wrong.

Deciding whether or not to believe an alibi is a decision many investigators have to make, and sometimes investigators make the wrong decision. Researchers have found that it is generally difficult to determine whether an alibi statement is true or false. This has been demonstrated with students reading alibi statements generated by other students (e.g., Culhane et al., 2013) and with a sample of police detectives reading alibi statements generated by males who had recently been arrested (Nieuwkamp et al., 2019). These are difficult decisions to make because it certainly is possible to falsify an alibi. When Culhane et al. (2008) asked their participants if they could come up with falsified physical evidence to support an alibi statement, 34% thought they could; 61% thought they could find someone to lie for them. Given the combination of relatively easy alibi fabrication and an inability to know when one is being lied to, those judging an alibi may resort to being skeptics and exhibit a lie bias; alibis are frequently not believed.

B. Contributing Causes of Conviction

As we have shown, there are many possible reasons why an alibi may be perceived as weak and subsequently not believed. However, we can still ask why the so-called "strong" alibi evidence of non-motivated corroborators, multiple corroborators, and/or the presence of strong physical evidence did not convince investigators of the veracity of the alibis in this sample? Because in each of these cases, as in all others, there was evidence that served to make the defendant appear guilty. We found, for example, that 75% of those with an alibi had a case that included mistaken eyewitness evidence (eyewitness evidence was significantly more likely in cases with defendants who had, as opposed to did not have alibis). Twenty-two percent of those with an alibi confessed (although those with an alibi were less likely to confess than those without), and for those with alibis, approximately half had improper forensic evidence as part of their case. Twenty percent of those with an alibi had an informant implicating them, at times claiming that the presented alibi was false. A third of the defendants with alibis had cases that included government misconduct (this was marginally more likely to occur for those with alibis than for those without), and almost a third of defendants with alibis claimed that their defense was inadequate (this occurred significantly more often for those with alibis than for those without).

How does an innocent person end up with evidence indicating his or her guilt? There are various pathways and while some defendants were convicted due to unfortunate errors (eyewitnesses can make mistakes without being pressured to identify a particular person—see e.g., Buckhout, 1980), in many cases, biased procedures play a role. We'll review three of the major contributing causes to conviction (mistaken eyewitnesses, false confessions and improper forensic evidence) and their potentially biased procedures here.

As noted above, while it is possible for an eyewitness to be honestly mistaken, some of the procedures police use with eyewitnesses can make errors even more likely. As we have shown, many of the DNA exonerees had mistaken eyewitnesses as part of their case. Indeed, we found that 27% of the defendants with an alibi had *only* eyewitness evidence contributing to their conviction. The procedure to obtain eyewitness identification was, in some cases, tainted. Investigators may be so convinced that the suspect is guilty that they encourage a particular identification.

One suggestive technique used in this sample was the show-up (see Wells et al., 2020). In fact, show-ups were used more often in cases in which an alibi was offered by the defendant (19%) than when an alibi was not offered (9%). Why the difference? One possibility is that since the defendants in these cases were not guilty and had alibi evidence to support that fact, perhaps the investigators felt especially compelled (consciously or not) to lead an eyewitness to make the needed identification. It is reasonable to assume that no credible evidence exists against an innocent person (Leo & Drizin, 2010). Do police investigators work harder to secure evidence when the suspect has an alibi?

Other suggestive techniques beyond show-ups were used with this sample of DNA exonerees. Here are a few examples: In Larry Mayes' case, the victim identified another person in the lineup, but then the police officer grabbed the victim and insisted she take another look at the lineup; she then identified Larry Mayes (*Mayes v. Indiana*, 1996). In some cases, the suspect's photo stood out as different, potentially influencing the eyewitness' identification choice. For

example, when Thomas Doswell was arrested for rape, the victim was shown a photo lineup and his photo was the only one marked with an "R" (it was explained during the trial that "R" stood for rape—Innocence Project, n.d.). In Marvin Anderson's case, the photo lineup had his photo in color while all others were in black and white (Innocence Project, n.d.). In a number of cases (e.g., Malcolm Alexander-- https://innocenceproject.org/cases/malcolm-alexander/), investigators presented the same suspect in repeated identification tasks, and the suspect was the only person shown multiple times. This is problematic because multiple identification experiences have been shown to contaminate a witness' memory (Haw et al., 2007). These eyewitness identification procedures were all biased. Thus, despite each of these defendants having an alibi, they were each chosen as the culprit. Eyewitnesses should never be led to choose a particular person (see Wells et al., 2020 for recommendations regarding the collection of eyewitness evidence).

While it is possible for an innocent person to confess without being pressured to do so (see Kassin, 2006), the procedures police use can induce false confessions. The following is one common pathway. Initially, the suspect is asked questions in a non-confrontational manner about the crime in question. During this questioning period, police investigators assess the suspect's behavioral responses (e.g., posture, eye contact) as indicators of the suspect's credibility. If the investigators decide that a suspect is not being honest, they begin interrogating the suspect (Inbau et al., 2011). Unfortunately, police investigators (like most others) are not generally accurate in detecting deception (e.g., Ekman & O'Sullivan, 1991); thus, they can end up interrogating an innocent person. Interrogators typically have a presumption of guilt when they question suspects (Inbau et al., 2011), and their interrogation tactics (e.g., making false claims about the evidence, making or implying promises or threats) can lead innocent people to confess (e.g., Kassin, 1997). Once a confession is in hand, the investigation often ends (Kassin, 2012) which could mean that an alibi, even a strong one, will be ignored. While we did find that those with an alibi were less likely to falsely confess than those without an alibi, the problem of police-induced confessions is a concern for both populations. See Kassin et al. (2010) for more on risk factors that can lead to police-induced confessions and recommendations for interrogation procedures.

Forensic evidence has also been cited as a major contributor to wrongful conviction, and forensic evidence is also potentially subject to bias. For example, in some cases, the forensic analysts have knowledge of implicating evidence (e.g., a confession, an eyewitness) before analyzing forensic evidence (Saks et al., 2003). This knowledge could influence the analyst's findings (e.g., Dror & Hampikian, 2011). To avoid the potentially biasing effect of information from police investigators, blind forensic testing is recommended among other reforms (e.g., Kassin et al., 2013).

Each of the types of evidence noted in this section can be manipulated, coerced, and created where none should exist. Eyewitnesses can be led to choose a particular individual as the culprit; innocent people can be forced to confess to something they did not do, and forensic evidence can be fabricated, tainted by expectation. In each case, one's beliefs can affect the way one looks at evidence (see Charman et al., 2017b). This tendency to have one's preexisting expectations influence the perception of evidence has been referred to as a confirmation bias (Nickerson, 1998). It can lead to "tunnel vision" in which those in the criminal justice system focus on one suspect, seeking out incriminating evidence and discounting any evidence that is exculpatory (e.g., Findley

& Scott, 2006, p. 292).[12] This is not necessarily a deliberate set of actions (Nickerson, 1998), but it can be damaging, nonetheless.

C. Recommendations for Reform

Many in our sample were wrongly convicted despite having an alibi. Given this information, we recommend reforms in the investigation of alibis. While we do recognize that some alibis may be impossible to verify (e.g., "I was home alone"), many can, and it appears that some in the Innocence Project database had corroborating evidence that was ignored. Officers need to take the time to thoroughly investigate the validity of an alibi statement as quickly as possible. An alibi should never be ignored. Alternatively, an alibi should not simply be believed without the benefit of an investigation. Both approaches are inappropriate. In addition, when alibis are evaluated, it is important to avoid confirmation biases (Nickerson, 1998). We recommend, akin to what was put forth by Marksteiner et al. (2011), having an independent evaluator – one who has not formed an opinion of the suspect's guilt or innocence – investigate the suspect's alibi.

As noted above, an alibi should be investigated by police investigators as early as possible. However, if a defendant comes to trial without the benefit of having his or her alibi investigated, then the defense attorney has a responsibility to complete that investigation. Interestingly, over 70% of Dysart and Strange's (2012) law enforcement sample said that private defense attorneys have a responsibility for investigating a defendant's alibi, and to neglect to do so is indicative of providing a substandard defense. Recall that 30% of the exonerees that claimed to have had an inadequate defense included an alibi-based reason for that claim.

We also recommend a reform similar to what those who study false confessions recommend (e.g., Leo et al., 2009). Police should require probable cause to interrogate. Unfortunately, this does not always happen. Relatedly, Dysart and Strange (2012) found that less than half of the sampled detectives agreed to the statement that "a thorough investigation is *always* conducted before a warrant or arrest," while 38% indicated that "a thorough investigation is *often* conducted," and almost 8% said "a thorough investigation is *sometimes* conducted (p. 17). Almost 5% reported that a suspect's alibi is *rarely* or *never* investigated prior to an arrest or a warrant. Recall that an interrogation includes the presumption of guilt, which can lead one to a false confession and prompt a complete disregard of a presented alibi.

Reforms in the training of police investigators are also worth considering. Dysart and Strange (2012) found that only 23% of their sampled law enforcement officers had received specific training on how to interview alibi witnesses. Officers also need to be trained regarding how to evaluate an alibi. If someone provides a direct contradiction upon retelling their account of an event, that could mean something very different from someone committing an act of commission (adding something in a later interview that was only just remembered, also known as reminiscent details) or an act of omission (leaving something out that was stated in an earlier interview). All could be seen as inconsistencies, but one could argue that a direct contradiction is

[12] Another potential indication of tunnel vision is that, in at least 3% of cases (e.g., Jeff Deskovic--https://innocenceproject.org/cases/jeff-deskovic/), investigators determined, prior to the trial, that the DNA from the crime scene did not match the suspect's DNA, yet they continued with the prosecution. (This should be footnote #13)

more indicative of deception than the addition or deletion of details that just were not remembered during one or more retellings. Krix et al. (2015) did find that reminiscent details can be accurate, suggesting that inconsistency is not necessarily a good indicator of accuracy. Interestingly, Potter and Brewer (1999) found that a police sample in South Australia did not perceive the recall of new information to indicate inaccuracy, but they did see testimony inconsistent with one's own statements and with others' statements to be an indicator of inaccuracy. This distinction between direct contradictions versus reminiscent details should be clear in the training of those investigating alibis.

D. Future Research

It is important to recognize that, in the real world, one piece of evidence is rarely evaluated in isolation. In other words, evaluators are typically not just evaluating a piece of evidence, but are integrating that piece of evidence with others. Researchers have begun to investigate how alibis and various forms of evidence are viewed in cases in which they co-exist. (Recognize that bidirectionality of influence is possible here--the presence of an alibi can affect how evidence that contributes toward a conviction is perceived, *and* the presence of evidence that contributes toward a conviction can affect how an alibi is perceived.) For example, researchers have considered how alibis and eyewitnesses are viewed when pitted against each other (e.g., Dahl et al., 2009) and how a confession might change the actions of an alibi witness (e.g., Marion et al., 2016). In the present study we found that eyewitnesses were significantly more likely to be a contributing cause of conviction for those with an alibi than for those without an alibi, and the use of show-ups was significantly more likely for those with an alibi than for those without. These results suggest that investigators may be treating cases differently when an alibi is offered (it may or may not be intentional). Future researchers may wish to look at this possibility more closely. Researchers should also continue to explore how the believability of an alibi can vary when it is presented with various forms of evidence.

Charman et al. (2019) recently applied Wells' (1978) classic research on the effects of estimator and system variables on eyewitness accuracy to alibi research (also see Allison & Brimacombe, 2010). Much of the research that has been conducted on the topic of alibis has focused on what Wells referred to as estimator variables, variables that are not controlled by the legal system. For example, researchers have found that the relationship between an alibi provider and alibi corroborators can affect alibi believability (e.g., Hosch et al., 2011). Who the suspect has as an alibi corroborator is something that is set by circumstances, not by anything the legal system does. Charman et al. maintain that researchers need to turn their focus to studying system variables, procedures that the legal system can put in place to help ensure that innocent suspects are allowed to provide an alibi that will be fairly evaluated. With this in mind we provide the following recommendations for future research.

The present investigation revealed that in some cases relatively strong alibis were inappropriately ignored by investigators. We need to learn how to maximize the strength of the alibi evidence provided by innocent suspects. Are innocent suspects providing all the details about their alibi that they could provide? One possible avenue for future research is to develop questioning techniques that will aid innocent suspects/defendants when they are attempting to recall where they were when the crime occurred. Matuku and Charman's (2020) recent work on uncovering strategies to improve the quality of alibi evidence for innocent suspects is an example

of this. They found that asking people to recall chronologically what they did as opposed to just asking them for a free recall narrative, served to increase the amount of physical evidence recalled. They also found that, in some cases, asking people to take another's perspective into account could increase recall of potential physical evidence sources.

The growing use of digital technology means that changes are likely occurring in the availability of physical evidence. Those questioning suspects and those evaluating alibis need to be aware that physical evidence may be available, although its presence may not be immediately obvious; researchers need to learn how best to access that information. As retired FBI Supervisory Special Agent James Gagliano recently reported on CNN (2020), it is "tough to walk across the street without emitting some type of digital exhaust. Data hitting off of a cell tower nearby or an easy pass or some type of device—go across a bridge and it takes a picture of your license plate." Furthermore, in today's communities in which cameras are increasingly plentiful (e.g., banks, schools, stores, roadways, private home door cameras), finding video evidence may be more possible than ever (Goodison et al., 2015). Virtual documentation can also be possible—website visits, keyword searches on Google, email sign-ins, and Internet shopping all can provide information regarding what someone was doing at a particular time. "Cell tower dumps" in which data are compiled from telecommunication companies to identify phones used near crime scenes may also be helpful. In some cases, police investigators have obtained a "geofence warrant, a type of digital data hunt" that can identify people in an area at a certain time (Schuppe, 2020).

Researchers should, of course, continue to learn how to differentiate true from false alibis (the detection of deception research is relevant here-see e.g., Kassin & Fong, 1999). Differentiating between true and false alibis is an especially difficult task, because not only can suspects lie, but it is also possible that those providing an alibi are innocent but mistaken about where they were (thus, they are not literally lying). For example, when Ronald Cotton was arrested for sexual assault, he provided an alibi, but he had misremembered where he was at the time of the crime. He later realized his mistake and corrected it, but this inconsistency made him look dishonest (Thompson-Cannino et al., 2009). How do we differentiate between those who are honestly mistaken and those who are lying?

Nieuwkamp et al.'s (2019) sample of detectives achieved a 60% accuracy level when detecting deception in alibis, while Culhane et al.'s (2013) student sample detected false alibis at a chance level. Neither the students nor the police detectives were given an opportunity to validate the presented alibis, a task that may have made it easier to detect a false alibi. Interestingly, the police detectives commented that they would have liked to have been able to view the suspect when he gave his alibi account or be provided with an opportunity to ask follow-up questions. It is unclear at this point whether these actions would have served to increase or decrease accuracy in detecting false alibis or just potentially served to make the detectives more (or perhaps less) certain of their decisions. These are potential questions for future research.

We also need to understand how police investigators view inconsistencies. Inconsistency in recall is not unusual. In fact, it has been documented in memory for both unusual events and for more mundane events (Talarico & Rubin, 2003), and there can be a variety of reasons for inconsistencies in memory (see Crozier et al., 2017). One possible reason for inconsistencies is that memory decays with time (e.g., Murre & Dros, 2015). Another reason for inconsistencies is that those providing an alibi may, at least initially, rely on their schemas to help them generate an

alibi. They report what they usually do at the time in question and that information may not be correct (Leins & Charman, 2016).

Laliberte et al. (2021) recently provided data that documents the ways inconsistency can be seen in alibis. They used a smartphone application to record information such as participants' GPS location every 10 minutes for four weeks (thus ground-truth was known). After a one-week retention period, they asked participants to indicate where they were at a particular time (they had a choice of four possible locations). Overall, participants were wrong 36% of the time. Nineteen percent of the time they were right about the day of the week but were wrong about which week it was. They also made mistakes such as choosing the right hour of the day but the wrong day. It is possible to imagine that someone honestly wavering in their presentation of alibi details would be seen as inconsistent and thus dishonest. It should be noted that Laliberte's participants were college students who generally had regular schedules and were asked to choose from four possible locations, yet their memories were still considerably faulty. Future researchers could extend the external validity of Laliberte et al.'s work (e.g., asking for free recall from a non-college sample).

Researchers also need to generate recommendations that will help ensure that provided alibis are investigated fully and fairly. The research of Olson and Wells (2012) suggests one possibility. They found that participants who first generated their own alibis before evaluating a suspect's alibi rated the suspect's alibi as more believable. The idea here is that generating your own alibi gives one an idea as to how difficult it can be to generate a convincing alibi. At this point, this work has only been done with undergraduates; however, the idea that experience could change the outlook of those judging alibis does have promise and should be investigated further.

E. Limitations

There are some limitations to this archival analysis. We were only able to use information that was available. Just because some DNA exonerees are not represented here as having an alibi does not mean that they did not have an alibi. Some may have offered an alibi, and that information is just not represented in the Innocence Project summaries or in the Innocence Record files that have been made available. We do have evidence that some details were missing. Recall that 22% of the alibis could not be analyzed because details were not available. It is also worth noting that, while in some cases we were able to work directly with trial documents (i.e., the Innocence Record), in other cases, we were limited by summaries of trial documents created by others (i.e., the Innocence Project and Garrett's (2019) *DNA Exonerations Database*); we pointed out the few instances in which we found disagreements in content. Finally, recall that we only reviewed Innocence Record documents that explicitly included the word "alibi;" it is possible that we did not capture all of the relevant information.

F. Conclusion

One might think that in this restricted sample of those who were wrongly convicted, you would have a group of defendants that largely did not have alibis. But this was not the case. Sixty-five percent had alibis, some of them strong. But there were forces working against these defendants at every turn—mistaken eyewitnesses, coerced confessions, improper forensics to name a few, and sometimes, faced with the possibility of a conviction, investigators, prosecutors, jurors and perhaps even defense attorneys seemed to discount the alibi, sometimes not even taking

the time to evaluate the alibi that was offered. One lesson of this work is that alibis need to be evaluated as quickly and thoroughly as possible, ideally by someone who is not already convinced of the suspect's/defendant's guilt.

We need to recognize that an alibi supported by family and friends can represent truth; we need to recognize that just because someone doesn't have physical evidence to support a statement does not mean the statement is not true, and we need to learn how to do a better job of differentiating between true and false alibis. The bottom line is that the lack of an alibi or the presence of an alibi perceived as weak should not be seen as incriminating evidence. Devlin (1976) provides a position supported by the present authors: "The alibi will be at best convincing and at worst, neutral" (p. 92). To think otherwise is a mistake with consequences that can be far too great.

References

Allison, Meredith, & Brimacombe, C. A. Elizabeth (2010). Alibi believability: The effect of prior convictions and judicial instructions. *Journal of Applied Social Psychology, 40(5),* 1054-1084, online: https://doi.org/10.1111/j.1559-1816.2010.00610.x.

Bruer, Kaila C., Price, Heather L., & Dahl, Leora C. (2017). When an alibi is not enough: Judgments of evidence needed to lay charges in a burglary case. *Journal of Police and Criminal Psychology, 32(2),* 94-104, online: https://link.springer.com/article/10.1007%2Fs11896-016-9209-6.

Buckhout, Robert (1980). Nearly 2,000 witnesses can be wrong. *Bulletin of the Psychonomic Society, 16(4),* 307-310, online: https://doi.org/10.3758/BF03329551.

Burke, Tara M., Turtle, John W., & Olson, Elizabeth A. (2007). Alibis in criminal investigations and trials. In Michael P. Toglia, J. Don Read, David F. Ross & R. C. L. Lindsay (Eds.), *The handbook of eyewitness psychology* (pp. 157-174). Lawrence Erlbaum Associates Publishers.

California v. Bravo. App.# 003313, Sup. Ct. of Los Angeles Cty., 1991.

Charman, Steven D., Kavetski, Melissa, & Mueller, Dana H. (2017b). Cognitive bias in the legal system: Police officers evaluate ambiguous evidence in a belief-consistent manner. *Journal of Applied Research in Memory and Cognition, 6(2),* 193-202, online: https://www.sciencedirect.com/science/article/abs/pii/S2211368116301486?via%3Dihub.

Charman, Steven, Matuku, Kureva., & Mosser, Alexandra. (2019). The psychology of alibis. In Brian H. Bornstein & Monica K. Miller (Eds.), *Advances in psychology and law*, 4 (pp. 41-72). Springer, online: https://link.springer.com/chapter/10.1007%2F978-3-030-11042-0_2.

Charman, Steve D., Reyes, Andrea, Villalba, Daniella K., & Evans, Jacqueline R. (2017a). The (un)reliability of alibi corroborators: Failure to recognize faces of briefly encountered strangers puts innocent suspects at risk. *Behavioral Sciences & the Law, 35*(1), 18-36, online: https://onlinelibrary.wiley.com/doi/10.1002/bsl.2264.

Connors, Edward, Lundregan, Thomas, Miller, Neal, & McEwen, Tom. (1996). *Convicted by juries, Exonerated by Science: Case Studies in the use of DNA evidence to establish*

innocence after trial. Washington, DC: U.S. Department of Justice, National Institute of Justice. Retrieved on July 17, 2021, online: https://www.ojp.gov/pdffiles/dnaevid.pdf.

Crozier, William E., Strange, Deryn, & Loftus, Elizabeth F. (2017). Memory errors in alibi generation: How an alibi can turn against us. *Behavioral Sciences & the Law, 35(1),* 6-17, online: https://onlinelibrary.wiley.com/doi/10.1002/bsl.2273.

Culhane, Scott E., & Hosch, Harmon M. (2004). An alibi witness' influence on mock jurors' verdicts. *Journal of Applied Social Psychology, 34*(8), 1604-1616, online: https://onlinelibrary.wiley.com/doi/10.1111/j.1559-1816.2004.tb02789.x.

Culhane, Scott E., Hosch, Harmon H., & Kehn, Andre (2008). Alibi generation: Data from U.S. Hispanics and U.S. non-Hispanic Whites. *Journal of Ethnicity in Criminal Justice, 6*(3), 177-199, online: https://www.tandfonline.com/doi/abs/10.1080/15377930802243395.

Culhane, Scott E., Kehn, Andre, Horgan, Allyson J., Meissner, Christian A., Hosch, Harmon M., & Wodahl, Eric J. (2013). Generation and detection of true and false alibi statements. *Psychiatry, Psychology and Law, 20*(4), 619-638, online: https://www.tandfonline.com/doi/abs/10.1080/13218719.2012.729018.

Dahl, Leora C., Brimacomb, C. A. Elizabeth, & Lindsay, D. Stephen (2009). Investigating investigators: How presentation order influences participant-investigators' interpretations of eyewitness identification and alibi evidence. *Law and Human Behavior, 33(5),* 368-380, online: https://doi.org/10.1007/s10979-008-9151-y.

Devlin, Honorable Lord. (1976). *Report to the Secretary of State for the Home Department of the Departmental Committee on Evidence of Identification in Criminal Cases*. London: Her Majesty's Stationery Office. Retrieved on July 17, 2021, online: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/228523/0338.pdf.

Dror, Itiel E., & Hampikian, Greg (2011). Subjectivity and bias in forensic DNA mixture interpretation. *Science and Justice, 51,* 204-208, online: https://doi.org/10.1016/j.scijus.2011.08.004.

Dror, Itiel E., Peron, Ailsa E., Hind, Sara-Lynn, & Charlton, David (2005). When emotions get the better of us: The effect of contextual top-down processing on matching fingerprints. *Applied Cognitive Psychology, 19,* 799-809, online: https://onlinelibrary.wiley.com/doi/10.1002/acp.1130.

Dysart, Jennifer E., & Strange, Deryn (2012). Beliefs about alibis and alibi investigations: A survey of law enforcement. *Psychology, Crime & Law, 18*(1), 11-25, online: https://doi.org/10.1080/1068316X.2011.562867.

Eastwood, Joseph, Lively, Christopher J., Snook, Brent, & Snow, Mark D. (2020). Quality vs quantity: The effect of relationship and number of corroborators on alibi assessments. *Psychiatry, Psychology and Law, 27(6),* 973-988, online: https://www.tandfonline.com/doi/full/10.1080/13218719.2020.1754956.

Eastwood, Joseph, Snook, Brent, & Au, David. (2016). Safety in numbers: A policy-capturing study of the alibi assessment process. *Applied Cognitive Psychology, 30,* 260-269, online: https://doi.org/10.1002/acp.3200.

Ekman, Paul, & O'Sullivan, Maureen (1991). Who can catch a liar? *American Psychologist, 46(9),* 913-920, online: https://doi.apa.org/doiLanding?doi=10.1037%2F0003-066X.46.9.913.

Ex Parte A.B. Butler, Jr., No. 483-2; No. 483-3, 114th Jud. Dist. Ct., Tex., Resp. to Appl. For Writ of Habeas Corpus, July 20, 1990.

FBI testimony on microscopic hair analysis contained errors in at least 90% of cases in ongoing review. (4/20/15). Retrieved on June 19, 2021, online: https://innocenceproject.org/fbi-testimony-on-microscopic-hair-analysis-contained-errors-in-at-least-90-of-cases-in-ongoing-review/.

Findley, Keith A., & Scott, Michael S. (2006). The multiple dimensions of tunnel vision in criminal cases. *Wisconsin Law Review, 2,* 291-397.

Garrett, Brandon L. (2011). *Convicting the innocent: Where criminal prosecutions go wrong*. Harvard University Press, online: https://www.degruyter.com/document/doi/10.4159/harvard.9780674060982/html.

Garrett, Brandon L. (2019). *Convicting the Innocent: DNA Exonerations Database*, online: https://convictingtheinnocent.com/about/.

Giannelli, Paul C. (2006). Wrongful convictions and forensic science: The need to regulate crime labs. *North Carolina Law Review, 86,* 163-235.

Goodison, Sean E., Davis, Robert C., & Jackson, Brian A. (2015). Digital evidence and the criminal justice system: Identifying technology and other needs to more effectively acquire and utilize digital evidence. *National Institute of Justice.* Retrieved on May 25, 2021, online: https://www.ojp.gov/pdffiles1/nij/grants/248770.pdf.

Granhag, Pär A., Strömwall, Leif A., & Jonsson, Anna-Carin (2003). Partners in crime: How liars in collusion betray themselves. *Journal of Applied Social Psychology, 33*(4), 848-868, online: https://doi.org/10.1111/j.1559-1816.2003.tb01928.x.

Gross, Samuel R., Possley, Maurice, & Stephens, Klara (2017). Race and wrongful convictions in the United States. *National Registry of Exonerations*. Retrieved on May 30, 2021, online:http://www.law.umich.edu/special/exoneration/Documents/Race_and_Wrongful_Convictions.pdf.

Haw, Ryann M., Dickinson, Jason J., & Meissner, Christian A. (2007). The phenomenology of carryover effects between show-up and line-up identification. *Memory, 15(1),* 117-127, online: https://doi.org/10.1080/09658210601171672.

Hosch, Harmon M., Culhane, Scott E., Jolly, Kevin W., Chavez, Rosa M., & Shaw, Leslie H. (2011). Effects of an alibi witness's relationship to the defendant on mock jurors' judgments. *Law and Human Behavior, 35(2),* 127-142, online: https://doi.org/10.1007/s10979-010-9225-5.

Illinois v. Dominguez, App.# 2-90-0566/Gen. No. 89 CF 1995, Sup. Ct of Ill., Pet. for Leave to Appeal to the Ill. Sup. Ct., 113, n.d.

Illinois v. Hernandez a/k/a Alex Hernandez, Stephen Buckley, and Rolando Cruz, No 84 – CF 361-01-12; No 84 – CF 362-01-12; No 84 – CF 363-01-12, Trial Tr., 33, Feb. 21, 1985.

In re Dominquez, Pet. For Executive Clemency Based on Actual Innocence, Ill. Prisoner Review Board, 14, Winter Term 2004.

In re Restivo, Pet. for a Writ of Habeas Corpus, App. & Detailed Discussion in Support of Pet'r's Objections to the Report & Recommendations of the Hon. Arlene R. Lindsay, USMJ, Sept. 15, 2000.

Inbau, Fred E., Reid, John E., Buckley, Joseph P., & Jayne, Brian C. (2011). *Criminal interrogation and confessions.* (5th ed.) Gaithersburg, MD: Aspen Publishers.

Johnson v. Illinois, No.91-CR-20794, Mot. to Compel Sero. and Biochem. Testing, Cir. Ct. of Cook Cty. (1994).

Kassin, Saul M., (1997). The psychology of confession evidence. *American Psychologist, 52(3),* 221-233, online: https://doi.org/10.1037/0003-066X.52.3.221.

Kassin, Saul (2006). Judging eyewitnesses, confessions, informants and alibis: What is wrong with juries and can they do better? In Anthony Heaton-Armstrong, Eric Shepherd, Gisli Gudjonsson & David Wolchover (Eds.), *Witness testimony: Psychological, investigative and evidential perspectives.* (pp. 345-362). Oxford University Press.

Kassin, Saul M., Bogart, Daniel, & Kerner, Jacqueline (2012). Confessions that corrupt: Evidence from the DNA exoneration case files. *Psychological Science, 23(1),* 41-45, online: https://doi.org/10.1177/0956797611422918.

Kassin, Saul M., Drizin, Steven A., Grisso, Thomas, Gudjonsson, Gisli H., Leo, Richard A., & Redlich, Allison D. (2010). Police-induced confessions: Risk factors and recommendations. *Law and Human Behavior, 34(1),* 3-38, online: https://doi.apa.org/doiLanding?doi=10.1007%2Fs10979-009-9188-6.

Kassin, Saul M., Dror, Itiel E., & Kukucka, Jeff (2013). The forensic confirmation bias: Problems, perspectives, and proposed solutions. *Journal of Applied Research in Memory and Cognition, 2,* 42-52, online: https://www.researchgate.net/publication/257741822_The_Forensic_Confirmation_Bias_Problems_Perspectives_and_Proposed_Solutions.

Kassin, Saul M., & Fong, Christina T. (1999) "I'm innocent!": Effects of training on judgments of truth and deception in the interrogation room. *Law and Human Behavior, 23(5),* 499-516, online: https://doi.org/10.1023/A:1022330011811

Krix, Alana C., Sauerland, Melanie, Lorei, Clemens, & Rispens, Imke (2015). Consistency across repeated eyewitness interviews: Contrasting police detectives' beliefs with actual eyewitness performance. *PLOS One, 10*(2), 1-17, online: https://doi.org/10.1371/journal.pone.0118641.

