

# A Stone of Hope: Legal and Empirical Analysis of California Juvenile Lifer Parole Decisions

---

Kristen Bell<sup>1</sup>

“With this faith, we will be able to hew out of the mountain of despair a stone of hope.”

—Dr. Martin Luther King, Jr.

*In a recent line of cases, the Supreme Court held that sentencing juveniles to life in prison without the possibility of release on parole violates the Eighth Amendment in all but the rarest cases. Many states have responded by extending the possibility of release on parole to individuals serving juvenile life sentences. Whether the possibility of parole can render juvenile life sentences constitutional is a topic of ongoing debate among courts, litigants, and scholars. Thus far, that debate has not engaged with one of the most longstanding critiques of parole systems: that parole-release decision-making can be arbitrary and capricious. This Article develops this critique as applied to an original empirical study of 426 California parole decisions among people sentenced to life with the possibility of parole for crimes committed as juveniles. The study uses regression analysis and other quantitative techniques to assess the extent to which parole is consistently granted to those who demonstrate comparable levels of rehabilitation. When combined with qualitative analysis of decision-making procedures, the evidence suggests that parole decisions are as arbitrary and capricious with respect to a measure of rehabilitation as death penalty decisions were to a measure of culpability when the Supreme Court struck down the death penalty as arbitrary and capricious in 1972. The Article argues that, as applied during the time period of this study, California’s system of parole-release decision-making for people sentenced to life as juveniles may be unconstitutional on three grounds: it may violate the Eighth Amendment’s prohibition against arbitrary and capricious punishment, it may be void for vagueness, or it may deny ade-*

---

<sup>1</sup> Kristen Bell, J.D., Ph.D., Assistant Professor at University of Oregon Law School. This article was made possible through a Soros Justice Fellowship, hosted by the Post-Conviction Justice Project at the Gould School of Law (2014–2016), and by a Senior Liman Fellowship at Yale Law School (2016–2018). Heidi Rummel and Elizabeth Calvin were instrumental in conceiving of this study and supporting its development. I am indebted to the following people for expertise in study design, statistical analysis, and feedback: Gregory Bell, Andrea Bell, Miguel de Figueiredo, Barry Feld, Catherine Grosso, Paul Labys, Thomas Lyon, Tracey Meares, Daniel Markovits, Debbie Mukamal, Mark Miller, Joan Petersilia, Kelly McWilliams, Judith Resnik, Simon Singer, Anna VanCleave, and the Yale StatLab. I am also grateful for feedback provided at the ACS Junior Scholar Workshop (2018), the American Society of Criminology Conference (2018), the Conference on Empirical Legal Studies (2017), the Justice Collaboratory at Yale Law School, and at Hofstra Law School, SMU Law School, the University of Idaho, and the University of Oregon. Special thanks to Mana Rostami-Mouripour who managed collection of transcripts, and to those who coded transcripts: Karen Acros, Ama Amofo-Yeboah, Marie Bell, Sarah Cohen, Shana Emile, Cameron Gomez, Nikhil Goyal, Catherine McCarthy, Clayton Michael, Rachel Rothberg, and Ling Tsui. I thank Larry Rosser, Robert Garcia, Ryan Lo, and the members of the Y.O.U.N.G. group (Youth Offenders United ’N Growth) at California State Prison-Lancaster for challenging my understanding of justice from the inside out.

*quate procedural due process. The Article proposes reforms that are designed to improve fairness and equity in parole decision-making by restricting the parole board's discretion, improving the exercise of that discretion, and providing effective oversight and accountability over parole-release decisions.*

LIST OF TABLES AND FIGURES . . . . . 456

INTRODUCTION . . . . . 458

I. JUVENILE SENTENCING, PAROLE, AND THE PROMISE OF A MEANINGFUL OPPORTUNITY FOR RELEASE . . . . . 461

II. CASE STUDY OF CALIFORNIA PAROLE HEARINGS: DESCRIPTION . . . . . 468

    A. *Design of California Youth Offender Parole Hearings* . . . . . 469

    B. *Juvenile Lifer Parole Decisions in Practice: Description of Case Study* . . . . . 473

III. CASE STUDY OF CALIFORNIA PAROLE HEARINGS: EVALUATION OF OUTCOMES . . . . . 480

    A. *Distribution of Decisions Along an Index of "Demonstrated Rehabilitation"* . . . . . 480

    B. *Grant Rate Comparisons among Legitimate and Illegitimate Variables* . . . . . 485

    C. *Regression Analysis* . . . . . 493

    D. *Time-served before being granted parole* . . . . . 506

IV. CASE STUDY OF CALIFORNIA PAROLE HEARINGS: PROCESS OF DECISION-MAKING . . . . . 508

    A. *Traditional Due Process Protections* . . . . . 508

    B. *Decision-Making Body* . . . . . 513

    C. *Substantive Legal Standard* . . . . . 515

V. CONSTITUTIONAL QUESTIONS . . . . . 519

    A. *Cruel and Unusual Punishment, as Applied* . . . . . 520

    B. *Void for Vagueness* . . . . . 523

    C. *Procedural Due Process* . . . . . 525

VI. A STONE OF HOPE: REFORMING THE PAROLE PROCESS . . . . . 527

    A. *Cabin Discretion* . . . . . 528

    B. *Improve the Exercise of Discretion* . . . . . 531

    C. *Establish Oversight and Accountability Over the Exercise of Discretion* . . . . . 533

VII. CONCLUSION . . . . . 535

LIST OF TABLES AND FIGURES

TABLES

TABLE 1: PAROLE GRANT RATE BY RACE AND CLEAN TIME . . . . . 486

TABLE 2: PAROLE GRANT RATE BY RACE AND PROGRAM PARTICIPATION . . . . . 487

2019]	A Stone of Hope	457
TABLE 3:	PAROLE GRANT RATE BY RACE AND EDUCATION LEVEL ..	487
TABLE 4:	PAROLE GRANT RATE BY ATTORNEY TYPE .....	489
TABLE 5:	PAROLE GRANT RATE BY PRIOR EXPERIENCE WITH THE PAROLE BOARD.....	490
TABLE 6:	PAROLE GRANT RATE AMONG CANDIDATES WITH 3+ YEARS CLEAN TIME, MODERATE OR EXTENSIVE PROGRAMMING, AND A GED OR HIGHER (N=286).....	491
TABLE 7:	PAROLE GRANT RATE BY RACE, ATTORNEY, AND BOARD EXPERIENCE .....	492
TABLE 8:	CRA MODEL AND HEARING RESULT MODEL.....	499
TABLE 9:	RELATIVE IMPACT OF VARIABLES SIGNIFICANT TO PAROLE DECISION .....	500
TABLE 10:	SPREAD IN TIME-SERVED AMONG CANDIDATES GRANTED PAROLE BY CONVICTION-TYPE .....	507

FIGURES

FIGURE 1:	HYPOTHETICAL “PERFECT” DISTRIBUTION OF DECISIONS ALONG REHABILITATION INDEX .....	483
FIGURE 2:	HYPOTHETICAL RANDOM DISTRIBUTION OF DECISIONS ALONG REHABILITATION INDEX .....	484
FIGURE 3:	ACTUAL DISTRIBUTION OF DECISIONS ALONG REHABILITATION INDEX .....	484
FIGURE 4:	INFLUENCE OF RACE ON LIKELIHOOD OF PAROLE BY REHABILITATION LEVEL .....	503
FIGURE 5:	INFLUENCE OF RETAINED ATTORNEY ON LIKELIHOOD OF PAROLE BY REHABILITATION LEVEL .....	504
FIGURE 6:	LIKELIHOOD OF PAROLE AT INITIAL VS. SUBSEQUENT HEARING BY REHABILITATION LEVEL.....	507
FIGURE 7:	AVERAGE TIME-SERVED BY CONVICTION-TYPE AND PAROLE DECISION .....	507

APPENDIX

TABLE A:	DESCRIPTIVE STATISTICS WITH HEARING RESULTS .....	538
TABLE B:	REGRESSION FOR REHABILITATION INDEX.....	543
TABLE C:	ODDS RATIOS FOR HEARING RESULT MODEL .....	544
TABLE D:	ROBUSTNESS CHECKS WITH ADDED YOUTH VARIABLES ...	545
TABLE E:	ROBUSTNESS CHECKS WITH ADDED CRIME AND OTHER VARIABLES .....	546
TABLE F:	ROBUSTNESS CHECKS WITH CHANGES TO VARIABLE DEFINITIONS.....	547
TABLE G:	ROBUSTNESS CHECKS WITH CHANGES TO SAMPLE.....	548

## INTRODUCTION

The United States Supreme Court has held that, except in rare cases, it is cruel and unusual punishment to sentence a juvenile to life in prison unless the juvenile is afforded a “meaningful opportunity to obtain release based on demonstrated maturity and rehabilitation.”<sup>2</sup> Many states have responded to this holding by passing legislation that makes individuals who are serving life sentences for juvenile convictions (“juvenile lifers”) eligible to be reviewed for release by a state parole board.<sup>3</sup> The task of providing the constitutionally required “meaningful opportunity to obtain release” has thus been passed into the hands of parole boards, state administrative agencies that traditionally act with nearly unfettered discretion.<sup>4</sup> An estimated 6,000 juvenile lifers are incarcerated in ten states alone; half of those individuals are incarcerated in the state of California.<sup>5</sup> Parole boards have been charged with the discretion to choose whether these men and women will die behind bars or will at some point live in society as adults.

Courts are currently facing the question of whether state parole boards provide juvenile lifers with a constitutionally adequate opportunity to obtain release. Litigation has occurred in multiple federal district courts,<sup>6</sup> and state courts in New York and Florida have held that juvenile lifer parole hearings failed to comply with the Eighth Amendment.<sup>7</sup> The Massachusetts Supreme Judicial Court has held that heightened procedural protections are required at juvenile lifer parole hearings in order for life with the possibility of parole sentences to comply with the Massachusetts Constitution.<sup>8</sup> The California Supreme Court has held that providing juvenile lifers with parole hearings renders their sentences constitutional under the Eighth Amendment, but only if the parole hearings provide “a meaningful opportunity for release.”<sup>9</sup> The

---

<sup>2</sup> See *Graham v. Florida*, 560 U.S. 48, 75 (2010); accord *Miller v. Alabama*, 567 U.S. 460, 479–80 (2012); *Montgomery v. Louisiana*, 136 S. Ct. 718, 734 (2016).

<sup>3</sup> See Sarah French Russell & Tracy L. Denholtz, *Procedures for Proportionate Sentences: The Next Wave of Eighth Amendment Noncapital Litigation*, 48 CONN. L. REV. 1121, 1132 (2016).

<sup>4</sup> See *Greenholtz v. Inmates of the Nebraska Penal and Correctional Complex*, 442 U.S. 1, 13 (1979); *Bd. of Pardons v. Allen*, 482 U.S. 369, 384 (1987) (Scalia, J., dissenting); Kimberly A. Thomas & Paul D. Reingold, *From Grace to Grids: Rethinking Due Process Protections for Parole*, 107 CRIM. L. & CRIMINOLOGY 213, 218 (2017); Sarah French Russell, *Review for Release: Juvenile Offenders, State Parole Practices, and the Eighth Amendment*, 89 IND. L.J. 373, 396 (2014).

<sup>5</sup> See SARAH MEHTA, AMERICAN CIVIL LIBERTIES UNION, FALSE HOPE: HOW PAROLE SYSTEMS FAIL YOUTH SERVING EXTREME SENTENCES 35 (2016), [www.aclu.org/feature/false-hope-how-parole-systems-fail-youth-serving-extreme-sentences](http://www.aclu.org/feature/false-hope-how-parole-systems-fail-youth-serving-extreme-sentences), archived at <https://perma.cc/5CF3-BC3W>.

<sup>6</sup> See, e.g., *Hayden v. Keller*, 134 F. Supp. 3d 1000, 1009 (E.D.N.C. 2015); *Greiman v. Hodges*, 79 F. Supp. 3d 933, 940, 944 (S.D. Iowa 2015); see also Russell & Denholtz, *supra* note 3.

<sup>7</sup> See *Hawkins v. N.Y. State Dep’t of Corr. & Cmty. Supervision*, 30 N.Y.S. 3d 397, 400–01 (N.Y. App. Div. 2016); *Atwell v. State of Florida*, 197 So. 3d 1040, 1050 (Fla. 2016).

<sup>8</sup> See *Diatchenko v. Dist. Attorney for Suffolk Dist.*, 27 N.E.3d 349, 361 (Mass. 2015).

<sup>9</sup> See *People v. Franklin*, 370 P.3d 1053, 1066–67 (Cal. 2016).