Laliberte, Elizabeth, Yim, Hyungwook, Stone, Benjamin, & Dennis, Simon J. (2021). The fallacy of an airtight alibi: Understanding human memory for "where" using experience sampling. *Psychological Science, 32(6),* 944-951, online: https://doi.org/10.1177/0956797620980752.

Leins, Drew A., & Charman, Steve D. (2016). Schema reliance and innocent alibi generation. *Legal and Criminological Psychology, 21,* 111-126, online:

https://www.researchgate.net/publication/259554023_Schema_reliance_and_innocent_alibi_generation.

Leo, Richard A., Costanzo, Mark, & Shaked-Schroer, Netta (2009). Psychological and cultural aspects of interrogations and false confessions: Using research to inform legal decision-making. In Daniel A. Krauss and Joel Lieberman's (Eds.). *Psychological expertise in court: Psychology in the courtroom*. Ashgate.

Leo, Richard A., & Drizin, Steven A. (2010). The three errors: Pathways to false confession and wrongful conviction. In G. Daniel Lassiter & Christian Meissner, eds., *Police Interrogations and False Confessions: Current Research, Practice, and Policy Recommendations*. Univ. of San Francisco Law Research Paper No. 2012-04.

Louisiana v. Hayes, Tr. Of Proceedings, 52, Dec. 19, 2006.

Louisiana v. Hayes, Docket#05-KH-320, NO 97-3780, La. 5th Cir. Ct. of App., Appl. For Writs of Prohibition, Mandamus and Certiorari, 2006.

Marion, Stéphanie B., & Burke, Tara M. (2017). Altruistic lying in an alibi corroboration context: The effects of liking, compliance, and relationship between suspects and witnesses. *Behavioral Sciences & the Law, 35*(1), 37-59, online: https://onlinelibrary.wiley.com/doi/10.1002/bsl.2269.

Marion, Stéphanie B., Kukucka, Jeff, Collins, Carisa, Kassin, Saul M., & Burke, Tara M. (2016). Lost proof of innocence: The impact of confessions on alibi witnesses. *Law and Human Behavior, 40*(1), 65-71, online: https://doi.apa.org/doiLanding?doi=10.1037%2Flhb0000156.

Marksteiner, Tamara, Ask, Karl, Reinhard, Marc-André, & Granhag, Pär A. (2011). Asymmetrical scepticism towards criminal evidence: The role of goal- and belief-consistency. *Applied Cognitive Psychology, 25*(4), 541-547, online: https://onlinelibrary.wiley.com/doi/10.1002/acp.1719.

Masip, Jaume, Alonso, Hernán, Herrero, Carmen, & Garrido, Eugenio (2016). Experienced and novice officers' generalized communication suspicion and veracity judgments. *Law and Human Behavior, 40*(2), 169-181, online: https://doi.apa.org/doiLanding?doi=10.1037%2Flhb0000169.

Matuku, Kureva, & Charman, Steve D. (2020). Enhancing innocent suspects' memories for corroborating alibi evidence. *Psychology, Public Policy, and Law, 26(4),* 442-454, online: https://doi.apa.org/doiLanding?doi=10.1037%2Flaw0000264.

Mayes v. Indiana, App. Lake Sup. Ct. No.: 1282S463, Br. of Def.-Appellant, 1996.

Meissner, Christian A., & Kassin, Saul M. (2002). "He's guilty!" Investigator bias in judgments of truth and deception. *Law and Human Behavior, 26(5),* 469-480, online: https://doi.apa.org/doiLanding?doi=10.1023%2FA:1020278620751.

Meterko, Vanessa (2017). Strengths and limitations of forensic science: What DNA exonerations have taught us and where to go from here. *West Virginia Law Review, 119,* 639-649.

Montana v. Bauer, No 83-407, Sup. Ct. Mont., Resp't Brief on Appeal, Dist. Ct. Sec. Jud. Dist. Mont., In and for the County of Silver Bow, 4, Dec. 8, 1983.

Murdock, Jr., Bennet B. (1962). The serial position effect of free recall. *Journal of Experimental Psychology, 64(5),* 482-488.

Murre, Jaap M. J., & Dros, Joeri (2015). Replication and analysis of Ebbinghaus' forgetting curve. *PLoS ONE, 10(7),* 1-23, online: https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0120644.

Natapoff, Alexandra (2018). The shadowy world of jailhouse informants: Explained. *The Appeal*. Retrieved on March 14, 2021, online: www.theappeal.org.

National Academy of Sciences (2009). *Strengthening forensic sciences in the United States: A path forward*. Retrieved on May 24, 2021, from online: https://www.ojp.gov/pdffiles1/nij/grants/228091.pdf

New York v. Newton, Indictment No. 2441/1984, May 14, 1985, N.Y. Sup. Ct., Term Part 67, County of Bronx, Tr. Of Trial Proceedings, 870, June 22, 1987.

New York v. Restivo and Halstead, Indictment. No 61322, Min. of Sandoval Hr'g and Jury Trial, 25, Oct. 20, 1986.

New York v. Sterling – Appellant, App. Div. Doc. No. KA98-5037/Ind. No. 324/91, Br. for Appellant, n.d.

Nickerson, Raymond S. (1998). Confirmation bias: A ubiquitous phenomenon in many guises. *Review of General Psychology, 2(2),* 175-220, online: https://journals.sagepub.com/doi/10.1037/1089-2680.2.2.175.

Nieuwkamp, Ricardo, Horselenberg, Robert, & van Koppen, Peter (2019). True and false alibis among prisoners and their detection by police detectives. *Psychiatry, Psychology and Law, 25*(6), 902-921, online: https://doi.org/10.1080/13218719.2018.1482570.

Nieuwkamp, Ricardo, Horselenberg, Robert, & Van Koppen, Peter J. (2017). The illusion of the perfect alibi: Establishing the base rate of non-offenders' alibis. *Journal of Investigative Psychology and Offender Profiling, 14*(1), 23-42, online: https://doi.org/10.1002/jip.1470.

Olson, Elizabeth A., & Charman, Steve D. (2012). 'But can you prove it?'—Examining the quality of innocent suspects' alibis. *Psychology, Crime & Law, 18*(5), 453-471, online: https://doi.org/10.1080/1068316X.2010.505567.

Olson, Elizabeth A., & Wells, Gary L. (2004). What makes a good alibi? A proposed taxonomy. *Law and Human Behavior, 28*(2), 157-176, online: https://doi.org/10.1023/B:LAHU.0000022320.47112.d3.

Olson, Elizabeth A., & Wells, Gary L. (2012). The alibi-generation effect: Alibi-generation experience influences alibi evaluation. *Legal and Criminological Psychology, 17(1),* 151-164, online: https://bpspsychub.onlinelibrary.wiley.com/doi/10.1111/j.2044-8333.2010.02003.x.

Potter, Rob, & Brewer, Neil (1999). Perceptions of witness behaviour-accuracy relationships held by police, lawyers and mock-jurors. *Psychiatry, Psychology and Law, 6(1),* 97-104, online: https://www.tandfonline.com/doi/abs/10.1080/13218719909524952.

Pozzulo, Joanna D., Pettalia, Jennifer L., Dempsey, Julie L., & Melo, Cynthia M. (2012). Influential factors in jurors' decisions: Eyewitness age and alibi corroboration. *American Journal of Forensic Psychology, 30*(4), 63-79.

Price, Heather L., & Dahl, Leora C. (2014). Order and strength matter for evaluation of alibi and eyewitness evidence. *Applied Cognitive Psychology, 28*(2), 143-150, online: https://doi.org/10.1002/acp.2983.

Ribeiro, Gianni, Tangen, Jason, & McKimmie, Blake (2020). Does DNA evidence in the form of a likelihood ratio affect perceivers' sensitivity to the strength of a suspect's alibi? *Psychonomic Bulletin & Review, 27,* 1325-1332, online: https://link.springer.com/article/10.3758%2Fs13423-020-01784-x.

Saks, Michael J., Risinger, D. Michael, Rosenthal, Robert, & Thompson, William C. (2003). Context effects in forensic science: A review and application of the science of science to crime laboratory practice in the United States. *Science & Justice, 43,* 77-90.

Schuppe, Jon (2020, Dec. 29). *She didn't know her kidnapper. But he was using Google Maps—and that cracked the case.* Retrieved on June 2, 2021, from online: https://www.nbcnews.com/news/us-news/she-didn-t-know-her-kidnapper-he-was-using-google-n1252472.

Selby, Daniele (2020). Only one prosecutor has ever been jailed for misconduct leading to a wrongful conviction. Retrieved on July 4, 2021, from online: https://innocenceproject.org/ken-anderson-michael-morton-prosecutorial-misconduct-jail/.

Shrestha, Rijen, Kanchan, Tanuj, & Krishan, Kewal (2020) *Methods of estimation of time since death*. FL: StatPearls Publishing. Retrieved on June 12, 2021, online: https://www.ncbi.nlm.nih.gov/books/NBK549867/.

Sommers, Samuel R., & Douglass, Amy Bradfield (2007). Context matters: Alibi strength varies according to evaluator perspective. *Legal and Criminological Psychology, 12*(1), 41-54, online: https://doi.org/10.1348/135532506X114301.

Talarico, Jennifer M., & Rubin, David C. (2003). Confidence, not consistency, characterizes flashbulb memories. *Psychological Science, 14*(5), 455-461, online: https://doi.org/10.1111/1467-9280.02453.

Thompson-Cannino, Jennifer, Cotton, Ronald, & Torneo, Erin (2009). *Picking Cotton: Our memoir of injustice and redemption.* New York: St. Martin's Press.

Torres, John A. (2017). Set up: Murder on the space coast, season 2, episode 3. *Florida Today*. Retrieved on May 29, 2021, online: https://www.floridatoday.com/story/murder/2017/03/23/set-up-wilton-dedge-and-snitch-murder-space-coast-season-2-episode-3/98692936/.

Travis Hayes v. Burl Cain, Uniform Appl. For Post-Conviction Relief, No. 97-3780, Docket # 407218, ii, n.d.

Wells, Gary L., Kovera, Margaret Bull, Douglass, Amy Bradfield, Brewer, Neil, Meissner, Christian A., & Wixted, John T. (2020). Policy and procedure recommendations for the collection and preservation of eyewitness identification evidence. *Law and Human Behavior, 44*(1), 3-36, online: https://doi.org/10.1037/lhb0000359.

Wells, Gary L., Small, Mark, Penrod, Steven, Malpass, Roy S., Fulero, Solomon M., & Brimacombe, C. A. E. (1998). Eyewitness identification procedures: Recommendations for lineups and photospreads. *Law and Human Behavior, 22*(6), 603-647, online: https://doi.org/10.1023/A:1025750605807.

West, Emily M. (2010). *Court findings of ineffective assistance of counsel claims in post-conviction appeals among the first 255 DNA exoneration cases.* Retrieved on May 15, 2021, online: https://www.innocenceproject.org/wp-content/uploads/2016/05/Innocence_Project_IAC_Report.pdf.

West, Emily, & Meterko, Vanessa (2015/2016). Innocence Project: DNA exonerations, 1989-2014: Review of data and findings from the first 25 years. *Albany Law Review, 79,* 717-795.

Wisconsin v. Avery, Wis. Ct. of App., Dist. 2, Case No.: 86-1831-CR, Reply Br. Of Def.-Appellant---On Appeal to Review a J. of Conviction and Order Denying Post Conviction Relief, n.d.

Wisconsin v. Saecker, Wis. Cir. Ct. Case No.: 89-CF 33 & 36.

Zack, Emma (2020). *Why holding prosecutors accountable is so difficult*. Retrieved on July 3, 2021, online: https://innocenceproject.org/why-holding-prosecutors-accountable-is-so-difficult/.

Innocent in the Dark:
Toward a Duty to Preserve Biological Evidence
in Chilean Criminal Justice

Víctor Beltrán-Román*
Ph.D. Candidate, School of Law
Diego Portales University
Chile

Preservation of biological evidence can profoundly impact criminal justice as it can be essential to establish the innocence of a convicted person and thus make evident a miscarriage of justice. The paper provides information and insights regarding the state's duty to preserve biological evidence in criminal justice, thus improving accessibility issues in the post-conviction review in Chile. In doing so, the paper looks beyond Chile's borders and seeks to obtain lessons from US states' preservation statutes. The research uses law comparison to assess and comprehend the appropriateness of Chilean regulation and then to identify areas for improvement in the criminal justice system.

Faculty Endorsement: *Faculty Endorsement: Claudio A. Fuentes Maureira, Professor, Department of Procedural Law at Diego Portales School of Law. I endorse this article for publication in the Wrongful Conviction Law Review.*

I. Introduction
II. The Road to Exoneration: Challenging a Conviction in Chile
  A. Overview of Post-conviction Review in Chile
  B. Post-conviction Review in Action
  C. Pending Challenges
III. Methodology and Sources of Information
IV. Duty to Preserve Evidence
  A. Overcoming Classic Objections
    a. Costs
    b. Administrative Burden
    c. Finality of Judgments
  B. Setting the Duty
    a. Where is Chile in this scheme?
V. Assessing the Chilean law
  A. The Legal Sources Puzzle
  B. Identification, Collection and Custody of Biological Evidence

* The author receives funding for his doctoral studies by ANID/Doctorado Nacional/2021-605991. I would like to extend my sincere thanks to Rodrigo Robles Oteíza, for his outstanding assistance in preparing this article.

C. Destination Uncertain: Retention or Disposition?
D. A Few Lessons
VI. Conclusion

I Introduction

The development of DNA technology has shown how fragile criminal justice systems can be and how vulnerable they are to making mistakes. Since the late '80s, this technology has actively served the purposes of justice since it not only has exposed dramatic cases in which the system convicted innocent people, but it has also helped identify and incriminate the actual perpetrator of such crimes. This technology has been fundamental in the emergence of post-conviction litigation in the US, where DNA-based post-conviction relief applications have helped determine that the courts have convicted and sentenced innocent people.[1] For instance, the Innocence Project database shows that from 1989 to date, there have been at least 375 DNA exonerations. Likewise, the National Registry of Exonerations considers 535 DNA-based exonerations.[2] Thereby, DNA-based exonerations have undoubtedly gained relevance by exposing the problem of wrongful convictions and helping to free the innocent.[3]

Despite the growing use and significance of DNA in criminal justice, Chile has thus far not witnessed DNA-based exonerations.[4] While this may sound promising for those advocating for a

---

[1] In general, by post-conviction relief, I refer to the mechanisms used to correct a conviction after the defendant loses a direct appeal, and thus based on issues not reflected in the trial record or considered on direct appeal. In this context, however, I will be implicitly referring to them as based on, or supported by, new DNA testing. In Chile, the only relief available after a conviction becomes final is the so-called "recurso de revision" which I shall call *post-conviction review* throughout this article. However, other Chilean scholars refer to this mechanism as *wrongful conviction claim* (e.g., Duce, 2015; Fernández & Olavarría, 2009), *habeas corpus* (e.g., Duce, 2017), *revision action* (e.g., Mañalich, 2020) or *remedy of revision* (e.g., Carbonell & Valenzuela, 2021).

[2] See Innocence Project (2020). See also The National Registry of Exonerations (2020).

[3] In Keith Findley's words, "DNA moved exonerations from the periphery to the front and center" (Findley, 2017, p 184). For an overview of the impact of DNA on criminal justice, see Garret, 2011, pp 217-222; Medwed, 2017. See also West & Meterko, 2016, p 752 (asserting that DNA testing is the only forensic discipline that has been recognized as a scientifically valid and reliable method for differentiating individuals, as well as for demonstrating the connection between evidence and a specific individual or source). Nonetheless, it should be noted that while it is a reliable and accurate technology, scholars have pointed to a few circumstances under which DNA does not work, see Visser & Hampikian, 2012; Gill, 2014; Murphy, 2015. For additional limitations of DNA, see Bandes, 2008, p 10; Findley, 2008, p 1161.

[4] Although Chile's Innocence Project includes a few DNA exonerations in its registry, these cases cannot be considered either exonerations or wrongful convictions, as no sentence has been imposed. In said cases, the Criminal Court dismissed the case during the pretrial investigation based on article 250 section b) of the Chilean Code of Criminal Procedure (when the defendant's innocence has been clearly established). Therefore, such cases are much closer to the concept of *near misses* (Carrano et al, 2014, p 476) or, as it has been suggested in Chile, to the concept of *wrongful prosecution* (Duce & Villarroel, 2019, p 217).

better criminal justice system, the lack of exonerations does not mean that the system makes no mistakes. Conversely, it means that there are many problems to access or succeed in post-conviction review applications. On one hand, the post-conviction review legal setting is an issue, and Supreme Court interpretations and practices have made this an inaccessible proceeding (Duce, 2015; Fernández & Olavarría, 2019; Mardones, 2011). On the other, even if such a proceeding were to become accessible, there is no manner for those who have been wrongly convicted to present evidence to support their applications for post-conviction review through DNA testing, as physical evidence and biological samples are rapidly destroyed.

This scenario raises the issue of evidence preservation. In this regard, in 2005, the Innocence Project at Cardozo School of Law reported that 75% of the cases in which legal assistance in the exoneration process was provided eventually failed because evidence had either been destroyed or lost (Jones, 2005). Thus, when evidence is rapidly destroyed, lost, or even degraded over time due to improper preservation, the system creates colossal barriers to the prevailing of the innocent in post-conviction relief (Jones, 2005; Medwed, 2005; Norris et al, 2018). In Chile, however, the problem is double; on one hand, post-conviction relief is hard to access; on the other, their laws do not impose a clear duty to preserve evidence after a conviction. These two issues establish enormous obstacles for the innocent in the path of challenging their convictions and would suggest that Chile has a dark figure of wrongful convictions.

However, this is a matter not only of preservation but overall, the manner in which an investigation is conducted from the very beginning. Thus, to properly preserve a piece of evidence, several critical steps are required, such as its identification, collection, custody, tracking, and storage. In 2011, research analyzing the first 197 cases of DNA-based exonerations in the US established that exculpatory evidence was almost always obtained early on, during the original investigation (Hampikian et al, 2011, p 98). The early destruction or spoliation of evidence raises issues related to the state's duty to preserve the evidence, that is, an obligation to retain evidence that may contain biological material so that the evidence can be tested for actual perpetrator DNA or the absence of the defendant’s DNA. This scenario has led many US states to enact or strengthen innocent protection laws, enshrining provisions that mandate the state to preserve biological evidence. Chile, in turn, has some provisions that regulate the matter, but they are scarce, diffuse, and even contradictory. In this context, this work seeks to describe such rules in Chilean law to then assess and criticize them in the light of comparative experience and the recommendations of expert organizations.

As a first attempt to illuminate and incentivize the study of the issue of preservation in Chile, this article looks at the experience of the US and aims to identify areas for improvement in the Chilean criminal justice system. The first section presents an overview of the Chilean criminal justice system, focusing on the post-conviction review mechanism and describing its shortcomings. Then, it presents the methodology and research’s limitations. Later, the paper presents information on duty to preserve evidence and reflects upon the Chilean reality. Finally, the article describes, systematizes, and criticizes the Chilean rules and assesses them considering the comparative experience and expert recommendations.

II The Road to Exoneration: Challenging a Conviction in Chile

Imagine that you live in Santiago, Chile, and were recently convicted for a murder you did not commit. Your attorney filed a direct appeal, but the Supreme Court rapidly rejected it: the initial judgement is upheld, and you're sentenced to prison. From this point, let's analyze three scenarios.

In the first scenario, you hire a new attorney to file your post-conviction review application based on the retractation of a key state's witness, as well as the exculpatory testimony of two people, which the police never obtained during the original investigation. Although your innocence claim has merit, the Supreme Court declares it inadmissible due to a lack of grounds, as Chilean law does not allow a convicted person to apply for a review based on a new testimony or retractations.

In the second scenario, your attorney collects a key piece of evidence from the scene of the crime, which was not detected by the police, and submits it to the lab for DNA testing. The results are conclusive: the DNA profile obtained from the evidence does not match you. Based on these results, she files a post-conviction review application before the Supreme Court. However, after oral arguments, the court rejects the application because the DNA results are not new evidence under the court's criteria.

In the third scenario, you believe that a specific piece of evidence might contain the DNA profile from the actual perpetrator. Nevertheless, after an attorney-client meeting, you learn that the state destroyed all the evidence seized in connection to the case immediately following your conviction and testing such elements for DNA becomes impossible. Your hands are tied.

As illustrated, challenging a conviction in Chile can become a steeplechase. While this article focuses primarily on the third scenario's problem, this sub-chapter seeks to introduce general aspects of the Chilean criminal justice system, as well as the essential elements of the current post-conviction review mechanism, as well as its relevant shortcomings.

A. Overview of Post-conviction Review in Chile

In 2000, Chilean criminal justice underwent a profound reform, transitioning from a classic inquisitorial system towards an adversarial one. Thus, whereas the old system concentrated both the investigative and decision-making functions solely in the criminal judge, the adversarial separates such functions between the prosecutor as an investigator, and the judges as decision-makers. In addition, the adversarial system replaced the written dossier as the basis for deciding a case, establishing instead an oral and hearing-based proceeding. Then, along with creating the Public Prosecutor's Office, the reform introduced a system of discretion to rationalize criminal prosecution. Lastly, the reform replaced the old figure of the criminal judge with two new actors: the Guarantee Judge, entrusted with the investigative and pre-trial stages, and a judicial panel composed of three professional judges for trial proceedings.[5]

---

[5] Naturally, this section aims to present the reader only with an overall view of the essential aspects of the reform process. For a detailed review on the reform, see: Duce & Riego, 2007, pp 37-88.

While the reform modified the essence of the criminal justice system, the post-conviction review mechanism has survived almost unchanged for about two centuries. Indeed, article 473 of the new code, which entered into force in 2000, is almost identical to article 657 of the old Code of Criminal Procedure enacted in 1906, with only a few minor changes in setting the legal design of post-conviction review proceedings.[6] Particularly, the differences are minor drafting modifications and a new ground for applications (see below article 473 provision e).

The post-conviction review is a special procedure that allows the Supreme Court to revisit and eventually vacate a conviction despite it being a final judgment (Horvitz & López, 2004). Thus, the grounds for applying for review are:

a) When, by virtue of two contradictory judgments, two or more persons are sentenced for a crime that could not have been committed by more than one.
b) When a person is sentenced as the author, accomplice, or accessory to the homicide of an individual whose existence is proved after the conviction.
c) When a person is sentenced by virtue of a judgment based on a document or the testimony of one or more persons, provided that said document or testimony had been declared false by a final judgment in a criminal proceeding.
d) When, after the conviction, a fact occurs or is discovered, or an unknown document appears, and said fact or document is of a nature that, on its own, is sufficient to prove the convicted person's innocence.
e) When the conviction has been pronounced due to prevarication or bribery of the judges who issued it, whose existence has been declared by a final judgment.[7]

Unlike the US, where post-conviction relief applications are generally filed before the trial court, in Chile, it is the Supreme Court who has original jurisdiction to hear and decide these cases. However, before deciding to hear a case, the application must pass a preliminary admissibility analysis, which has become a tremendous barrier in practice. Indeed, research established that during the period between 2007-2016, 89.7% of post-conviction review applications were declared inadmissible by the Court. This led to the conclusion that the Court applies strict scrutiny when reviewing post-conviction review applications through the preliminary admissibility in comparison with other types of applications in criminal matters (Duce, 2017, pp 10-11; Duce, 2021, p 10). In these cases, the Court declined to hear them based solely on the written submission without granting oral arguments, in application of Article 475 of the Criminal Procedure Code. In sum, the Court decides most of the cases in the early stages, based on merely formal but not substantive analysis. The standing to file a review application is held by the Public Prosecution Office, the convicted, or their ancestors, descendants, or siblings. There is no deadline to file a petition; therefore, it can be filed even if the sentence has been completed, or if the convicted died

[6] See Duce, 2021, p 4 (citing Londoño et al, 2003, pp 439-446, and asserting that the criminal justice reform did not reach the post-conviction review, and there was no legislative discussion on the topic during the process).
[7] For further details see Horvitz & Lopez, 2004, pp 447-457.

while or after completing the sentence. In this latter hypothesis, their inheritors may file the claim to rehabilitate the convict's honour.

Although there are five grounds to apply for post-conviction review, the following subsection focuses on section d) of Article 473 for three reasons: first, in theory, it is the only provision that would allow revisiting convictions based on new or unknown evidence, thus opening the door to DNA testing; second, this would be the only hypothesis referring to factual innocence, while the others are cases of procedural innocence (Mañalich, 2020). Third, all post-conviction review applications have been granted based on said section, while the others have remained virtually useless (Fernández & Olavarría, 2009; Fernández & Olavarría, 2018; Duce, 2015).

B. Post-conviction Review in Action

In the period between 2007-2017, 550 post-conviction review applications were filed, of which the Supreme Court only granted fifty-three; that is, about 9.6% of those submitted (Duce, 2017). In this regard, the average rate of exonerations in Chile would almost double that of other countries where the average does not surpass 5%.[8] While this might seem promising, it is far from it. Indeed, research has shown that the forty-two exonerations have been based on a practice in which upon detention the actual perpetrator of a crime stated a name and ID number other than their own, and thus a different person was convicted (Duce, 2017; Fernández & Olavarría, 2018). Thus, this results in only eleven cases other than those related to fraudulent identification; however, seven of them can be explained as gross errors in law enforcement agencies and prosecution.[9] Thereby, after depuration, in the aforementioned ten year period, the Supreme Court has granted only four cases, which reduces the average rate of exonerations to 0.79% (Fernández & Olavarría, 2018).[10] As anticipated, while promising for those advocating for a better criminal justice system, the low rate of exonerations hides many problems.

Most concerning for this study has been the Supreme Court's interpretation of "new evidence" in light of section d) of Article 473. According to Fernández & Olavarría's findings, after analyzing more than 550 Supreme Court post-conviction review decisions, only one defendant used DNA evidence to prove innocence under section d).[11] In such a case, the Supreme Court ruled that the DNA result was not "new evidence" or "evidence unknown at the time of

[8] See Gross et al, 2014 (establishing a wrongful conviction rate of 4.1% in death penalty cases in the US); See also Risinger, 2007 (determining an error rate between 3.3% and 5% in rape-murder cases in the US).
[9] See Fernández & Olavarría, 2018, p 1214 (in which the authors provide the following examples: a) the case of a person convicted of bad checks, who later proved that the debt had already been paid; b) a person convicted of illegal possession of weapons, who later demonstrated having previously acquired the required permit; c) a person convicted of driving with a fraudulent license, which was later shown to be authentic, etc).
[10] See Fernández & Olavarría, 2018, pp 1213-1216 (explaining the method of database depuration and referring to this scenario as "the miraculous Chilean criminal process").
[11] For more examples of restrictive Supreme Court interpretations, see Duce, 2021, pp 13-17.

judgment", as it was obtained after the case had been already decided. In other words, this reasoning closes the door to any post-conviction DNA testing under this provision.[12]

C. Pending Challenges

The post-conviction review mechanism has not been modified in over two hundred years, and thus scholars have started claiming its shortcomings.[13] The prior section presented a few of these, but there are even more. First, post-conviction review claims are only available for those convicted of serious crimes, disregarding minor offences, which comprise 33% of the incoming cases in the criminal justice system. Second, the requirements that law prescribes to make such a review claim preliminarily admissible is also problematic, which imposes additional barriers for the innocent (e.g., ground and foundations, attaching certain documents, etc.). Third, the restrictive character of the grounds for application are also barriers for potential claims (Duce, 2021)[14]. Additionally, other scholars have pointed out the necessity of a proper definition of innocence specific to post-conviction review (Mañalich, 2020) and certain evidentiary aspects in this stage, such as the need to have a new standard of proof of innocence (Carbonell & Valenzuela, 2021).

In the end, if we imagine this subject like a soccer game, getting to play in the stadium of 'post-conviction review' is extremely difficult. Even so, those lucky ones that can make it, then realize at the beginning of the match that they must face an opponent comprised of worldwide stars. It is like playing with their legs tied for the entire game and so prevailing is extremely unlikely for them.

The issues presented are a huge problem; however, there are many different actions we can take in order to generate a change to better protect the innocent. While most of them are beyond the scope of this research, I have dedicated some paragraphs to introduce them as joint progress must be made in these areas to protect the innocent adequately. Fixing such issues is imperative to the usefulness of a potential law of evidence preservation. Conversely, such a law would guarantee operability of post-conviction review. Thereby, improving these areas would provide the wrongly convicted not only formal but substantive accessibility to post-conviction review, that is, a real chance to correct their convictions, and not an illusory right.

III Methodology and Sources

This research aims to explore the consistency of the legal setting in Chile in the issue of preservation. Thus, it will reflect on whether the Chilean law adequately protects wrongly

---

[12] See Duce, 2021, p 16 (citing Roxin, 2019, p 692, who asserts that the use of DNA is a paradigmatic example of the use of new evidence in a post-conviction review).

[13] See Duce, 2021, p 4 (asserting that the mechanism's design comes from the Spanish Criminal Procedure Law, which, in turn, closely followed the French Napoleonic Code of Criminal Instruction of 1808).

[14] See Horvitz & López, 2004, p 451 (describing the grounds for application as extreme cases, where the legitimacy of the decision that imposes a criminal sanction is in crisis. See Mañalich, 2020, pp 30-31 (describing the grounds for application as situations where the gravity, viewed from the injustice of the decision, makes the execution of the sentence (or its continuation) legally unbearable).

convicted individuals and if it provides them with real possibilities to challenge their convictions through new DNA testing. As an underlying assumption to this question, and cross-cutting to this research, there are two premises. First, that DNA technology is the most powerful, accurate, and reliable technology available to provide means for wrongly convicted to challenge their convictions. Second, that evidence retention might provide what I shall call *substantive accessibility*, which relies on preserving biological materials to support innocence claims and operationalize the post-conviction review.

Strictly speaking, it is not necessary to look at comparative law to identify problems in the Chilean regulation on the preservation of evidence, since it can quickly be seen that there are very few, scattered and even contradictory norms. Nonetheless, I find the law comparison a powerful and useful tool to learn how to improve the Chilean criminal justice system. Thus, the goals pursued in this research through law comparison are as follows. First, it seeks to obtain knowledge of the US legal structures in biological evidence preservation. Second, it finds arguments in the comparative experience that might support establishing a preservation duty. Third, it aims to identify areas for improvement in this matter in Chile by law comparison. Finally, in laying down those points for improvement, it hopes to guide potential reform discussions.[15]

In order to carry on the law comparison, I have chosen US state-level legislation for the following reasons. First, unlike Chile, US states do register post-conviction DNA exonerations, which sheds light on the operability of the wrongful conviction correction mechanisms based on this technology. Second, considering the latter, most of these jurisdictions have adopted or strengthened regulations on biological evidence preservation until the post-conviction stage, with the precise object of ensuring the operativity of post-conviction relief based on new DNA testing; in doing so, they have followed different legal designs. Third, as a personal factor, considering my background, I have become more familiar with the US legal system rather than others.[16] Fourth, there are good structural reasons that make law comparison possible, as in both countries, criminal justice works under the paradigm of an adversary system and there are many similarities post-conviction stage. Therefore, it is fair to assume that there is a structural equivalence in criminal justice where it is possible finding more than just a lowest common denominator.[17]

Regarding sources, I have used the Innocence Project database to compile all the statutes requiring biological evidence preservation across the US to analyze them and revise their conformity with the standards and recommendations by experts and this research's interests.[18] I have also consulted specialized literature on wrongful convictions and the preservation of biological evidence. Additionally, to understand how the Chilean criminal justice institutions deal with an item collected in connection to a criminal case, and in my attempt to clear this obscure scenario, I have used the Chilean law of transparency and filed several open records requests,

[15] Regarding functions and goals of law comparison, see Pieters, 2009, pp 3-10.

[16] However, naturally, I cannot be entirely familiar with practices in all the jurisdictions included in the comparison. In regard to my background, as I am not a scientific expert in DNA technology, I approach the issue from the legal perspective. These must be considered as research limitations.

[17] The phrase "lowest-common-denominator" is borrowed from Damaška, 1986, p 5 and Langer, 2004, p 7.

[18] This appendix can be accessed upon request.

asking for data and documents from the Prosecutor's Office, Public Defender Office, Forensic Medical Services (hereinafter SML), and the Police Departments. This source was helpful to access crucial documents, information, and data to reconstruct this reality, although in several times, these institutions did not provide the information requested because they did not have it; these deficiencies are also part of the findings and will be reported when relevant.[19]

Methodological risks can be anticipated. The first one is the so-called danger of ethnocentricity, since one of the jurisdictions included in the comparison is the author's own (Pieters, 2009, p 27). However, such a risk is minimized and should not be a concern in this study, since this research doesn't seek to influence the others but rather benefit from them. Second, a challenge arises from the perspective of legal sources; while several jurisdictions have established the duty through regular laws, a few have materialized it through other means, such court or governor orders, general attorney guidelines or police policies. Similarly, in Chile, the rules are scattered within the Code of Criminal Procedure, laws and decrees on DNA, police protocols, chief prosecutor's general instructions, and others, which might arise challenges with uniformity and comparing legal sources of different levels and binding. Third, the diversity within US jurisdictions can be considered in two ways. On the one hand, the fact of the several existing legal designs on evidence preservation can enrich the law comparison and be valuable lessons to Chile. On the other, however, the diversity of jurisdictions is a limitation since I cannot address all the specific practices of each of them, which inevitably impacts the depth of the analysis considering the distance between the *law-in-the-books* and the *law-in-action*. Therefore, my focus will be on describing the regulations and their elements in order to have an overview of how the statutes that enshrine the duty to preserve work.

In light of these considerations, the presented methodology and sources, although limited, allow this research to approach the issue and explore a comparative and national reality, thus collecting valuable information, especially to Chile's criminal justice, where the issue of preservation remains in the dark.[20]

IV Duty to Preserve Evidence

Overall, by duty to preserve evidence I shall understand the state's obligation to retain, under specific technical conditions, either biological or physical evidence with the purpose of testing its biological material for DNA in support of an innocence claim filed within the context of a post-conviction proceeding. In an ideal model, such an obligation should apply to all criminal cases. Moreover, it should only cease once the convicted is freed from any form of state-ordered supervision.

In this section, I shall look to the US to extrapolate a few lessons that might be beneficial to Chilean law. First, the paper goes over the objections usually raised by those contrary to

[19] These open records forms, and their responses, can be accessed upon request.

[20] The issue has not been directly addressed, except for a brief mention in Chaparro (2013), Proyecto Inocentes (2021), Duce (2021), Castillo (2013).

establish such a duty. Then, the different legal arrangements or designs followed by the US states are revised. In both sections, I shall present reflections upon the Chilean regulation and reality.

A. Overcoming classic objections

Those who oppose the establishment of a duty to preserve evidence base their position on three objections: high costs, excessive administrative burdens, and the finality of judgments (Jones, 2005, p 1262). This subsection, on Jones's shoulders, reviews such objections to contrast them with the reality in Chile. Here, I shall argue that these objections would not find support in Chile.

a. Costs

The first and greatest objection rests on the allegedly excessive costs required to preserve each piece of evidence obtained from a criminal investigation, both in strictly economic terms and others such as human resources, infrastructure, space, and technology equipment (Jones, 2005). This objection mainly concerns with the *quantity* of evidence to be preserved. Thus, it is necessary to know the approximate number of criminal cases in which biological evidence is obtained, or to at least identify in what *types* of cases such evidence is more likely to be collected. Unfortunately, there is no data available on this aspect in Chile.[21] However, to orient our investigation, research has shown that the *types of crimes* in which the most amount of biological evidence is obtained and analyzed are in violent crimes, sexual crimes, robberies, and missing and unidentified persons (Medwed, 2012; West & Meterko, 2016).

Based on this assumption, and looking at the national reality, it is possible to estimate that the duty to preserve would only apply to a rather small number of cases. According to available data in Chile, obtained from the Prosecution Service, out of a total of 1,508,350 cases reported in 2019, sexual crimes represented 2.1% (32,510), while homicides only represented 0.1% (2,170). In contrast, the majority of incoming cases corresponded to crimes against property, such as robbery 20.9% (316,272) and other less severe offences against property 15.9% (241,428). A similar trend can be observed in the 2020 figures, where out of 1,430,960 cases, sexual crimes represented 1.9% (28,143), homicides 0.1% (2,795), whereas robbery represented 16.5% (237,013), and other crimes against property theft represented 11.7% (169,609). Likewise, in the period from January to June 2021, out of 661,339 cases, sexual crimes corresponded only to 2.2% (15,164), and homicides just 0.1% (1,146), while robbery represented 13.4% (88,675), and other crimes against property represented 10.6% (70,754). Therefore, considering only sexual and homicide offences that do not surpass 2.3% of the total, if the law were to impose a duty to preserve evidence, this would be only applicable to a small number of cases, which does not support the objection of high costs for the state.[22]

---

[21] The Prosecution Service asserted that there's no available statistic regarding the number of cases where DNA evidence has been collected (in response to open record request #13462). Likewise, the Public Defender's Office indicated that, unfortunately, the Criminal Defense Management Computer System does not register the nature of evidence items (in response to open record request #AK005T0000746).

[22] In making this estimation, I have disregarded crimes against property as, in light of the data I have, it would be misleading to believe that biological evidence is collected in all of them. Second, under robberies,

Additionally, research has shown that about 76% of all crimes reported in the US are property offences and thus do not involve biological evidence. Therefore, a duty to preserve would only be applicable to a minuscule percentage of cases (Stephens, 2018). This argument also seems to apply to the Chilean reality, where the largest number of reported cases correspond to crimes against property, as showed.

Other objections related to high costs fail on their own. First, states are not required to preserve and store millions of large physical items of evidence, but rather only to extract a sufficient number of biological material samples in the precise quantities needed to conduct DNA tests. Once samples are drawn, evidence can be subject to disposition as appropriate according to the law. Second, storing such samples only requires a dark, dry, and air-conditioned room but no exorbitant expenses as one might intuitively think (Ballout et al, 2013 Jones, 2005: Medwed, 2012).

b. Administrative Burden

The second objection suggests that such a duty would impose an excessive administrative burden on the states, as they would need to have personnel labeling, classifying, tracking, and storing evidence (Jones, 2005, p 1263). This is a misleading argument, as the duty to preserve (or custody) is limited only to those pieces of evidence which the state has obtained from the beginning of the investigation. Indeed, the state is not being asked to go and find new pieces of evidence, nor to take measures of evidence preservation from those carried out according to its own interest in the case, as well as with the purpose of obtaining a conviction. (Jones, 2005, Medwed, 2012). A clear example of such interests is that the state will always be concerned with properly preserving the evidence collected in a scene up until its introduction at the trial stage, as any break in the chain of custody could be a reason to challenge the admissibility of such pieces of evidence at trial, thereby frustrating the conviction (Ballout et al, 2013). In Reed's words, retention statutes only standardize and extend the already existing post-conviction period, without imposing additional facilities or personnel (Reed, 2004).

To rebut this objection, I am going to briefly reconstruct the path of evidence. In Chile, the law entrusts the police with the protection and preservation of all crime scenes by closing or isolation, so that its personnel can identify, collect and keep all the items that appear to have served the commission of the investigated crime under seal.[23] Then, such items are submitted to the Public Prosecution Office for their custody,[24] although biological evidence can be immediately submitted to SML if the prosecutor requires an expert report or further analysis.[25] Afterwards, materials are stored or subject to disposition according to law. In a nutshell, no new activity is required in these early activities; thereby, no excessive burden is imposed on police, prosecutors, or any other

the data considers cases involving both violent and non-violent appropriation of another's property. Thus, it is fair to assume many cases might not have any kind of biological evidence. Lastly, under other crimes against property, several different conducts are considered, so it would not be fair to assume that biological evidence could be gathered in all of them.

[23] Article 83 c), Code of Criminal Procedure, Law No 19.696, 12 October 2000, Diario Oficial [DO] (Chile).

[24] Article 188, Code of Criminal Procedure, Law No 19.696, 12 October 2000, Diario Oficial [DO] (Chile).

[25] Article 24 of Regulation on Custody of Items Seized by the Public Prosecution Office.

criminal justice institution. If a retention obligation were imposed, it would only require that the items collected be preserved for a longer period.

It is also important to note that research conducted on the first 197 DNA exonerations in the US established that exculpatory evidence was almost always obtained during the original investigation (Hampikian et al, 2011), which not only ends the argument of excessive burden, but also strengthens the idea that appropriate preservation of evidence starts and depends on the investigation activities early on in a case.[26] Hence, it is crucial to improve police performance and techniques in this subject, so that materials can maintain their utility throughout the process, including the post-conviction stages.

Furthermore, establishing a duty to preserve evidence would not only benefit those who have been wrongly convicted, but also the interests of the state and the victims. Indeed, after being tested, such evidence could allow the identification of the actual perpetrator of a crime or determine the perpetrator in cold cases, thus improving the state's clearance rate and bring justice to the victims (Jones, 2005). Conversely, early destruction of evidence would prevent the state either from prosecuting the true perpetrator or linking cold cases committed by the same individual, as well as bringing justice to victims and their families.

Regarding the interests of the state, establishing a preservation duty might benefit prosecutions. In fact, the so-called SACFI units[27] were recently created to strengthen criminal prosecution and investigation of unsolved cases, as well as to avoid the excessive use of prosecutorial discretion, specifically, the so-called *archivo provisional*.[28] Therefore, while helping wrongly convicted people, evidence preservation also benefits the state and these units by contributing to connect cold cases that might have been committed by the same individual.

Finally, I strongly believe that retention of evidence should be relevant for prosecutors as well, since they have standing to file claims for review according to the current legal setting.[29] Thus, having biological evidence available for potential DNA testing would also serve their interest in this matter. Nonetheless, I think it is necessary to develop a culture that recognizes the potential likelihood of making mistakes, as criminal justice is a human endeavor. In such a goal, regarding prosecution service, other legal reforms would play a pivotal point, for instance, through the creation of the so-called conviction integrity units.

---

[26] See National Institute of Justice, 2000 (stating that actions taken at the crime scene, at the outset of an investigation, can play a pivotal role in the resolution of a case. That is, careful and thorough investigation is key to ensure that potential physical evidence isn't tainted or destroyed).

[27] SACFI is the acronym for "Sistema de Análisis Criminal y Foco Investigativo" which can be translated as "System of Criminal Analysis and Investigative Focus". See Law No 20.861, 20 August 2015, Diario Oficial [DO] (Chile).

[28] *Archivo provisional* is a discretionary power that allows prosecutors to keep a case unfiled when there are no available records or pieces of evidence that would allow conducting activities in order to determine if a crime has occurred. The case may remain unfiled until further information arises (e.g., this prosecutorial power has been usually applied in crimes against property, when the author's identity is unknown).

[29] Regarding the role of prosecutors in preserving biological evidence, see Medwed, 2012, pp 156-157.

c. Finality of Judgments

A third objection asserts that allowing actual innocence challenges grossly undermines the state's interest in the finality of judgments and providing victims with closure (Jones, 2005). Thus, opponents of the duty to preserve evidence argue that the narrow margin of error that results in wrongful convictions demonstrates that the system, while imperfect, operates fairly and should no longer be burdened with such a duty.

This certainly calls us to reflect upon our justice system's values. In Chile, both the legal arrangement of post-conviction review and Supreme Court decisions show that the finality of judgments is a crucial value in the system. Also, scholars have pointed out in the same direction, considering that the grounds for review are cases where the legitimacy of the decision imposing a criminal sanction is in crisis (Horvitz & López, 2004) or situations where the gravity, viewed from the injustice of the decision, makes the execution of the sentence (or its continuation) legally unbearable (Mañalich, 2020). While the finality of judgments seems to be the main concern for our system, bringing real justice and not only an illusion of it to the victim and victim's family should also be a crucial value to be pondered. Hence, the balance of these values needs to be revisited.

In any case, the classic objections are overcome by reality, as well as technological and scientific advances. Thus, the emergence of organizations such as the Innocence Project have demonstrated that criminal justice systems actually do make mistakes, and that exonerations based on DNA evidence are inconceivable if there is no duty of preservation (Hampikian et al, 2011; Jones, 2005). Criminal justice systems not only fail when they convict the innocent, but also when they impede individuals from accessing the mechanism to correct such mistakes and from obtaining the necessary materials to reverse their sentence.

B. Setting the Duty

Hand in hand with the innocence movement, US states have enacted or strengthened innocent protection laws. These bodies of laws generally consider a post-conviction DNA testing proceeding, a compensation law, and other reforms on investigative techniques, such as the use of confessions, informants, identification procedures, etc. Particularly, in the issue of preservation, most of the US states have enacted laws mandating the state with the duty to preserve biological evidence.

Currently, there are only six states with no law requiring evidence preservation: Delaware, Idaho, New York, North Dakota, Vermont, and West Virginia. However, although all other states and territories have such a law, only twenty-eight meet the NIST standards,[30] while sixteen do

[30] This is the case of Arkansas, California, Colorado, Connecticut, District of Columbia, Florida, Georgia, Hawaii, Illinois, Indiana, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Nebraska, Nevada, New Hampshire, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Texas, and Wisconsin.

not.[31] Said standards come from the so-called *Technical Working Group on Biological Evidence Preservation*, which contributed with two publications that establish uniform practices regarding the handling and preservation of biological evidence.[32] These standards have guided the reform on laws of evidence preservation in the US. In general, they distinguish between the type of crime as well as the case status in order to then set a period of time during which retention or preservation of evidence is required.[33] For instance, in homicide offences, they require the authority to retain the evidence indefinitely either in open cases or when charges were filed. If the case was adjudicated, retention is required for the length of incarceration. When prosecutorial discretion is applied (e.g., unfounded, reused, denied, no further investigation), the evidence can be disposed upon receipt of authorization. In other crimes, such as sexual offences, assault offences, kidnapping, abduction and robbery, the standards establish a minimum retention period, that is, for the length of the statute of limitations in open cases, and for the length of incarceration once the case is adjudicated (Ballou et al, 2013).

Thus, in setting the duty to preserve, at least three main variables must be considered. First, whether the obligation automatically emerges or requires further activities, such as a court order or a motion for post-conviction DNA testing. Secondly, the cases eligible for such evidence retention, considering types of crimes and case status. Thirdly, the duration of the period of preservation. However, other variables might also be relevant, such as the legal source where the duty has been established (e.g., law, police department policies, state Attorney General guidelines (New Jersey), administrative rules, etc), the criminal justice actor or institution upon which the duty has been imposed, in other words, who must take measures for adequate preservation (e.g., attorney general (South Dakota), prosecuting attorney (Kansas), law enforcement agencies (Kentucky), police departments), the tension between strict and well-defined rules or discretion to make decisions (e.g., in Washington judges can determine the length of retention, but generally the law sets such a period), the evidence to be preserved and its qualification (e.g., whether the evidence or biological material was introduced at trial), procedurals events (e.g., statutes making retention applicable only to cases decided in a trial, others also including cases where the defendant pled guilty, or both), the sanction for beaching the duty, etc.

Regarding the first variable, that is, whether or not the duty to preserve automatically emerges, statutes can be classified as follows: *no-duty* statutes, *qualified duty* statutes, and *blanket duty* statutes (Jones, 2005). Now, I shall mainly rely upon this classification, but I'm going to attempt to include the other variables as well, in order to find out how these statutes might protect the innocent, or rather fail to do so.

First, *no-duty* statutes group such laws that purport to establish a right to DNA testing for prisoners but fail to mandate preservation of the biological evidence needed to give that right any real meaning. For instance, North Dakota does not have duty to retain, but the law allows a

[31] This is the case of Alabama, Alaska, Arizona, Iowa, Kansas, Kentucky, Missouri, Montana, New Jersey, Ohio, Pennsylvania, South Dakota, Tennessee, Utah, Virginia, and Washington.

[32] See Ballout et al, 2013 (also including recommendations on packaging, tracking, disposition, etc). See also Ballout et al, 2015 (including recommendations for policy makers in this subject).

[33] See Ballout et al, 2015, pp 3-5. Particularly, in p 5, Table 1-2: Summary of Biological Evidence Retention Guidelines for Crime Categories.

convicted person to file motions for DNA testing to demonstrate actual innocence. Similarly, Idaho, with no law of evidence preservation, has enacted the Uniform Post-conviction Act, allowing a convicted individual who claims to be innocent to apply for DNA testing of evidence that was secured in relation to the trial that resulted in said conviction, but which was not subject to such testing.

The problem with this group of statutes is rather clear. With no legal obligation to retain evidence, there wouldn't be an actual right to DNA testing for prisoners, as this right could easily be negated by systematically destroying all biological evidence in every closed criminal case, pursuant to the local evidence management policy. Thus, access to biological material for DNA testing in post-conviction stages cannot simply be contingent upon the goodwill of law enforcement agencies, as this completely weakens and nullifies the innocence protection statute. Conversely, to operationalize the post-conviction statutes in jurisdictions like Idaho or North Dakota, establishing such a duty to retain evidence must be essential, otherwise, such statutes only become a "statement of goodwill".

An example of this idea of goodwill is Idaho. In this matter, Dr. Greg Hampikian, Boise State University professor and codirector of the Idaho Innocence Project, has asserted that he has been able to examine evidence within in the state as old as 20 or 25 years old. Nonetheless, as depending on law enforcement agencies' goodwill, the length of retention varies across different cities in the state. Moreover, this arises concerns with the way in which evidence is handled by such agencies (Clark, 2019). Once again, with no legal regulation, everything becomes a factual matter, lacking uniformity and with room for discretion and arbitrariness.

In second place, laws under the category of *qualified duty* statutes require a trigger for the duty of evidence preservation to emerge. In other words, it is a qualified duty because it is not activated until a petition for DNA testing is filed. An example of this setting is Alabama law of evidence retention, where the preservation is possible in capital offences, but the duty only emerges upon notice of a motion for DNA testing. Similarly, under Kansas law, which allows preservation in murder and rape convictions, the duty is only activated upon a petition for DNA testing, whereupon the court must order the prosecuting attorney to preserve all biological evidence and to take all the necessary steps to ensure said biological material is preserved until post-conviction proceedings are completed. In South Dakota, the attorney general must preserve all evidence collected in connection with an investigation or prosecution until the completion of such a proceeding, but such a duty arises upon receiving notice from the court. Likewise, in Pennsylvania, the duty is contingent upon filing for post-conviction DNA testing and the subsequent court order. In Tennessee, the evidence must be preserved upon receiving notice from the court as well, and the duty extends throughout the pendency of the proceeding.

The inconvenience of this setting is quite evident, as many times the duty will frequently emerge late, when evidence has already been destroyed. Although in some cases it could work, it seems that this type of regulation does not offer a sufficient guarantee of substantive accessibility to post-conviction review.

Moreover, it is important to carefully review the scope of retention, as many of these statutes are restricted to specific offences, such as capital offences, murder, or sexual crimes (e.g.,

Alabama’s retention law only applies to capital offences). Also, a qualified duty statute may only set short periods of retention or leave the determination of the period to discretion and thus be insufficient to protect the innocent. For instance, Indiana’s statute establishes the duty in a court order issued after a petition for DNA testing; in this case, the state must retain the evidence during the pendency of the proceeding. In Utah, while requiring a petition for DNA testing in order for the duty to emerge, the law does not articulate the length of the preservation.

The third kind, *blanket duty* statutes, provide the most comprehensive evidence preservation requirement. Under such a regulation, the government has an obligation to preserve all biological evidence that has been collected during the initial criminal investigation, and to properly retain such evidence until the prisoner is released from confinement (Jones, 2005). Unlike the qualified duty, in this case the obligation is triggered automatically and is not contingent upon the filing of a petition for DNA testing. Likewise, the length of preservation is not limited to a specific period but rather extends until the convict's release.

Neat examples of this setting are Texas, Connecticut, Wisconsin, and Massachusetts. In Texas, the statute requires automatic preservation of biological evidence in felony cases, which must be maintained until the convicted dies, is executed, or released on parole (in capital felony convictions), until the defendant dies, completes the sentence, or is released on parole or mandatory supervision (in term confinement sentences), until the defendant completes the term of supervision (in sentences to community supervision), or, in cold cases, for no less than 40 years or until the statute of limitation has expired. In Connecticut, the law requires automatic preservation, for the length of a convict’s incarceration, of all items related to an investigation on a capital offence conviction, murder with special circumstances, or any crime where a person was convicted at trial, or upon court order. Wisconsin’s statute states that any biological material collected in connection with a criminal investigation that resulted in a criminal conviction, a delinquency adjudication, or commitment, shall be preserved until the convicted reaches his or her discharge date. Finally, in Massachusetts, preservation is automatic upon conviction, and the length is for the period that a person remains in custody or under parole or probation, with no regard to whether the evidence was introduced at trial.

Although still within the category of blanket duty statutes, other less protective regulations can be identified. Michigan and Mississippi have a similar setting, with a law requiring automatic preservation of biological materials for the person’s incarceration period, however, such an obligation is restricted to felony convictions. Likewise, Minnesota’s retention statute orders automatic preservation, for the length of sentence, but it is limited to evidence used to secure said conviction.[34]

Notwithstanding, it is also possible to discern an intermediate category of cases, that require preservation of all DNA evidence but are limited to a period other than the convict’s release. Although the duty emerges automatically in these situations, considering the length of retention, they might not provide substantial accessibility to post-conviction review. For instance, Iowa’s

[34] This statute can be seen as the opposite of Massachusetts'. While Minnesota preservation's scope is limited to the items used to secure a conviction, in Massachusetts the preservation duty applies even if the evidence was not introduced at trial.

retention law, which enshrines automatic preservation of all DNA evidence for criminal actions, establishes a mere three-year retention period. Another example is Montana, where even though the statute requires automatic preservation of biological evidence for a minimum of three years after the conviction becomes final, any extension of such period must be issued by a court. Likewise, Ohio's law orders automatic preservation of biological evidence for both aggravated and ordinary murder offences, but just for the period in which the crime remains unsolved. Missouri can be labeled as an intermediate case as well, since law orders automatic preservation in certain felony convictions, but the length of the preservation period is not expressed.

The same is true in other intermediate cases that I have identified, where the blanket duty is rather apparent, due to the fact that it does not cover all offences required by standards. For instance, Virginia's statute requires automatic preservation of all biological evidence when the death penalty is imposed, however, in non-death criminal cases, the duty can only be activated upon defendant's motion, and only for a maximum period of 15 years, which can be extended by the determination of the court.

Finally, I want to give a few thoughts regarding the practical performance of retention statutes, their implementation, and their impact on DNA exonerations. A 2019 article showed that, up to said year, 13 states had never exonerated a convicted based on DNA evidence (Emmanuel, 2019). Among them, 10 had a law requiring evidence retention, although only 7 meeting the NIST standards. The remaining three did not have such a law. Thus, while the lack of exonerations has not a definitive answer, the absence of a law requiring evidence might explain it in those three states. Then, the destruction or misplacing of DNA evidence emerges as one even in those states that have said law. Also, it might be explained because states have enacted a law of preservation just a few years ago. Moreover, the setting of post-conviction DNA testing and especially the high standard to prevail in such a stage can also be a factor. Therefore, this might illustrate that establishing a retention law is not in itself a guarantee of exonerations. Conversely, police practices and training in handling DNA evidence are important, as well as the legal setting of post-conviction remedies and the barriers that these might inherently impose. As I have emphasized, all these issues must move forward together to adequately provide the innocent with adequate means to try to reverse their conviction.

a. Where is Chile in this scheme?

In this scheme, it is not easy to categorize Chilean law. While I shall delve into such rules in section V, in the following paragraphs I'll provide their essential aspects.

In Chile, the law does not impose a clear duty to preserve evidence, either physical or biological, until post-conviction proceedings have ended, but naturally only extends such an obligation from the initial investigation up until a short time frame after a conviction has been obtained. Thus, once a piece of evidence has been retrieved from the scene, the police begin the chain of custody, submitting the item to the Prosecution Office for its safekeeping during the pendency of trial. Once a conviction becomes final, the evidence is generally kept for no more than six months after which it is auctioned to the public or destroyed, depending on the nature of the property seized. The situation varies slightly when such evidence is biological. Thus, after being collected from the scene it can be submitted by the police directly to the lab for analysis and

its subsequent destruction, unless a qualified exception applies to allow its retention. Moreover, if a biological sample is obtained in connection with the investigation of certain sexual offences, it must be preserved for at least a year.

In general, although restricted in length, the duty to preserve physical evidence after conviction emerges automatically. Regarding biological materials the situation is different, after analysis, prompt destruction is ordered unless SML determines that obtaining biological materials is technically unrepeatable. If so, the prosecuting attorney may order the retention for up to 30 years upon discretion. Therefore, in the case of biological samples, their conservation is triggered by a two-step process; first, the lab's qualification of the biological material as technically unrepeatable, and then, the length of retention upon the prosecutor's determination. Nonetheless, if a biological sample is obtained in connection to certain sexual crimes, the law orders its preservation for no less than a year.

In the following section, with the goal of identifying areas for improvement, I delve into these rules to assess them in light of the comparative experience presented, as well as expert recommendations on the matter.

V Assessing the Chilean Law

A. The Legal Sources Puzzle

While the regulation on preservation of evidence is diffuse and nearly non-existent, several legal instruments contain provisions related to collecting, handling, tracking, and custody of physical evidence. The Code of Criminal Procedure is the main source, but other administrative regulations have been issued by authorities or agreed upon by criminal justice institutions. For instance, the National Prosecutor has created several administrative regulations, such as the "Regulation on Custody Procedures, Storage and Elimination of Records, Documents, and Others", "Regulation on Administration of Physical Evidence", and the "Regulation on Custody of Property Seized". In addition, the Protocol of First Investigation Proceedings was established by the National Prosecutor in order to uniform the police proceedings of the Chilean national law enforcement police ("*Carabineros de Chile*") and of the Chilean Criminal Investigations Police (PDI).

Particularly, regarding biological evidence, there are very few rules. In 2004, the legislature enacted Law No 19.970, creating a National Registry of DNA.[35] Subsequently, the Executive issued Decree No 634 which specifies its scope and complement the law in several technical aspects.

This dispersion of rules challenges not only the interpreter, who performs a systematic study of them, but also their internal consistency. Thus, it is possible to find contradictions between the code of criminal procedure and other administrative regulations. This is not to say that absolutely everything needs to be regulated by a law; actually, I consider that giving other

[35] Law No 19.970, 6 October 2004, Diario Oficial [DO] (Chile).

authorities the faculties to establish rules within a limited scope is helpful, especially to facilitate their modifications, and considering the high specialization and technicality of some matters. Nonetheless, an important aspect, such as the period that evidence must be retained, should be carefully regulated by the law, thereby preventing discretion and contradictions among the several bodies that regulate this matter.

B. Identification, Collection and Custody of Biological Evidence

Having an adequate definition of biological evidence is a crucial starting point. This is relevant to guide both the criminal investigation, as well as the attitude of those who lead it when coming in contact with these elements, since such a definition impacts how they must proceed in collecting, tracking, submitting, storing, and, in general, the path followed by such items. Experts recommend defining biological evidence as "evidence commonly recovered during a criminal investigation in the form of skin, hair, tissue, bones, teeth, blood, semen, or other bodily fluid, which may include samples of biological materials, or evidence items containing biological material" (Ballou et al, 2015, p 4). Thus, a definition as proposed attempts to illuminate all potential handlers on how to proceed once an item is identified as biological evidence, upon its encounter at the crime scene and throughout the criminal process, and whether such item should be retained and, if so, for how long (Ballou et al, 2015).

There is no definition for *biological evidence* in Chilean Law. In fact, the Code of Criminal Procedure does not use such an expression, although it is possible to find the term *biological sample* in a couple of provisions. Furthermore, Decree No 634 does not define *biological evidence* either, however, its article 4 No 6 does define *biological sample* as "any fluid or tissue from a human source, either liquid or solid, susceptible of containing DNA that can be attributed to an individual whose identity is known".[36] Then, article 4 No 7 defines *evidence* as "any physical element that contains or may contain DNA of a preliminary unknown person". While these definitions could be of some use, they are insufficient because their scope is restricted only to Decree No 634 and Law No 19.970, which are particularly concerned with DNA comparison and DNA matching expert reports.[37] In other words, such definitions do not apply in the context of a criminal investigation and thus they are not intended to guide the investigator's behavior.

The *handbook on crime scene police work,* which is used for police training in Chile, does not provide a proper definition either. Thus, the same problem arises, since it only defines *evidence* as "physical element directly connected to the investigated crime, including elements such as fingerprints, blood, tissue, personal items, and elements used by the offender (knife, gun, crowbar,

---

[36] Decree No 634, 12 June 2013, Diario Oficial [DO] (Chile).

[37] According to SML, DNA comparison and DNA matching are two types of expert reports elaborated by the service in the context of a criminal investigation. The first is made by contrasting specific genetic fingerprints whether of known origin or not, which eventually allows them to establish an identification, contribution, or a biological relationship between them. The second is made by contrasting specific genetic fingerprints with those contained in one or more DNA registries of the system, which has been specifically required, by the competent authority, in a criminal procedure (as indicated in response to open record request # AK003T00001786).

etc)". Notwithstanding, the document appears to be mainly concerned with the collection of evidence, as it emphasizes the gathering and manipulation of such items. In addition, it promotes good practices in chain of custody, while highlighting this institution's role as a guarantee in keeping evidence safe and integrally preserved for its presentation before trial court. Once again, this reinforces what I previously argued against the objection of excessive administrative burden; namely, that we are not asking the police to do anything different than what they are doing now.