California court explicitly reserved the question of whether parole hearings live up to that requirement in practice.<sup>10</sup>

The litigation and scholarship in this area has questioned the fairness of procedural protections at parole hearings, but it has yet to engage with one of the most longstanding critiques of parole boards: that their decision-making can be arbitrary and capricious in practice. Scholars, advocates, and politicians of the 1970s criticized the wide discretion that parole boards exercised, and argued that idiosyncratic judgment and racial bias led to unjustifiable disparities in release decisions.<sup>11</sup> This critique of parole-release decisions as arbitrary exercises of discretion, alongside skepticism about the effectiveness of rehabilitation and a rise in tough-on-crime rhetoric, led many states and the federal government to abolish parole systems in the 1970s through the 1990s.<sup>12</sup>

This Article brings the critique of arbitrariness to bear in the context of juvenile lifer parole decisions. It presents an original empirical study of 426 juvenile lifer parole decisions in California, which is designed to evaluate the extent to which these decisions consistently grant release to individuals who demonstrate comparable levels of rehabilitation. The analysis focuses on California for several reasons. First, the relative transparency of California's parole process and its large population of juvenile lifers make quantitative and qualitative analysis possible. More importantly, California is a national leader in juvenile lifer parole reform.<sup>13</sup> It was one of the first states to pass legislation designed to reform the parole process specifically for juvenile lifers, and, according to the ACLU's national survey of juvenile lifer parole systems, California has done more than any other state to create a meaningful opportunity for release among juvenile lifers.<sup>14</sup> If California's juvenile parole system, which has been recognized as among the best in the

---

<sup>10</sup> *See id.*

<sup>11</sup> *See, e.g.*, Jon O. Newman, *Parole Release Decisionmaking and the Sentencing Process*, 84 *YALE L.J.* 810, 816 n.14, 847 (1975) (citing such scholarship); Robert M. Garber and Christina Maslach, *The Parole Hearing: Decision or Justification?*, 1 *LAW & HUM. BEHAV.* 3, 263 (1977); John A. Conley & Sherwood E. Zimmerman, *Decision-Making by a Part-Time Parole Board: An Observational and Empirical Study*, 9 *CRIM. JUST. AND BEHAV.* 396, 396–97 (Dec. 1982); PIERCE O'DONNELL ET AL., *TOWARD A JUST AND EFFECTIVE SENTENCING SYSTEM: AGENDA FOR LEGISLATIVE REFORM* 12 (1977); Anne M. Heinz, John P. Heinz, Stephen J. Senderowitz, & Mary Anne Vance, *Sentencing by Parole Board: An Evaluation*, 67 *J. OF CRIM. L. AND CRIMINOLOGY* 1 (1976).

<sup>12</sup> *See, e.g.*, Kate Stith & Steve Y. Koh, *The Politics of Sentencing Reform: The Legislative History of the Federal Sentencing Guidelines*, 28 *WAKE FOREST L. REV.* 223, 227–29 (1993); Edward E. Rhine, Alexis Watts, Kevin R. Reitz, *Parole Boards within Indeterminate and Determinate Sentencing Structures*, *ROBINA INSTITUTE* (Apr. 3, 2018), <https://robinainstitute.umn.edu/news-views/parole-boards-within-indeterminate-and-determinate-sentencing-structures> (listing sixteen states that abolished parole systems), archived at <https://perma.cc/8Q6Y-K2DY>.

<sup>13</sup> *See* MEHTA, *supra* note 5, at 227–29.

<sup>14</sup> *Id.* at 49–50.

country, is arbitrary and capricious to some extent in practice, then it is likely that other state parole systems are arbitrary and capricious as well.<sup>15</sup>

The Article is structured as follows. Part I describes the Supreme Court's developing Eighth Amendment jurisprudence on juvenile sentencing in *Roper v. Simmons*,<sup>16</sup> *Graham v. Florida*,<sup>17</sup> *Miller v. Alabama*,<sup>18</sup> and *Montgomery v. Louisiana*,<sup>19</sup> and how this relates to jurisprudence on parole-release decision-making. Parts II, III, and IV set forth the empirical study of California's parole-release system for juvenile lifers. The study analyzes transcripts from all contested juvenile lifer parole hearings conducted in the eighteen-month period beginning January 1, 2014, the effective date of a state statute designed to improve the parole process for juvenile offenders. Part II provides an overview of the study and how California's parole system operates for juvenile lifers. Part III uses quantitative analysis to identify the extent to which factors pertaining to rehabilitation explain why 176 parole candidates in the sample were granted parole, and the remaining 250 parole candidates were denied parole. The study finds that California juvenile lifer parole decisions show a high degree of inconsistency with respect to a measure of rehabilitation. The study also finds that a considerable degree of variability in this set of decisions is explained by race and other factors that are illegitimate criteria for these decisions. The quantitative evidence shows a risk, but not conclusive proof, that the parole system is not treating relevantly like cases alike. Part IV provides a qualitative analysis of the structural process of decision-making in California juvenile lifer cases. The analysis shows that the process of decision-making does not seem to abate, but rather affirms, the risk that the parole board is failing to treat relevantly like cases alike.

Based on the evidence of arbitrariness uncovered in the study, Part V outlines the following three arguments that the California juvenile lifer parole system may be unconstitutional: the system may be arbitrary and capri-

---

<sup>15</sup> The scope of this paper is focused on arbitrariness in parole decision-making, and it does not include a review of all problematic features of juvenile life sentencing and parole decision-making in California or elsewhere. That broader topic has been periodically covered in scholarly literature as the applicable law has continued to develop. See, e.g., Megan Anitto, Graham's *Gatekeeper and Beyond: Juvenile Sentencing and Release Reform in the Wake of Graham and Miller*, 80 BROOK. L. REV. 119 (2014); Brianna H. Boone, *Treating Adults Like Children: Re-Sentencing Adult Juvenile Lifers After Miller v. Alabama*, 99 MINN. L. REV. 1159, 1161 (2015); Beth Caldwell, *Creating Meaningful Opportunities for Release: Graham, Miller, and California's Youth Offender Parole Hearings*, 40 N.Y.U. REV. L. & SOC. CHANGE 245 (2016); Laura Cohen, *Freedom's Road: Youth, Parole, and the Promise of Miller v. Alabama and Graham v. Florida*, 35 CARDOZO L. REV. 1031, 1048–69 (2014); Marsha L. Levick & Robert G. Schwartz, *Practical Implications of Miller v. Jackson: Obtaining Relief in Court and Before the Parole Board*, 31 LAW & INFO. 369, 405 (2013); Russell, *supra* note 4; Sarah Sloan, *Why Parole Eligibility Isn't Enough: What Roper, Graham, and Miller Mean for Juvenile Offenders and Parole*, 47 COLUM. HUM. RTS. L. REV. 243 (2015).

<sup>16</sup> 543 U.S. 551 (2005).

<sup>17</sup> 560 U.S. 48 (2010).

<sup>18</sup> 567 U.S. 460 (2012).

<sup>19</sup> 136 S. Ct. 718 (2016).

cious as applied under the Eighth Amendment, or void for vagueness, or inadequate on procedural due process grounds. Part VI then proposes three types of reforms to reduce the inconsistency of decision-making observed in California's system. The reforms include cabining discretion, improving the exercise of discretion, and developing systematic oversight of parole-release decision-making. Importantly, the policies and strategies suggested here are designed to promote greater consistency in parole decision-making, but they are not designed to address a number of other problems that the author observed in reviewing parole hearing transcripts, and which are beyond the scope of this single Article. The reform to the parole system offered in Part VI is thus proposed not as a comprehensive fix, but as what Dr. King referred to as a "stone of hope."<sup>20</sup>

#### I. JUVENILE SENTENCING, PAROLE, AND THE PROMISE OF A MEANINGFUL OPPORTUNITY FOR RELEASE

The Supreme Court's developing jurisprudence on juvenile sentencing is driven by the principle that children are "constitutionally different from adults for purposes of sentencing."<sup>21</sup> The Court has explained that juveniles—defined as individuals under eighteen years old—have diminished culpability compared to adults by virtue of several distinct features of youth. Neuroscience shows that juvenile brains are underdeveloped, which makes juveniles more susceptible to environmental and peer influence, increases their propensity for risk-taking, and diminishes their ability to consider the consequences of their actions.<sup>22</sup> Juveniles have also had less opportunity to distance themselves from negative influences and criminogenic environments, making it unfair to hold them wholly responsible for actions that are influenced by those environmental factors.<sup>23</sup> Further, juveniles have enhanced capacity for rehabilitation; not only are their brains still developing, but their habits of thought and action have had less time to

---

<sup>20</sup> "I Have a Dream" speech by Rev. Martin Luther King, Jr. at Lincoln Memorial, Washington, D.C. (Aug. 28, 1963) ("With this faith we will be able to hew out of the mountain of despair a stone of hope.").

<sup>21</sup> See *Miller*, 567 U.S. at 471–72.

<sup>22</sup> See *id.* at n.5 (citing Brief for American Psychological Association et al. as *Amici Curiae*) ("It is increasingly clear that adolescent brains are not yet fully mature in regions and systems related to higher-order executive functions such as impulse control, planning ahead, and risk avoidance."); *Graham*, 560 U.S. at 68 (citing Brief for American Medical Association et al. 16–24; Brief for American Psychological Association et al. 22–27) ("[D]evelopments in psychology and brain science continue to show fundamental differences between juvenile and adult minds. For example, parts of the brain involved in behavior control continue to mature through late adolescence.").

<sup>23</sup> See, e.g., *Miller*, 567 U.S. at 471; *Roper v. Simmons*, 543 U.S. 551 (2005) (citing Steinberg & Scott, *Less Guilty by Reason of Adolescence: Developmental Immaturity, Diminished Responsibility, and the Juvenile Death Penalty*, 58 AM. PSYCHOLOGIST 1009, 1014 (2003)) ("[A]s legal minors, [juveniles] lack the freedom that adults have to extricate themselves from a criminogenic setting.").

become fixed.<sup>24</sup> These distinctive features of youth underlie the Court's reasoning in its recent juvenile sentencing cases, summarized below.

In *Roper v. Simmons*, the Court held that the Eighth Amendment prohibits imposing the death penalty on a person for a crime committed as a juvenile.<sup>25</sup> The Court reasoned that children's diminished culpability and increased impulsivity vitiated two of the legally accepted justifications for punishment—retribution and deterrence—and left no sufficient justification for the death penalty.<sup>26</sup> The Court next held in *Graham v. Florida* that the Eighth Amendment prohibits life imprisonment without the possibility of parole as a punishment for juveniles convicted of non-homicide offenses.<sup>27</sup> The Court reiterated that the rationales of retribution and deterrence were vitiated with respect to juveniles, and that if incarceration until death could be justified for juveniles, it had to be on the basis of some other rationale.<sup>28</sup> The Court considered the rationales of incapacitation and rehabilitation, and found that these rationales are similar in that their ability to justify punishment depends on whether an individual demonstrates change over time.<sup>29</sup> If a juvenile convicted of a non-homicide offense demonstrates maturity and rehabilitation as an adult, then incarceration can no longer be justified in the name of incapacitation or rehabilitation.<sup>30</sup> Continued incarceration lacks justification and becomes cruel and unusual punishment.<sup>31</sup> If a juvenile never demonstrates maturity and rehabilitation, however, the Eighth Amendment does not prohibit incarceration until natural death.<sup>32</sup> The Court therefore held that in sentencing juveniles convicted of a non-homicide offense, the Eighth Amendment requires that states provide a “meaningful opportunity to obtain release based on demonstrated maturity and rehabilitation.”<sup>33</sup> The Court was silent on whether life with the possibility of parole sentences met this constitutional requirement, but it was explicit that life sentences with eligibility for release through clemency did not meet the requirement.<sup>34</sup> Clemency could not provide a “meaningful opportunity to obtain release based on demon-

---

<sup>24</sup> See *Miller*, 567 U.S. at 472; *Roper*, 543 U.S. at 570 (citing Steinberg, 58 AM. PSYCHOLOGIST at 1014 (“For most teens, [risky or antisocial] behaviors are fleeting; they cease with maturity as individual identity becomes settled. Only a relatively small proportion of adolescents who experiment in risky or illegal activities develop entrenched patterns of problem behavior that persist into adulthood.”)).

<sup>25</sup> See *Roper v. Simmons*, 543 U.S. 551, 570–71 (2005).

<sup>26</sup> See *id.* at 571.

<sup>27</sup> See *Graham*, 560 U.S. at 75.

<sup>28</sup> See *id.* at 71–72.

<sup>29</sup> See *id.* at 72–73.

<sup>30</sup> See *id.*; accord Chad Flanders, *The Supreme Court and the Rehabilitative Ideal*, 49 GA. L. REV. 383, 414 (2015).

<sup>31</sup> See *Graham*, 560 U.S. at 75; accord *Miller*, 567 U.S. at 472–73; Martin Gardner, *Youthful Offenders and the Eighth Amendment Right to Rehabilitation: Limitations on the Punishment of Juveniles*, 83 TENN. L. REV. 455, 527 (2016).

<sup>32</sup> See *Graham*, 560 U.S. at 73–74.

<sup>33</sup> *Id.* at 75.