Anyhow, the lack of definition might cause problems. First, it might impact the path of evidence. In general, items collected in a criminal investigation are kept under the custody of the Prosecution Service.[38] However, biological evidence follows a different path, as it is submitted to the lab for analysis, after which it's either preserved in qualified cases or destroyed.[39] Therefore, without an adequate definition there is no way to figure out if the police are submitting for lab analysis all the evidence they are supposed to or not.

Second, and related to the above, it can be said that, within the Code of Criminal Procedure, the general rule is to preserve physical evidence for up to six months. After that, if no interested party claims any right over the property, it can be actioned or destroyed. However, this provision does not consider that such items might contain biological material; therefore, there is room for early loss or destruction of biological evidence.

Third, based on internal regulations, the Prosecution Service has the power to increase the length of retention up to the time of statute of limitation, but this is applicable only to evidence under its custody. Once again, biological evidence follows a different path.

Now, it is important to note that the administrative rule allowing longer preservation relies on the prosecuting attorney's discretion, as there is no guideline or instruction on how or when to use such a faculty and for how long. In addition, the fact that there's no data available on how many cases a longer retention of evidence has been ordered, nor on the type of cases in which this has occurred, is extremely worrying. In general, there is a lack of the minimal information required to understand and evaluate the functioning of criminal justice institutions.

Finally, related to this, while the Code of Criminal Procedure, in those cases of improper preservation, allows the defendant to file a motion before the Guarantee Judge, who may adopt any necessary measure for the proper preservation and for ensuring the integrity of the evidence collected, it seems to be applicable only to physical evidence under Prosecution's custody. Moreover, parties may access such materials to recognize them or to carry on scientific analyses.[40] In conclusion, these rules are not only deficient in the matter of retention, but also in terms of access to biological evidence.

[38] Article 188, Code of Criminal Procedure, Law No 19.696, 12 October 2000, Diario Oficial [DO] (Chile).
[39] Article 25, Decree No 634, 12 June 2013, Diario Oficial [DO] (Chile).
[40] Article 188.2, Code of Criminal Procedure, Law No 19.696, 12 October 2000, Diario Oficial [DO] (Chile).

C. Retention or disposition?

In order to provide an adequate answer to this question, several distinctions need to be made. In other words, the destiny of a piece of evidence depends on its nature: physical evidence, biological sample, or biological sample in connection to certain sexual offences. Regarding physical evidence, after conviction has been obtained, the possibilities are destruction, public auction, or destination. The rules leading the destiny of physical evidence are article 469 and 470 of the Code of Criminal Procedure, as presented in Table 1.

Table 1. Summary on rules of physical evidence disposition in the Criminal Procedure Code

Legal Source	Ground	Retention	Disposition
Article 469 Crim Pro Code	Property subject to criminal forfeiture	While pending disposition to be made as soon as the judgment becomes final	Destruction, public auction, or destination
Article 470 Crim Pro Code	Property seized but not forfeited in cases terminated by final judgment in a trial	Until six months after decision becomes final	Public auction
Article 470 Crim Pro Code	Property seized but not forfeited in case temporary dismissed or derived to pretrial diversion	At least for a year	Public auction unless of unlawful property subject to destruction
Article 470 Crim Pro Code	Property seized but not forfeited in case terminated by prosecutorial discretion[41]	At least for six months	Public auction unless of unlawful property subject to destruction
Article 470 Crim Pro Code	Unlawful property seized but not forfeited	While prosecuting attorney request a warrant to destroy	Destruction

By analyzing these rules, various problems can be anticipated. First, due to the lack of an adequate definition of biological evidence, the conspicuous problem is that the rules leave room

[41] Under this provision, prosecutorial discretion considers the powers of articles 167 (*archivo provisional*, see footnote 29), 168 (refusal to investigate), 170 (opportunity principle), and 248 provision c) (decision not to persevere in criminal prosecution). All these articles, from the Code of Criminal Procedure, Law No 19.696, 12 October 2000, Diario Official [DO] (Chile).

for either the loss or destruction of physical evidence, that might contain biological materials, shortly after conviction. This is undesirable, especially considering all the evidence indicating the likelihood of convicting an innocent person, and the importance of having materials, especially biological, to challenge a wrongful conviction based on DNA evidence.

Second, in comparison with the US statutes and experts' recommendations, the rules presented here do not distinguish categories of crimes nor their severity; all cases are treated as the same. As presented in section IV, it is pivotal that retention rules determine the types of crimes where evidence is to be preserved.

Third, when comparing the length of retention of the articles 469 and 470 of the Code of Criminal Procedure with those contained in the statutes presented in section IV, the former are not only shorter but certainly insufficient. If an evidence retention law wants to make conviction review mechanisms operational, the length of retention must be reviewed and adjusted. This is especially the case since there is no deadline for filing a review application.

Fourth, in several cases, the use of prosecutorial discretion, particularly the so-called *archivo provisional* could include unsolved serious crimes. In such cases, the early destruction might prevent said investigations from reopening if additional information were to become available in the future. This is undesirable, as it goes against the goals pursued by units like SACFI, but also because it prevents the state from improving its clearance rate, and most importantly, solving such cases and bringing real justice.

Up until this point, I have only referred to physical evidence. Thus, continuing with the second distinction, when a biological sample has been obtained in the context of a criminal investigation, it is submitted to the lab for analysis directly from the scene. Once the lab analysis is completed, the general rule is the prompt destruction of said sample. However, the rule considers a quite interesting hypothesis, that opens the door for a longer retention period, as presented in Table 2.

Table 2. Rules on disposition of biological samples in Decree No 634

Legal source	Ground	Disposition
Article 25 Decree No 634	Once forensic report and results are submitted	Prompt destruction
Article 25 Decree No 634	Immediately after receiving lab results.	Prompt destruction
Article 25 Decree No 634	SML qualifies the obtaining of biological material as *technically unrepeatable*	Preservation of a part up to 30 years upon prosecuting attorney discretion

Thus, in the Chilean setting, if the SML, which acts as a technical agency, has qualified the obtainment of the biological material as *technically unrepeatable*, this allows the prosecuting attorney to order the preservation of part of the sample for up to 30 years. This scenario is far removed from those studied in the American legal design, where it is the law that sets the length of retention or, in other cases, it is left up to the judge's discretion. Overall, it should be noted that the excessive dependence on the prosecutor's discretion is quite characteristic of the revised norms of Chilean regulation on the subject.

From 2016 to 2020, the SML has made such a qualification in 3,448 cases; this results in an average of 862 each year.[42] Unfortunately, there is no data that allows us to know whether in said cases the prosecuting attorney effectively used the power to extend the length of retention and, if so, for how long. There is no information regarding the type of crimes in such cases either. Moreover, we lack information regarding the existence of guidelines or internal prosecutorial regulations that guide the application of this faculty.

Now, regarding the third distinction, according to the Criminal Procedure Code, the obtention of biological samples in connection to the investigation of certain sexual offences triggers different rules. In this case, such samples are obtained either as a product of medical exams or evidence as such. The institution in charge of obtaining the samples and performing tests must conserve both the samples obtained as well as the results of the analysis and exams performed under its own custody. Curiously, under this provision, the length of retention is for no less than a year, after which they are to be submitted to Prosecution Service, as presented in Table 3.

Table 3. Rules on disposition of biological samples in the Criminal Procedure Code

Legal source	Ground	Disposition
Article 198 Crim Pro Code	Biological sample obtained in connection to certain sexual offences	Preservation for no less than a year to then be submitted to Prosecutions Office

Unfortunately, once again, neither the Prosecution Service nor the Public Defender's Office has available data regarding the number of investigations for sexual offences that have obtained biological evidence according to this provision.[43] However, as presented above, the total of sexual offences that are yearly reported in Chile's criminal justice system are not significant in light of the total cases reported. Now, when reviewing the cases-ending data, it is implied that an important part of sexual offence investigations has no available evidence, although it is impossible to determine from said data if they lack biological or any type of evidence, nor the specific type of sexual offence. In any case, it is an analysis worth doing.

Thus, most sexual offences usually end in light of the *archivo provisional*, while a minimum portion either goes to trial or end by means of the defendant's guilty plea. For instance,

[42] Forensic Medical Service, in response to open records request #AK003T00001786.

[43] In response to open record request #13462 and #AK005T0000746, respectively.

in 2019, 2,718 convictions were obtained, and 638 cases ended with an acquittal. In the same period, the Prosecution Service applied discretion to end 19,412 sexual offence investigations based on *archivo provisional* and 1,026 based on the decision to not persevere. These two prosecutorial powers are based on the lack of evidence. In the first, the absence of information impedes the development of any investigation activity, and so the case remains unfiled. In the second, although evidence is available, the prosecuting attorney decides not to take the case to trial since the evidence is insufficient to get a conviction.

More worrying is the fact that there is no information available on the amount of biological evidence that is retained or destroyed each year, nor the type of crimes on which such materials were obtained.[44] Certainly, aspects such as transparency and information availability need to improve.

D. A Few Lessons

In this last subsection, I simply want to recapitulate the most important lessons, although I do not pretend to be exhaustive when pointing out the possible defective areas. On the contrary, these lessons seek to be the first approximation to understand how adequate Chile's national regulation is.

First, as a formal matter, rules on retention should not only be uniform in their consistency and non-contradiction, but it would also be desirable to concentrate them in a single statute. Thus, enacting a law that regulates, at the very least, the essential aspects of the duty to preserve, would prevent the problems derived from having multiple regulations on the same matter, as we’ve detected in this article. Moreover, it would reduce the room of the prosecuting attorney’s discretion in regard to the application of a retention extension and the length of such.

Second, in the context of a criminal investigation, and in order to guide the investigator's behavior, it is necessary to enshrine an adequate definition of biological evidence according to the aforementioned experts’ recommendations. Such a definition should also frame biological evidence as such, as well as physical evidence that contains or that might contain biological materials. Thus, this would allow criminal investigators to know, at a very early stage, which path each type of evidence should follow and, above all, how said evidence should be preserved and until when it should be retained.

Third, overall and considering the rules revised, it seems that the issue of evidence retention isn’t a subject the legislator is particularly concerned with. Most rules in the matter are contained in legal sources other than the Code of Criminal Procedure. Thus, the issue is governed by administrative regulations generated by the National Prosecutor, Decrees, or police protocols. This raises concerns about excessive secretion and possible arbitrariness.

Fourth, the state of current Chilean regulation is far from the recommendations and legal design of the American statutes revised. For instance, Chile’s statute and regulations do not distinguish the type of crime investigated in order to establish the duty. Moreover, the retention

[44] Forensic Medical Service, answer to open records request #AK003T00001786.

length is shorter, and thus prevents the material from being used for potential DNA testing. Finally, while the law distinguishes the case status in regard to physical evidence (Table 1), such status does not impact on the length of retention. In all other cases, the rules do not concern on case status.

Last but not least, although beyond its scope, during this research I realized that this is an under-explored area, greatly characterized by the lack of information.[45] Thereby, there is plenty of room for future investigations, both from a strictly legal perspective, as well as other approaches. In further studies, I will venture with a specific proposal for a legal design or arrangement on the matter. This study has only attempted to begin to illuminate the issue.

VI Conclusion

Chile's criminal justice system does not adequately protect those wrongly convicted, as it does not provide them with any concrete possibilities to challenge their convictions. Nowadays, the post-conviction review mechanism, which has remained unmodified in over two hundred years, is hardly accessible, either because of its legal setting (e.g., the grounds for applications, standard of proof, etc.) or due to the Supreme Court's interpretation and practices (e.g., barriers in preliminary admissibility, Court's understanding of new evidence, etc.) Thus, to provide formal accessibility to post-conviction review, reform in the legal setting and change in Court practices are needed.

Still, it is necessary to create new legal structures to operationalize such a review mechanism, as the one suggested herein, by strengthening the rules for the preservation of evidence, and thus providing substantive accessibility to review, as well as enforcing additional values. While it can exonerate the innocent, the DNA technology might also be helpful to incriminate the actual perpetrator, or it may also contribute to identify the perpetrator of multiple connected crimes, which have thus far remained unsolved, thereby improving the state's clearance rate, and bringing real justice to victims. Thus, the proposed legal structure would actively serve the purposes of justice while also perfecting the system in the process.

This paper has sought to be an initial attempt at illuminating the issue of evidence preservation in Chile. Many aspects of the post-conviction review must be analyzed and reformed if we're to improve its accessibility shortcomings, especially regarding the matter of evidence retention, an area in which Chilean law is quite defective, as this research has identified. Only in the extent that these aspects are reformed, and when an actual evidence preservation statute is established, we will be able to say that the law grants substantive accessibility to those who have been wrongly convicted. All these aspects need to walk side by side though; otherwise, to a greater or lesser extent, the innocent will continue to remain in the dark.

---

[45] For instance, part of the requested information was denied because institutions simply did not have it. As stated in footnote 21, in their open record responses, both the Prosecution Service and the Public Defender's Office explained that their computer systems and database do not register certain information. This was certainly a barrier for this research.

References

Ballou, Susan *et al* (2013). *The Biological Evidence Preservation Handbook: Best Practices for Evidence Handlers*.

Ballou, Susan *et al* (2015). *Biological Evidence Preservation, Considerations for Policy Makers*.

Bandes, Susan (2008). Framing Wrongful Convictions. *Utah Law Review*, *5*, 5-24.

Carbonell, Flavia & Valenzuela, Jonatan (2021). La prueba de la inocencia y las defensas probatorias: el caso de la revisión [Proof of Innocence and evidentiary defences: the case of the remedy of revisión]. *Revista Chilena de Derecho*, *48*(1), 55-80.

Carrano, Julia *et al* (2014). Predicting Erroneous Convictions. *Iowa Law Review*, *99*, 471-522.

Castillo, Ignacio (2013): Enjuiciando al proceso penal chileno desde el inocentrismo (algunos apuntes sobre la necesidad de tomarse en serio a los inocentes). *Política Criminal*, *8*(13), 249-313.

Chaparro, Andrea (2013). Escaso plazo de custodia de pruebas dificulta acciones por error judicial. *El Mercurio Legal*.

Clark, Lauren (2019, February 7). No evidence retention law in murder cases exists in Idaho. *Idaho News*, online: https://idahonews.com/news/local/only-on-2-no-evidence-retention-law-in-murder-cases-exists-in-idaho

Damaška, Mirjan (1986). *The faces of justice and state authority*. (New Heaven: Yale University Press)

Duce, Mauricio (2015). La condena de inocentes en Chile: una aproximación empírica a partir de los resultados de los recursos de revisión acogidos por la Corte Suprema en el periodo 2007-2013 [The conviction of innocents in Chile: an empirical approximation from the results of wrongful convictions claims admitted by the Supreme Court during the 2007-2013 period]. *Política Criminal*, *10*(19), 159-191.

Duce, Mauricio (2017). Los recursos de revisión y la condena de inocentes en Chile: una aproximación empírica en el periodo 2007-2016 [Habeas Corpus and Wrongful Convictions in Chile: An empirical Approach for the 2007-2016 Term]. *Doctrina y Jurisprudencia Penal*, *30*, 3-40.

Duce, Mauricio (2021). La corrección de condenas erróneas en Chile: la necesidad de discutir un nuevo equilibrio [The correction of wrongful convictions in Chile: the Necessity for discussing a new equilibrium]. Manuscript submitted for publication; access provided by its author.

Duce, Mauricio & Villarroel, Romina (2019). Indemnización por error judicial: una aproximación empírica a la jurisprudencia de la Corte Suprema de los años 2006-2017 [Compensation for miscarriages of justice: an empirical approach to the Supreme Court decisions years 2006-2017]. *Política Criminal*, *14*(28), 216-268.

Duce, Mauricio, & Riego, Cristian (2007). *Proceso Penal*. Santiago: Editorial Jurídica de Chile.

Emmanuel, Adeshina (2019, December 16). 13 states have never exonerated a prisoner based on DNA evidence. Here’s why. *Injustice Watch*.

Fernández, José Manuel, & Olavarría, Malva (2009). Teoría y práctica de la acción de revisión en el nuevo Código Procesal Penal, causal letra d) del artículo 473 [Theory and Practice of Wrongful Conviction Claim in the New Código Procesal Penal, Provision Letter D) Article 473]. *Ius et Praxis*, *15*(2), 215-255.

Fernández, José Manuel, & Olavarría, Malva (2018). Examinando de nuevo la acción de revisión [Revisiting the Wrongful Conviction Claim]. *Política Criminal*, *13*(26), 1190-1285.

Findley, Keith (2010). "Defining innocence". *Albany Law Review*, *74*(3), 1157-1208.

Findley, Keith (2017). Flawed Science and the New Wave of Innocents. In Medwed, D (Ed), *Wrongful Convictions and the DNA Revolution*. (pp 184-207). Cambridge, UK: Cambridge University Press.

Garret, Brandon (2011). *Convicting the Innocent*. Cambridge, Massachusetts: Harvard University Press.

Gill, Peter (2014). *Misleading DNA Evidence*. United States: Academic Press.

Gross, Samuel *et al* (2014). Rate of false convictions of criminal defendants who are sentenced to death. *Proceedings National Academy of Sciences of the United States of America, 111*(20), pp. 7230-7235.

Hampikian, Greg, West, Emily, & Akselrod, Olga (2011). The genetics of innocence: analysis of 194 US DNA exonerations. *Annual Review of Genomics and Human Genetics*, *12*, 97-120. https://oi.org/10.1146/annurev-genom-082509-141715.

Horvitz, María Inés, & López, Julián (2004). *Derecho procesal penal chileno*, *Tomo II*. Editorial Jurídica de Chile.

Innocence Project. (2020). *DNA Exonerations in the United States*, online: https://innocenceproject.org/dna-exonerations-in-the-united-states/

Jones, Cynthia (2005). Evidence Destroyed, Innocence Lost: The Preservation of Biological Evidence under Innocence Protection Statutes. *American Criminal Law Review*, *42,* 1239-1270.

Langer, Maximo (2004). From legal transplants to legal translations: the globalization of plea bargaining and the Americanization thesis in criminal procedure. *Harvard International Law Journal*, *45*(1), 1-64.

Mañalich, Juan Pablo (2020). Justicia, procedimiento y acción de revisión. El principio de culpabilidad frente a la cosa juzgada [Justice, procedure, and revision action. The culpability principle facing res judicata]. *Revista Ius et Praxis*, *26*(1), 28-56.

Mardones, Fernando (2011). El recurso de revisión, una mezquina protección al inocente. *Revista 93*, *6*(2), 45-47.

Medwed, Daniel (2005). Up the River without a Procedure: Innocent Prisoners and Newly Discovered Non-DNA Evidence in State Courts. *Arizona Law Review*, *47*, 655-718.

Medwed, Daniel (2012). *Prosecution Complex*. New York: New York University Press.

Murphy, Erin (2015). *Inside the Cell*. New York: Nation Books.

National Institute of Justice. (2000). “Crime Scene Investigation: A Guide for Law Enforcement.” NCJ 178280. Washington, DC: US Department of Justice, Office of Justice Programs, National Institute of Justice, Technical Working Group on Crime Scene Investigation, 58.

Norris, Robert, Bonventre, Catherine &Acker, James (2018). When justice fails. United States of America: Carolina Academic Press.

Pieters, Danny (2009). Functions of comparative law and practical methodology of comparing, online: https://www.law.kuleuven.be/personal/mstorme/Functions%20of%20comparative%20law%20and%20practical%20methodology%20of%20comparing.pdf

Proyecto Inocentes. (2021). Acceso y preservación de evidencia, online: http://www.proyectoinocentes.cl/pag/9/349/modificacion_a_procesos_de_identificacion

Reed, Ted (2004). Freeing the Innocent: A Proposed Forensic Evidence Retention Statute to Optimize Utah’s Post-Conviction DNA Testing Act for Claims of Actual Innocence. *Utah Law Review*, *2004*(3), 877-904.

Risinger, Michael (2007). Innocent convicted: an empirically justified wrongful conviction rate. *The Journal of Criminal Law & Criminology, 97*(3)*,* 761-806.

Stephens, Marjon Creel (2018). Preserving Evidence: Biological Evidence Preservation and Systematic Reform, *West Virginia Law Review Online*, *120*(88), 88-105.

The National Registry of Exonerations. (2020). *2,783 Exonerations Since 1989 more than 24,840 years lost*, online: https://www.law.umich.edu/special/exoneration/Pages/browse.aspx?View={b8342ae7-6520-4a32-8a06-4b326208baf8}&SortField=DNA&SortDir=Desc&FilterField1=DNA&FilterValue1=8%5FDNA

Visser, Rick & Hampikian, Greg (2012). When DNA Won't Work. *Idaho Law Review, 49*(1), 39-67.

West, Emily & Meterko, Vanessa (2016). Innocence Project: DNA Exonerations, 1989-2014: Review of Data and findings from the first 25 years. *Albany Law Review*, *79*, 717-795.

A Critical Analysis of Post-Conviction Review in New South Wales, Australia

Rhanee Rego[1]
Ph.D Candidate, Newcastle Law School
The University of Newcastle
N.S.W., Australia

Wrongful convictions leave an indelible mark on society. They are a tangible demonstration that the criminal legal system has failed, and a poignant reminder that all human institutions are fallible. Robust post-conviction review mechanisms are essential to provide an opportunity for justice to be achieved eventually for those who are wrongfully convicted. Through a critical examination of the post-conviction review mechanisms in NSW, which includes determining the existence of independence, transparency and accountability in the system, some deficiencies will be identified and analysed. Drawing on insights from the author's role as a lawyer for Kathleen Folbigg (a woman convicted in 2003 of the murder of three of her infant children, and the manslaughter of her first child), this article will outline some of the key problems with the current system of post-conviction review in NSW. It then critically compares the existing system with the United Kingdom Criminal Cases Review Commission ("UK CCRC"). The UK CCRC has been chosen because it is a pioneering model which is designed to identify and remedy wrongful convictions in an independent, transparent, and accountable way. The article concludes that a body similar to the UK CCRC should be implemented in NSW to achieve justice for those wrongfully convicted.

Faculty Endorsement*: Amy Maguire, Associate Professor, Newcastle Law School, The University of Newcastle, Australia. I endorse this article for publication in the Wrongful Conviction Law Review.*

I. Introduction
II. Post-Conviction Review in NSW
  A. A Petition to the Governor
  B. An Application to the Supreme Court
  C. An Inquiry as an Outcome Arising from a Petition to the Governor and an Application to the Supreme Court
III. Justice as Fairness: Independence, Transparency and Accountability
  A. Independence
  B. Transparency
  C. Accountability
IV. Some Key Criticisms of Post-Conviction Review in NSW
V. The Folbigg Case

[1] Rhanee Rego is a solicitor of the New South Wales Supreme Court and the High Court of Australia. She is in private practice. Rhanee is also a Sessional Academic and PhD candidate at The University of Newcastle Law School, NSW, Australia.

VI. The Issues with the Review in Ms. Folbigg's Case
A. A Lack of Legal Timeframes
B. Selection of Commissioner and Counsel Assisting
C. The Commissioner's Broad Discretion in the Inquiry Process
a. Scope of Inquiry
b. "Hot Tubbing" Experts and Treatment of Expert Witnesses
c. Redactions of Evidence
d. Refusal to Consider Ms. Folbigg's Diaries in Context
e. Leave to Appear at Inquiry
f. Not Reopening Hearings to Hear Further Evidence
D. Independence, Transparency and Accountability in Ms. Folbigg's case?
VII. The United Kingdom's Criminal Cases Review Commission
VIII. NSW v UK: How do the Systems Compare?
IX. Recommendations
X. Conclusion

I Introduction

There is no worse injustice than "when the law turns upon itself and convicts an innocent person."[2] This has a significant impact on society: it is a recognition that the criminal legal system has failed in a substantial way. Many factors contributing to wrongful convictions (e.g., prosecutorial misconduct or errors in forensic science) are now well recognised and understood.[3] There is, however, very little known about how the system of post-conviction review – directed to remedying those failings of the criminal justice system – operates in New South Wales (NSW), Australia.[4] The process for reviewing wrongful convictions is afforded to the executive government to engage in a process that lacks significant independence, transparency, and accountability. Unlike other common law countries, such as the United Kingdom where a Criminal Cases Review Commission ("UK CCRC") has been established,[5] there is no independent body tasked with investigating wrongful convictions in NSW. There are no well-funded and appropriately scaled innocence projects as in various jurisdictions of the United States. Consequently, there is no appropriate pathway available for review of wrongful convictions in NSW, and there is a significant risk that such cases will go unidentified and unremedied.

This article is a critical analysis of the system of post-conviction review in NSW. It is intended to be an introduction to analysing the *structure* and *function* of the system. It does not consider the factors which *cause* or *contribute* to wrongful convictions such as errors in forensic science or police misconduct. The article will first provide a background to the post-conviction

---

[2] *Van der Meer v The Queen*, [1988] 82 ALR 10, Reasons of Deane J, at para 7 [*Van der Meer*].

[3] Australian Academy of Science, "It is profoundly wrong to deny justice by denying science," (29 August 2021), online:<https://www.science.org.au/news-and-events/news-and-media-releases/it-is-profoundly-wrong-to-deny-justice-by-denying-science> [*AAS*].

[4] New South Wales is the most populous Australian state.

[5] A CCRC has also been established in Scotland, Norway, and New Zealand. In early 2021, it was announced that Canada is taking steps to establish its own Commission.

review system in NSW and offer some criticisms. It then provides a theoretical framework to evaluate post-conviction review: the notion of justice as fairness. In this context, justice and therefore fairness, is measured through three key elements: independence, transparency, and accountability.

Kathleen Folbigg's case is then used to demonstrate how the system works in practice. In 2003, Ms. Folbigg was convicted of the murder of three of her infant children – Patrick, Sarah, and Laura – and the manslaughter of her firstborn, Caleb. Each died at different times over a period of 10 years. The prosecution claimed that Ms. Folbigg smothered her four children in a state of stress/rage. There was no evidence from the children's autopsies to indicate smothering or inflicted harm to any of them. The prosecution focused heavily on cherry-picked entries from Ms. Folbigg's private diaries, which were said to constitute confessions of murder.[6] Ms. Folbigg is now serving her 19th year of prison. At present she awaits a decision by the Attorney General of NSW on whether he will recommend to the Governor that she should be pardoned and released. The petition requesting her immediate release is based largely on new genetic findings for Sarah and Laura Folbigg. It has been supported by approximately 150 leading researchers and practitioners in science and medicine. Nobel Laureate and world-renowned scientist Professor Elizabeth Blackburn has said, in support of the petition, that "[i]t is profoundly wrong to deny justice by denying science."[7]

Part of the analysis is based on the author's insights as a lawyer who worked for Ms. Folbigg in the post-conviction review system. The article will focus disproportionately on inquiries as the mode of review (as was ordered in Ms. Folbigg's case) to highlight some of the previously unknown ways in which NSW post-conviction review operates.[8] A critical comparison between the review system in NSW and the UK CCRC will then be used to outline, theoretically, how Ms. Folbigg's case might have been dealt with by the latter. This article ultimately concludes that a

---

[6] However, expert opinions on the diaries recently obtained by the author and her colleague on behalf of Ms. Folbigg (these reports being the first of their kind in the history of this case) conclude that the diaries cannot be taken as confessions of murder or harm to her children, and do not show any signs of buried hostility or rage towards her children. They conclude that diaries and journals are not for anyone else to interpret except the author. Any interpretations by others are highly likely to be wrong, *see* The Daily Telegraph, "New Recording of Kathleen Folbigg talking about her children," (9 October 2021), online: <https://www.dailytelegraph.com.au/truecrimeaustralia/crimeinfocus/new-recording-of-kathleen-folbigg-talking-about-her-children/news-story/74a7df10aebe46a0359460c9625fa164>[*Daily Telegraph*].
60 Minutes Australia aired an update program on Kathleen Folbigg's case on 21 November 2021 which reports on the new expert analyses on the diaries, online:
<https://www.youtube.com/watch?v=hCQyfPhg7uA><https://www.youtube.com/watch?v=4CArRdiNHHE>
[*60 Minutes*].

[7] *AAS*, *supra* at note 3.

[8] The author acknowledges that not all cases subject to post-conviction review, and more specifically, a petition to the Governor, would necessarily occur in the same way or confront the same issues. Although, a conclusion that can be reasonably drawn is that there is a deficiency in law and process, which allowed the below identified issues to occur in Kathleen Folbigg's case.

Criminal Cases Review Commission ("CCRC") is a preferable method of review to that which currently exists in NSW and suggests that NSW implement something like it.

II Post-conviction review in NSW

Australia has a Westminster system of government[9] like the United Kingdom and Canada. The United Kingdom once had post-conviction review mechanisms almost identical to those of NSW.[10] Canada still has very similar review processes, but reform is underway to establish a CCRC.[11]

The history of post-conviction review in NSW can be traced back to the *Criminal Law Amendment Act 1883* (NSW)[12] and later, to the *Crimes Act 1900* (NSW).[13] There is no comprehensive history prior to this time.[14] The provisions in the preceding legislation were in all material respects the same as the current legislation; very little has changed between the first recorded legislation on post-conviction review to now. Before the current *Crimes (Appeal and Review) Act 2001* (NSW) ("the Act"), the spotlight was on the post-conviction system review due to a series of wrongful convictions: Lindy Chamberlain; Kelvin Condren; Alexander McLeod-Lindsay; Ziggy Pohl; and Arthur Loveday.[15] At the time, there was a "general climate of public concern" about wrongful convictions in Australia and elsewhere, especially in the United Kingdom.[16]

---

[9] See e.g., Jack Richardson, *Australia's Constitutional Government* (Chatswood DC, Australia: LexisNexis Butterworths, 2016); RAW Rhodes, *Comparing Westminster* (Oxford: Oxford University Press, 2009).

[10] Carolyn Hoyle & Mai Sato, *Reasons to Doubt: Wrongful Convictions and the Criminal Cases Review Commission* (Oxford: Oxford University Press, 2019) at 3-7 [*Hoyle & Sato*].

[11] Department of Justice Canada, *Minister of Justice and Attorney General of Canada takes important step toward creation of an independent Criminal Case Review Commission*, online: <https://www.canada.ca/en/department-justice/news/2021/03/minister-of-justice-and-attorney-general-of-canada-takes-important-step-toward-creation-of-an-independent-criminal-case-review-commission.html>.