<sup>34</sup> See *id.* at 70 (citing *Solem v. Helm*, 463 U.S. 277, 301 (1983)).

strated maturity and rehabilitation” because the prospects of release through clemency were both too remote and ad hoc.<sup>35</sup>

In *Miller v. Alabama*, the Court considered juveniles convicted of homicide offenses and held that mandatory sentencing of juveniles to life without the possibility of parole violates the Eighth Amendment.<sup>36</sup> A court may sentence a juvenile convicted of a homicide offense to life without the possibility of parole on a discretionary basis after considering the mitigating factors of youth and finding that the juvenile shows “irreparable corruption.”<sup>37</sup> The Court was clear that the irreparably corrupt juvenile was a rare case, and that all other juveniles cannot be sentenced to life in prison unless the sentence includes a “meaningful opportunity to obtain release based on demonstrated maturity and rehabilitation.”<sup>38</sup>

Most recently, in *Montgomery*, the Court held that the rule it announced in *Miller* applied retroactively because it imposed a substantive limit on punishment—specifically, that life without the possibility of parole for a conviction as a juvenile is excessive under the Eighth Amendment “for all but ‘the rare juvenile offender whose crime reflects irreparable corruption.’”<sup>39</sup> As articulated in *Graham*, the penological justification for punishment collapses if, by demonstrating rehabilitation over time, juveniles show that they are not in fact irreparably corrupt. In *Montgomery*, however, the Court did not use the phrase “meaningful opportunity to obtain release based on demonstrated maturity and rehabilitation.”<sup>40</sup> It stated that “[a] State may remedy a *Miller* violation by permitting juvenile homicide offenders to be considered for parole, rather than by resentencing them.”<sup>41</sup> The Court explained that “[a]llowing those offenders to be considered for parole ensures that juveniles whose crimes reflected only transient immaturity—and who have since matured—will not be forced to serve a disproportionate sentence in violation of the Eighth Amendment.”<sup>42</sup>

The statement that allowing a person to be considered for release “ensures” release to those who have since matured is in deep tension with the Court’s decades-old jurisprudence on parole. In the 1979 case of *Greenholtz v. Inmates of the Nebraska Penal and Corrections Complex*,<sup>43</sup> the Court made clear that eligibility for release on parole does not ensure release: the “possibility of parole provides no more than a mere hope that the benefit

---

<sup>35</sup> *Graham*, 560 U.S. at 75; see also *Solem*, 463 U.S. at 301 (“A Governor may commute a sentence at any time for any reason without reference to any standards.”).

<sup>36</sup> See *Miller*, 567 U.S. at 479.

<sup>37</sup> *Id.* at 479–80.

<sup>38</sup> See *id.*

<sup>39</sup> See *Montgomery v. Louisiana*, 136 S. Ct. 718, 734 (2016) (applying *Teague* doctrine and holding that *Miller* applied retroactively because it was a substantive limit on punishment).

<sup>40</sup> *Graham*, 560 U.S. at 75.

<sup>41</sup> See *Montgomery*, 136 S. Ct. at 736 (citing WYO. STAT. ANN. § 6–10–301(c) (2013)).

<sup>42</sup> *Id.* (emphasis added).

<sup>43</sup> 442 U.S. 1 (1979).

will be obtained.”<sup>44</sup> States are free to operate systems in which parole boards make release decisions on a wholly discretionary basis without any stated standards and without any scrutiny under the Due Process Clause.<sup>45</sup> In such wholly discretionary systems, parole boards can grant or deny release in a way that is no less ad hoc or remote than clemency.<sup>46</sup>

Not all states, however, opt for such a wholly discretionary system.<sup>47</sup> If a state statute requires that parole “shall” be granted unless the parole board makes certain findings, then there is a presumption in favor of parole and the Due Process Clause applies.<sup>48</sup> The Court required only the minimal procedural protections of an in-person hearing at the initial consideration and a statement of reasons for the decision.<sup>49</sup> In this way, presumptive parole systems are distinct from clemency systems.<sup>50</sup>

Nevertheless, presumptive parole systems remain a far cry from providing legal assurance of release to those who demonstrate rehabilitation. Although presumptive systems direct parole boards to release parole candidates unless the parole board finds some factor or set of factors, the factors can be so broad and vague that they provide no functional restraint on discretion.<sup>51</sup> As the Court made clear in *Greenholtz*, the Nebraska parole board retained “very broad” discretion in finding factors that can defeat the presumption of parole in a given case, and that their inquiry is “necessarily subjective.”<sup>52</sup> Following *Greenholtz*, the Court held in *Board of Pardons v. Allen* that the Montana parole statute created a presumption of parole, but notably one of the factors that could defeat the presumption was whether parole was “in the best interest of society.”<sup>53</sup> As the dissent clearly stated, “[e]ven a cursory examination of the Montana statute reveals that the [parole board] is subject

---

<sup>44</sup> *Id.* at 11.

<sup>45</sup> *Id.* at 7.

<sup>46</sup> *See id.*; *Conn. Bd. of Pardons v. Dumschat*, 452 U.S. 458, 465 (1981) (holding that Connecticut administrative agency’s (The Board of Pardons and Board of Parole) petitions for release were “nothing more than an appeal for clemency” despite the agency’s operating system which released approximately seventy-five percent of prisoners serving life sentences, because the system was not governed by a statute with written standards or mandatory language).

<sup>47</sup> *See Greenholtz*, 442 U.S. at 11; *id.* at 29 n.9 (Marshall, J., dissenting) (“[P]arole statutes of 47 States establish particular standards, criteria or factors to be applied in parole release determinations.”); *see also* Steve Disharoon, *California’s Broken Parole System: Flawed Standards and Insufficient Oversight Threaten the Rights of Prisoners*, 44 U.S.F. L. REV. 177, 206–09 (2009) (listing state parole statutes that create a liberty interest in parole).

<sup>48</sup> *Greenholtz*, 442 U.S. at 12.

<sup>49</sup> *Id.* at 14–15.

<sup>50</sup> *See Conn. Bd. of Pardons*, 452 U.S. at 466; *Solem v. Helm*, 463 U.S. 227, 300 (1983).

<sup>51</sup> *Bd. of Pardons v. Allen*, 482 U.S. 369, 384 (1987) (O’Connor, J., dissenting).

<sup>52</sup> *Greenholtz*, 442 U.S. at 13 (“[T]he Parole Board’s decision as defined by Nebraska’s statute is necessarily subjective in part and predictive in part. Like most parole statutes, it vests very broad discretion in the Board. No ideal, error-free way to make parole-release decisions has been developed; the whole question has been and will continue to be the subject of experimentation involving analysis of psychological factors combined with fact evaluation guided by the practical experience of the actual parole decisionmakers in predicting future behavior.”)

<sup>53</sup> *Bd. of Pardons v. Allen*, 482 U.S. at 384 (O’Connor, J., dissenting).

to no real restraint.”<sup>54</sup> In such systems, when presented with two people who demonstrate the same amount of rehabilitation, the board may grant release to one and deny release to the other without any accountability for that decision under law.<sup>55</sup>

In the decade leading up to *Greenholtz*, research on a variety of different parole systems highlighted that parole boards often wielded their discretion in an arbitrary manner that was influenced, at best, by idiosyncratic judgment and, at worst, by racial bias.<sup>56</sup> In addition, some decisions relied on patently erroneous facts;<sup>57</sup> for example, a researcher reported having seen parole files in which “black men [are] listed as white and Harvard graduates [are] listed with borderline IQ’s.”<sup>58</sup> In addition to research showing that parole boards were operating in an ad hoc manner, more recent research has shown periods in which the prospect of release through a presumptive parole system has been more remote than the prospect of release through a clemency system. For example, no more than ten percent of people sentenced to life with the possibility of parole in California were granted parole in any year from 1981 to 2008 despite a presumption favoring parole, whereas seventy-five percent of people serving life without the possibility of parole were granted release through a wholly discretionary clemency system in Connecticut in 1981.<sup>59</sup> Under the Florida clemency system, the system at issue in *Graham*, five people received commutations from 1999 to 2002, and, during the same time period, only two people received release through California’s presumptive parole system.<sup>60</sup> It should come as no surprise that parole boards can, and sometimes do, grant release in as arbitrary and sparse a manner as clemency. The historic roots of parole-release systems lie in the

---

<sup>54</sup> *Id.*

<sup>55</sup> *Id.* at 384–85 (citing Susan N. Herman, *The New Liberty: The Procedural Due Process Rights of Prisoners and Others Under the Burger Court*, 59 N.Y.U. L. REV. 482, 550 (1984)) (“A parole statute providing that parole shall be granted unless the prospective parolee ‘poses a danger to society’ is not significantly different from one under which the parole board’s decisions are nonreviewable, since a court would be unlikely to reverse a parole board decision made under such a discretionary standard.”).

<sup>56</sup> See Conley, *supra* note 11.

<sup>57</sup> See *Greenholtz*, 442 U.S. at 33 n.15 (Marshall, J., dissenting), and cases cited.

<sup>58</sup> *Id.* (citing Hearings on H.R. 13118 et al. before Subcommittee No. 3 of the House Judiciary Committee, 92d Cong., 2d Sess., pt. VII-A, p. 451 (1972) (testimony of Dr. Willard Gaylin)).

<sup>59</sup> Compare Kathryn M. Young, Debbie A. Mukamal, & Thomas Favre-Bulle, *Predicting Parole Grants: An Analysis of Suitability Hearings for California’s Lifer Inmates*, 28 FED. SENT’G REP. 268, 271 (2016), with Conn. Bd. of Pardons v. Dumschat, 452 U.S. 458, 465 (1981).

<sup>60</sup> Compare *Commutation of Sentence Cases Granted 1980 through January 1, 2018*, FLA. COMM’N ON OFFENDER REVIEW, <https://www.fcor.state.fl.us/docs/clemency/CommutationofSentences.pdf>, archived at <https://perma.cc/KM47-B8PS>, with W. David Ball, *Heinous, Atrocious, and Cruel: Apprendi, Indeterminate Sentencing, and the Meaning of Punishment*, 109 COLUM. L. REV. 893, 918 (2009).

executive clemency power, and state governors still exercise considerable control over parole boards.<sup>61</sup>

Given the reality of the structure and practice of parole-release systems, federal district courts and state supreme courts have held that several parole systems fail to provide people convicted as juveniles with a “meaningful opportunity for release based on maturity and rehabilitation.”<sup>62</sup> The general response to these holdings has been to require additional procedural protections at parole hearings for those who were convicted of crimes as juveniles, and to explicitly require that parole boards consider an individual’s youth at the time of the crime.<sup>63</sup> Parole boards, however, have retained broad discretion to decide who leaves prison and who dies in prison, and courts have been reluctant to impose a meaningful check on the substantive quality of their decisions. This approach effectively trusts that the parole board will make good enough decisions so long as modest procedural protections are in place and they are required to give at least lip service to the features of youth. Research in other contexts of administrative law has shown, however that “procedural due process has failed miserably in its mission to rationalize frontline decisionmaking.”<sup>64</sup> It would be naïve to expect procedural protections to do better here, in the context of agencies with such a checkered history of arbitrary decision-making.

When an administrative agency is determining whether a person will ever step foot in society as an adult, we ought to do more than trust in procedural protections and the good judgment of a parole board to release those who demonstrate rehabilitation. The law should provide some substantive check on whether the parole board is getting it right, but this task is easier said than done. How can the law provide such a check? Rehabilitation is a markedly amorphous concept; neither statutes nor common law set forth an objective threshold of rehabilitation, such that if a juvenile were to demonstrate rehabilitation above that threshold, a decision to withhold release would violate the Eighth Amendment.<sup>65</sup> A central argument of this Article is that lawmakers should decide upon and set forth an objective threshold.<sup>66</sup> Such a decision is undoubtedly difficult, but deciding not to

---

<sup>61</sup> See, e.g., Sheldon L. Messinger et al., *The Foundations of Parole in California*, 19 LAW & SOC’Y REV. 69, 100–01 (1985) (discussing how in California, governors moved for the establishment of parole boards to relieve them of the work, and political risk, entailed in reviewing growing numbers of clemency petitions).

<sup>62</sup> See, e.g., *Hayden v. Keller*, 134 F. Supp. 3d 1000, 1009 (E.D.N.C. 2015).

<sup>63</sup> See Russell & Denholtz, *supra* note 3, at 1132–34.

<sup>64</sup> See Daniel E. Ho, *Does Peer Review Work? An Experiment of Experimentalism*, 69 STAN. L. REV. 1, 81 (2017) (citing Jerry L. Mashaw, *The Management Side of Due Process: Some Theoretical and Litigation Notes on the Assurance of Accuracy, Fairness, and Timeliness in the Adjudication of Social Welfare Claims*, 59 CORNELL L. REV. 772, 776–91 (1974)).

<sup>65</sup> See, e.g., Chad Flanders, *The Supreme Court and the Rehabilitative Ideal*, 49 GA. L. REV. 383, 386 (2015) (citing FRANCIS A. ALLEN, *THE DECLINE OF THE REHABILITATIVE IDEAL* 2 (1981) (discussing inconsistency in how the Supreme Court has interpreted “rehabilitation” and noting that it is “an inherently complex term, filled with ambiguities”)).

<sup>66</sup> See *infra* at Part VI.A.

decide and leaving the parole board to navigate the question on a discretionary case-by-case basis is potentially worse. Such a system can flout one of the most basic principles of justice under law: that like cases be treated alike. It gives the parole board freedom to adopt a sense of rehabilitation that is a moving target from one case to the next, and leaves open the door to arbitrary and discriminatory decision-making.

The study below brings into focus the actual consequences of operating a juvenile lifer parole system that lacks an objective standard for release. The study evaluates the extent to which a parole board is actually treating like cases alike on the basis of factors that should matter—factors that are related to rehabilitation—and the extent to which decisions appear to be influenced by characteristics that should not matter—such as race/ethnicity, poverty, and other factors that are orthogonal to rehabilitation or otherwise illegitimate. In other words, the study seeks to assess the extent to which parole candidates who demonstrate a comparable measure of rehabilitation receive consistent decisions from the parole board.

To be clear, this Article argues simply that *one* of the ways for a parole system to fail is for the system to render release decisions that are inconsistent with respect to levels of rehabilitation. The Article's focus on evaluating consistency in parole decisions with respect to rehabilitation should not be understood as implying that this consistency is sufficient for a parole system to provide the constitutionally required "meaningful opportunity to obtain release" to people serving life sentences for juvenile convictions. Far from it. Consistency is only one necessary, but not sufficient, condition in this context. For example, a parole system that denies release to all (or almost all) juvenile lifers who demonstrate rehabilitation renders consistent decisions, but does not provide a meaningful opportunity for release based on rehabilitation.<sup>67</sup> A system would also be constitutionally defective if the prison fails to provide adequate rehabilitation programs and if the parole board consistently denies parole to people who have not engaged in rehabilitation programs due to the lack of an adequate opportunity to do so.<sup>68</sup> As scholars and litigants have argued, juvenile lifers may rightfully be entitled access to rehabilitation programs that are needed to demonstrate rehabilitation and gain parole.<sup>69</sup>

---

<sup>67</sup> See generally МЕЙТА, *supra* note 5.