[12] ss 383 and 384.

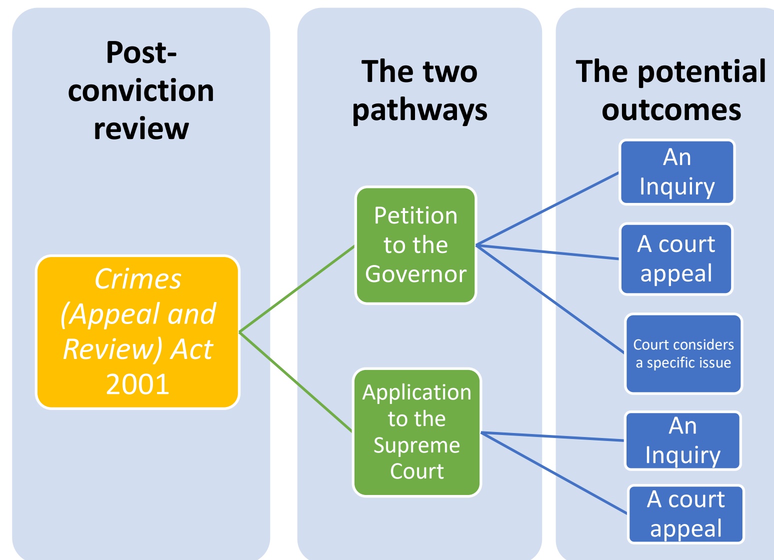
[13] s 475.

[14] For a brief account of the history see, *Eastman v Director of Public Prosecutions (ACT)* (2003), 214 CLR 318.

[15] For more information on Lindy Chamberlain: see generally, Katherine Biber, "Evidence in the museum: Curating a miscarriage of justice" (2018) 22:4 Theor Criminol 505; Kelvin Condren: see generally, Rachel Dioso-Villa, "'Out of grace': Inequity in post-exoneration remedies for wrongful conviction" (2014) 37:1 UNSW LJ 349; Alexander McLeod-Lindsay: see generally, Malcolm Brown & Paul Wilson, *Justice and nightmares: successes and failures of forensic science in Australia and New Zealand* (Sydney, NSW, Australia: New South Wales University Press, 1992); Ziggy Pohl: see generally, Bernie Matthews, "Australian Miscarriages of Justice" (2004) 10 Nat' Legal Eagle 14 at 15; Arthur Loveday: see generally, Yvonne Swift, "Section 475 Inquiry – The Last Resort" (1993) 5:1 CICJ 93.

[16] David Brown, "Review of Section 475 of the Crimes Act 1900: The Attorney General's Issue Paper" (1993) 5:1 CICJ 85. About this time the United Kingdom was reflecting on their own system of post-

Post-conviction review is now governed by Part 7 of the Act which is entitled "[r]eview of convictions and sentences." Part 7 contains two pathways that can be used by a convicted person to seek review: a petition to the Governor for a review of a conviction or sentence;[17] and an application to the Supreme Court.[18] There is also one further pathway available to a convicted person: a petition to the Governor to exercise the Royal Prerogative of Mercy (to issue a pardon). Analysis of this pathway is outside of the scope of this paper.



The relevant decision makers who determine if a case is sufficiently meritorious to receive a review, and subsequently if there is enough doubt to refer it to the Court of Criminal Appeal (after the review has been conducted), are the Governor, the Attorney General, and the Supreme Court (acting administratively).

The Governor is appointed by the Queen of England and not an elected official.[19] She/he is the Crown representative and head of the executive branch of government in the State. The

---

conviction review, having ordered a Royal Commission into Criminal Justice in 1991. After a lengthy review of the criminal justice operations in the country, the establishment of a CCRC was recommended by the Commission Report, known as the "Runciman Report", online: <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/271971/2263.pdf> [*Runciman Report*].

[17] *Crimes (Appeal and Review) Act 2001* (NSW), No120, s 76 [*Crimes Act*]; It will be referred throughout this paper as "petition to the Governor". A petition to the Governor requesting that she/he exercise the pardoning power (Royal Prerogative of Mercy) is contained in the same section.

[18] *Ibid* at s 78.

[19] The Governor is the representative of the Queen in the State and the formal head of State, see Governor of New South Wales, *Role of the Governor*, online: <https://www.governor.nsw.gov.au/governor/role-of-the-governor/>. She/he is not required to be legally trained and therefore advice from the Attorney General being the first law officer of the State is, by convention, usually provided.

Attorney General is the first law officer of the State[20] and is also an elected member of Parliament.[21] She/he is appointed to the role of Attorney General by the Governor on the advice of the State Premier.[22] The Supreme Court of New South Wales is the highest court in the independent State judiciary, but it can also exercise non-judicial functions.[23]

In practice, however, the Attorney General is effectively the decision maker in petitions to the Governor. The Attorney General also appears to have some oversight in applications to the Supreme Court, the outcome of which must be reported to her/him.[24] This article is chiefly concerned with petitions to the Governor because of the author's experience of how this mechanism works in practice. [25]

A. Petition to the Governor

A petition to the Governor allows a convicted person (or someone on their behalf) to request a review of their conviction or sentence.[26] There are several considerations in approving a petition: if fresh evidence is provided to substantiate the claim by the applicant (which came about post-conviction and after appeal(s)); and, if there has been a previous request for a review using

---

[20] *Constitution Act 1902* (NSW) s 9A; see also Anne Twomey, *The Constitution of New South Wales* (Annandale, NSW, Australia: Federation Press, 2004) at 621-2 [*Twomey*].

[21] The Attorney-General fulfils a combination of legal, administrative, and political functions. In general terms, the responsibilities of the Attorney fall into four categories: (1) Legal representative of the Crown; (2) Legal adviser of the Government (including, where called upon, the Governor); (3) Administrator of the legal department; and (4) in certain special cases, adjudicator (select instances where the Attorney is required to act in a judicial capacity), see *Twomey*, *supra* note 20 at 691-3.

[22] The Attorney General is appointed by the Governor on advice from the Premier of the State. The Premier is the Chief Minister of the Government of the State. The Premier is tasked with leading and coordinating the work of the Ministers in Government, see NSW Government, *The Premier*, online: <https://www.nsw.gov.au/premier-of-nsw/premier#:~:text=The%20Premier%20is%20the%20chief,Government%20than%20any%20other%20Minister>. See also *Twomey*, *supra* note 20 at 690-1.

[23] It is well accepted that the independence of the judiciary is a fundamental principle of NSW constitutional law, see *Twomey*, *supra* at note 20. Note that judicial appointments in NSW are by the Governor on advice of the Executive Council. There is, however, very little known about how and why judges are appointed, see e.g., Elizabeth Handsley & Andrew Lynch, "Facing up to Diversity? Transparency and the Reform of Commonwealth Judicial Appointments 2008–13" (2015) 37 Syd L Rev 187; Rebecca Ananian-Welsh & Jonathan Crowe, *Judicial Independence in Australia: Contemporary challenges, future directions* (Annandale, NSW, Australia: Federation Press, 2016).

[24] s 79(5) of the Act.

[25] As is demonstrated below, there are no extensive reports in the literature about how these review mechanisms work in practice. The conclusion that reform is required to NSW post-conviction review is not weakened by a disproportionate analysis of petitions to the Governor over applications to the Supreme Court. This is because the tenor of the issue with post-conviction review in NSW the way in which the system is structured does not promote independence, transparency, and accountability.

[26] *Crimes Act*, *supra* note 17 at s 76.

this avenue.[27] Approval of review can only occur if it "appears that there is doubt or question as to the convicted person's guilt, as to any mitigating circumstance in the case or as to any part of the evidence in the case."[28] If there is such a doubt or question, the Governor can order an inquiry; the Attorney General can send the matter to the Court of Criminal Appeal to be dealt with as a court appeal; or the Attorney General can ask the Court of Criminal Appeal to give an opinion on any point arising in the case.[29] The Governor or Attorney General may refuse to consider or deal with a petition[30] or defer consideration on certain grounds (e.g., if a court appeal avenue remains open to the applicant).[31] A decision by the Governor to order an inquiry is to be informed by advice from the Attorney General; this is consistent with the convention that the Governor acts on advice of the relevant Minister in Executive Council. The author could not locate any instance in which a Governor has gone against the advice of the Attorney General in this context. The name of the review pathway being a petition to the Governor is, therefore, misleading given that the Attorney General is effectively the decision maker in all three options available to an applicant.

B. An Application to the Supreme Court

An application to the Supreme Court allows a convicted person (or someone on their behalf) to apply to the Supreme Court to request review of their conviction or sentence.[32] The same considerations apply to granting a review (or not) as those for petitions to the Governor. A judge will examine the applicant's material and determine if there is doubt or question about the conviction or sentence.[33] How the judge is selected for this task and what exact considerations are involved in the process of review are not defined. The Supreme Court can order an inquiry or it can be dealt with by way of appeal in the Court of Criminal Appeal.[34] Proceedings under this section are not judicial proceedings despite the decision maker being the Supreme Court.[35] The

---

[27] *Ibid* at s 77.

[28] *Ibid* at s 77(2).

[29] *Ibid* at ss 77(1)(a); 77(1)(b); and 77(1)(c), respectively.

[30] *Ibid* at s 77(3).

[31] *Ibid* at s 77(3A).

[32] *Ibid* at s 78.

[33] *Ibid* at s 79(2). The Attorney-General and Minister for Prevention of Domestic and Sexual Violence is the Minister currently responsible for the administration of the Act; see *Allocation of the Administration of Acts* (NSW) [as of 6 October 2021].

[34] The only difference is that the Supreme Court cannot request the Court of Criminal Appeal to provide an opinion on any part of the case, see s 79(1) of the Act.

[35] In determining an application under s 78 of the Act, the Supreme Court performs an administrative function that does not amount to a judicial proceeding, see 79(4) of the Act; *Varley v Attorney-General (NSW)* (1987), 8 NSWLR 30 at 48-50 (Hope JA); *Eastman v DPP (ACT)* (2003), 214 CLR 318. Such decisions are therefore amenable to review for jurisdictional error, see *Patsalis v Attorney-General (NSW)*, [2013] NSWCA 343 at [23] - [24] (Basten JA). The conferral of administrative functions on a judicial body raises concerns about the separation of powers and the preservation of an independent and impartial judiciary. Although there is no strict separation of powers (as a matter of law) in the Australian States (see e.g., *Clyne v East*, [1967] 2 NSWR 483; *Kable v Director of Public Prosecutions* (NSW) (1996), 189 CLR

Attorney General also appears to have to have oversight of this pathway: the legislation states that a copy of the application must be sent to the Attorney General.[36] The extent of that involvement is unclear and there is no literature commenting on this point.

C. An Inquiry as an Outcome Arising from a Petition to the Governor and an Application to the Supreme Court

An inquiry can arise from both review avenues. It is a special hearing convened to investigate an issue(s). It is an inquisitorial process[37] which is distinct from the adversarial approach to criminal litigation which is typically conducted in NSW.[38] A Commissioner, usually a former judicial officer, is appointed to carry out the inquiry.[39] She/he is appointed by either the Governor or the Supreme Court, depending on who ordered the inquiry. To assist the inquiry, a legal practitioner (usually a senior barrister) is appointed as Counsel Assisting the Commissioner. Terms of reference for the inquiry are set by either the Governor or Supreme Court in a formal order given once a decision is made; these outline the matters to be investigated.[40]

The Commissioner has wide powers to conduct the investigation; they are the extraordinary powers afforded to Commissioners of Royal Commissions.[41] What evidence is heard and formally admitted to the proceedings is a decision for the Commissioner with the assistance of Counsel

51), the Commonwealth Constitution (by implication) prohibits State Parliaments from conferring on State courts and judges functions that impair the institutional integrity of the State courts, see e.g., *Wainohu v New South Wales* (2011), 278 ALR 1; *Vella v New South Wales*, [2019] HCA 38. This has the effect of preserving the independence and impartiality of those courts and judicial officers, with a view to maintaining public confidence in the judiciary. The application of those principles raises difficult questions in many contexts. For diverging views on whether post-conviction review mechanisms breach the separation of powers, see e.g., David Caruso & Nicholas Crawford, "The Executive Institution of Mercy in Australia: The Case and Model for Reform" (2014) 37:1 UNSW LJ 312; Cf, Catherine Dale Greentree, "Retaining the Royal Prerogative of Mercy in New South Wales" (2019) 42:4 UNSW LJ 1328.

[36] *Crimes Act*, *supra* note 17 at s 78(2).

[37] See generally, Leonard Arthur Hallett, *Royal Commissions and Boards of Inquiry: Some legal and procedural aspects* (Pyrmont, Australia: Law Book Co of Australasia, 1982); Stewart Field, "Fair Trials and Procedure Tradition in Europe" (2009) 29:2 Oxford J Leg Stud 365.

[38] See e.g., Australian Law Reform Commission, *Review of the Adversarial System of Litigation* (Report No 89, December 1999) at 102; Kent Roach, "Wrongful Convictions: Adversarial and Inquisitorial Themes" (2010) 35:2 NCJ Int'l L & Com Reg 388 at 391.

[39] See generally, Gabrielle Appleby & Alysia Blackham, "The Growing Imperative to Reform Ethical Regulation of Former Judges" (2018) 67:3 Int'l & Comp LQ 505.

[40] Nowhere in the *Royal Commission Act 1923* (NSW) could the author locate a power given to a Commissioner of an inquiry to either widen or restrict the scope of the inquiry once it is ordered by the Governor or the Supreme Court.

[41] All the powers of the *Royal Commission Act 1923* (NSW) (except section 17). A Royal Commission is a public inquiry and is "the highest form of inquiry on matters of public importance", see *Royal Commissions*, online: <https://www.royalcommission.gov.au/about-royal-commissions>.

Assisting.[42] After inquiry hearings have closed, the Commissioner is required to prepare a report to send (along with the transcripts of the depositions from the hearings) to the Governor or Chief Justice of the Supreme Court.[43] The Commissioner can also refer the case to the Court of Criminal Appeal if she/he considers that there is reasonable doubt about the conviction or some issue with an applicant's sentence.[44] For both pathways, the final decision to be made after the inquiry has concluded – referral of the case to the Court of Criminal Appeal for consideration of whether the convictions should be quashed or sentence to be reviewed, or to take no action at all – is ultimately the remit of the Governor.[45] It is clear from the legislation that the Governor theoretically has the final word; but by convention, that decision would typically be informed through formal advice of the Attorney General.[46] As stated, there is no documented instance which the author could locate in which a Governor has gone against the advice of an Attorney General in the context of post-conviction review. This makes the Attorney General, in effect, the relevant decision maker.

As outlined above, post-conviction review in NSW is dominated by a small number of high-level executive actors whose process for reviewing cases is often shrouded in secrecy. A major concern is the need for decisions to be fair and considered properly by those in power. Below is summary of what justice and fairness mean in the context of post-conviction review.

III Justice as Fairness: Independence, Transparency and Accountability

For centuries, defining justice (as it relates to the law) has been fraught with difficulty.[47] It has preoccupied the work of some of history's best known philosophers – Aristotle,[48] Aquinas,[49]

---

[42] The author could not locate any legislation or case law which states that the only party permitted to tender documents for admission into evidence is Counsel Assisting the inquiry. However, public commentary has said that the function of Counsel Assisting is the organisation and administration of a Royal Commission or inquiry, see Peter M Hall, "The role of counsel assisting in commissions of inquiry" (2005), online: *Bar News* <http://www.austlii.edu.au/au/journals/NSWBarAssocNews/2005/14.pdf> at 31 [*Hall*].

[43] *Crimes Act*, *supra* note 17 at ss 82(1)(a) and 82(1)(b), respectively.

[44] *Ibid* at s 82(2)(a).

[45] "The Governor may then dispose of the matter in such a manner as to the Governor appears just", *Ibid* at s 82(4).

[46] As a matter of convention, the Governor acts on the advice of the Executive Council in exercising powers conferred on her/him by statute, see *Twomey*, *supra* note 20 at 635; see also *Interpretation Act 1987* (NSW) s 14 which is discussed in David Caruso & Nicholas Crawford, "The Executive Institution of Mercy in Australia: The Case and Model for Reform" (2014) 37:1 UNSW LJ 312 at 314-6.

[47] See, e.g., Denise Meyerson, *Jurisprudence* (Oxford: Oxford University Press, 2011) at 4-7.

[48] See, e.g., Aristotle, *Nicomachean Ethics* 1st ed (London: Penguin Classics, 2003); Aristotle, *The Politics* (London: Penguin Classics, 1981).

[49] See, e.g., Anthony J Lisska, *Aquinas's Theory of Natural Law: An Analytic Reconstruction* (Oxford: Oxford University Press, 1998); Eleonore Stump, *Aquinas* (London: Routledge, 2003).

and Hume.[50] A common thread in philosophical thought is a recognition that the law provides rights and obligations for society to function in an organised and civilised way.[51] Some philosophers differ, however, on the extent to which morality is (and should be) reflected through the law.[52]

Innate understandings of right and wrong are embodied in the concept of natural law: those understandings are derived from humanity (and thus morality).[53] Immanuel Kant, one of the first proponents of natural law, argued that ethical principles are justified by reason alone and are hence indefeasible by law.[54] According to Kant, ethical principles are, therefore, inherent; although they are not created *by* law, they should be reflected *in* law.[55] Another approach is the utilitarian theory of justice which is derived from the early work of Jeremy Bentham, and later, John Stuart Mill.[56] Justice is concerned with utility, guided by the aim of achieving the greatest happiness for the greatest number of people.[57] This shifted the focus away from individual rights and freedoms to the collective experience. In the context of post-conviction review, a utilitarian might not place as much weight on the implications of wrongful convictions given they happen so infrequently (and they do not have an impact on the majority). This, however, would stand in stark contrast to natural law and liberal theories in which individual rights and freedoms are core values.

In response to utilitarian conceptions of justice, eminent philosopher John Rawls proposed a new theory: justice as fairness.[58] In doing so, he relied on distributive justice and revived the

---

[50] See, e.g., Donald C Ainslie & Annemarie Butler, *The Cambridge Companion to Hume's Treatise* (Cambridge: Cambridge University Press, 2015).

[51] John Finnis, "Natural Law Theories" (2020) (Summer) SEP, online: < https://plato.stanford.edu/entries/natural-law-theories/>.

[52] See, e.g., Michael Sandel, *Justice: What's The Right Thing To Do?* (New York: Farrar, Straus & Giroux, 2010). For a critique on some of the major theories of justice, see generally, Amartya Sen, *The Idea of Justice* (New Delhi: Allen Lane, 2009).

[53] See, e.g., Marcus Tullius Cicero, *The Political Works of Marcus Tullius Cicero* (Toledo, OH: Veritatis Splendor Publications, 2014); Aristotle, *The Politics* (London: Penguin Classics, 1981); Plato, *Gorgias*, ed, E R Dodds, 2nd ed (Oxford: Oxford U Press, 1990), Plato, *Republic*, 2nd ed (Indianapolis, IN: Hackett Classics, 2nd ed, 1992); Lon Fuller, *The Morality of Law*, revised ed (New Haven: Yale University Press, 1965); Thomas Aquinas, *Summa Question 94*, A.3; John Finnis, *Natural Law and Natural Rights*, 2nd ed (Oxford: Oxford University Press, 2011).

[54] Immanuel Kant, *The Doctrine of Virtue: Part II of the Metaphysic of Morals,* trans. Mary J Gregor (New York: Harper Torchbooks, 1964).

[55] *Ibid*; Robert Johnson & Adam Cureton, "Kant's Moral Philosophy" (2021) (Spring) SEP, online: https://plato.stanford.edu/entries/kant-moral/.

[56] Jeremy Bentham, *An Introduction to the Principles of Morals and Legislation* (Oxford: Oxford University Press, 1823); John Stuart Mill, *Utilitarianism* (North Charleston: Createspace Independent Publishing Platform, 1879); John Stuart Mill, "Utilitarianism" in Roger Crisp, ed, *Utilitarianism* (Oxford: Oxford University Press, 1998) at 56.

[57] *Ibid*.

[58] John Rawls, *Justice as Fairness: A Restatement* (London: Belknap Press, 2001) [*Rawls*]. See also his earlier works: John Rawls, *A Theory of Justice* (London: Belknap Press, 1999); John Rawls, "Justice as

concept of the social contract.[59] Rawls opined that justice could be achieved through a reset of society's moral and ethical principles. This, however, could only be achieved when all members of society, in a hypothetical state, are unknowing of their individual features and characteristics, in what he described as the "original position."[60] He argued that two principles arise from the original position: the first is that all people are entitled to equal basic liberties which are indefeasible; and the second is that social and economic opportunities should be afforded to everyone on an equal basis. According to Rawls, if opportunities cannot achieve pure equality, they should advantage the worst off in society.[61] This, in contrast to utilitarianism, would see wrongful convictions as a prime example of an unacceptable failure of society. Rawls' theory is apt as a framework to evaluate post-conviction review in this article because it is concerned with procedural "justice" as opposed to substantive law, which is the chief focus of this analysis.[62] Importantly, Rawls' theory raises the important issue around power given to decision makers in "how [they] may reach a decision and what they may authorise."[63]

This article identifies independence, transparency, and accountability as three essential features of post-conviction review and will address each in turn below.[64]

A. Independence

Much of the domestic and international literature on post-conviction review refers to the need for "independent review mechanisms."[65] Independence in this context refers to a decision

---

Fairness: Political not Metaphysical" (1985) 14 Philos Public Aff 223; John Rawls, *Political Liberalism* (New York: Columbia University Press, 2005); John Rawls, "The Law of Peoples" (1993) 20:1 Crit Inq 36.

[59] *Rawls*, *supra* at note 58.

[60] The "original position" refers to a situation where an individual imagines themselves behind a "veil of ignorance", such that all personal characteristics are forgotten including natural abilities and position in society. Rawls argues that such a state allows individuals to think as equal, free, rational and moral beings. This allows society to re imagine agreed moral and ethical principles by which to live, see *Rawls*, *ibid* at note 58.

[61] Ben Davies, "John Rawls and The "Veil of Ignorance"", online: <https://human.libretexts.org/Bookshelves/Philosophy/Introduction_to_Ethics_(Levin_et_al.)/03%3A_Persons_Autonomy_the_Environment_and_Rights/3.02%3A_John_Rawls_and_the_Veil_of_Ignorance_(Ben_Davies)>.

[62] He considers the rule of law as one which is characterised by "formal justice" and "regularity": *Rawls*, *supra* note 58 at 236. See also Donald HJ Hermann, "The Fallacy of Legal Procedure as Predominant over Substantive Justice: A Critique of the Rule of Law in John Rawls' a Theory of Justice" (1974) 23:4 DePaul L Rev 1408 at 1409 [*Hermann*].

[63] J R Lucas, *The Principles of Politics* (Oxford: Oxford University Press, 1966) 107 cited in *Hermann*, *supra* note 62 at 1414.

[64] Magnus Ulvang, "Criminal and Procedural Fairness: Some Challenges to the Presumption of Innocence" (2014) 8 Crim Law Philos 469 at 472.

[65] See generally, P Braiden & J Brockman, "Remedying Wrongful Convictions Through Applications to the Minister of Justice Under Section 690 of the Criminal Code" (1999) 17 WYAJ 5. The Marshall

maker being free from either real or perceived conflicts of interest.[66] It is an essential feature of decision making in the law, especially in the criminal law. For example, there has always been significant focus on having an independent judiciary in Australia. That is chiefly because there is a need for impartial adjudication of issues necessitated by the rule of law. The former Chief Justice of the High Court of Australia, Gerard Brennan said, "[i]f that independence were, or were thought by the litigants or the public to be, put at risk, the rule of law would be imperilled and the peace and order of society would be problematic."[67] Judges, therefore, need to be independent and to be seen to be independent. While post-conviction review is in the hands of executive government actors in NSW, they are in substance still adjudicating on issues which affects people's rights and their liberty. For this reason, the need for independence is of the same importance as it is in the judiciary.

The role of the Attorney General is said to be potentially "conflicting" given the different roles and responsibilities she/he has.[68] One example of that conflict in the context of post-conviction review is the extent of the relationship between the Attorney General and Office of the Director of Public Prosecutions (ODPP). The management role the Attorney General has over the ODPP could create a potential conflict situation where mistakes are made by the ODPP or police which have either caused or exacerbated a wrongful conviction. It becomes problematic when the Attorney General is tasked with deciding if a case should get a review.[69] Simply put, it does not bode well that there is a connection between the agency that pursued the charges and the decision

---

Commission in Canada found that "the type of investigative capability required for an effective review process was one independent of official governmental control and perceived to be so by the public", see Peter H Howden, "Judging Errors of Judgment: Accountability, Independence & (and) Vulnerability in a Post-Appellate Conviction Review Process" (2002) 21 WYAJ 569 at 587 [*Howden*]; for criticism of independence and transparency in the Canadian context, see Paul J Saguil, "Improving Wrongful Conviction Review: Lessons from a Comparative Analysis of Continental Criminal Procedure" (2007) 45:1 ALR 117.

[66] For example, the Attorney General of NSW is responsible for giving advice to the Governor on petitions for review. Because the Attorney General is an elected official, it could be said they he/she could be "subject to majoritarian electoral considerations and cabinet solidarity", *Howden*, *supra* note 65 at 587.

[67] Gerard Brennan, "Judicial Independence" (2 November 1996), online: <https://www.hcourt.gov.au/assets/publications/speeches/former-justices/brennanj/brennanj_ajc.htm>.

[68] The Attorney General effectively occupies two offices: a common law office being the first law officer of the State and a ministerial office with a portfolio given to them. By virtue of this, it is argued that there can be conflicting responsibilities because of the dual positions, see Gerard Carney, "Comment - The Role of the Attorney-General" (1997) 9(1) Bond L Rev 1 at 2. See also Anne Twomey, *The Veiled Sceptre: Reserve Powers of Heads of State in Westminster Systems* (Cambridge: Cambridge University Press, 2018) at 55-7 where mention is given to the inherent conflict of interest that an Attorney may face in advising the Governor, and the potential for unconscious bias.

[69] For more functions of the Attorney General in relation to the ODPP, see *Director of Public Prosecutions Act 1986* (NSW) ("DPP Act") Part 4 "The Attorney General".

maker who is tasked with potentially challenging it.[70] Even without real conflict, the perception of such is enough to call into question the independence of the Attorney General in having responsibility for post-conviction review in NSW.

B. Transparency

Transparency, a cornerstone of the principle of "open justice", is a key feature of any process in the criminal law.[71] This is reflected in the most standard of legal processes – for example, open court proceedings and the publishing of judgments.[72] It has long been recognised that transparency is essential for justice not only to be done, but also seen to be done.[73] This is critically important to the maintenance of public confidence in the legal system and informed public participation in the law. Having clear laws and publicly available procedures to guide decision makers is fundamental to ensuring that cases are treated with consistency and the public are aware of how, and on what basis, cases are being decided. Public participation (and thus scrutiny) of governmental decisions is also a hallmark feature of a democratic society.[74] Because very little is known about what happens after an application for review is submitted to either the Governor or the Supreme Court,[75] there is limited transparency overall in the post-conviction review system in NSW. This is examined in more depth below both generally and in Ms. Folbigg's case.

C. Accountability

Accountability is another critical element necessary in all legal processes, particularly those which involve a person's liberty. Supplying executive actors (the Governor, Attorney General and judges acting administratively) with the enormous power to decide if a person should remain convicted must be accompanied by responsibility for those decisions.[76] Meaningful accountability in this context encompasses trust and confidence that the "right" thing will be done

---

[70] In Canada, where post-conviction review is currently conducted almost identically to NSW, a lack of independence is seen as one of the biggest barriers to remedying miscarriages of justice, see e.g., *Howden*, *supra* at note 65. Cf Scullion who claims that criticism levelled at independence may be spurious: Kerry Scullion, "Wrongful Convictions and the Criminal Conviction Review Process pursuant to Section 696.1 of the Criminal Code of Canada" (2004) 46:2 Can J Crim Just 189 [*Scullion*].

[71] This is yet another key feature that is lacking in Canadian post-conviction review, which has been subject to scrutiny by scholars and advocates, see e.g., *Howden*, *supra* at note 65. Cf Scullion states that the level of transparency has been enhanced in recent times, *Scullion*, *supra* at note 70.

[72] James Spigelman, "Seen to be Done: The Principle of Open Justice – Part I" (2000) 74 Aust L J 290.

[73] See e.g., Beverley McLachlin, "Courts, Transparency and Public Confidence – To the Better Administration of Justice" (2003) 8:1 Deakin L Rev 1 [*McLachlin*]; Claire Baylis, "Justice Done and Justice Seen to be Done – The Public Administration of Justice" (1991) 21 Vic Univ Wellingt L Rev 177.

[74] Emma Cunliffe, "Open Justice: Concepts and Judicial Approaches" (2012) 40 FLR 386 at 389.

[75] *Crimes Act*, *supra* note 17 at ss 76 and 78, respectively.

[76] *Howden*, *supra* at note 65; Peter Newell, "Taking Accountability into Account: The Debate so Far" in Peter Newell & Joanna Wheeler, eds, *Rights, Resources and the Politics of Accountability* (London: Zed Books, 2006) at 37-59.

by those in power.[77] Accountability intersects importantly with transparency, as both are required for public confidence in the administration of justice.[78] The fact that very little is known about what occurs behind the scenes of post-conviction review makes it difficult to assign appropriate accountability to decisions.

Independence, transparency, and accountability are three necessary features of post-conviction review. Because there is often heightened public interest in cases which are significant wrongful convictions, they frequently attract political attention. This tends to be the case if convictions are considered reprehensible, such as the murder of infant children as in the cases of Lindy Chamberlain and Kathleen Folbigg. Because of the nature of what post-conviction review is aimed to achieve, and invariably the subject matter being serious criminal convictions, there is a need for high levels of independence, transparency, and accountability in post-conviction review. This is necessary to ensure that all members of the public have faith that cases are dealt with fairly and according to proper process, whatever the ultimate outcome. This article now turns to outline some criticisms of post-conviction review processes in NSW.