<sup>68</sup> The U.S. Supreme Court has noted the possibility of this problem, recognizing that "[i]n some prisons, moreover, the system itself becomes complicit in the lack of development . . . . [I]t is the policy in some prisons to withhold counseling, education, and rehabilitation programs." *Graham v. Florida*, 560 U.S. 48, 79 (2010).

<sup>69</sup> See, e.g., Russell & Denholtz, *supra* note 3, at 1146–47 (citing *Greiman v. Hodges*, 79 F. Supp. 3d 933, 938 (S.D. Iowa 2015)) (describing litigation in which juvenile serving life sentence sought an order requiring the Department of Corrections to permit him to enroll in the necessary prison programs to become parole eligible); Martin Gardner, *Youthful Offenders and the Eighth Amendment Right to Rehabilitation: Limitations on the Punishment of Juveniles*, 83 TENN. L. REV. 455, 486 (2016) ("Various commentators have viewed *Graham* as establishing, in some sense, a constitutional 'right to rehabilitation.'"); Cara H. Drinan, *Graham on the*

Additionally, the presence of a constitutionally adequate mechanism for release is not sufficient in order for a life with the possibility of release sentence to be just or constitutional. A system may be unjust or unconstitutional if it requires juvenile lifers to serve an excessive period of time before becoming eligible for parole<sup>70</sup> or before being released on parole.<sup>71</sup> Further, regardless of the quality of the release mechanism, a sentence that permits incarceration until death for a juvenile may be disproportionate to that individual's culpability and the circumstances of that particular case. For example, decades before the *Miller* decision, the California Supreme Court held that under the California Constitution, a sentence of life with the possibility of parole after seven years was disproportionate for a seventeen-year-old convicted of first-degree felony murder and robbery.<sup>72</sup> The constitutionality of imposing a life with the possibility of parole sentence upon any given juvenile in the first place is, however, beyond the scope of this Article.

## II. CASE STUDY OF CALIFORNIA PAROLE HEARINGS: DESCRIPTION

This case study of California parole hearings for individuals serving life with the possibility of parole sentences is organized into three parts. First, Part II summarizes the design of these parole hearings, as well as the sources and methods used to analyze how those hearings function in practice. The study then follows a two-step process for evaluating consistency in decisions with respect to rehabilitation.<sup>73</sup> The first step, undertaken in Part III, quantitatively analyzes a set of decisions and measures (i) the extent to which legitimate factors pertaining to rehabilitation explain differences in decisions, and (ii) the extent to which the remaining variability is attributable to illegitimate factors, such as race/ethnicity or poverty. The second step, undertaken in Part IV, qualitatively analyzes the underlying process by which decisions are made. Qualitative information obtained from the parole hearing transcripts is used to evaluate whether procedures are designed in a way that sufficiently abates the risk that like cases are not being treated alike.

---

*Ground*, 87 WASH. L. REV. 51, 78 (2012) (*Graham* demands that states provide a “meaningful opportunity to rehabilitate themselves prior to and in preparation for that parole hearing.”).

<sup>70</sup> See, e.g., Kallee Spooner & Michael S. Vaughn, *Sentencing Juvenile Homicide Offenders: A 50-State Survey*, 5 VA. J. CRIM. L. 130, 165–66 (2017) (“The American Academy of Child and Adolescent Psychiatry (AACAP) recommended juvenile offenders be eligible for parole after five years or reaching the age of twenty-five, and subsequent reviews should not exceed three years.”).

<sup>71</sup> See *In re Palmer*, 245 Cal. Rptr. 3d 708, 712, 722 (Cal. Ct. App. 2019) (sentence of life with possibility of parole imposed upon a juvenile for a kidnapping offense became constitutionally excessive after parole had been denied ten times and over thirty years of incarceration had been served).

<sup>72</sup> See *People v. Dillon*, 668 P.2d 697, 727 (Cal. 1983).

<sup>73</sup> This two-step approach mirrors the basic framework that the Supreme Court has relied upon in evaluating consistency in death penalty decisions. See *infra* Part V.A.

A. *Design of California Youth Offender Parole Hearings*

In 2013, the California Legislature enacted Senate Bill 260 [the Youth Offender Parole Law] which creates specialized “youth offender parole hearings” for people serving adult sentences longer than fifteen years on the basis of offenses committed before the age of eighteen.<sup>74</sup> Passed in the wake of *Miller v. Alabama*, the statute provides that these parole hearings shall provide a “meaningful opportunity to obtain release.”<sup>75</sup> People serving life with the possibility of parole sentences<sup>76</sup> as well as people serving determinate terms are potentially eligible<sup>77</sup> for youth offender parole hearings in their fifteenth, twentieth, or twenty-fifth year of incarceration.<sup>78</sup> For some, this means that the initial hearing will come several years or even several decades earlier than they had anticipated based on the initial sentence.

Due to an amendment to the Youth Offender Parole Statute in 2017, eligibility for youth offender parole hearings now extends to people serving life with parole and long determinate terms for crimes committed while at age twenty-five or under.<sup>79</sup> This study considers only those parole hearings for individuals serving life with the possibility of parole for crimes as juveniles, and where relevant, refers to this subset of youth offender parole hearings as “juvenile lifer parole hearings.”

Part V provides a full discussion of the decision-making process at juvenile lifer parole hearings, but a preliminary summary is provided here to orient the reader. Throughout the remainder of the Article, the term “parole

---

<sup>74</sup> 2013 Cal. Legis. Serv. Ch. 312 (West) (amending CAL. PENAL CODE §§ 3041 (West 2017), 3046 (West 2017), 4801 (West 2017), and enacting § 3051 (West 2017)).

<sup>75</sup> See *Miller v. Alabama*, 567 U.S. 460, 479 (2012); see also *Montgomery v. Louisiana*, 136 S. Ct. 718, 734 (2016); *People v. Gutierrez*, 324 P.3d 245, 270 (Cal. 2014).

<sup>76</sup> After the legislature enacted penal code section 3051 in 2013, it amended the statute in 2015 and 2017. Under the initial version of section 3051 that was in effect during the time period of the study (January 2014 to June 2015), juveniles sentenced to life without the possibility of parole were ineligible to receive parole hearings under section 3051. In 2017, however, the legislature amended section 3051 to extend eligibility to people who are serving life sentences without the possibility of parole for convictions under the age of eighteen. See 2017 Cal. Legis. Serv. Ch. 684 (West).

<sup>77</sup> A youth offender is ineligible under section 3051 if the controlling offense was a second- or third-strike offense or a one-strike sex offense. *But see* *People v. Edwards*, 246 Cal. Rptr. 3d 40 (2019) (striking exclusion of one-strike sex offenders in 3051 as a facial violation of the Equal Protection Clause). Further, a youth offender becomes disqualified under section 3051 if, after age twenty-five, he or she “commits an additional crime for which malice aforethought is a necessary element of the crime or for which the individual is sentenced to life in prison.” See CAL. PENAL CODE § 3051(h) (West 2017).

<sup>78</sup> See CAL. PENAL CODE § 3051 (a), (b) (West 2017). The date of the youth offender’s initial parole hearing depends on the “controlling offense,” defined as the offense or enhancement for which a sentencing court imposed the longest period of incarceration. See CAL. PENAL CODE § 3051(b) (West 2017). If the controlling offense is a determinate term of years, the youth offender is eligible for release during the fifteenth year of incarceration; if it is a life term less than twenty-five-to-life, the youth offender is eligible for release during the twentieth year; and if it is a life term of twenty-five-to-life or longer, the youth offender is eligible for release during the twenty-fifth year. *Id.*

<sup>79</sup> See 2015 Cal. Legis. Serv. Ch. 471 (West).

candidate” is used to refer to a prisoner who is serving a life sentence and has served enough time to be eligible for release at a parole hearing.

Aside from the following three provisions, youth offender parole hearings are conducted in the same fashion and are governed by the same statutes as parole hearings for adult offenders serving life sentences. First, at youth offender parole hearings, the Board is required to give “great weight to the diminished culpability of youth as compared to that of adults, the hallmark features of youth, and any subsequent growth and increased maturity of the prisoner in accordance with relevant case law.”<sup>80</sup> Second, if the Board relies on psychological evaluations and risk assessment instruments, these must also consider the diminished culpability of youth, the hallmark features of youth, and subsequent growth and maturity.<sup>81</sup> Third, the Youth Offender Parole Law also directs the Board to review and revise its existing regulations governing parole hearings to ensure that youth offender parole hearings provide a “meaningful opportunity to obtain release.”<sup>82</sup> As of May 2019, six years after the effective date of the Youth Offender Parole Law, regulations have been proposed by the Board but not yet finalized by the state Office of Administrative Law.<sup>83</sup>

### 1. Summary of Legal Standard and Procedural Rights

The California parole statute directs that the Board “shall normally” find parole candidates suitable for release on parole, which creates a rebuttable presumption in favor of parole.<sup>84</sup> The California Supreme Court has made clear that the ultimate question for the Board is whether the parole candidate poses “an unreasonable risk to public safety.”<sup>85</sup> If the Board finds that the candidate is not currently dangerous, parole must be granted.<sup>86</sup> State law provides the following procedural rights: the right to an in-person hearing,<sup>87</sup> to notice of that hearing, to review the prison file prior to the hearing,<sup>88</sup> to legal counsel,<sup>89</sup> to appointment of legal counsel if a parole candidate is indigent,<sup>90</sup> and to judicial review of the parole decision.<sup>91</sup>

<sup>80</sup> See CAL. PENAL CODE § 4801(c) (West 2017).

<sup>81</sup> See CAL. PENAL CODE § 3051(f) (West 2017). Section 4801 requires the Board to give “great weight” to the diminished culpability of youth, the hallmark features of youth, and subsequent growth and maturity, while Section 3051 requires any psychological evaluation or risk assessment that the Board relies upon to “consider” these same factors. Compare CAL. PENAL CODE § 4801(c) (West 2017) with CAL. PENAL CODE § 3051(f) (West 2017).

<sup>82</sup> See CAL. PENAL CODE § 3051(e) (West 2017).

<sup>83</sup> See CAL. CODE REGS., tit. 15, §§ 2440–46 (filed with Office of Administrative Law Dec. 24, 2018), [https://www.cdcr.ca.gov/BOPH/reg\\_revisions.html](https://www.cdcr.ca.gov/BOPH/reg_revisions.html), archived at <https://perma.cc/K52Z-EPTS>.

<sup>84</sup> See CAL. PENAL CODE § 3041 (a) (West 2017).

<sup>85</sup> See *In re Lawrence*, 190 P.3d 535, 560 (Cal. 2008).

<sup>86</sup> See *id.*; *In re Shaputis*, 190 P.3d 573, 585 (Cal. 2008).

<sup>87</sup> See CAL. PENAL CODE § 3041.5 (West 2017).

<sup>88</sup> See *id.*

<sup>89</sup> See CAL. PENAL CODE § 3041.7 (West 2017).

<sup>90</sup> See *id.*; CAL. CODE REGS., tit. 15, § 2256 (c).

Both the public and the parole candidate have a right to transcripts of hearings,<sup>92</sup> and those transcripts are required to include everything that is said in the hearing and a definitive statement of the reasons for the parole decision.<sup>93</sup> The transcripts are therefore a reliable source of both the underlying evidence the Board draws upon and the stated justification for its decisions.

## 2. *Record of Evidence*

The Board considers all relevant and reliable information available in determining parole suitability.<sup>94</sup> Information includes, but is not limited to: records from the underlying conviction; records of misconduct in prison; records of participation in education, vocation, and self-help groups in prison; any essays or self-help book reports that a parole candidate has written; transcripts from prior parole hearings; psychological evaluations (discussed further below); mental health records; written statements by the candidate; letters of support from family, friends and community members; written statements of commendation by prison staff (“laundry chromos”); documentation of parole plans; letters of opposition; and statements by the victim or the victim’s next-of-kin.<sup>95</sup> In some cases, the Board also considers information in the confidential portion of the prison file; this information is not disclosed to anyone at the hearing other than the hearing panel.<sup>96</sup>

In addition, the Board considers a “Comprehensive Risk Assessment” (CRA) report. Shortly before a prisoner’s initial parole hearing, a forensic psychologist employed by the Board conducts an interview with the prisoner and writes the CRA report.<sup>97</sup> The psychologist reviews the prison file, which includes, but is not limited to, all the information described above, except for letters of opposition, statements from victims or the victim’s next-of-kin, and parole plans if they have not yet been made.<sup>98</sup> The psychologist reports a risk

---

<sup>91</sup> See *In re Lawrence*, 190 P.3d 535 (Cal. 2008).

<sup>92</sup> See CAL. PENAL CODE § 3041.5 (West 2018); *In re Bode*, 88 Cal. Rptr. 2d 536, 539 (Cal. Ct. App. 1999).

<sup>93</sup> See *In re Prather*, 234 P.3d 541, 556 (Cal. Ct. App. 2010) (Moreno, J., concurring) (“[T]he Board [is] required to issue a *definitive* written statement of reasons. The Board cannot, after having its parole denial decision reversed, continue to deny parole based on matters that could have been but were not raised in the original hearing.”).

<sup>94</sup> See CAL. CODE REGS., tit. 15, § 2402 (2015).

<sup>95</sup> See CAL. PENAL CODE § 3043 (West 2016) (referring only to “statements by the victim or the victim’s next-of-kin”).

<sup>96</sup> See CAL. PENAL CODE § 3042 (West 2017); CAL. CODE REGS., tit. 15, § 2235 (2015).

<sup>97</sup> See CAL. CODE REGS., tit. 15, § 2240 (2015); *Forensic Assessment Division*, CAL. BD. OF PAROLE HEARINGS, <http://www.cdcr.ca.gov/BOPH/fad.html>, archived at <https://perma.cc/2GNW-ST2T>.

<sup>98</sup> Review of anonymous sample of Comprehensive Risk Assessments [CRAs] from youth offender parole hearings on file with author. See also Jeremy Isard, *Under the Cloak of Brain Science: Risk Assessments, Parole, and the Powerful Guise of Objectivity*, 105 CAL. L. REV. 1223, 1243 (2017).

assessment score of low risk, low-moderate risk, moderate risk, moderate-high risk, or high risk of future violence.<sup>99</sup>

### 3. *Proceedings at Parole Hearings*

The Board schedules a parole candidate's first parole hearing approximately one year before the candidate has served the minimum amount of time on the sentence.<sup>100</sup> In many cases, the hearing does not occur on the scheduled date due to waivers, continuances, and postponements.<sup>101</sup> Further, some candidates stipulate that they are not suitable for parole.<sup>102</sup>

Hearings are conducted in a room inside the prison where the parole candidate is incarcerated. Generally, one commissioner from the Board and one deputy commissioner (the "hearing panel") are present to conduct the hearing and make a finding about whether a person is suitable for release on parole.<sup>103</sup> The attorney representing the parole candidate is present,<sup>104</sup> and a district attorney from the office of the county of conviction may be present in person or via video conference.<sup>105</sup> Victims and victims' next-of-kin are notified about the hearing in advance; some do not participate, others contribute statements but do not attend, and some attend the hearings in-person.<sup>106</sup>

The vast majority of time at the hearing is devoted to questioning of the parole candidate by the hearing panel. Questions are highly specific to the facts of each case and generally fall into four categories: (i) the candidate's background prior to the conviction, (ii) the underlying offense, (iii) post-conviction activities, and (iv) parole plans. After the questioning period, the

---

<sup>99</sup> For discussion of risk assessments, see *supra* note 5 and accompanying text.

<sup>100</sup> See CAL. PENAL CODE § 3041 (West, 2018).

<sup>101</sup> See CAL. CODE REGS., tit. 15, § 2253 (2015).

<sup>102</sup> See *id.*; see also ROBERT WEISBERG, DEBBIE MUKAMAL & JORDAN SEGALL, STANFORD CRIMINAL JUSTICE CENTER, LIFE IN LIMBO: AN EXAMINATION OF PAROLE RELEASE FOR PRISONERS SERVING LIFE SENTENCES WITH THE POSSIBILITY OF PAROLE IN CALIFORNIA 11–12 (2011), <https://law.stanford.edu/publications/life-in-limbo-an-examination-of-parole-release-for-prisoners-serving-life-sentences-with-the-possibility-of-parole-in-california/>, archived at <https://perma.cc/3WUL-SGCB>. When a parole candidate waives a hearing, she decides to push the hearing date back one, two, three, four, or five years later. CAL. CODE REGS., tit. 15, § 2253. A parole attorney may advise a client to waive a hearing if, for example, there is a very recent disciplinary infraction and a strong probability that the Board will deny parole and impose a long setback period before the next hearing occurs. A candidate may enter up to three consecutive waivers, and must do so forty-five days prior to the hearing. CAL. CODE REGS., tit. 15, § 2253. A stipulation differs from a waiver in three ways: first, a candidate who stipulates agrees that she is unsuitable for release on parole, second, a candidate may stipulate at any time, and third, when a stipulation occurs, there will be a setback period of fifteen, ten, seven, five, or three years until the next hearing. *Id.* When a waiver is available and a candidate has received timely advice from counsel, it is unclear why a candidate would stipulate to a denial.

<sup>103</sup> See generally California Board of Parole Hearings, Parole Consideration Transcripts (2014-2015) (on file with author); see also CAL. PENAL CODE § 3041 (West 2018).

<sup>104</sup> See CAL. PENAL CODE § 3041.7 (West 2016).

<sup>105</sup> See generally California Board of Parole Hearings, Parole Consideration Transcripts (2014-2015) (on file with author).

<sup>106</sup> See CAL. PENAL CODE § 3043 (West 2016).

district attorney and the parole-candidate's attorney may ask clarifying questions and make closing statements. The parole candidate is then given the opportunity for a closing statement, followed by the victim or the victim's next of kin.<sup>107</sup>

#### 4. *Hearing Decisions*

At the end of the hearing, the Board deliberates and then announces its decision and provides an exhaustive list of reasons for the decision. If parole is denied, the panel determines when the next hearing will be scheduled.<sup>108</sup> The presumptive period of time until the next hearing is fifteen years; the Board may set the time for a shorter period of ten, seven, five, or three years if it finds by clear and convincing evidence that considerations of public safety do not require a longer period of time.<sup>109</sup>

#### 5. *Decision Review*

After the hearing, the case is referred to the Board's decision review unit, which may recommend a modification to the decision. If so, the case is reviewed by the full Board, which may rescind or overturn the decision. After this internal review by the Board, the decision is referred to the Governor who is authorized to review and reverse parole decisions in only murder cases.<sup>110</sup> In non-murder cases, the Governor is not authorized to reverse parole decisions, but is authorized to review them and request that the Board re-consider its decision. As discussed further *infra* in Part III.B, the Governor makes the decision without conducting a hearing, and is required to apply the same factors which the parole board must consider.

#### B. *Juvenile Lifer Parole Decisions in Practice: Description of Case Study*

This study considers all contested<sup>111</sup> parole hearings in California for all individuals sentenced to life with the possibility of parole for juvenile convictions from the date the Youth Offender Parole Law took effect (January 1, 2014) until June 5, 2015.<sup>112</sup> There were 465 such hearings.<sup>113</sup> Thirty-eight

---

<sup>107</sup> See generally California Board of Parole Hearings, Parole Consideration Transcripts (2014-2015) (on file with author); see also Kathryn M. Young, *Parole Hearings and Victims' Rights: Implementation, Ambiguity, and Reform*, 49 CONN. L. REV. 431, 445-46 (2016) (describing general hearing procedures with attention to role of victims).

<sup>108</sup> See CAL. PENAL CODE § 3041.5 (West 2016).

<sup>109</sup> *Id.*

<sup>110</sup> See CAL. CONST. art. V, § 8.

<sup>111</sup> This study does not consider hearings during this period that were postponed, waived, or in which the parole candidate stipulated to a denial of parole. Future research would be beneficial in this regard.

<sup>112</sup> Via public record requests, the author received transcripts from all youth offender parole hearings in this time period. This study does not analyze parole hearings for candidates

percent of candidates at these hearings were granted parole; notably, the grant-rate is significantly lower when the numbers include all youth offender parole proceedings, including stipulations.<sup>114</sup> For the purpose of the Article, the term “granted” is used when the hearing panel found a candidate suitable for parole at the parole hearing. Being granted parole does not mean the candidate was ultimately released. As discussed above, the hearing decision may be rescinded or overturned by the Board en banc, and, in murder cases, it may be reversed by the Governor. In this study-set, the full Board reversed an estimated 5% of decisions to grant parole,<sup>115</sup> and the Governor reversed 11% of decisions to grant parole.<sup>116</sup>

None of the candidates in this study set who were released have returned to prison, according to data received by the author from the California Department of Corrections and Rehabilitation (CDCR) in October 2016. According to data obtained by Human Rights Watch, that has remained true as of July 31, 2017.

---

who were convicted for crimes under the age of 18 and are serving a determinate term of years (“juvenile long-termers”) rather than an indeterminate sentence of life with the possibility of parole. Review of the full set of transcripts showed that the Board conducted 127 hearings for juvenile long-termers during the time period of the study. Analysis of juvenile long-termer parole hearings is reserved for future research. Long-termers are not further investigated here because they are differently situated compared to juvenile lifers. Long-termers are serving determinate sentences, meaning that they have a pre-determined release date, and they had no expectation that they would ever appear before the Board until the Youth Offender Parole Law was passed in 2013. *See* 2013 Cal. Legis. Serv. Ch. 312 (West) (amending CAL. PENAL CODE §§ 3041 (West 2017), 3046 (West 2017), 4801 (West 2017), and enacting § 3051 (West 2017)). Review of data in transcripts showed that the demographics of juvenile long-termers are substantially different than those of juvenile lifers. For example, during the time period of the study, 11% of juvenile long-termers were granted parole (as compared to 38% of juvenile lifers), 48% of youth offenders with determinate sentences were in maximum-security prisons (as compared to 23% of juvenile lifers), and 56% were Latinx (as compared to 32% of juvenile lifers). *See* Appendix, Table A.

<sup>113</sup> Excluded from the sample are one decision in which no decision was made at the hearing, and one decision for a parole candidate who was incarcerated in Ohio due to convictions in both Ohio and California.

<sup>114</sup> From January 1, 2014 through December 31, 2016, the Board conducted 2,250 youth offender parole hearings. *See* Defendant’s January 2017 Status Report filed in *Coleman v. Brown* and *Plata v. Brown*, on file with author. The Board granted parole at 26% of these hearings (585 hearings), and denied parole at the remaining 74% of the hearings (1,665 hearings, 280 of these were cases in which the youth offender stipulated to the denial). *Id.*

<sup>115</sup> Calculation based on review of the Board’s en banc decisions in 2014 and 2015. *See En Banc Decisions*, STATE OF CALIFORNIA, BOARD OF PAROLE HEARINGS, <https://www.cdcr.ca.gov/BOPH/enbanc.html>, archived at <https://perma.cc/MTP7-L8QP>.

<sup>116</sup> Calculation based on review of Governor’s decisions to reverse parole decisions in 2014 and 2015. *See* Governor Edmund G. Brown Jr., “Executive Report on Parole Review Decisions; Decisions for the Period January 1, 2014 through December 31, 2014,” [https://www.ca.gov/archive/gov39/wp-content/uploads/2017/09/2014\\_Executive\\_Report\\_on\\_Parole\\_Review\\_Decisions.pdf](https://www.ca.gov/archive/gov39/wp-content/uploads/2017/09/2014_Executive_Report_on_Parole_Review_Decisions.pdf), archived at <https://perma.cc/K4MU-2QXU>; Governor Edmund G. Brown Jr., “Executive Report on Parole Review Decisions; Decisions for the Period January 1, 2015 through December 31, 2015,” [https://www.ca.gov/archive/gov39/wp-content/uploads/2017/09/2015\\_Executive\\_Report\\_on\\_Parole\\_Review\\_Decisions.pdf](https://www.ca.gov/archive/gov39/wp-content/uploads/2017/09/2015_Executive_Report_on_Parole_Review_Decisions.pdf), archived at <https://perma.cc/4TJU-LMQ2>.

### 1. Sources and Methods

The primary sources of information about these hearings are hearing transcripts produced by the Board, which are public records. Transcripts from these hearings averaged 116 pages; the shortest was less than fifty pages (a seventy-five-minute hearing) and the longest exceeded 300 pages (a hearing lasting over seven hours). The author requested data from CDCR that was not consistently included in the transcripts: the race/ethnicity of each parole candidate, the level of security at which each candidate was incarcerated, and whether those released from prison subsequently returned.

The author also drew on personal experience providing legal assistance and in-prison education to juvenile lifers in California from 2014 to 2017. During this period, the author represented a juvenile lifer at a parole hearing and the subsequent judicial review of that hearing. Knowledge about the parole process was further informed by conversations and correspondence with California attorneys who regularly represent candidates at lifer parole hearings. The author also participated in workshops at five different state prisons to educate prisoners about the youth offender parole process. Last, the author regularly facilitated a group of twenty-five men serving life sentences for juvenile convictions who wanted to support one another in rehabilitation and prepare for parole hearings.

As described further below, the general method of the quantitative portion of the study was to obtain data about variables that were hypothesized to impact the parole decision, and to apply statistical techniques, primarily regression analysis,<sup>117</sup> to assess the extent to which parole decisions were consistent with a measure of rehabilitation.