IV Some key criticisms of post-conviction review in NSW

The aim of post-conviction review is the identification and correction of wrongful convictions. In NSW at present, there are significant barriers to a convicted person's ability to access review; one prominent obstacle is a lack of guidance on how to formulate a review application. The NSW Justice Government Department advises that independent legal advice should be sought before making an application for review.[79] This is concerning given the simple fact that convicted people are unlikely to be able to locate a lawyer when they are incarcerated, let alone having the financial resources to fund legal assistance. Persons serving a lengthy sentence for serious crime(s), might also not possess the knowledge or resources to engage the assistance of pro bono lawyers or community legal assistance. In the likely event that they are left without legal assistance, the preparation of a cogent application is nearly impossible. The absence of a prescribed form or any suggestions for preparation of the application for the Governor or the Supreme Court[80] is a major barrier of access to justice.[81]

---

[77] Richard Mulgan & John Uhr, "Accountability and governance" in Glyn Davis & Patrick Weller, eds, *Are You Being Served? State, Citizens and Governance* (St Leonards, NSW, Australia: Allen & Unwin, 2001) 152 at 170.

[78] *McLachlin*, *supra* at note 73.

[79] NSW Government Justice, *Review of convictions or sentences under the Crimes (Appeal and Review) Act 2001 Factsheet*, online: <https://www.justice.nsw.gov.au/Documents/Contact%20us/Freq%20Ask%20Ques/review-of-convictions-or-sentences.pdf>.

[80] *Ibid.*

[81] There are other factors which make accessing the legal system more difficult for some convicted people, for example, mental health issues and language barriers; consideration of those factors are outside of the scope of this paper.

A lack of independence on the part of decision makers in post-conviction review is best highlighted through the relationship the Attorney General has with the State prosecution agency. In NSW, the Attorney General[82] is the responsible Minister for the ODPP, the agency in charge of criminal proceedings on behalf of the State. According to the legislation, the Director of the ODPP is answerable to the Attorney General for "due exercise of the Director's functions."[83] The Director, upon request, shall consult with the Attorney General on matters in which the Director can exercise her/his discretion.[84] The Attorney General also has the same functions as the Director in relation to, inter alia, finding a bill of indictment in respect of an indictable offence or directing the discontinuation of proceedings.[85] The Attorney General's power prevails in the event of a conflict with the Director's actions in a matter.[86] Once again, this is problematic in situations in which the Attorney General must decide if a review is warranted and such a consideration involves, for example, errors made by the ODPP.

Another challenge facing post-conviction review in NSW is a lack of knowledge about what occurs behind the scenes. Post-conviction review is rarely discussed in Australian public life. This might be because it represents a relatively small issue in criminal justice overall,[87] and cases which obtain a review are rare. There is also limited scholarship, and certainly no in-depth critical analysis of the NSW system that provides insights from practice. The principle of open justice necessitates transparency and accountability in all decisions involving criminal law. In the context of post-conviction review, publicly available procedures and/or guidelines for how the Governor, Attorney General and judges make decisions are important for transparency and accountability.[88] Currently, there are none. This raises some important questions:

1) Who is reviewing the application?
2) What timeframe is to be expected for review?
3) Is there consistency in review of similar cases?
4) When issues arise around forensic evidence, for example, what approaches are taken for engagement of expert advice/evidence?

These are significant questions which are currently unanswered.

---

[82] See DPP Act "Status Information".

[83] DPP Act s 4(3); It is, however, unknown the extent of the interaction between the Director and the Attorney General, and whether, in fact the Attorney General has very little, or a substantial influence, over the operations of the ODPP.

[84] DPP Act s 25(1).

[85] *Ibid* at s 7(2).

[86] *Ibid* at s 28(1).

[87] Quantifying wrongful convictions is a difficult task, and therefore statistics on the frequency of such cases are likely significantly under reported, see Tony G Poveda, "Estimating Wrongful Convictions" (2001) 18:3 Justice Q 689 at 705; see generally, Kelly Walsh et al, "Estimating the Prevalence of Wrongful Convictions" (2017) *Office of Justice Programs*, online: <https://www.ojp.gov/pdffiles1/nij/grants/251115.pdf>.

[88] John McKechnie, "Directors of Public Prosecutions: Independent and Accountable" (1996) 26 Univ West Aust Law Rev 266.

A lack of publicly available guidelines/procedures has in the past been labelled as "secretive" in relation to prosecution agencies.[89] Given that both prosecution agencies and the Attorney General have significant powers in relation to determining a person's liberty, the same standard of transparency should be applied to both. The impacts of a lack of guidelines can manifest in different ways. Without some guidance on how to approach matters, this leaves it almost entirely up to the discretion of the decision maker. Wide discretion is known to sometimes lead to abuse and "can dangerously be synonymous with unchecked power."[90] Defined, clear, and accessible processes also allow for greater acceptance of unfavourable outcomes because the public is informed about how the decision is made.[91] It is thus problematic that NSW has no publicly available procedures and guidelines. It makes this area of the legal system inaccessible to the public and incapable of accurate scrutiny.

The UK's previous approach to post-conviction review (which was very similar to that in NSW) had been described as a "pathetic little organisation"[92] and one in which "[i]ts processes were opaque and unaccountable. Officials mostly saw their job as rebutting evidence uncovered by prisoners, lawyers, journalists, and campaigners. Cases dragged on for years frequently culminating in curt, inexplicable dismissals."[93] As the below case study of Kathleen Folbigg will reveal, there is some truth in this description of the NSW process.

V The Folbigg Case

Kathleen Folbigg's case has been recognised as potentially the biggest miscarriage of justice in Australian history.[94] She has previously been labelled Australia's "worst female serial killer" and the most "hated woman in Australia." She is now in her 19th year of prison, for which she has served the entire duration in maximum security prisons in NSW. After almost two decades, a significant number of leading scientists and doctors, and many members of the media, have raised

---

[89] Australian Law Reform Commission, *Sentencing of Federal Offenders* (Report No 15, 1980). See also Kenny Yang, "Public Accountability of Public Prosecutions" (2013) 20:3 Murdoch Univ L Rev 28 at 37.

[90] Michael A Simons, "Prosecutorial Discretion and Prosecution Guidelines: A Case Study in Controlling Federalization" (2002) 75 NYU L Rev 893 at 899.

[91] James L Gibson, "Understandings of Justice: Institutional Legitimacy, Procedural Justice, and Political Tolerance" (1989) 23(2) Law Soc Rev 469 at 471.

[92] A quote from Michael Zander QC cited in *Hoyle & Sato*, *supra* note 10 at 4. See generally Hoyle & Sato for an account of how the Home Secretary organisation, the Criminal Cases Unit "C3", conducted review prior to the establishment of the CCRC.

[93] Paul May, "Partly excellent, partly abysmal': 20 years of the CCRC" *The Justice Gap* (31 March 2017), online: < https://www.thejusticegap.com/partly-excellent-partly-abysmal-20-years-ccrc/>.

[94] Robyn Tongol "Is Kathleen Folbigg Innocent? New Evidence Suggests She Is," *Lawyers Weekly* (17 September 2021), online: <https://www.lawyersweekly.com.au/podcast/32524-is-kathleen-folbigg-innocent-new-evidence-suggests-she-is>; Naomi Neilson, "Every Lawyer Should Be Concerned: Kathleen Folbigg, Miscarriages of Justice and the Opportunities to Reform the Justice System," *Lawyers Weekly* (21 September 2021), online: <https://www.lawyersweekly.com.au/biglaw/32557-every-lawyer-should-be-concerned-kathleen-folbigg-miscarriages-of-justice-and-the-opportunities-to-reform-the-justice-system>.

the prospect that Ms. Folbigg might be innocent.[95] Eminent, world recognised child and public health researcher Professor Fiona Stanley said in relation to Ms. Folbigg's case that "[i]t is deeply concerning that medical and scientific evidence has been ignored in preference of circumstantial evidence..."[96] Professor John Shine, President of the Australian Academy of Science has supported the call for Ms. Folbigg's release saying, "it is the right thing to do" based on the existence of natural causes of death for the children.[97]

Below is a brief timeline of the legal proceedings Ms. Folbigg has had to date;[98] these will be explained in more detail below.

On 1 February 1989 Caleb Folbigg was born, and at only 19 days old he died. His death certificate recorded the death as Sudden Infant Death Syndrome ("SIDS") with a finding of laryngomalacia.[99] The next child, Patrick Folbigg was born on 3 June 1990. At around four months of age, Patrick suffered an Apparent Life-Threatening Event ("ALTE") followed by blindness and intractable seizures that continued for four months. He died on 13 February 1991 and his death was recorded as epilepsy due to an encephalopathic disorder.[100] Ms. Folbigg's next child, Sarah Folbigg, was born on 14 October 1992. At 10 months old, four days after seeing her general

---

[95] For an overview on the new science in this case, see the 60 Minutes program entitled 'Murder Under the Microscope' which aired in August 2021, online: <https://www.youtube.com/watch?v=V00rgtcfKJ8>. 60 Minutes also aired a program in March 2019 which questioned the safety of Ms. Folbigg's convictions entitled 'Mothers accused of killing their four babies', online: <https://www.youtube.com/watch?v=4z4YtquTJjM>.

[96] Australian Academy of Science, *Leading Scientists Call for Folbigg Pardon*, online: <https://www.science.org.au/news-and-events/news-and-media-releases/leading-scientists-call-folbigg-pardon>.

[97] *Ibid*.

[98] Outlined in the diagram are the substantive appeals Ms Folbigg had after her conviction and sentence. She also appealed in 2002 to the Supreme Court of NSW prior to her trial commencing, appealing the decision of a single judge to refuse to have her charges tried separately: *R v Folbigg*, [2002] NSWSC 1127. Ms Folbigg appealed this decision to the Court of Criminal Appeal in 2003, which was denied: *R v Folbigg*, [2003] NSWCCA 17. Ms Folbigg then applied for special leave of the High Court of Australia, appealing the previous decision of the Court of Criminal Appeal refusing her application for separate trials: *Folbigg v The Queen*, [2003] HCA Trans 589.

[99] For full details, see Inquiry into the Convictions of Kathleen Megan Folbigg, *Forensic Pathology Tender Bundle (Exhibit H)*, online: <https://www.folbigginquiry.justice.nsw.gov.au/Documents/Exhibit%20H%20-%20Forensic%20Pathology%20Tender%20Bundle.pdf> at 3-11, 24-9 [*Pathology Tender*].

[100] *Ibid* at 36-7.

practitioner for a croupy cough and being started on antibiotics, she died. The death certificate recorded the cause of death as SIDS.[101] The last child, Laura Folbigg, was born on 7 August 1997. At 18 months old, two days after being treated with paracetamol and pseudoephedrine for a respiratory infection, she died. Her death was recorded as "undetermined" with an incidental finding of myocarditis.[102]

In 2003, Ms. Folbigg was convicted of: the manslaughter of Caleb; maliciously inflicting grievous bodily harm upon Patrick; the murder of Patrick, Sarah and Laura. She was sentenced to 40 years imprisonment with a non-parole period of 30 years.[103] This was later reduced on appeal to 30 years imprisonment with a 25-year non-parole period.[104]

The prosecution case theory was that Ms. Folbigg smothered each of her children in a state of rage/stress. There was, however, no pathological evidence from the autopsies that she smothered any of her children. On the contrary, each child had natural causes of death diagnosed. In the absence of pathological evidence to support the prosecution's case theory, it proceeded on two main points: (1) "Meadow's Law", from which it was derived that multiple infant deaths in one family from natural causes are so rare it was impossible to happen in the Folbigg family; (2) Ms. Folbigg's diaries were to be construed as confessions that she murdered her children.[105]

The five separate charges against Ms. Folbigg were joined together and the prosecution case relied heavily on tendency and coincidence evidence.[106] The prosecution contended that the

---

[101] *Ibid* at 90-102.

[102] *Ibid* at 166 -77. The forensic pathologist, Dr. Allan Cala, who conducted the autopsy indicated at the Inquiry into Ms. Folbigg's convictions in 2019 "I think, with Laura, there's undoubtedly myocarditis and I've said I can't exclude that as being the cause of death" see Inquiry into the Convictions of Kathleen Megan Folbigg, *Transcript 21 March 2019*, online: <https://www.folbigginquiry.justice.nsw.gov.au/Documents/FINAL%20-%20Transcript%20of%2021%20March%202019.pdf> at 281 line 20 [*Transcript 21 March*].

[103] *R v Folbigg*, [2003] NSWSC 895.

[104] *R v Folbigg*, [2005] NSWCCA 23.

[105] There was other evidence heard at the trial that formed the prosecution's circumstantial case, including that of Ms. Folbigg's former husband, Craig Folbigg. However, the central focus was on the aspects mentioned above. For the full trial transcripts, see Inquiry into the Convictions of Kathleen Megan Folbigg, *Complete set of transcripts of evidence given at 2003 trial (Amended Exhibit F)*, online: <https://www.folbigginquiry.justice.nsw.gov.au/Documents/Amended%20Exhibit%20F.pdf> [*Trial Transcripts*].

[106] For a brief account, see Report of the Inquiry into the Convictions of Kathleen Megan Folbigg, online: <https://www.folbigginquiry.justice.nsw.gov.au/Documents/Report%20of%20the%20Inquiry%20into%20the%20convictions%20of%20Kathleen%20Megan%20Folbigg.pdf> at 48-53 [*Inquiry Report*]. For a discussion on the issues with the use coincidence and tendency evidence, see the author's submission with colleague Dr. Robert Cavanagh: Injustice Law, *Folbigg Submission on Coincidence*, online: <https://www.injustice.law/2021/08/19/folbigg-submission-on-coincidence/> [*Coincidence*].

four deaths could not be a coincidence because there were "striking similarities" to the deaths; and that Ms. Folbigg had a tendency to become stressed and smother her children.[107] It was acknowledged in one of Ms. Folbigg's appeals to the Court of Criminal Appeal that had the counts been heard separately, a verdict of guilty could not be found for the individual charges because the prosecution could not have proved its case beyond reasonable doubt.[108] This demonstrates the heavy reliance placed on tendency and coincidence evidence by the prosecution to argue it's case in the absence of any pathological evidence to support smothering.

The prosecution's case theory was based largely on Meadow's Law. This was the name given to the dogma espoused by Sir Roy Meadow, a once prominent British paediatrician, who hypothesised that "one infant death is a tragedy, two is suspicious and a third is murder until proven otherwise."[109] This doctrine came to prominence in the United Kingdom in the 1990s after Meadow gave evidence in several trials in which mothers were accused of killing their children.[110] Mostly notably Meadow gave evidence at the trial of Sally Clark in which he incorrectly stated the chance of two children dying as a result of SIDS was 1 in 73 million. Clark's successful appeal in 2003 found Meadow's evidence to be incorrect.[111] Other convictions in the United Kingdom based on Meadow's evidence were dismissed. Meadow's Law had been discredited before Kathleen Folbigg's trial commenced in 2003.[112]

Although the prosecution in Ms. Folbigg's trial did not cite Meadow's Law verbatim, it nevertheless found its way into the court room and set the tone for the entirety of the court

---

This submission was provided to the Attorney General and Governor as part of the Petition for Pardon of Ms Folbigg. The Petition was submitted by the author and Dr. Robert Cavanagh in March 2021 which is still with the Attorney General to provide advice to the Governor about how to act.

[107] *Coincidence*, *supra* at note 106.

[108] Justice Hodgson (with Sully and Buddin JJ agreeing) said, inter alia, "'[f]urthermore, my own view is that, on following that course in relation to each count, there would be a deficiency of proof of guilty in relation to each count without evidence concerning the other children…", see *R v Folbigg,* [2003] NSWCCA 17 at [32].

[109] This dogma is said to originally came from American pathologists Dominick DiMaio and Vincent DiMaio. The theory was stated by Meadow in his book *ABC of Child Abuse* 3rd ed (London: BMJ Books, 1997). For more on Meadow's Law, see the two-part series produced by Discovery Channel entitled "The Baby Killer Conspiracy" about the cases of Sally Clark, Angela Cannings and Kathleen Folbigg which aired on 20 November 2021 (available via UK Discovery+ and UK Amazon).

[110] Including the cases of Sally Clark, Angela Cannings, Trupti Patel and Donna Anthony in the United Kingdom.

[111] See *General Medical Council v Meadow,* [2006] EWCA Civ 1390. See also the report of Professor Philip Dawid in which he labelled the statistical evidence by Roy Meadows as "highly misleading and prejudicial" in his report, *Expert report for Sally Clark Appeal*, online:
< https://www.statslab.cam.ac.uk/~apd/>.

[112] See the successful appeal of Sally Clark, *R v Clark*, [2003] EWCA Crim 1020. Trupti Patel and Angela Cannings are another two women convicted of killing their infant children (3 and 2 respectively), in which Meadow also gave evidence at their trials. They were acquitted in June 2003 and December 2003, respectively.

proceedings. The prosecution case revolved around a key proposition: four natural infant deaths in one family had never been reported or observed before; therefore, it was impossible to have happened in this case. At Ms. Folbigg's committal proceedings,[113] the report of Dr. Janice Ophoven (a forensic pathologist from the United States) was used, in which she said: "[f]orensic standards of practice would not allow for consideration of a second diagnosis of SIDS after a second sudden death and by the time a third child has died, the death must be investigated as a homicide."[114] She also stated (which she later retracted) that four SIDS deaths in one family is a one in a trillion statistical likelihood; and she encouraged the court to reason that "multiple infant homicides within one family are now well documented in the literature and in forensic experience."[115] This, along with other evidence on the rarity of multiple natural infant deaths, dominated the tone of the committal hearing which ultimately committed Ms. Folbigg to trial in the NSW Supreme Court and formed a backbone of judicial reasoning to permit tendency and coincidence evidence.[116]

While no statistical evidence was given at Ms. Folbigg's trial, three expert witnesses for the prosecution gave evidence that they were not aware of a case of three or more natural infant deaths in the one family. Professor Peter Herdson, Professor Peter Berry and Dr. Susan Beal said they were not aware (from their experience or the literature) of a case of three or more natural infant deaths in the one family.[117] Almost 16 years later, at the Inquiry into Ms. Folbigg's convictions in 2019, it was revealed that literature existed prior to 2003 documenting multiple infant deaths in some families;[118] therefore, it can be concluded that the above experts' testimony was inaccurate. The rarity of multiple natural infant deaths as explained by expert witnesses at Ms. Folbigg's trial could have been formative to the jury's understanding of the possibility that four natural deaths could have occurred in this specific instance.

---

[113] A committal proceeding is a preliminary hearing which determines if there is enough evidence for a trial to go ahead, see Ugur Nedim, *What are Committal Hearings?*, online: < https://nswcourts.com.au/articles/what-are-committal-hearings/>.

[114] Report of Dr. Janice Ophoven dated 6 October 2000, see *Pathology Tender*, *supra* at note 99. Note: Dr. Ophoven did not give evidence at Ms. Folbigg's trial, only at the committal hearing.

[115] *Ibid*; Interestingly, in the analogous case of Carol Matthey in Victoria who was charged with smothering her children, Coldrey J expressed many concerns with the evidence given by Dr. Ophoven (of which were very similar to Ms. Folbigg's case). The prosecution in Matthey's case relied on the opinions of Dr. Ophoven, Dr. Cala and Dr. Beal, all of whom featured in Ms. Folbigg's case for the prosecution. Carol Matthey's case did not proceed to trial, see *R v Matthey*, (2007) 17 VR 222.

[116] *Coincidence*, *supra* at note 106.

[117] Aside from the fact that issues arise in expert's population sample in their capacity to answer the question properly, there was in fact literature at the time which documented three or more deaths from SIDS in the one family, see *Inquiry Report*, *supra* note 106 at 126-40. Interestingly, Dr. Beal published an article in 1988 in which she reported such a case yet gave evidence to indicate had never heard of such a case, see S M Beal & H K Blundell, "Recurrence incidence of sudden infant death syndrome" (1988) 63:8 ADC 924 at 927-8.

[118] The Inquiry identified several articles which existed before 2003, see *Inquiry Report*, *supra* note 106 at 126-40.

The rarity of multiple infant deaths was emphasised in a facetious and ill-suited analogy by the prosecutor, Mark Tedeschi, when he made the following remark in his closing address to the jury:

> Caleb may have died from a **floppy larynx or SIDS**. Patrick may have had **an ALTE**, which was a first epileptic attack or encephalitis. His death may have been caused by an **epileptic attack, an epileptic seizure**. Sarah may have had a displaced **uvula or SIDS**. Laura may have died of **myocarditis**. **Well, yes, ladies and gentlemen, I can't disprove any of that**, but one day some piglets might be born from a sow, and the piglets might come out of the sow with wings on their back, and the next morning Farmer Joe might look out the kitchen window and see these piglets flying out of his farm. I can't disprove that either. I can't disprove that one day some piglets might be born with wings and that they might fly. Is that a reasonable doubt? No. Is the hypothesis that the defence advances a reasonable doubt? No. Why not? Because if you look at what they are suggesting, not in isolation, but in totality: There has never ever been before in the history of medicine that our experts have been able to find any case like this. It is preposterous. It is not a reasonable doubt. It is a fantasy, and of course the Crown does not have to disprove a fanciful idea.[119]

This in effect created a default position that the children's deaths must be murder: four children dying of natural causes in one family had never happened before; and because of this, the natural causes of death at autopsy given by experts must, therefore, constitute a "fantasy". Meadow's Law reasoning and incorrect evidence about the absence of cases of multiple recurrent natural infant deaths in a family resulted in the effective reversal of the onus of proof: Ms. Folbigg was required to demonstrate natural causes because the default position was murder.

In criminal trials in NSW, the prosecution is required to prove their case beyond reasonable doubt.[120] This includes negativing any reasonable possibility consistent with innocence.[121] It was not the role of the defence in this case to prove natural causes. It is clear from the passage above the prosecution was aware it was unable to negate the natural causes of death as diagnosed at autopsy for each child. Because of the application of Meadows Law reasoning to the tendency and coincidence arguments admitted at trial, this also became part of Ms. Folbigg's appeals.[122]

Ms. Folbigg's private diaries and journals featured prominently in the prosecution case. Ms. Folbigg's kept diaries/journals since she was about 10 years of age. She wrote in a few diaries/journals over the period of 10 years of her children's lives and deaths. Two of them were handed in by Ms. Folbigg's husband after she initiated a separation from him; he said he discovered

---

[119] *Trial Transcripts*, *supra* note 105 at 1375 (emphasis added).

[120] *Evidence Act 1995* (NSW), s 141(1).

[121] A reasonable possibility consistent with innocence needs to be negatived by the prosecution before an individual can be found guilty of a criminal offence, see *Moore v R*, [2016] NSWCCA 185 at [43], [94], [125]; *Pell v The Queen*, [2020] HCA 12 at [42].

[122] *Coincidence*, *supra* at note 106.

the diaries/journals and claimed he was troubled by what he read in them.[123] The prosecution selected a handful of entries from the corpus of her writings (which comprise well over forty-thousand words total) to suggest they were admissions of murdering her children.[124] Indeed, the prosecution said that cherry-picked entries were the "strongest evidence the jury could possibly have for Ms. Folbigg having murdered her four children."[125] Ms. Folbigg has always maintained she never harmed her children and her entries were reflective of her guilt feelings for not being a good enough mother.[126]

Ms. Folbigg was ultimately convicted of one count of manslaughter, one count of grievous bodily harm and three counts of murder. She has appealed several times. In 2005, Ms. Folbigg appealed to the Court of Criminal Appeal on four points: (1) that the five charges should not have been heard together; (2) the jury verdicts were unreasonable and could not be supported by the evidence; (3) prosecution experts said that they were unaware of previous cases in which three or more infants in one family died suddenly, and this was wrong; (4) the judge did not properly direct the jury about tendency and coincidence evidence.[127] She was unsuccessful and sought special leave from the High Court of Australia in 2005 to challenge this decision. That request was denied.[128] She then appealed again in 2007[129] to the Court of Criminal Appeal on the basis that jurors had obtained the following information at trial: (1) that Ms. Folbigg's father killed her mother, and (2) the generalised length of time that an infant's body remains warm after death. Ms. Folbigg said those two points impacted on the jury's decision.[130] She was unsuccessful in this appeal.

After having exhausted her court appeals, in June 2015, she first engaged the post-conviction review system. Ms. Folbigg's legal representatives petitioned the Governor requesting a review of her convictions.[131] A strong basis for which she requested a review was centred on a report from leading forensic pathologist, Professor Stephen Cordner. He reviewed all the forensic pathology evidence and concluded that there is "no forensic pathology support for the contention that any or all of these children have been killed, let alone smothered."[132] The petition also

---

[123] *Trial Transcripts*, *supra* note 105 at 180.

[124] See *Inquiry Report*, *supra* note 106 at 365-77 for a summary of the entries used by the prosecution at trial.

[125] *Trial Transcripts*, *supra* note 105 at 1372; *Inquiry Report*, *supra* note 106 at 74 [145].

[126] For a full copy of Ms. Folbigg's journals and diaries, along with a copy of her Electronically Recorded Interview (ERISP) with police from 1999, see Inquiry into the Convictions of Kathleen Megan Folbigg, *Diaries Tender Bundle (Exhibit AZ)*, online: <https://www.folbigginquiry.justice.nsw.gov.au/Documents/Exhibit%20AZ%20-%20Diaries%20tender%20bundle.pdf> [*Diaries Tender*].

[127] *R v Folbigg*, [2005] NSWCCA 23 which was an appeal against conviction and sentence.

[128] *Folbigg v R*, [2005] HCA Trans 657.

[129] She sought leave to appeal, which was granted, see *Folbigg v R*, [2007] NSWCCA 128.

[130] *Folbigg v R*, [2007] NSWCCA 371.

[131] See, Injustice Law, *Petition to the Governor for Review,* online: <https://www.injustice.law/2015/05/15/folbigg-petition-to-governor-for-review/>.

[132] Report of Professor Stephen Cordner, online:

demonstrated that knowledge about sudden infant death had advanced considerably since 2003. Attorneys General Gabrielle Upton (over two years) and then the current NSW Attorney General Mark Speakman (over a year) delayed acting on this petition for a total of approximately three years and two months. In August 2018, nine days after an Australian Broadcasting Company (ABC) program aired its investigation of Ms. Folbigg's case,[133] an inquiry was announced by Mr. Speakman.

From March 2019, three weeks of hearings were held in which evidence was presented in the areas of forensic pathology, immunology and infection, cardiology, neurology, and genetics.[134] Ms. Folbigg also gave evidence over three days concerning her diaries/journals.[135] Despite genetic and medical evidence establishing a natural cause of death for each child, the Commissioner (retired judge Reginald Blanch) concluded that he had no reasonable doubt as to Ms. Folbigg's convictions, and was "even more certain" of her guilt based on her "explanations and behaviour in respect of her diaries."[136] This was so despite three eminent forensic pathologists agreeing on a natural cause of death for each child, five experts in genetics and cardiac arrythmias agreeing on the likelihood of a genetic mutation in the *CALM2* gene causing the death of Sarah and Laura, other experts opining on the interconnected role other matters played in the deaths (for example, infection in Sarah Folbigg), and no forensic evidence of smothering. The Commissioner said the only reasonable conclusion open to him is that Ms. Folbigg smothered all four children.[137] This conclusion, however, runs counter to the medical and scientific evidence presented to the Inquiry.

In March 2021, the author of this article along with her colleague Dr. Robert Cavanagh (barrister) submitted a petition requesting the Governor exercise the Royal Prerogative of Mercy and pardon Ms. Folbigg.[138] This petition was based on the fact there is no evidence of smothering and only natural causes of death (supported by fresh genetic evidence obtained in November

---

<https://www.folbigginquiry.justice.nsw.gov.au/Documents/Exhibit%20Q%20-%20Expert%20report%20of%20Professor%20Stephen%20Cordner.PDF> at 7.

[133] The program, entitled 'From Behind Bars' can be viewed here online: <https://www.abc.net.au/austory/from-behind-bars/10105090>.

[134] See, Inquiry into the Convictions of Kathleen Megan Folbigg, *Exhibits*, online: <https://www.folbigginquiry.justice.nsw.gov.au/Pages/exhibits.aspx>.

[135] Transcripts of all hearing days, including the three days in which Ms Folbigg gave evidence can be found here: Inquiry into the Convictions of Kathleen Megan Folbigg, *Transcripts*, online: <https://www.folbigginquiry.justice.nsw.gov.au/Pages/transcripts.aspx>.

[136] *Inquiry Report*, *supra* note 106 at 480 [89].

[137] "It remains that the only conclusion reasonably open is that somebody intentionally caused harm to the children, and smothering was the obvious method. The evidence pointed to no person other than Ms Folbigg" *Inquiry Report*, *supra* note 106 at 480 [88].

[138] The Petition for Pardon can be viewed here: Australian Academy of Science, online: <https://www.science.org.au/files/userfiles/events/news/documents/petition-to-governor-of-nsw-for-pardon-of-kathleen-folbigg-05-03-21.pdf>; This petition was requested under s 76 of the Act requesting the Governor exercise the pardon power and release Ms Folbigg immediately. Note: a successful pardon does not remove Ms Folbigg's convictions; she would need to go to the Court of Criminal Appeal to have her convictions quashed.

2020).[139] This petition was backed 90 eminent scientists, medical practitioners and prominent science advocates, including Professor John Shine, President of the Australian Academy of Science; Nobel Prize Laureates Professors Peter Doherty and Elizabeth Blackburn; Former Chief Scientist of Australia Professor Ian Chubb, leading Australian of the Year researchers Professors Fiona Stanley and Ian Frazer and three of the world's most distinguished cardiologists and/or cardiac geneticists, Professors Peter Schwartz, Christopher Semsarian and Reza Razavi. A further 66 members of the Royal Society of NSW, including the then President, Professor Ian Sloan, have since put their name to support the petition.

The extraordinary scientific support of the petition was, in large part, due to the genetic evidence of the cardiac mutation (*CALM2*) found in Sarah and Laura Folbigg. A study was performed by Professors Peter Schwartz, Michael Toft Overgaard, Carola Vinuesa and a team of 24 scientists across the world in multiple labs and was published in a peer-reviewed study in the prestigious Oxford University Journal, *EP Europace* ("Europace"). The study concluded that the cardiac mutation (the *CALM2* mutation) was a reasonable and likely cause of Sarah and Laura's deaths.[140] This, combined with the fact there was no evidence of smothering, and only natural causes of death for all four children determined by autopsy, makes the case for a pardon in this instance compelling.[141] Ms. Folbigg is currently waiting for Attorney General Mr. Speakman to provide advice to the Governor about how she should act in relation to the petition.

Below, the article identifies some matters observed in Ms. Folbigg's Inquiry in 2019 which raise questions about the extent to which post-conviction review is independent, transparent, and accountable in NSW.

VI The issues with the review in Ms. Folbigg's case

The issues with Ms. Folbigg's review process will be discussed chronologically from when the petition was initially submitted to the Governor asking for review in June 2015 through to the outcome of the Inquiry in July 2019.

---

[139] Malene Brohus et al, "Infanticide vs. inherited cardiac arrhythmias" (2021) 23:3 *EP Europace* 441, online: <https://academic.oup.com/europace/article/23/3/441/5983835>.