The focus of the inquiry is on assessing consistency in decision-making, which stands in contrast to other research on parole decision-making that

---

<sup>117</sup> Regression analysis is a statistical technique used to understand the relationship between independent variables which are “thought to produce or be associated with changes in [a] dependent variable.” For example, suppose one is trying to determine how a house’s price is impacted by various factors such as the number of rooms in the house and the number of windows. In such an example, the price of the house would be the dependent variable and the number of rooms and the number of windows would be independent variables. A regression analysis allows the relationship between these variables to be expressed as an equation of the following form: price of house = (the effect-on-price due to the number of rooms) \* (the number of rooms) + (the effect-on-price due to the number of windows) \* (the number of windows) + a constant term. The regression analysis calculates the respective values for the effect-on-price for each of the variables. The resulting equation is not a perfect predictor of price, but it is the “best-fit” in statistical terms based on the number of rooms and number of windows. In most of the regression analyses done in this paper, the parole decision is the dependent variable, and the various variables that are hypothesized to influence the parole decision are independent variables. Because the dependent variable here is not a continuous measure but is instead a binary measure—that is, either granted or denied parole—the regression analysis is termed a logistic regression analysis. For a more detailed explanation of regression analysis, see Daniel L. Rubinfeld, *Reference Guide on Multiple Regression*, in FEDERAL JUDICIAL CENTER, REFERENCE MANUAL ON SCIENTIFIC EVIDENCE 303–57 (3d ed. 2011); see also *ATA Airlines, Inc. v. Fed. Express Corp.*, 665 F.3d 882, 889 (7th Cir. 2011) (providing explanation of regression analysis in “plain English”).

focuses on recidivism. The basic normative assumption behind this approach is that a decision to grant parole is “correct” if the person who is released successfully completes parole and it is “incorrect” if the person violates parole and/or commits a new crime. The approach is to essentially evaluate parole board decisions in the same way one might assess the skill of a fortune-teller or a stockbroker; how frequently does the prediction of the future match what actually happens? This method is problematic for several reasons, not least of which is that it scrutinizes decisions to grant parole but essentially insulates from scrutiny decisions to deny parole. There is no way to say a decision to deny parole is “correct” or “incorrect” because we do not know whether people who were denied parole would have actually succeeded if they were released. This asymmetry means that a foolproof way to get only “correct” decisions would be to release zero people on parole, and thereby guarantee zero recidivism among parolees.

This method is furthermore ill-suited to the present context of juvenile lifers because, for starters, none of the people released in this sample have returned to prison. Most importantly, people serving life sentences for juvenile convictions are entitled to release if they demonstrate rehabilitation—and demonstrated rehabilitation is distinct from, although related to, a prediction about what a person will do upon release from prison. A person who clearly demonstrates rehabilitation—a “model inmate” who shows improvements in every way reasonably attainable within prison—may nevertheless commit a crime when released from prison. However, the commission of that crime would not change the conclusion that the person had demonstrated rehabilitation during their time in prison. One person may demonstrate more improvement than anyone else in a state’s prison system, and return to an environment in which they commit another crime. Another person may have demonstrated very little rehabilitation in prison, but return to an environment in which they never commit crime. The commission of the crime may provide reason to improve the conditions of release into the community, or perhaps the quality of programs in the prison, but it does not justify concluding that the judgment of rehabilitation at the time of the release decision was incorrect.

## 2. *Coding Process*

The author and nine research assistants coded transcripts according to a detailed coding manual, answering forty-two questions for each transcript.<sup>118</sup> To ensure reliability across coders, research assistants periodically coded the same transcripts.<sup>119</sup> To verify accuracy of coding, a second group of research

---

<sup>118</sup> The coding manual drew heavily upon the manual used by the Stanford Criminal Justice Center’s study of lifer parole hearings. See Weisburg, et al., *supra* note 102; see also Young et al., *supra* note 59.

<sup>119</sup> The author checked samples of coding and met with researchers regularly to discuss and refine coding. A standard measure of reliability, the Cohen’s Kappa, was used to determine

assistants coded the same set of parole hearing transcripts for seventeen variables hypothesized to be significant after regression analysis on the initial data set.<sup>120</sup> The author checked any discrepancies found between the data entered in the first- and second-rounds of coding, and made corrections based on additional review of the transcripts.

### 3. Variable Selection

Two types of variables were collected: outcome measures and factors hypothesized to influence whether parole is granted or denied. The outcome measures included whether parole was denied, and if so, the length of the setback period (the number of years until the next parole hearing) and the types of reasons the Board used to justify the decision. Hypotheses about what influenced decisions to grant or deny parole were drawn from three sources: considerations identified by law (including those listed in the Board's regulations,<sup>121</sup> as well as those given great weight under the Youth Offender Parole Statute<sup>122</sup>), factors that attorneys hypothesize influence parole decisions, and factors that have been identified as significant to parole decisions in prior studies.<sup>123</sup> Appendix Table A details how these variables were defined and measured.

---

reliability across coders. *See generally* Mary L. McHugh, *Interrater Reliability: The Kappa Statistic*, 22 *BIOCHEMIA MEDICA* 3 (2012).

<sup>120</sup> The variables that were double-coded include: *Prog\_gen*, *Prog\_sub*, *Prog\_gang*, *Edu*, *Clean\_time*, *Total\_disc*, *Hx\_mental\_ill*, *Initial*, *Time\_over*, *Initial*, *Da\_opp*, *Vic\_opp*, *Youth\_drugal*, *Youth\_priorv*, *Crime\_max*, *Crime\_mur1*, *Crime\_sex*, and *CRA*. *See* Appendix, Table A.

<sup>121</sup> *See* CAL. CODE REGS., tit. 15, § 2402 (2015).

<sup>122</sup> *See* CAL. PENAL CODE § 4801(c) (West 2018). The hallmark features of youth include mitigating factors regarding youth that are identified in state and federal case law. Variables that are indicators of the presence of such factors include (a) childhood trauma or acute disadvantage (other than victim of sexual abuse) (*Youth\_unstable*), (b) childhood sexual abuse (*Youth\_sex*), (c) peer pressure or other influence involved in the commission of the crime (*Crime\_peer*), (d) age at the time of the crime (*Agecrime*), (e) drug or alcohol abuse as a youth (*Youth\_drugal*), (f) violent behavior as a youth prior to the crime (*Youth\_priorv*), and (g) participation in a street gang as a youth (*Youth\_gang*).

<sup>123</sup> The most relevant studies are those done on parole hearings for candidates serving life sentences with the possibility of parole in California. *See* Caldwell, *supra* note 15 (finding that the following variables increase the likelihood of being granted parole: lower score on forensic risk assessment, fewer total disciplinary infractions, more time since last disciplinary infraction, and younger age at time of crime); Young et al., *supra* note 59 (finding that the following variables increase the likelihood of being granted parole: younger age at the time of the crime, older age at hearing, only "low" risk scores, fewer disciplinary infractions, confirmed job offer, participation in substance abuse program, and violent prior criminal history; and that the following variables decrease the likelihood of being granted parole: failing to answer a question about the Twelve Steps of Alcoholics/Narcotics Anonymous, opposition from the district attorney, and attempting to lie or evade law enforcement officers after the crime); David R. Friedman & Jackie M. Robinson, *Rebutting the Presumption: An Empirical Analysis of Parole Deferrals Under Marsy's Law*, 66 *STAN. L. REV.* 173 (2014); *see also* Joel M. Caplan, *What Factors Affect Parole: A Review of Empirical Research*, 71 *FED. PROBATION* 16 (2007) (reviewing literature to date and finding that institutional behavior, crime severity, criminal history, and mental illness are among the most influential factors affecting parole release

Absent from Appendix Table A are several variables that are hypothesized to influence whether parole is granted, but which were not used in regression analysis for a variety of reasons. First, several variables could not be used because they applied to less than 5% of the population. These included gender, use of a translator at the hearing, reliance on an expert report from a private psychologist, and assertion of factual innocence for the crime.

Second, “insight,” the lack of which may be the basis for denial of parole, was not included due to the absence of a reliable operationalized measure. Insight is a term the Board uses to refer to a candidate’s acceptance of responsibility for the crime and understanding of the factors that causally contributed to the crime.<sup>124</sup> Despite repeated discussions among coders, an evaluation of insight could not be reliably coded. For similar reasons, the degree of remorse was not used as a variable in the regression. Evaluations of insight and remorse are markedly subjective; if they track measurable features that can be reliably identified by a diverse group of people, these features were undiscoverable by the author. It would be easy to identify cases in which the candidate was wholly devoid of insight or remorse—cases in which, for example, a candidate stated that he continued to stand by what he did or that the victim deserved to die. Such cases were extremely rare. The difficulty instead lay in demarcating reliable gradations along a spectrum of more or less insight or remorse. Coding of insight and remorse were further complicated by a high degree of variability in the questions that the Board asked to assess insight.<sup>125</sup>

Third, variables pertaining to the underlying crime are somewhat limited. Three variables related to the crime are used: whether the underlying conviction included a first-degree murder, whether the underlying conviction included a sexual offense, and whether the offense was committed with the influence of peers or adults. The number of victims within a conviction-type was considered, but there was insufficient variability in the sample to include this in the analysis.<sup>126</sup> Subjective measures of heinousness listed in the Board’s regulations, such as the extent to which the victim suffered or the triviality of the motive, were not included due to difficulty in reliable coding. Notably, a prior study on lifer parole in California found that relative degrees of heinousness of the crime did not have a statistically significant impact on the parole decision.<sup>127</sup>

---

decisions; education, gender, and age may also have a significant influence on parole release dispositions).

<sup>124</sup> See *In re Shaputis*, 190 P.3d 573, 581 (Cal. 2008).

<sup>125</sup> An indirect measure for insight might be the *Psych\_resid* variable, which is the forensic psychologist’s judgment of a person holding all other case factors constant. This variable is not a direct measure of insight, however, because the psychologist’s ultimate question is a prediction about future conduct. Further research would be beneficial to test this hypothesis.

<sup>126</sup> Fewer than 5% of candidates were convicted of more than one count of first-degree murder.

<sup>127</sup> See Young et al., *supra* note 59. A significant difference in the method of this Article as compared to the prior study of California parole hearings is that all variables used in the regression analysis in this Article were independently coded by two different individuals.

A fourth variable which is not included in regression analysis, but which was hypothesized to influence the parole decision, is whether a candidate is validated by the prison as an active member or associate of a prison gang. The hypothesis—strongly supported by both attorney opinions and the governing legal standard<sup>128</sup>—is that active gang validation essentially guarantees denial of parole. Indeed, active gang validation was the only dichotomous variable that was a perfect predictor of a denial of parole. Rather than including this unique variable as one alongside many, the ten candidates validated as active members of a prison gang were removed from the sample.

Confidential information was a fifth variable that was hypothesized to influence parole decisions but was not directly used as a variable in regression analysis. The Board is required to state when they rely on confidential information to deny parole, and they did so in twenty-nine of the 465 hearings (6%). There is no way to know the scope of the variability in the content, type, or materiality of this evidence. Information could range, for example, from credible evidence that the candidate perpetrated a recent serious assault, to a notation that the candidate was the victim of an assault, to hearsay that a suspected gang member mentioned the person's name decades ago. Given the absence of any meaningful indication of similarity between the "confidential information" used from one case to the next, it does not make sense to treat "confidential information" as an independent variable in a regression analysis. Instead, the twenty-nine cases where parole was denied on the basis of confidential information were removed from the sample.

After removal of validated, active gang members and those denied on the basis of confidential information, the study sample includes parole hearings for 426 juvenile lifer parole candidates.<sup>129</sup>

#### 4. *Descriptive Statistics*

Appendix Table A provides descriptive statistics from the 426 hearings about all independent variables that were hypothesized to influence the decision to grant or deny parole (aside from those described above). For each variable, reported information includes the frequency at which the variable is observed, the rates at which parole is granted, and whether there are statistically significant differences in the frequency at which the Board granted parole.<sup>130</sup>

---

<sup>128</sup> Parole is denied if a candidate is currently dangerous, and when the prison validates a person as an active gang member, it is labeling these individuals as currently dangerous. *See* CAL. CODE REGS., tit. 15, § 3378.2 (2015); *In re Efstathiou*, 133 Cal. Rptr. 3d 34, 37–38 (Cal. Ct. App. 2011).

<sup>129</sup> Latinx candidates were significantly over-represented relative to other racial/ethnic groups among the hearings removed from the sample due to denial based on gang validation or confidential information. *See infra* Table 1.

<sup>130</sup> None of the variables in Table A are collinear aside from current age (discussed among interaction effects).

### III. CASE STUDY OF CALIFORNIA PAROLE HEARINGS: EVALUATION OF OUTCOMES

This Part aims to assess the consistency of decisions with respect to rehabilitation. That is, to what extent do candidates who demonstrate comparable levels of rehabilitation get the same decision outcomes? The first step is to construct an operationalized measure of rehabilitation. To do so, the study adopts the following basic, working definition of rehabilitation: substantial, pro-social,<sup>131</sup> and reasonably attainable<sup>132</sup> improvement in behavior after the conviction.<sup>133</sup> With this working definition, variables can be categorized into those which are legitimate in assessing demonstrated rehabilitation, and those which are illegitimate. Variables that are legitimate are those that measure post-conviction behavior over which parole candidates have reasonable control—for example, participation in programs that are offered at the prison and a pattern of compliance with prison rules. Factors that are clearly illegitimate include race/ethnicity and class, as well as factors that are orthogonal to parole candidates' behavior in prison—such as whether the victim attends the parole hearing. Part III.A assesses the extent to which variables that are legitimate measures of rehabilitation can explain the decision outcomes. Part III.B then considers the extent to which illegitimate variables can explain the decision outcomes when the legitimate variables are held constant. Part III.C turns to create a model that best accounts for all factors that are hypothesized to influence the parole decision, and assesses the comparative weight that legitimate and illegitimate variables play in that model.

#### A. *Distribution of Decisions Along an Index of “Demonstrated Rehabilitation”*

The first technique aims to measure the extent to which parole decisions are explained by factors that are legitimate measures of rehabilitation.

---

<sup>131</sup> Not every form of improvement in behavior is considered as rehabilitation; improvement must be directed toward living a law-abiding life in the community outside of prison (thus, improving job skills would count as demonstrated rehabilitation but improving knife-fighting skills would not).