[140] *Ibid*.

[141] NSW Government Communities & Justice Fact Sheet on the Royal Prerogative of Mercy states that "some examples of extraordinary circumstances in which pardons have been granted include wrongful convictions, where new methods of forensic evidence raise significant questions as to the petitioner's guilt...", see NSW Government, Communities & Justice, *Royal Prerogative of Mercy Factsheet March 2021*, online: <https://www.justice.nsw.gov.au/justicepolicy/Documents/royal-prerogative-mercy-review-terms-of-reference.pdf>.

A. Lack of legal timeframes

There is no legislative timeframe in which the decision maker must decide whether or not a petition or application is to be granted.[142] There is also no clear timeframe for when an inquiry is to commence after the approval of review.[143] At the conclusion of an inquiry, the Commissioner must send a report of her/his findings to the Governor or Chief Justice of the Supreme Court. Once again, there is no timeframe provided for this.

There are many examples of legislation which do not provide a specific timeframe for decision making. In some instances, however, legislation requires a decision to be made within a "reasonable time."[144] The importance of having a "reasonable time" mandated, at bare minimum, is to ensure that the person who is seeking to invoke their rights at law has some certainty of when a decision is likely to occur. There are general administrative law remedies that allow for a decision-maker to be ordered to make a decision;[145] however, these are often complex and are discretionary in nature. While there is a need for these remedies, having certainty of timeframe in the first instance might avoid the need to engage in seeking remedies in administrative law as they can have the effect of holding decision makers to account.

In the case of Ms. Folbigg, it took three years and two months for the Attorney General's office to recommend an inquiry be established. There were no reasons provided to explain such an inordinate delay. While the inquiry was established quickly after it was announced, the lack of a timeframe could lead to delay in other cases. In the case of the Commissioner's report being sent to the Governor, this was done expeditiously, although without the safeguard of a timeframe, this too could be problematic in future cases.

A lack of clearly defined time expectations is a transparency and accountability issue; the public ought to be aware of when decisions will be provided especially in circumstances in which a person's liberty is affected.

B. Selection of Commissioner and Counsel Assisting

A Commissioner is appointed by the Governor[146] or the Chief Justice of the Supreme Court[147] after an inquiry is ordered. In Ms. Folbigg's case, Commissioner Reginald Blanch was appointed. Mr. Blanch was the first Director of Public Prosecutions in NSW and served in that

---

[142] Anecdotally, the author was informed by a colleague that they had made an application to the Supreme Court requesting a review on behalf of a woman convicted of murder. The application was submitted in July 2011 and they received a denial in September 2013. This furthers the argument in the body of the paper that a lack of legal timeframe can lead to inordinate delay.

[143] An inquiry is to be established "as soon as practicable": s 80 of the Act.

[144] A reasonable time is used frequently in contract law.

[145] See, for example, the writ of mandamus: Australian Law Reform Commission, *A Common Law Principle*, online: <https://www.alrc.gov.au/publication/traditional-rights-and-freedoms-encroachments-by-commonwealth-laws-alrc-report-129/15-judicial-review/a-common-law-principle-13/>.

[146] *Crimes Act*, *supra* note 17 at s 81(1)(a).

[147] *Ibid* s 81(1)(b).

capacity from 1987 to 1994. During Mr. Blanch's time as Director, the Crown Prosecutor of Ms. Folbigg's trial, Mark Tedeschi, was appointed to the role of Deputy Senior Crown Prosecutor. Mr. Blanch was also the Chief Judge of the NSW District Court from 1994 to 2014. Gail Furness, a senior barrister with some experience in inquiries, was appointed to the role of Counsel Assisting Ms. Folbigg's Inquiry. No reasons were given for why Mr. Blanch and Ms. Furness were selected for this Inquiry.

The appointment of Commissioners and Counsel Assisting in inquiries is currently not transparent. There is no statutory appointment process or publicly available information to indicate if there is a tender process (or similar) undertaken to select the best candidate. The lack of openness around the selection of a Commissioner and Counsel Assisting raises issues of independence and transparency in who is selected and on what basis.

C. The Commissioner's broad discretion in the Inquiry process

The Commissioner conducting an inquiry is given the powers, authorities, protections and immunities afforded to Commissioners of Royal Commissions (which are usually established to investigate systemic and wide-reaching issues).[148] Justice Peter M. Hall, as he then was, said that "documented guidelines are often drafted and as necessary periodically revised" in relation to the due and proper exercise of expansive powers by an inquiry.[149] Although in the Folbigg Inquiry, to the author's knowledge, there were no documented guidelines of the kind described.

The following passages analyse how the Commissioner of Ms. Folbigg's Inquiry exercised his discretion and considers how the use of discretion affects the fairness of the post-conviction review process. The matters outlined below are issues that go to the procedure of the Inquiry; these ultimately highlight the deficiency in the law to give certainty to what can and cannot, and indeed should or should not, be done. These matters concern the transparency and accountability of an inquiry process.

a. Scope of Inquiry

There is no specific law that gives power to a Commissioner to either restrict or extend the scope of an inquiry outside of that which is mentioned in the formal direction from the Governor/Supreme Court in ordering the inquiry.[150] It appears that Commissioners *interpret* the terms from the formal direction; this interpretation becomes the scope of the investigation.[151] In 2018, the Governor ordered an inquiry into Ms. Folbigg's convictions to investigate evidence "as to the incidence of reported deaths of three or more infants in the same family attributed to unidentified natural causes."[152]

---

[148] *Royal Commissions Act 1923* (NSW) Division 1, Part 2: s 81(2)(a).

[149] *Hall*, *supra* note 42 at 31.

[150] This point requires further research and is outside the scope of this paper.

[151] *Hall*, *supra* note 42 at 29.

[152] See Inquiry into the Convictions of Kathleen Megan Folbigg, *Exhibit A*, online: <https://www.folbigginquiry.justice.nsw.gov.au/Documents/exhibit-a-governor-direction-tendered-at-directions-hearing-held-on-25-October-2018.pdf>.

The Commissioner of the Inquiry determined the scope of the Inquiry to include medical evidence and non-medical evidence, including Ms. Folbigg's diaries and evidence from her about them. Very little attention was paid to the conduct of Ms. Folbigg's trial and the treatment by the prosecution of the cherry-picked diary entries in those proceedings. This included a lack of attention to prosecutor's conduct and how this might have influenced the jury decision.[153] The Commissioner also advised Ms. Folbigg's representatives that he did not want a psychiatric report to advise him how to interpret Ms. Folbigg's diaries.[154] This meant that Ms. Folbigg's diaries were not properly contextualised; therefore, the Inquiry only considered a singular, inculpatory interpretation of the cherry-picked entries.[155] The Commissioner's determination of the scope of the Inquiry led to a narrow view of the possible issues in relation to Ms. Folbigg's convictions.

b. "Hot tubbing" experts and treatment of expert witnesses

Ms. Folbigg's Inquiry adopted a style of expert questioning that is foreign to most criminal procedures in Australia. "Hot tubbing" refers to the process when experts give evidence together in a group setting. It might have some utility, for example, when there is a need to understand tensions or novel points in a field of expertise that could not be adequately addressed in pre-trial conferences. In this instance, however, hot tubbing limited the proper testing of the evidence. Some experts were not permitted to give comprehensive answers to questions asked (instead being required to answer with a simple "yes" or "no").[156] Some experts were also not asked the same

---

[153] Brief reference in the Inquiry Report to the prosecutor's conduct (see pages 109-112) does not constitute a full and proper consideration; yet despite this the Commissioner concluded that he found the conduct of the prosecutor did not cause a "procedural irregularity or an error in the trial process…" see *Inquiry Report*, *supra* note 106 at 111 [391].

[154] See Inquiry into the Convictions of Kathleen Megan Folbigg, *Transcript 20 March 2019*, online: <https://www.folbigginquiry.justice.nsw.gov.au/Documents/FINAL%20-%20Transcript%20of%2020%20March%202019.pdf> 354-55 [*Transcript 20 March*].

[155] *Daily Telegraph, supra* at note 6. *60 Minutes*, *supra* at note 6.

[156] Instances where Counsel Assisting Gail Furness advised the witnesses to answer her question: see e.g., Inquiry Transcript 19 March 2019 page 78 line 5; Transcript 20 March 2019 page 146 line 40. The Commissioner also requested that witnesses simply answer the question they were asked: Inquiry Transcript 22 March 2019 page 320 line 5; and by Counsel Assisting on page 322 line 35 and line 45; page 347 line 40 where Counsel Assisting said to a witness "No, just answer the question, am I right or wrong". The Commissioner also cautioned the forensic pathologists in attendance to focus their answers and not "talk unnecessarily" because things got "discursive" on the previous day: Inquiry Transcript, 21 March 2019, page 241 line 15 and line 20, online: <https://www.folbigginquiry.justice.nsw.gov.au/Pages/transcripts.aspx>. The issue of not permitting an expert to give a comprehensive answer rises where complex evidence is being examined; precision and explication is required from the witness for the court to understand the issues properly. Limiting the witness to a yes or no is not appropriate in the context of an inquiry process, although it may be appropriate in cross examination in adversarial proceedings.

follow up questions that others were asked.[157] The way in which the questioning occurred, featuring the limitations as mentioned, meant that experts were not able to respond comprehensively to the questions asked. This had the practical effect of reducing the range and depth of expert opinion provided to the Inquiry. These issues highlight the procedural limitations of hot tubbing when compared with examination of a witness on their own.

Another aspect that influenced the Inquiry's comprehensive review of Ms. Folbigg's convictions was the differential treatment of witnesses. One example was the early invitation by Counsel Assisting for geneticists Professor Carola Vinuesa and Dr. Todor Arsov (engaged by Ms. Folbigg's representatives) to leave the hearing. The other "team" of geneticists ("the Sydney Team"; engaged by the Inquiry) were not invited to leave and they subsequently remained to hear and respond to the evidence of two neurologists. There was no reason given for Counsel Assisting's invitation for Professor Vinuesa and Dr. Arsov to leave, and this was not challenged or questioned by the Commissioner. Conceivably, Professor Vinuesa and Dr. Arsov might have given further evidence, as the other team did. The absence of Professor Vinuesa and Dr. Arsov might have had an impact on the comprehensive understanding of the relationship between genetics and neurology, particularly in relation to the death of Patrick Folbigg. The Inquiry hearing from Professor Vinuesa and Dr. Arsov is also a matter of procedural fairness to Ms. Folbigg.

c. Redactions of evidence

In Royal Commissions and special inquiries established to review convictions,[158] the normal rules of evidence applied to criminal proceedings do not apply. This is because the scope of an inquiry necessitates consideration of a broad range of material; this is in line with the purpose - a search for the truth as opposed to an adversarial litigious proceeding. It is for the Commissioner to determine what she/he will receive and require to investigate the matter fully. In this regard "there is…a well recognised adaption by commissioners of those principles to which judges and jurors traditionally resort when engaged upon critical process of fact finding."[159] It is also well established that procedural fairness is required in inquiries.[160]

There is no law which dictates who is responsible for the tendering of evidence at an inquiry; however, Counsel Assisting undertook that role at Ms. Folbigg's Inquiry. It was assumed that the actions of Counsel Assisting in all respects were approved by the Commissioner as he

[157] Professor Stephen Cordner was placed on the other side of the room away from Professors Hilton and Duflou and Dr. Cala who were seated on the other side of the room (there was quite some distance between the two seating areas). At times during the questioning by Counsel Assisting, Professor Cordner was not asked his thoughts on matters the other three forensic pathologists were asked, see Inquiry Transcripts from 19, 20 and 21 March 2019,
online:<https://www.folbigginquiry.justice.nsw.gov.au/Pages/transcripts.aspx>.
[158] These investigative mechanisms are not legally binding, they provide recommendations.
[159] Australia, Report of the Royal Commission into an Attempt to Bribe a Member of the House of Assembly and Other Matters (Tasmania, 1991) vol at 37 cited in *Hall*, *supra* note 42 at 30.
[160] See e.g., *Ainsworth v Criminal Justice Commission*, [1992] HCA 10.

made no objection.[161] Counsel Assisting's role in inquiries generally has been recognised as having the responsibility to "elicit material in the fullest and fairest manner in relation to the subject matter of the inquiry."[162]

Emeritus Professor Robert Clancy, a world recognised immunologist, was engaged by Ms. Folbigg's legal representatives to give evidence at the Inquiry. His expertise was in SIDS, immunology and infection. He gave opinions about the role of such in understanding the deaths of the Folbigg children. During his evidence, he was invited by Counsel Assisting to respond to a report from Professor Rosemary Horne (engaged by the Inquiry, who gave evidence about SIDS risk factors) by way of a further report.[163] Professor Clancy did so; yet upon receipt, all relevant opinions given by him on Professor Horne's report were redacted. Those portions redacted directly questioned the reliability and currency of Professor Horne's evidence and therefore, the weight that ought to be ascribed to it. No reasons were given as to why this occurred or who redacted the evidence. These redactions were made without any consultation with Ms. Folbigg's representatives or Professor Clancy.[164]

Redactions were also made to a report of Professor Paul Goldwater, an expert on infection in SIDS, engaged by Ms. Folbigg's representatives (although he was not invited to give evidence at the Inquiry). Professor Goldwater provided a review of the opinions offered by Professor Caroline Blackwell (microbiologist) and Professor Robert Clancy in relation to SIDS, infection and immunology. He also commented on the approach of other experts at trial in relation to these fields of expertise. The redacted portions of the report related to his questioning of the reliability and accuracy of evidence given at trial, which were entirely open for Professor Goldwater to make based on his experience and qualifications.[165] It was in Ms. Folbigg's interests for the report to be tendered in full. It is unclear who redacted this evidence.

---

[161] "The Commission may conduct hearings. At those hearings the Commissioner who is presiding is empowered to require a person to answer questions. Although the questions may be asked by another, the Act contemplates counsel assisting, nevertheless each question is asked with the authority of the Commissioner. The Commissioner is charged with the function of ensuring that the questions are fair to the witness and that procedural fairness is afforded to that person" see *R v Vos* (2011), 223 A Crim R 316 at [36] (McClellan CJ at CL with Hidden and Johnson JJ agreeing) which was also cited as good authority in the case of *McCloy v Latham*, [2015] NSWSC 1897 at [97] (McDougall J).

[162] *Hall*, *supra* note 42 at 32.

[163] See Inquiry into the Convictions of Kathleen Megan Folbigg, *Transcript 22 March 2019*, online: <https://www.folbigginquiry.justice.nsw.gov.au/Documents/FINAL%20-%20Transcript%20of%2022%20March%202019.pdf> at 331 line 25.

[164] Redacted report of Professor Robert Clancy dated 27 March 2019, online: <https://www.folbigginquiry.justice.nsw.gov.au/Documents/Exhibit%20AT%20-%20Additional%20expert%20report%20of%20Professor%20Robert%20Clancy%20dated%2027%20March%202019.PDF>.

[165] Redacted report of Professor Paul N Goldwater dated 29 March 2019, online: <https://www.folbigginquiry.justice.nsw.gov.au/Documents/Exhibit%20AU%20-%20Expert%20report%20of%20Professor%20Paul%20Goldwater%20dated%2029%20March%202019.PDF>.

The wide powers afforded to the Commissioner and Counsel Assisting in Ms. Folbigg's Inquiry led to important evidence not being admitted formally to the Inquiry. It was unclear to those representing Ms. Folbigg whether it was Counsel Assisting, Gail Furness, who redacted the opinions of Professors Clancy and Goldwater, or if this was requested by the Commissioner after he received it. The importance of clear and well-understood procedures for dealing with evidence was revealed by the redaction of potentially vital expert evidence that could have impacted the Commissioner's comprehensive assessment of evidence specifically, and in totality.

In the context of a Royal Commission, broad discretionary powers might be appropriate given the scale often associated with an inquiry of large proportion,[166] such as one in which a systemic issue such as child sexual abuse in institutions is being investigated. The need for extraordinary powers in these circumstances might be suitable, e.g., the need to compel witnesses to give evidence and the power to redact certain material to protect vulnerable persons. When a special inquiry is established for the purpose of investigating an individual's conviction, as in the case of Ms. Folbigg, these powers might not be appropriate, because the scale and objective(s) are necessarily different. In this case, the redactions to material evidence might have affected the assessment of all the evidence by the Commissioner and the ultimate fairness of the outcome to Ms. Folbigg.

d. Refusal to consider Ms. Folbigg's diaries in context

Commissioner Blanch indicated he did not want an expert to assist him in understanding Ms. Folbigg's diaries or her mental state at the time of writing:

> … I would not be assisted at all in this Inquiry by a psychiatrist who wanted to come along and tell me (a) what the words of the diary mean or (b) about the fact that a mother who had lost her babies would be upset and emotional and so on. Those are things that are readily apparent, I think, unless there is some other aspect of it.[167]

Through these comments and reminders by him that context "is irrelevant",[168] the Commissioner restricted Ms. Folbigg's evidence and did not allow her to give comprehensive evidence about her state of mind at the time she wrote her diaries/journals. The Commissioner said that the diaries/journals must be interpreted on the words only; on their "ordinary English meaning" or "plain meaning."[169] The discretion afforded to the Commissioner to restrict Ms. Folbigg's evidence led to a highly limited understanding of what she wrote in her diaries/journals. This is particularly problematic given the fact that the Commissioner focused disproportionately

---

[166] See generally, Scott Prasser, *Royal Commissions and Public Inquiries in Australia* (Chatswood, NSW: LexisNexis Butterworths, 2006).

[167] *Transcript 20 March*, *supra* note 154 at 354-55.

[168] For example, The Commissioner said "Well, I must say that I take the view…that the context is irrelevant.", see Inquiry into the Convictions of Kathleen Megan Folbigg, *Transcript 29 April 2019*, online: <https://www.folbigginquiry.justice.nsw.gov.au/Documents/FINAL%20-%20Transcript%20of%2029%20April%202019.pdf> at 618-19 [*Transcript 29 April*].

[169] *Inquiry Report*, *supra* note 106 at 447-9.

on the diaries/journals and Ms. Folbigg's evidence in relation to them; he used these to conclude he had no reasonable doubt about her convictions. Recent expert opinion (of the kind Commissioner Blanch advised he did not want) from this year has revealed that context is highly relevant to explanations from people about their private writings, but more importantly, only the author can interpret their own private writings.[170]

The determination of what is relevant, like the power to redact potentially important information, demonstrates a deficiency in the way in which inquiry procedure is currently structured. The denial by the Commissioner to be guided by relevant expert opinion also calls into question the transparency of inquiry procedure in relation to what is deemed relevant evidence. These factors can ultimately affect the fairness of outcomes.

e. Leave to appear at the inquiry

All parties wanting to appear at an inquiry must be granted leave. There is a requirement that a person whose character might be affected during inquiry proceedings to be granted leave to question witnesses.[171] It has obvious necessity; if a person's character is called into question by evidence given at an inquiry, natural justice necessitates that the person be present to meet that challenge.[172] It is reasonable to conclude that the wording of the provision means that questioning of a witness for this purpose would be restricted to that which might affect her/his character or reputation.

At the Inquiry, Ms. Margaret Cunneen (Counsel for Mr. Folbigg, Kathleen Folbigg's ex-husband) was granted leave to appear and permitted to cross examine Ms. Folbigg for approximately a day and a half about her diaries/journals. The line of questioning by Ms. Cunneen only focussed on Ms. Folbigg's diary entries and whether she killed the children, neither of which have anything to do with Mr. Folbigg's character or reputation.[173] Ms. Cunneen asked Ms. Folbigg approximately 65 times if she had killed the children; Ms. Folbigg denied this on each occasion. Much of her questioning had already been covered in the cross examination by Counsel for the ODPP which preceded. The only mentions of Mr. Folbigg was when Ms. Folbigg gave evidence to say "…I felt like Craig did sleep too easily through a lot and that I just felt like he could've helped out more"[174] and other similar comments about needing his help with the care of the children. In contrast, most of the mentions of Mr. Folbigg by Ms. Folbigg were positive, for example, Ms. Folbigg stated that she knew Craig loved his children and would care for them.[175]

---

[170] *Daily Telegraph, supra* at note 6. *60 Minutes*, *supra* at note 6.
[171] *Crimes Act*, *supra* note 17 at s 81(4).
[172] See e.g., *Kioa v West* (1985,) 159 CLR 550 at 582 (Mason J), 618-9 (Brennan J); *Annetts v McCann* (1990), 170 CLR 596 at 608 (Brennan J); *Ainsworth v Criminal Justice Commission*, [1992] HCA 10 at [27] (Mason CJ, Dawson, Toohey and Gaudron JJ).
[173] See Inquiry Transcripts from 29 April 2019, 30 April 2019 and 1 May 2019. Mr. Folbigg's cross examination starts on page 677 of the transcript of 29 March 2019, online: <https://www.folbigginquiry.justice.nsw.gov.au/Pages/transcripts.aspx>.
[174] *Transcript 29 April*, *supra* note 168 at 657 line 5.
[175] *Ibid* at 685.

In the normal course of events, cross examination of Ms. Folbigg by Mr. Folbigg's Counsel on such matters would have usually arisen after examination in chief by Ms. Folbigg's representatives. Matters that arose from Ms. Folbigg's evidence in chief, would then be cross examined; however, Ms. Cunneen's questioning immediately followed the cross-examination by Counsel representing the ODPP (who led evidence from Ms. Folbigg first). As Ms. Folbigg was the Inquiry's witness (and not her own representatives' witness as in the case in adversarial proceedings), normal procedure of inquiries/Royal Commissions should have seen Counsel Assisting lead evidence from Ms. Folbigg, as she did with all the other witnesses present at the Inquiry.[176] Counsel for Ms. Folbigg raised the fact that Mr. Folbigg does not have a general right of cross-examination and any questioning ought to be limited to that which is required to protect his reputation or character only. The Commissioner of the Inquiry disagreed and permitted all the questioning by Ms. Cunneen.[177]

If any questioning were to be allowed, it should have been limited in scope to Mr. Folbigg's helping or not with the children. The Commissioner restricted the scope of Ms. Folbigg's evidence to relate to "strictly… about the diary entries, possession of the diaries and her disposal of the diaries" and "nothing else."[178] This fact makes it highly problematic that the Commissioner permitted Ms. Cunneen to cross-examine the way she did. The questioning by Mr. Folbigg's Counsel demonstrates the significant discretion afforded to the Commissioner of an inquiry.

e. Not reopening hearings to hear further evidence

It is well recognised that an inquiry is a search for the truth and not a litigious exercise. To that end, Commissioners need to consider all relevant matters that might inform her/his task to the inquiry. The role of Counsel Assisting has also been said to involve the re-calling of witnesses for procedural fairness purposes because the objective is truth seeking.[179]

The Commissioner of the Inquiry did not reconvene the hearings to hear new important evidence relating to a genetic mutation identified in the two female Folbigg children, nor did Counsel Assisting recommend this course of action. During the Inquiry, a cardiac mutation, commonly known as the *CALM2* mutation, was identified in Ms. Folbigg and her two daughters Sarah and Laura. There was some contention between the two teams of geneticists as to the lethality of this mutation. Because there was no expert to reconcile this tension, Professor Vinuesa

---

[176] Without consultation with Ms. Folbigg's representatives, in a private conversation that took place, it was agreed between Counsel Assisting Gail Furness, Christopher Maxwell for the Office of the Director of Public Prosecutions and Margaret Cunneen for Craig Folbigg, what order they would they question Ms. Folbigg, see where Maxwell says "I've discussed it with my learned friend, Ms Cunneen and counsel assisting, Ms Furness, and I'm happy to start my cross-examination sooner rather than later", see *Transcript 29 April*, *supra* note 168 at 619 line 10; On the role of Counsel Assisting in this regard, see Peter M Hall, *Investigating Corruption and Misconduct in Public Office: Commissions of Inquiry – Powers and Procedures* (Law Book Co, 2004) at 673-6.

[177] *Transcript 29 April*, *supra* note 168 at 697 lines 10-20.

[178] *Ibid* at 618 lines 5 to 10.

[179] John Stowe, "Some notes on natural justice in relation to inquisitorial proceedings" (Seminar at New South Wales Bar Association, 2 November 1992) 7 cited in *Hall*, *supra* note 42 at 29.

contacted the leading expert in calmodulinopathies (caused by mutations in *CALM* genes), Professor Peter Schwartz. At this stage, the Inquiry hearings had closed. Professor Schwartz wrote to the Inquiry to indicate that the mutation in Sarah and Laura was likely to be lethal.[180] He pointed to data from the International Calmodulinopathy Registry ("ICalmR") which detailed the death and cardiac arrest of two US siblings with a mutation in the same calmodulin residue – Glycine 114, G114 – as Sarah and Laura. He also pointed out that a portion of deaths caused by *CALM* genes occurred whilst asleep (Sarah and Laura died during a sleep period), in young children in the ages of Sarah and Laura, and without any previous warnings of symptoms.[181]

This was significant as it changed the way in which the genetic evidence received during the hearings could be assessed. Professor Schwartz and Professor Toft-Overgaard (who endorsed the position of Professors Schwartz and Vinuesa) were the only experts in calmodulinopathies to provide their opinion to the Inquiry; therefore, their evidence should have been given more weight than other expert witnesses who did not have subject matter expertise. To assess the genetic evidence in totality, the hearings should have been reconvened to hear from Professor Schwartz on this issue in formal evidence. This was especially important since the only cardiologist who gave evidence at the Inquiry hearings incorrectly indicated that there was no reported case of asymptomatic sudden cardiac death in infancy during a sleep period associated with a calmodulin variant in young children. The Commissioner relied on the cardiologist's opinion to conclude incorrectly that genetic mutations did not contribute to Sarah or Laura's deaths.[182] This was in direct contrast to the information provided to the Inquiry by Professor Schwartz based on the data from the ICalmR. The opinion of Professor Schwartz was substantiated by the publication of the Europace paper in November 2020 on the role of this mutation in the deaths of Sarah and Laura. Instead of reconvening the hearings on this important issue, the Commissioner dealt with this evidence in an addendum to his report,[183] preferring the expertise of the "Sydney Team." This is another example of how broad discretion given to a Commissioner might lead to a restricted approach to evidence.

The Commissioner ultimately found no reasonable doubt as to Ms. Folbigg's convictions, and instead the only reasonable conclusion open to him was that Ms. Folbigg smothered her children. He arrived at this conclusion despite the opinions of three eminent forensic pathologists that there was no evidence of smothering.

The above issues identified as resulting from the Commissioner's broad discretion limited the proper assessment and conclusions on the evidence available. Broad discretion in other inquiries might manifest in different ways; the central important point to be drawn from the above analysis is the *lack of certainty* around what is proper process in these forums. Without some legal

---

[180] See the letter from Professor Peter Schwartz to Professor Carola Vinuesa, online: <https://www.folbigginquiry.justice.nsw.gov.au/Documents/Exhibit%20BT%20-%20Letter%20from%20Professor%20Peter%20Schwartz%20to%20Professor%20Carola%20Vinuesa%20dated%2020%20June%202019.PDF>.

[181] See Lia Crotti *et al*, "Calmodulin mutations and life-threatening cardiac arrhythmias: insights from the International Calmodulinopathy Registry" (2019) 40:35 Eur Heart J 2964.

[182] *Inquiry Report*, *supra* note 106 at 507 [53].

[183] *Ibid* at 499-506.

certainty and clarification as to the extent of the powers available to a decision maker, the process is not transparent, nor is it accountable. While discretion will always play a role in the law, as it should, the discretion ought to be proportional to the task.

D. Independence, Transparency and Accountability in Ms. Folbigg's case

From the above points it can be concluded that in Ms. Folbigg's case there were several difficulties which limited the assessment of evidence in relation to her convictions. From the outset, the process of reviewing her petition was ambiguous: no one knew what the Attorney General's office was doing to consider her petition. It took over three years for a decision to be granted, and no reasons were given for the delay. When an inquiry was announced, a Commissioner and Counsel Assisting were chosen with no reasons given to support their selection. When the Inquiry commenced, it was restrictive in its terms and, in many respects, it did not consider all available evidence, new evidence or even requested evidence that might have impacted on the overall assessment of the case.

Ms. Folbigg's case raises very important questions around the extent of independence, transparency, and accountability in the system of post-conviction review in NSW. The article now turns to consider an alternate model of review – a Criminal Cases Review Commission.

VII The United Kingdom's Criminal Cases Review Commission

This section of the article will outline briefly the operation of the United Kingdom Criminal Cases Review Commission ("UK CCRC").

The UK CCRC was the "world's first statutory, publicly funded body" responsible for review of alleged wrongful convictions.[184] The high profile wrongful convictions of the Guildford Four (1974), the Birmingham Six (1975), the Maguire Seven (1976) and Judith Ward (1974)[185] prompted a Royal Commission on Criminal Justice in 1991 ("the Runciman Commission") which found that the post-conviction review processes were "incompatible with the constitutional separation of powers as between the courts and the executive."[186] It also revealed that Home Secretaries who were tasked with conducting post-conviction review[187] were failing to refer potential wrongful convictions for review for political as opposed to legal reasons.[188] It concluded in this regard that "it is neither necessary nor desirable that the Home Secretary should be directly responsible for the consideration and investigation of alleged wrongful convictions as well as being

---

[184] *Hoyle & Sato*, *supra* note 10 at 12.

[185] United Kingdom Criminal Cases Review Commission, *How it all Began*, online: <https://ccrc.gov.uk/how-it-all-began/>. See also Rebecca Bihler, *Miscarriages in the British Legal System – "The Guildford Four" and "The Birmingham Six"* (Munich, Germany: GRIN Verlag, 2009); Chris Mullin, "Miscarriages of justice in the UK" (1996) 2:2 J Legis Stud 8.

[186] *Runciman Report*, *supra* note 16 at 162.

[187] A role almost identical in this respect to the role of the Attorney General in NSW.

[188] See e.g., Michael Naughton, *The Criminal Cases Review Commission* (Basingstoke: Palgrave Macmillan, 2009) at 1 [*Naughton*].

responsible for law and order and for the police."[189] After a lengthy review of many facets of criminal justice operation, including post-conviction review mechanisms, the Runciman Report recommended the establishment of a Criminal Cases Review Commission and provided the framework for operation.[190]

In 1997 an independent body tasked with investigating alleged wrongful convictions was established. The UK CCRC has the power to compel documents from public bodies, interview new witnesses, re-interview previous ones, and obtain expert evidence on various matters.[191] It predominantly investigates cases that have already been subject to court appeal(s) and those from which there might be new arguments and/or evidence that calls into question the applicant's conviction or sentence.[192] If the UK CCRC finds there are sufficient grounds for a new appeal, it will refer it to the appeal court which must hear the matter.[193] The test for determining if a referral should be made is if the evidence "raises a real possibility that the appeal court will overturn the conviction" or that the court will reduce the sentence.[194] The UK CCRC does not have the power to quash a person's conviction or alter a sentence; only the appeal court can do that. Its job is to investigate and refer meritorious cases to the appeal court for consideration. The Commission can also be asked by the appeal court to investigate an issue for them. Providing advice on reforms is also part of the UK CCRC's mandate.[195]

The official UK CCRC website lays out what the Commission does, how it does it and who comprises the staff. It does not, however, provide every detail of exactly what it does in the process of review. For example, the public until recently had limited knowledge about how the Commission went about reviewing an application. A longitudinal study conducted by Professor Carolyn Hoyle and Associate Professor Mai Sato has done much to demystify the inner workings of the Commission. In their recent book, *Reasons to Doubt: Wrongful Convictions and the Criminal Cases Review Commission*, they provide new insights into the body's operations.[196] For example, they reveal that the Commission has Formal Memoranda and Casework Guidance Notes to provide a template for Commission staff in how they approach review.

---

[189] *Runciman Report*, *supra* note 16 at 182 [10].

[190] *Ibid* at 180-8.

[191] *Criminal Appeal Act 1995* (UK) ss 15-22 [*CAA*].

[192] United Kingdom Criminal Cases Review Commission, *What We Do*, online: <https://ccrc.gov.uk/about-us/what-we-do/>.

[193] *Ibid*.

[194] *CAA*, *supra* note 191 at s 13; for judicial interpretation of what the test involves see *R v Criminal Cases Review Commission (ex parte Pearson)*, [1999] 3 All ER 498.

[195] *Runciman Report*, *supra* note 16 at 184.

[196] *Hoyle & Sato*, *supra* at note 10.

The UK CCRC has approximately 90 staff (which can vary from year to year):

1. There are 12 **Commissioners** who are responsible for whether cases can be referred to the appeal court.[197] They are selected for their legal professional experience.[198]
2. There are around 30 **Case Reviewer Managers** who are responsible for screening and reviewing cases. [199]
3. There are around 5 **Group Leaders**; one **Legal Advisor** and one **Investigations Advisor** who oversee various functions in the Commission.[200]
4. There are around 30 **Administrative** and **Executive Support** staff, comprising of **Non-executive Directors** who are responsible for the provision of advice, constructive challenge and scrutiny of decisions and performance,[201] and the **Senior Management Team** who are responsible for the day to day running of the Commission.[202]

Through the research by Hoyle and Sato, it was recognised that Formal Memoranda and Casework Guidance Notes are interpreted differently by staff members. Some Commission staff apply them more strictly than others, and some think there is still place for discretion and "gut instinct". Ironically there exists a Casework Guidance Note on gut instinct.[203] Hoyle and Sato concluded that despite the guidance via Formal Memoranda and Casework Guidance Notes, there is still significant discretion applied in review actions and decisions.[204] They observed that the Commission does not operate in a robotic way; there are other forms of knowledge shared and created within the Commission which play an important role in the review process.[205] For example, Commission staff referred to the fact that they might seek assistance from a colleague who has expertise in an area.[206]

The following is a brief account of some of the key steps within the three stages of review from receipt of an application, to the decision of whether to refer a case to the appeal court:

---

[197] Commissioners are appointed in accordance with the Office for the Commissioner for Public Appointments' Code of Practice. They work with the senior management team to ensure the Commission runs effectively.

[198] All of the Commissioners currently have experience in the legal industry, see the website for information on the 12 Commissioners: United Kingdom Criminal Cases Review Commission, *Who we are*, online: <https://ccrc.gov.uk/who-we-are/> [*Who we are*].

[199] *Ibid*; *Hoyle & Sato*, *supra* note 10 at 6.

[200] *Hoyle & Sato*, *supra* note 10 at 6.

[201] See, *Who we are*, *supra* at note 198.

[202] *Ibid*.

[203] *Hoyle & Sato*, *supra* note 10 at 48.

[204] *Ibid* at 62.

[205] *Ibid* at 62.

[206] *Ibid* at 64.

1. **Screening Cases:**
   - An application is reviewed for eligibility according to law and must raise either a fresh argument or evidence.[207]
   - If an application is eligible, information is gathered to support review of the application. For example, documents from the applicant's trial and appeals (if applicable).
2. **Review of Cases:**
   - Cases are organised in priority and allocated for review accordingly.[208] Level 1 cases – maximum 3 months to complete review; Level 2 within 26 weeks; Level 3 within 78 weeks.[209]
   - Additional evidence required for consideration of the application is gathered.
   - If expert evidence is an issue, the Commission decides when to seek expert opinion, what evidence to obtain, and who to select as an expert witness. At this stage, input from the applicant and their legal representative (if they have one) can be considered by the Commission.
   - When reviewing information and collecting evidence, it is documented: what has been collected and why; how much time has been spent on a case; if other resources have been put to it; if there have been delays and why.[210]

3. **Decision making:**
   - A decision-making committee is formed to discuss the relevant issues in a case.
   - If there are grounds to refer the case to the appeal court, a minimum of three Commissioners must deliberate and decide on what grounds.[211]
   - If the case does not meet the requirement for referral, a single Commissioner is able to approve this decision although she /he must be satisfied that all enquiries have been made and that the material available does not give rise to a "real possibility" that the conviction would be set aside by the Court.[212]
   - When a decision not to refer is made, a Provisional Statement of Reasons is sent to the applicant which addresses the reasons for the decision and if further work is required by the Commission, it will outline this.[213] The applicant is invited to make written submissions in reply.

Actions taken within the review stages are guided by Formal Memoranda and Casework Guidance Notes to assist the Commission staff in how to perform their role appropriately. The following are some of the Formal Memoranda that the Commission have: when to gather

---

[207] The Casework Administrative Team is responsible to determine if the application is eligible for review by the Commission – they have regard to, inter alia, section 13 of the Criminal Appeal Act 1995 which sets out the test, as well as determining if the applicant has already appealed prior, see *Ibid* at 49-50.

[208] *Ibid* at 53.

[209] For example, in the case of Level 2 cases, the Commission achieved this target in 2015/2016 with a reported average time of just over 19 weeks and Level 3 cases an average of 55 weeks, see *Ibid* at 54.

[210] *Ibid* at 60.

[211] *Ibid* at 59.

[212] *Ibid*.

[213] *Ibid*.

additional evidence; when to use medical records;[214] when to interview witnesses;[215] on communicating with applicants;[216] to engage the investigating body to conduct a new review;[217] on recording progress for each review;[218] on post-decision activity;[219] and, on timeframe for applicant to provide further submissions.[220] Some Memoranda are more prescriptive than others; for example, the one on interviewing witnesses permits wide discretion to determine if the witness has something material to say;[221] while others are flexible and open to interpretation. Hoyle and Sato observed that "the Commission engages in a series of routines around the collection and management of information as well as ritualized processes for constructing a Statement of Reasons to demonstrate to those outside the organisation that it follows fair, consistent and legitimate procedures."[222] The process of decision making is not linear or artificially constrained; it is about making the "right decisions" and finding the "best evidence."[223]

When looking at the key measures of fairness in decision making, transparency and accountability are readily observed in several ways the Commission operates. The initial letter sent to the applicant to outline the Commission's understanding of the matter and to seek clarification about issues also appears to be a concerted effort at procedural fairness, which corresponds to the promotion of transparency and accountability. The same can be said for the invitation for the applicant to reply to the Provisional Statement of Reasons where a decision is made not to refer the case. While the Commission does not publicise on their website each process it takes to review a conviction, such as the Formal Memoranda and Casework Guidance Notes, their existence means that tracing any error in the review process is made easier by clear and tracked steps. The frequent communication with the applicant and the consultation with them on relevant matters (such as in the case of obtaining expert opinion) promotes transparency and accountability because the applicant is informed and involved in the process. The Statement of Reasons / Provisional Statement of Reasons also serves the purpose of "[accounting] for its decisions during investigations"[224] which also enhances transparency and accountability. The fact that such reasons can be used to challenge the Commission's actions, by way of judicial review, means that each step taken in the review process can be scrutinised for error. None of the above processes or practices are present in the NSW system, highlighting the comparable deficiency in transparency and accountability. Additionally, unlike NSW where usually an individual is responsible for decision making, the Commission has several people who are involved in the review process and a panel of Commissioners agree on the value of the case. This has the potential to both reduce the

---

[214] *Ibid* at 55.

[215] *Ibid* at 56.

[216] The Formal Memoranda says that communication with the applicant is made at least once every three months while the review is in progress, see *Ibid* at 57.

[217] The Formal Memoranda provides a non-exhaustive list of factors that can be taken into account by Commissioners when deciding whether to appoint an investigating officer, see *Ibid* at 58.

[218] *Ibid* at 61.

[219] *Ibid*.

[220] *Ibid*.

[221] *Ibid* at 57.

[222] *Ibid* at 67.

[223] *Ibid*.

[224] *Ibid* at 49.

error rate and to the remove the appearance and effect of bias, which is critical to ensuring the independence of the process.

Despite the reported success of the Commission to date[225] and the model being implemented in other countries across the world, there are critics of the UK CCRC.[226] One of the main reasons the UK CCRC was established was to provide *independence* for decision making. One main criticism that has been levelled at the Commission is the test used to determine if a case ought to be referred to the appeal court. It has been said that the "real possibility test" in effect means that there is an impermissible relationship between the UK CCRC and the appeal court; one of the very reasons why the UK CCRC was established. The UK CCRC, in using the test, needs to anticipate what the appeal court might decide. It has been said to lead to caution in referring cases which might go against the way the appeal court decides matters at the relevant time. Some critics contend that this means that the UK CCRC is "subordinate" to the appeal court, which is contrary to the vision for the body as outlined by the findings of the Runciman Commission.[227] UK CCRC staff have said that they could be bolder in referring cases to the appeal court,[228] an indication they agree to some extent with this criticism.

Additionally, other more specific criticisms have been made of the operation of the UK CCRC. Lawyers who have engaged with the UK CCRC claim it is not collecting all relevant documents, has failed to interview important witnesses and in some instances, misinterpreted the law.[229] These criticisms raise important questions about the efficacy of the Commission; however, some must be approached with caution. Hoyle and Sato comment that some prima facie strong criticisms "have little empirical basis."[230]

---

[225] See generally, annual reports, United Kingdom Criminal Cases Review Commission, *Corporate Information and Governance*, online: <https://ccrc.gov.uk/corporate-information-and-publications/>.

[226] See generally, Stephen Heaton, "Is the CCRC fit for purpose?", *The Justice Gap,* online: <https://www.thejusticegap.com/is-the-ccrc-fit-for-purpose/>; see also various publications by Michael Naughton on this issue, especially *Naughton*, *supra* at note 188; another main criticism is a lack of appropriate funding, see *Hoyle & Sato*, *supra* note 10 at 18-21.

[227] Michael Naughton, *Comments on the work of the Criminal Cases Review Commission*, online: <https://www.parliament.uk/globalassets/documents/commons-committees/Justice/02-A-Michael-Naughton-letter.pdf> 4; for other considerations on whether the CCRC is in fact "subordinate", see *Hoyle & Sato*, *supra* note 10 at 14-9 and Hannah Quirk, "Don't Mention the War: The Court of Appeal, the Criminal Cases Review Commission and Dealing with the Past in Northern Ireland" (2012) 76:6 Mod L Rev 949.

[228] *Hoyle & Sato*, *supra* note 10 at 67.

[229] The Guardian, *Miscarriages Of Justice Body Is Not Fit For Purpose, Lawyers Say*, online: <https://www.theguardian.com/law/2018/may/30/criminal-cases-review-commission-not-fit-for-purpose-lawyers-say> [*The Guardian*].

[230] Stephen Heaton, "A critical evaluation of the utility of using innocence as a criterion in the post conviction process", online: <https://core.ac.uk/download/pdf/29106228.pdf> at 97, cited in *Hoyle & Sato*, *supra* note 10 at 13.

Now that this article has explored post-conviction review in NSW, the Folbigg case and how the UK CCRC operates, a critical comparison will be provided. This is done by way of a hypothetical working through of how Ms. Folbigg's case might have been handled by the UK CCRC.

VIII NSW v UK: How Do the Systems Compare?

While some critics say the UK CCRC is not as effective as was initially hoped, even taken at its worst, it is a vast improvement on the way in which NSW conducts post-conviction review. This is because it is designed to conduct review in an independent, transparent, and accountable way. The UK CCRC was established because of the inadequacy of the former post-conviction review system, a system nearly identical to that in NSW at present. To illustrate the difference between the systems, the following brief account will be provided to illustrate how Kathleen Folbigg's matter might have been dealt with by the UK CCRC (integrating some of the known facts about her case and what occurred in the review of her convictions).

In June 2015, Ms. Folbigg's application for review would have been received by the UK CCRC. This application would have either been completed by her or her legal representatives. She could have filled out the easy-to-read application form on the UK CCRC's website. At the initial stage – the Screening Stage – it would have been decided that there was a real possibility that the appeal court would not uphold her convictions because there was never any pathological evidence of smothering and only natural causes of death at the autopsy for each child.

Her matter would likely have been assigned Level 2 priority, and an outcome would have been provided within 26 weeks (mainly because she is incarcerated and has been for a significant period). She might have argued for Level 1 priority because delay in consideration of her case was likely to have a significant effect on the criminal justice system; it could reveal a serious wrongful conviction and an expedited review was required to avoid any additional time incarcerated.[231] In any event, the outcome would have been received within 26 weeks, a stark contrast to over three years in her case in NSW. At this stage, the Commission would have sent Ms. Folbigg a letter advising what they understood her case to entail. After this initial contact they would have communicated with her once every three months to update her about her case, and if applicable, request her input on certain matters. All steps taken in the review would have been documented by each staff member involved.

The Case Review Managers would have then gathered relevant evidence, for example, all the trial transcripts, appeal judgements, health records from the state, and any other relevant information required to understand the issues. This would have been guided by the Formal Memoranda on when to gather evidence and when to use medical records.

At the Review Stage the central issues would have been identified and a decision made about what further information might be required. Because the cause of death of the children was the central issue, the CCRC might have interviewed the forensic pathologist to explain why the

---

[231] *Hoyle & Sato*, *supra* note 10 at 54.

cause of Laura Folbigg's death was recorded by him as "undetermined". The Commission might have sought an opinion from a forensic pathologist not involved in determining the diagnoses of the children (similar to that provided by Professor Stephen Cordner), to provide an independent assessment of the pathology reports and materials for all the autopsies. Other expert opinion might have been sought to identify other relevant medical and scientific matters, for example, genetics or immunology. The Commission might also have interviewed the investigating officers who pursued the charges against Ms. Folbigg.

If expert opinion obtained supported natural causes of death for the children (not murder), at the decision-making stage, it would have been determined that a real possibility existed that the appeal court would not uphold Ms. Folbigg's convictions.[232] This would be because Ms. Folbigg's convictions were based on the theory that she murdered her children by smothering them. A panel of three Commissioners would have then prepared a Statement of Reasons to refer her case to the appeal court and would have provided this to Ms. Folbigg.

Ms. Folbigg's case would then have been heard by the Court of Appeal. Due to the positive evidence of natural causes of death for each child, the Court would have concluded that the convictions are unsafe and have allowed the appeal.[233]

The above is a brief, hypothetical analysis of Ms. Folbigg's case based on what is known about the operations of the CCRC. In no way does this detail all the steps that would likely be taken, nor does it capture all the relevant issues in Ms. Folbigg's case. For example, it only focuses on the pathology of the children, not issues relating to her diaries. There would, no doubt, be discretion used by staff members in the different levels of review. The scenario is important because it illustrates *a defined process*. The fact that one can produce a likely step by step analysis of how this case might be dealt with at the CCRC illustrates that the process is transparent.

IX Recommendations

If the overall aim of post-conviction review is to uncover wrongful convictions and remedy them, all three key elements of independence, transparency and accountability must be present. A fundamental deficiency in any one of them might compromise the fairness of the outcome for an applicant.

Because of the inherent deficiencies in the NSW system, political factors might influence the impartial assessment of serious convictions. A very similar debate around a lack of independence when the Home Secretary, the United Kingdom's equivalent to the Attorney General in this context, oversaw post-conviction review was formative to the establishment of the UK CCRC. At present, there is very little independence in the process of post-conviction review in NSW. Transparency is also lacking in the system. There is currently no publicly available information regarding how executive actors in NSW make decisions. Do they engage expert opinions? Do they seek advice from the prosecution? Do they ask the police to reinvestigate? Do

---

[232] *CAA, supra* note 191 at s 13(1)(a).
[233] *Ibid* s 2.

they interview witnesses or re-interview previous ones? Does the applicant have the opportunity to comment on material that is adverse to them? These are all relevant actions where applicable, although it is uncertain if these are occurring in the review process. The lack of transparency in the way review is conducted by executive actors corresponds to a lack of accountability. When the public is unaware of how a decision is being made and by whom, there can be very little meaningful accountability. To make matters worse, people who alleged they have been wrongfully convicted are unable to surpass even the first hurdle – applying for review. They have no guidance about how to prepare a review or what matters the decision makers will be considering. This is a significant issue for access to justice. A lack of assistance in this regard is highly likely to mean that wrongfully convicted individuals will not apply in the first place.

In contrast to the NSW system, much is known about how the UK CCRC operates. The debate about a lack of sufficient separation between the UK CCRC and the appeal court, by way of the referral test, might have merit. In that case, UK CCRC might consider reforming the test used to ensure that the UK CCRC is not simply predicting how the current appeal court might act and is acting on *their* opinions of merit.[234] In terms of transparency, the UK CCRC is exemplary in comparison to NSW. The website is clear, accessible, and informative. It provides an easy-to-read application form designed to be accessible to people without legal training. The public is aware who comprises the UK CCRC, what they do (and cannot do), why they do it and how. The research by Hoyle and Sato has further enhanced the public's awareness of the Commission's role. There are timeframes in which an applicant can expect to receive a decision. For consistency in review, Commission staff are guided at each stage of the review process through Formal Memoranda and Casework Guidance Notes. In summary, the UK CCRC is structured to: avoid political factors influencing its impartial assessment of cases; stage the review process to permit a wider perspective of the issues in the case; conduct the review in a transparent way guided by defined processes; conduct reviews within targeted timeframes. The above features of the CCRC promote transparency and accountability.

This article recommends that NSW establish a Criminal Cases Review Commission. It does not, however, recommend a wholesale adoption of the UK CCRC. One chief consideration is the need to devise a sufficiently appropriate test that a Commission in NSW might use to refer cases to the Court of Criminal Appeal. It would also need to ensure that appropriate funding would allow the Commission to ensure matters are dealt with in a timely manner not at the expense of thoroughness. Most of the operations of the UK CCRC would be appropriate to a Commission in NSW. Many of the issues that arise in relation to wrongful convictions traverse national borders; these include prosecutorial misconduct and unreliable forensic evidence. Such matters are covered in Formal Memoranda and Casework Guidance Notes which could be adapted by any Commission.

---

[234] It has been suggested that a preferable test might be along the lines of "i.e., a test that requires the CCRC and the court of appeal to consider holistically whether a miscarriage of justice may have occurred for whatever reason.", see *The Guardian*, *supra* at note 229.

X Conclusion

Legal systems across the world will always experience wrongful convictions: the simple fact is legal systems are human institutions and are fallible. As Hoyle and Sato aptly describe: "[i]n all Western democracies, appeals processes may fail to identify wrongful convictions: appeals solicitors do not have adequate resources to investigate cases; judges fail to recognize when the system has erred; or at the time of direct appeal forensic science was insufficiently developed to be of probative value."[235] Just because wrongful convictions will always feature as a by-product of criminal legal systems, it does not mean that reform to post-conviction review is a fruitless endeavour. Criminal legal systems across the world should be aware that wrongful convictions do occur and commit to make changes to processes that are possible and appropriate. When wrongful convictions are identified, they should be taken as an opportunity to improve the system.

NSW is lagging behind its common law counterparts in the area of post-conviction review.[236] As recently as 2020, New Zealand adopted a Criminal Cases Review Commission to move away from having responsibility lie with the executive government. NSW is in a unique position; it has the benefit of learning from the decades of collective knowledge gained from countries who have also adopted this pioneering model. The experiences gained from similar bodies in other countries – subject to scrutiny and review for decades now in the case of the United Kingdom – mean that NSW could create best practice by devising a model which takes into account criticisms of other Commissions. A wholesale adoption of the United Kingdom's model is not the answer; NSW should be concerned to have the most independent, transparent, and accountable processes realistically possible suitable to the domestic context. The establishment of a Commission should give the NSW public confidence that the criminal legal system not only takes seriously the issues of wrongful convictions, but it also gives certainty to the way the system corrects its own mistakes. Without such reform, wrongful convictions will go undiscovered and unremedied, which is nothing short of a "searing injustice" [237] for both the convicted person and our society.

[235] *Hoyle & Sato*, *supra* note 10 at 6.
[236] See generally on the need for reform in Australia, Michael Kirby, "A new right of appeal as a response to wrongful convictions: is it enough?" (2019) 43 Crim LJ 299.
[237] *Van der Meer, supra* at note 2.

Wrongful Conviction in Sexual Assault: Stranger rape, acquaintance rape, and intra-familial child sexual assaults

By Matthew Barry Johnson
John Jay College of Criminal Justice
City University of New York
U.S.A.
(Oxford: Oxford University Press, 2021)

Reviewed by Gethin Rees
Lecturer, Newcastle University
Newcastle-Upon-Tyne
U.K.

I must confess that I took on this book review with a degree of trepidation. My concerns were twofold; on the one hand, I was concerned that the text would be part of a growing quantity of scholarship critically responding to the tide of historic sexual assault allegations aimed at celebrities and authority figures, which mobilises the traditional rape myth that women and children lie. The argument, I imagined, would present various case studies demonstrating the ways that suspects were wrongly accused by women and children known to them; against a contemporary background where convictions for rape and sexual assault (in England and Wales) are at an all-time low (Topping and Barr 2020), these kinds of arguments make for difficult reading. My second concern related to my own geographical location and appreciation of the context and culture (criminal justice and otherwise) in which the book had been written. Johnson's book is about the United States context, where questions about law enforcement response to ethnic minorities, especially Black males, are far more problematic and deeper-rooted than in the United Kingdom (although that is not to say that we do not have our own significant problems with law enforcement-ethnic minority relations). I was concerned that my ability to appreciate critically and understand the arguments in this book would be limited by my being situated outside that geographical and cultural milieu.

It was with these two concerns that I started to read Johnson's work, and I was delighted to discover from the outset that this book was not as I had imagined. Johnson is very careful to express sympathy to the arguments around the reporting of sexual assault and makes an important distinction, common amongst attrition rate literatures, between acquaintance rape (where there is some form of pre-existing relationship – no matter how short – between the perpetrator and the victim) and stranger rape (where there is no relationship). These different types of offences are likely to produce different outcomes, with Johnson arguing, "The risk of wrongful conviction is higher among stranger rapes, and the risk of the perpetrator escaping conviction is higher among date and acquaintance rape." (10) The majority of the book then sets out why wrongful convictions are more likely in stranger assaults.

The main argument is that the public anxiety around an unidentified perpetrator following a stranger assault produces a desire amongst the public, including law enforcement, to identify and punish those responsible. Responding to this need for "moral correction", law enforcement manufacture cases around suspects (often known recidivists in the community), regardless of evidence to the contrary. Drawing on concepts such as "tunnel vision", Johnson notes how the case construction process, enabled by lack of transparency around the interviewing of suspects and witnesses (to which the author refers as the "black box" of evidence manufacture), produces false confessions and false identifications. Law enforcement mobilise a variety of tactics, sometimes coercive (in the case of interrogations of suspects) and at other times manipulative (for instance including only one non-white person in an identity parade), in order to produce unreliable evidence. This evidence gains weight when coupled with other forms of unreliable evidence, in particular non-DNA based forensic and expert evidence, and so, when it is presented to prosecutors and juries (who have the same desire for moral correction as the law enforcement staff), they are likely to convict.

My other concern about the text was that I would not fully be able to appreciate the context of the United States' history of slavery and racism. Again, my concerns quickly dissolved due to Johnson's careful and detailed historical account of the punishment of Black men before the Civil War, between the Civil War and the Civil Rights movement and then after the Civil Rights movement. In a well-evidenced, though admittedly disturbing chapter, Johnson sets out the history of conspicuous racist punishments meted out to Black men under the belief that they had raped white women. As Johnson clearly identifies, prior to the Civil Rights movement, the imaginary of the innocent white woman assaulted by the Black man was powerful and justified many lynchings, whether legal or otherwise. The same imaginary continues to hold sway in the contemporary period, and powers law enforcement's necessity to identify and prosecute in stranger rape cases. While Johnson does also include cases where Black women were victims, it is clear that the majority of wrongful convictions fit the model of white victim, Black perpetrator. Again, the black box manufacture of unreliable evidence is demonstrated to be the product of cross-racial identification and law enforcement's construction of a case around an incorrectly identified perpetrator. Johnson is at pains throughout this chapter not to fall into the trap of stating that women lie, but rather shows the processes by which an inaccurate identification, especially in the context of cross-racial identification, can be made. The author concludes that the victims often undergo further trauma when they discover that they identified an innocent person.

The final chapter of case studies relates to child abuse hysteria and the ways that a moral panic around abuse necessarily produces allegations and evidence of abuse, even if none existed in the first place. Focusing on psychological evidence, especially recovered memories, Johnson shows how cases were manufactured around suspects when insufficient scepticism or scrutiny was applied to the alleged victims' accusations. Johnson's goal here is to set a clear example of "moral correction" in practice, where the anxiety, panic and disgust felt around child sex abuse reduces critical thinking and necessitates punishment. It is certainly a good example of the impacts of moral correction, but I could not help thinking that the chapter also runs counter to the careful way that Johnson has walked the line between lying accusers and innocent suspects. The author does not directly blame the children in this chapter, but rather the families, psychologists and law enforcement teams that develop the cases around the accused. Nevertheless, the situating of these cases is different to the others presented in the text, and even Johnson is aware of this, stating:

"While these cases are different in certain respects from the wrongful convictions in sexual assaults presented in previous chapters, they clearly are additional examples of wrongful conviction in sexual assault." (121)

While I very much appreciated the argument of this book, there are a few things that I thought required a little more consideration, for instance the ways that forensic science and expert evidence are presented. Johnson does not take a symmetric approach to expert evidence; rather, the expertise presented by law enforcement and the prosecution is presented as flawed, weak and unreliable, while the exculpatory forensic science, often introduced by the Innocence Project, is constructed as reliable and objective. One reason for this is the chronology, where most of the prosecutorial evidence introduced is now considered to have low reliability or individuating power, compared to the exculpatory evidence, most notably DNA evidence, which is considered reliable and individuating. On the other hand, it is not necessarily accurate to represent one set of experts as biased and not others. Why, for instance, are experts working for the prosecution constructed as self-interested or biased practitioners, while those working for the Innocence Project are not? Could not the knowledge that a professional is working for Innocence present as much cognitive bias into an analysis as is the case with those working for law enforcement? A more symmetrical representation of the forensic sciences would have bolstered the argument in my opinion.

My most significant criticism, however, relates to the final conceptual analysis, and the concept of moral correction. While Johnson indeed does an excellent job of evidencing the emotional impact that panic, anxiety and outrage have on law enforcement and the public at large around stranger rape and sexual assault, he does an even better job, in my opinion, of demonstrating the cultural and structural determinants that result in Black men, in particular, being accused of rape in stranger cases. While in the introduction Johnson asserts that moral correction includes "the social, as well as the individual, psychology where law enforcement and prosecutors not only are responding to community, and often political pressures to make arrests and win convictions as well as career incentives but also have a personal investment (desire) in 'correcting' what they perceive to be moral violations and outrages", the eventual conceptualisation of moral correction emphasises the individualistic-emotional response, rather than the collectivist accomplishment of, for instance, law enforcement in manufacturing a case against a suspect. We are left to understand each officer as performing their own acts of moral correction, rather than being part of a culture that not only enables but rewards the construction of successful cases, no matter how unreliable, for instance via clear-up rates.

This turn to the individual rather than the cultural is most notable due to the omission of almost any discussion of racism in the conceptual chapter. As noted earlier, Johnson has done an exemplary job providing a history of the racist policing of rape; however, this account is more or less ignored in the conceptualising of wrongful convictions, and its absence is startling. Again, working at the social or cultural level would have provided space to include the well-evidenced argument about racist practices within police case construction and resulted in a more satisfying conclusion. Of course, asking a psychologically trained scholar to focus on the social level rather than the individual is essentially asking a psychologist not to do psychology, but in this case, and given all the hard work that has gone into making the case around explicit and implicit racist practices, the absence of this discussion towards the end of the book feels like a significant omission.

This book will clearly appeal to criminal justice scholars, especially those interested in wrongful convictions. I would even strongly recommend it to feminist rape scholars who, if not put off by the title, will find a range of important case studies, sympathetically written, that draw important distinctions between the processing of stranger and acquaintance cases. In my opinion, however, the scholars who will most appreciate this work are those promoting the defunding, or even abolition, of law enforcement/criminal justice, especially in cases of rape and sexual assault. Johnson provides ample evidence of the structural barriers to justice for both victims (in terms of acquaintance cases) and suspects (in stranger cases), and this well-collated and well-martialled evidence could be successfully mobilised in abolitionist and transformative justice scholarship and practice. Overall, although I approached this text with trepidation, I found a well-evidenced, fascinating and important book, although its conceptualisation could be improved with a little more work at the social-cultural level.

Topping, A., Barr, C. (2020) "Rape Convictions Fall to Record Low in England and Wales" *The Guardian.* Accessed on 30 June 2021, online: https://www.theguardian.com/society/2020/jul/30/convictions-fall-record-low-england-wales-prosecutions

The 2021 WCLR Student Award Winners

The Editorial Board of the Wrongful Conviction Law Review is pleased to announce the winners of the 2021 Student Awards as follows:

Gold Prize - Esti Azizi, University of Ottawa, Canada
"Maintaining Innocence: The Prison Experiences of the Wrongfully Convicted"

Silver Prize - Víctor Beltrán-Román, Diego Portales University, Chile
"Innocent in the dark: Toward a Duty to Preserve Biological Evidence in Chilean Criminal Justice

Bronze Prize - Rhanee Rego, The University of Newcastle, N.S.W., Australia
"A Critical Analysis of Post-Conviction Review in New South Wales, Australia"