<sup>132</sup> Rehabilitation is generally considered as the type of improvement that should be achievable if a person puts forth sincere effort and engagement toward pro-social development. For example, if a fifty-year-old incarcerated person has taken every education class that the prison offers and is unable to pass a high-school equivalency exam due to a cognitive deficit, it would be unreasonable to say that this person has failed to demonstrate rehabilitation.

<sup>133</sup> This definition roughly accords with the definition of rehabilitation as a kind of training designed to help a person become a more productive member of society. *See generally* Flanders, *supra* note 65, at 396 (The goal of rehabilitation is to “become more fit to reenter society as a productive and contributing member. [A rehabilitated person] would be prepared to find a job upon release, or be able to enter and maintain a stable relationship, or simply be more equipped to cope with day-to-day life.”).

Based on the working definition of rehabilitation above, the factors considered at the parole hearing that most directly measure rehabilitation are those that assess post-conviction behavior over which parole candidates have reasonable control. These variables include the number of years since the last write-up for misconduct (*Clean\_time*), the extent of participation in self-help programs (*Prog\_all*),<sup>134</sup> and the degree of education attained in custody (*Edu*).

Other factors provide important context for assessing these factors (such as mental health history) and for establishing a baseline for improvement (such as marked instability in childhood), but they are not direct measures of post-conviction behavior. The risk score that is calculated by a forensic psychologist in a Comprehensive Risk Assessment (CRA) is also not a direct measure of post-conviction behavior. As discussed further, *infra* Part IV.A, the score is derived from a risk assessment tool that purports to predict the likelihood of future violent conduct based on factors correlated with violence in studies that were conducted primarily on mental health patients and adult offenders.<sup>135</sup> Many of the factors are static, meaning that they cannot change over time and a parole candidate has no control over them once in prison. For example, factors include whether a person engaged in violent or other antisocial behavior under the age of twelve, whether a person engaged in violent or antisocial behavior from ages thirteen to seventeen, whether the person was a victim of crime or trauma, and whether the person had adverse experiences as a child.<sup>136</sup> Given reliance on these factors, an individual with a stronger record of improvement in behavior since the time of the crime may score no better, or perhaps worse, than an individual with a weaker record of post-conviction behavior.

Programming, education, and clean time have been selected as legitimate measures because they are the best available measures for post-conviction behavior over which candidates have reasonable control—not because they are perfect measures. With respect to participation in programs, transcripts documented many instances in which parole candidates actively sought to participate in programs but could not do so for reasons outside of

---

<sup>134</sup> Instead of using *proggen*, which does not include gang or substance abuse programs, I created a variable (*prog\_all*) which does count participation in these programs toward the cumulative programming score.

<sup>135</sup> The risk assessment tool used in California youth offender parole hearings is called the Historical-Clinical-Risk Management-20, Version 3 (HCR-20-V3). See juvenile lifer CRA reports (on file with author); see also Kevin S. Douglas, et al., *Historical-Clinical-Risk Management-20, Version 3 (HCR-20V3): Development and Overview*, 13 INT'L JOURNAL OF FORENSIC MENTAL HEALTH 93, 93–108 (2014); Kevin S. Douglas, et al., *HCR-20 Violence Risk Assessment Scheme: Overview and Annotated Bibliography* (Nov. 24, 2008), <http://kdouglas.files.wordpress.com/2006/04/annotate10-24nov2008.pdf>, archived at <https://perma.cc/XE8P-EVQA>; see also Isard, *supra* note 98, at 1243.

<sup>136</sup> See Douglas et al., *supra* note 135, at 98; see also HCR-20-V3 Rating Sheet, Mental Health Law and Policy Institute, Simon Fraser University (2013), <http://hcr-20.com/materials/>, archived at <https://perma.cc/C3LG-AFFP>.

their control,<sup>137</sup> including unavailability of programs, ineligibility for programs, long waiting lists, or frequent transfers from one prison to another.<sup>138</sup> For this reason, a measure of participation in general programming is used rather than a measure of participation in any *particular* program. It is unreasonable to assume that every prisoner had access to specific programs like vocational training or cognitive therapy, but it is reasonable to assume that every prisoner had access to at least some programs over the course of many years. Education is included here because it is the one program that appeared to be available to all prisoners at some point during the course of their sentence. Notably, however, earning a GED or higher education is not reasonably attainable for every parole candidate; several transcripts indicated that a person participated in education courses and took the GED test multiple times but could not pass, perhaps due to cognitive deficits or learning disabilities. With respect to clean time, this variable is used rather than the total number of disciplinary write-ups in order to measure improvement in conduct as an adult; many juvenile lifers incur a large number of their total write-ups upon initial entry into adult prison as teenagers and emerging young adults. While clean time is a better measure of rehabilitation than total write-ups, it is also imperfect because write-ups are not fully within the control of a parole candidate; write-ups are sometimes a product of being in the wrong place at the wrong time, rather than purposefully violating the rules.<sup>139</sup> Race has also been hypothesized as a factor that can make a candidate more likely to receive disciplinary write-ups.<sup>140</sup>

Despite these caveats, the variables of clean time, general programming, and education are the best available objective measures of behavior that are reasonably within the control of the parole candidate. Using these three factors, an index measuring “demonstrated rehabilitation” was constructed to assess the extent to which parole decisions were explained by

---

<sup>137</sup> The difficulty in accessing programs has also been observed in other states. *See* ASHLEY NELLIS, THE SENTENCING PROJECT, THE LIVES OF JUVENILE LIFERS: FINDINGS FROM A NATIONAL SURVEY 4, 24 (2012) (62% of juvenile lifers are not engaged in programming in prison; of those, 82% wanted to take a program but could not access it).

<sup>138</sup> Statements in transcripts indicate that this phenomenon may be more likely among parole candidates incarcerated in a Level IV setting or in solitary confinement (over 95% of the sample was in solitary confinement at some point during their incarceration; several for multiple decades). Tests of statistical significance show that candidates incarcerated on Level IV prison yards are more likely to have lower rates of self-help programming than other candidates.

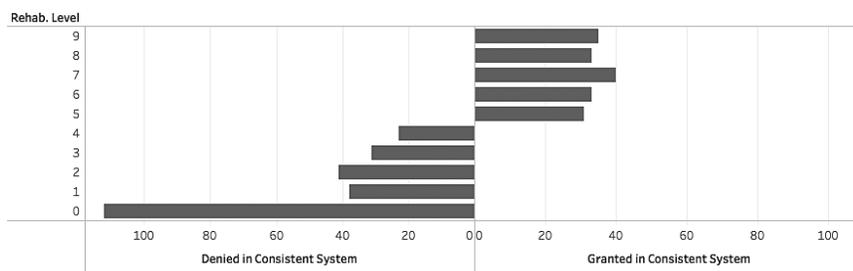
<sup>139</sup> For example, several transcripts discussed instances in which a person was attacked by another person in prison and responded with self-defense. *See generally* California Board of Parole Hearings, Parole Consideration Transcripts (2014-2015) (on file with author).

<sup>140</sup> *See, e.g.,* Andrea C. Armstrong, *Race, Prison Discipline, and the Law*, 5 U.C. IRVINE L. REV. 759, 761 (2015); Eric D. Poole & Robert M. Regoli, *Race, Institutional Rule Breaking, and Disciplinary Response: A Study of Discretionary Decision Making in Prison*, 14 LAW & SOC'Y REV. 931, 933 (1980); Heinz et al., *supra* note 11, at 1, 17 (“The finding that black[ ] [candidates] are more likely to have rule infractions on their records may be as much a result of selective perception or discrimination on the part of prison officials as it is of actual differences in behavior.”).

these factors. The index was constructed by running a logistic regression with the hearing decision as the dependent variable and these three variables as the independent variables.<sup>141</sup> Next, for each candidate, the likelihood of being granted parole was calculated based on these three variables. The likelihood was multiplied by ten, and this became the “rehabilitation level.” The levels ranged from 0.1 (for a candidate with minimal programming, no GED, and a write-up in the last three years) to 9.6 (for a candidate with maximum programming, a college degree, and no write-ups in over eleven years).

The graphs below visually depict the relationship between the rehabilitation level and the result of the parole hearing.<sup>142</sup> First, Figure 1 depicts a hypothetical system in which the decision to grant parole is perfectly responsive to the rehabilitation level. Those with high rehabilitation levels are granted parole, those with low rehabilitation levels are denied, and there are no instances in which candidates of the same rehabilitation level are both granted and denied. In contrast, Figure 2 depicts another hypothetical system which is entirely irresponsive to rehabilitation. To create Figure 2, a random number generator was used to determine which candidates were granted or denied. There is no correlation between the rehabilitation level and the decision to grant or deny parole, and there are many instances in which those with the same rehabilitation level are given opposite decisions. Figure 3 depicts the actual hearing results in the sample of 426 hearings considered in this study.

FIGURE 1: HYPOTHETICAL “PERFECT” DISTRIBUTION OF DECISIONS ALONG REHABILITATION INDEX



<sup>141</sup> See Appendix, Table B.

<sup>142</sup> As discussed *supra* at Part V.A, the technique used here mirrors a technique that John Baldus used to assess the extent to which death penalty decisions were consistent with respect to an index of culpability. See DAVID BALDUS, GEORGE WOODWORK & CHARLES PULASKI, EQUAL JUSTICE AND THE DEATH PENALTY: A LEGAL AND EMPIRICAL ANALYSIS 80–83 (1990).

FIGURE 2: HYPOTHETICAL RANDOM DISTRIBUTION OF DECISIONS ALONG REHABILITATION INDEX

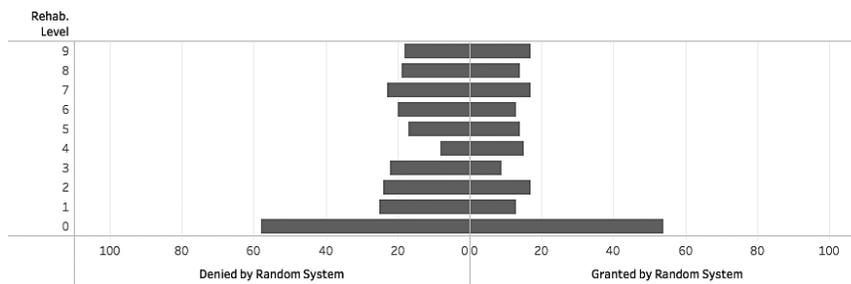
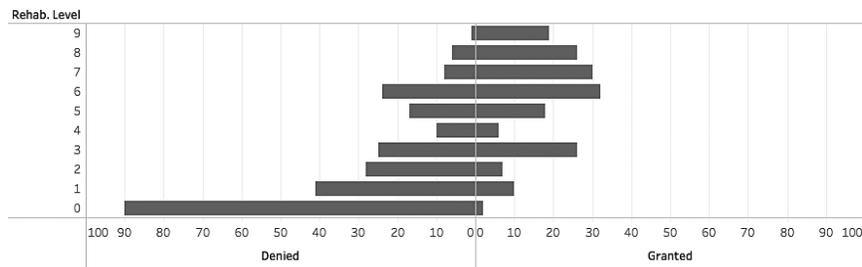


FIGURE 3: ACTUAL DISTRIBUTION OF DECISIONS ALONG REHABILITATION INDEX



As the figures show, the actual parole system falls somewhere between a system that is irresponsive to rehabilitation and one that is highly responsive to rehabilitation. Parole candidates with rehabilitation levels at either end of the spectrum can expect fairly consistent results: 95% (nineteen of twenty) of candidates at the highest level of rehabilitation (level nine) were granted parole, and 98% (ninety of ninety-two) of candidates with the lowest rehabilitation level (level zero) were denied parole. Among candidates at mid-range rehabilitation levels, however, decisions appear no more predictable than a coin-flip. Of those at rehabilitation level three, twenty-six were granted and twenty-five were denied; of those at level four, six were granted and ten denied; at level five, eighteen were granted and seventeen were denied; and at level six, thirty-two were granted and twenty-four were denied.

One way to quantify the degree of variability in decisions along the rehabilitation index is to consider the proportion of denied candidates who have rehabilitation levels that are comparable to “normal” grantees. There are a number of ways to define statistical normalcy here, but suppose for these purposes that “normal” grantees are defined as a subset of grantees that excludes those with irregularly high rehabilitation levels (levels in the top 5%, which is 9.43) and those with irregularly low rehabilitation levels

(levels in the bottom 5%, which is 1.64). If a system were highly responsive to rehabilitation levels, very few candidates who had a rehabilitation level greater than or equal to that of normal grantees would be denied. In the actual juvenile lifer parole system depicted in Figure 3, about half of the denials—48% (119 out of 250)—have rehabilitation levels that fall within the range of normal grantees. In other words, about half the candidates who were denied were roughly comparable with respect to the rehabilitation measure as candidates who were granted.

The distribution of decisions in Figure 3 is skewed by the large concentration of candidates who have a rehabilitation level less than one (92 of 426 candidates). It is more informative, therefore, to consider the set of hearings for those with a rehabilitation level of one or more. There were 334 candidates within this set; 174 were granted and 160 candidates were denied. Of the 160 who were denied, 74% have a rehabilitation level that is within the range of normal grantees. These data indicate that once a candidate has demonstrated enough rehabilitation to have a “fighting chance,” the decision distribution more closely approximates a system that is irresponsive to rehabilitation than it does a system which is highly responsive with respect to rehabilitation. In essence, candidates must pay to play, but then they roll the dice.

#### *B. Grant Rate Comparisons Among Legitimate and Illegitimate Variables*

The analysis above shows that while the rehabilitation index explains differences in parole decisions among candidates with rehabilitation levels on the ends of the spectrum, it leaves largely unexplained the parole decisions for the majority of candidates who are in the mid-range of the rehabilitation spectrum. The mere existence of this unexplained variability is not sufficient, however, to show that decisions are arbitrary and capricious. It is possible that the variability is due to morally sensitive, individual tailoring in each particular case. As Justice Brennan explained with respect to death penalty decisions, “[s]ince such decisions are not reducible to mathematical formulae, we are willing to assume that a certain degree of variation reflects the fact that no two defendants are completely alike.”<sup>143</sup> This section therefore aims to identify whether illegitimate factors explain the variability in decisions that is not attributable to the rehabilitation index. The analysis begins with tables listing the grant rates broken down by the most obviously legitimate—and illegitimate—factors in the parole decision. In the next section, multivariate regression allows for investigation across a larger number of variables.

---

<sup>143</sup> *McCleskey v. Kemp*, 481 U.S. 279, 337 (1987) (Brennan, J., dissenting).

### 1. Race/Ethnicity

Considered first are tables of descriptive statistics that consider how the parole grant rate varies with respect to racial/ethnic groups when variables measuring rehabilitation are held constant. Table 1 below shows significant differences in the parole grant rate among different racial groups when clean time is held constant.<sup>144</sup> Table 2 shows significant differences in the parole grant rate among different racial/ethnic groups when participation in programs is held constant, and Table 3 shows significant differences when education level is held constant. In the majority of categories, the grant rate among Black candidates is lower than that of candidates of other racial/ethnic groups.

TABLE 1: PAROLE GRANT RATE BY RACE/ETHNICITY AND CLEAN TIME

		Clean Time				Total
		0 to 2 years	3 to 5 years	6 to 11 years	12+ years	
<b>Black</b>	Denied	36	32	27	9	104
	Granted	2	12	15	18	47
	<i>Grant rate</i>	5%	27%	36%	67%	31%
<b>Latinx*</b>	Denied	23	23	16	8	70
	Granted	3	5	35	22	65
	<i>Grant rate</i>	12%	18%	69%	73%	48%
<b>Other</b>	Denied	10	8	6	5	29
	Granted	1	8	8	15	32
	<i>Grant rate</i>	9%	50%	57%	75%	52%
<b>White</b>	Denied	15	11	14	7	47
	Granted	0	4	10	18	32
	<i>Grant rate</i>	0%	27%	42%	72%	41%

\*Latinx candidates were significantly over-represented relative to other racial/ethnic groups among the hearings removed from the sample due to denial based on gang validation or confidential information. When these candidates are added back into the sample, the grant rate among Latinx candidates changes significantly, from 48% to 40%. There is no significant change in the grant rate among non-Latinx candidates.

<sup>144</sup> Descriptive statistics reported in Table A show that black candidates tend to have less clean time than other racial/ethnic groups. This finding is consistent with prior research showing racial disparities in prison disciplinary write-ups, *see supra* note 140, and with evidence of explicitly racist attitudes among correctional officers in at least one California state prison, *see* ROBERT A. BARTON & ROY W. WESLEY, OFFICE OF THE INSPECTOR GENERAL 2015 SPECIAL REVIEW: HIGH DESERT STATE PRISON, SUSANVILLE CA 11 (2015), [https://www.oig.ca.gov/media/reports/Reports/Reviews/2015\\_Special\\_Review\\_-\\_High\\_Desert\\_State\\_Prison.pdf](https://www.oig.ca.gov/media/reports/Reports/Reviews/2015_Special_Review_-_High_Desert_State_Prison.pdf), archived at <https://perma.cc/SN6W-S7CL>.

TABLE 2: PAROLE GRANT RATE BY RACE/ETHNICITY  
AND PROGRAM PARTICIPATION

		Program Participation			Total
		Minimal	Moderate	Extensive	
<b>Black</b>	Denied	20	72	12	104
	Granted	0	31	16	47
	<i>Grant rate</i>	0%	30%	57%	31%
<b>Latinx*</b>	Denied	23	35	12	70
	Granted	0	42	23	65
	<i>Grant rate</i>	0%	55%	66%	48%
<b>Other</b>	Denied	3	24	2	29
	Granted	0	21	11	32
	<i>Grant rate</i>	0%	47%	85%	52%
<b>White</b>	Denied	7	36	4	47
	Granted	0	24	8	32
	<i>Grant rate</i>	0%	40%	67%	41%

\*See note regarding Latinx candidates in Table 1.

TABLE 3: PAROLE GRANT RATE BY RACE/ETHNICITY  
AND EDUCATION LEVEL

		Education				Total
		No GED/HS	GED/HS	Some College	College Degree	
<b>Black</b>	Denied	19	51	26	8	104
	Granted	1	21	14	11	47
	<i>Grant rate</i>	5%	29%	35%	58%	31%
<b>Latinx*</b>	Denied	10	38	15	7	70
	Granted	7	25	25	8	65
	<i>Grant rate</i>	41%	40%	63%	53%	48%
<b>Other</b>	Denied	3	20	6	0	29
	Granted	1	12	11	8	32
	<i>Grant rate</i>	25%	38%	65%	100%	52%
<b>White</b>	Denied	4	19	21	3	47
	Granted	0	10	10	12	32
	<i>Grant rate</i>	0%	34%	32%	80%	41%

\*See note regarding Latinx candidates in Table 1.

## 2. Attorney

Another factor which is orthogonal to a measure of rehabilitation is whether the candidate retains a private attorney, or is represented by a Board-appointed attorney. Retaining a private attorney is the variable that comes closest to acting as a proxy for social class, but it is an imperfect one.<sup>145</sup> Table 4 shows substantial differences in grant rates among candidates who have retained an attorney and those who have a Board-appointed attorney, when clean time, programming, and education are held constant. The most substantial differences in grant rates are observed in the mid-range of clean time, as well as in the mid-range of programming. For example, among candidates who have three to five years clean time, 53% of those represented by a private attorney were granted parole whereas only 23% of those represented by an appointed attorney were granted parole. With respect to education, the difference in the grant rate is most substantial among those who do not have a GED or other high school equivalency. This observation accords with the experience of parole attorneys, who have described that candidates with cognitive deficits often struggle more to navigate the parole process. These candidates appear to gain more by retaining an attorney who can spend considerably more time helping them understand and navigate the process. For more discussion of the difference that attorneys can make at parole hearings, see discussion *infra* at Part IV.A.

---

<sup>145</sup> Retaining a private attorney is likely correlated with whether a parole candidate has support from family members with funds to pay for the attorney (although some retained attorneys were providing pro bono legal services). Prison wages are generally less than \$1.00 per hour and candidates did not have a meaningful opportunity to work before their incarceration.

TABLE 4: PAROLE GRANT RATE BY ATTORNEY TYPE

	Appointed Attorney			Retained Attorney			Diff. in Grant Rate (C-F)
	Col. A	Col. B	Col. C	Col. D	Col. E	Col. F	
<b>Clean time</b>	Denied	Granted	Grant Rate	Denied	Granted	Grant Rate	
0 to 2 years	74	4	5%	10	2	17%	-12
3 to 5 years	65	19	23%	9	10	53%	-30
6 to 11 years	54	51	49%	9	17	65%	-17
12+ years	25	49	66%	4	24	86%	-19
<b>Programming</b>							
Minimal	49	0	0%	4	0	0%	0
Moderate	146	84	37%	21	34	62%	-25
Extensive	23	39	63%	7	19	73%	-10
<b>Education</b>							
No GED/HS	35	8	19%	1	1	50%	-31
GED/HS	115	54	32%	13	14	52%	-20
Some college	54	39	42%	14	21	60%	-18
College Degree	14	22	61%	4	17	81%	-20
<b>Total</b>	218	123	36%	32	53	62%	-26

### 3. *Prior Experience*

The third variable considered here is whether a candidate is appearing at an initial or subsequent hearing. Unlike the variables of race/ethnicity and attorney type (which imperfectly tracks indigency), whether a candidate has prior experience with parole hearings does not describe any protected or suspect classification upon which it would be illicit to discriminate *per se*. Prior experience is nevertheless an illegitimate factor in a juvenile lifer parole decision because it is orthogonal to a measure of rehabilitation. If parole decisions are in fact based on a rubric of rehabilitation that is consistently applied from one case to the next, then whether a candidate has had prior experience at a parole hearing should not make a significant difference to whether the candidate is granted parole or not. There is no good reason to believe that someone appearing before the Board for the first time would, solely on that basis, have demonstrated any more or less rehabilitation than another parole candidate. Yet prior research and the experience of parole attorneys strongly suggest that prior experience with the parole board significantly improves a candidate's likelihood of being granted parole when other variables are held constant. Several theories might explain this; perhaps prior experience tends to help because it gives candidates a sense of what kinds of words or phrases the Board likes to hear, or perhaps some Board members simply prefer that candidates experience a denial before being granted parole. Although the mechanism for why prior experience makes a significant

difference to the likelihood of parole is unclear, what is clear is that prior experience should not be expected to make a difference if the system is treating like cases alike with respect to rehabilitation.

As shown in Table 5, the grant rate among those with prior experience with the Board exceeds the grant rate among those attending their initial hearing in almost every category of clean time, programming, and education. The most marked disparity is among candidates with clean time in the range of six to eleven years, where 58% of those with prior experience are granted as compared to 27% of those without prior experience.

TABLE 5: PAROLE GRANT RATE BY PRIOR EXPERIENCE  
WITH THE PAROLE BOARD

	Subsequent Hearing			Initial Hearing			Diff. in Grant Rate (C-F)
	Col. A	Col. B	Col. C	Col. D	Col. E	Col. F	
<b>Clean time</b>	Denied	Granted	Grant Rate	Denied	Granted	Grant Rate	
0 to 2 years	61	4	6%	23	2	8%	-2
3 to 5 years	55	27	33%	19	2	10%	23
6 to 11 years	44	61	58%	19	7	27%	31
12+ years	24	64	73%	5	9	64%	8
<b>Programming</b>							
Minimal	41	0	0%	12	0	0%	0
Moderate	121	106	47%	46	12	21%	26
Extensive	22	50	69%	8	8	50%	19
<b>Education</b>							
No GED/HS	23	8	26%	13	1	7%	19
GED/HS	93	62	40%	35	6	15%	25
Some college	54	52	49%	14	8	36%	13
College Degree	14	34	71%	4	5	56%	15
<b>Total</b>	184	156	46%	66	20	23%	23

Finally, combinations of the three legitimate variables and the three illegitimate variables are considered together. Table 6 compares grant rates among only the 286 candidates who were average or above average with respect to clean time, programming, and education. These candidates have not had a disciplinary write-up in at least three years, have moderate to extensive participation in programs, and have earned a GED or more. Within this set of 286 candidates, numbers were too small to meaningfully compare grant rates for each individual racial/ethnic group. Table 6 reports only the rate for Black candidates as compared to non-Black candidates; this categorization was chosen because the largest racial disparities observed in Table 1 were among Black candidates, and Black candidates are also the largest group in this sample. As shown below, among this set of 286 candidates, the

grant rate for Black candidates is sixteen percentage points lower than non-Black candidates; the grant rate for those with an appointed attorney is twenty-two percentage points lower than those with a retained attorney; and the grant rate is twenty-nine percentage points lower for those with no prior experience appearing before the Board.

TABLE 6: PAROLE GRANT RATE AMONG CANDIDATES WITH 3+ YEARS CLEAN TIME, MODERATE OR EXTENSIVE PROGRAMMING, AND A GED OR HIGHER (N=286)

	Black	Non-Black		Appointed	Retained
Denied	51	72	Denied	105	18
Granted	44	119	Granted	113	50
Total number	95	191	Total number	218	68
Grant rate	46%	62%	Grant rate	52%	74%
Diff. in Grant Rate	-16		Diff. in Grant Rate	-22	

	Initial	Subsequent
Denied	34	89
Granted	17	146
Total number	51	235
Grant rate	33%	62%
Diff. in Grant Rate	-29	

Table 7 compares differences in grant rates when the illegitimate variables are considered together. Among Black parole candidates who have not retained a private attorney and who have no prior experience with the board, one of twenty-four candidates (4%) was granted parole.<sup>146</sup> The grant rate was eighteen times higher among non-Black parole candidates who have retained an attorney and have prior experience with the board. Of those candidates, thirty-four of forty-seven (72%) were granted parole. When clean time, programming, and education are held constant, the disparity in these grant rates remains.

The racial disparities observed here call for more sustained research that is beyond the scope of this single Article. The research is particularly critical given that people of color make up 91% of all people serving parole-

<sup>146</sup> Ten of forty-five candidates (22%) were granted parole among those who are not Black, who have not hired a private attorney, and who have no prior experience with the board.

TABLE 7: PAROLE GRANT RATE BY RACE/ETHNICITY, ATTORNEY, AND BOARD EXPERIENCE

	Black Candidate, Appointed Attorney, and Initial Hearing			Non-Black Candidate, Retained Attorney, and Subsequent Hearing			Diff. in Grant Rate (C-F)
	Col. A	Col. B	Col. C	Col. D	Col. E	Col. F	
<b>Clean time</b>	Denied	Granted	Grant Rate	Denied	Granted	Grant Rate	
0 to 2 years	8	1	11%	4	0	0%	11
3 to 5 years	8	0	0%	5	7	58%	-58
6 to 11 years	5	0	0%	2	12	86%	-86
12+ years	2	0	0%	2	15	88%	-88
<b>Programming</b>							
Minimal	2	0	0%	2	0	0%	0
Moderate	19	0	0%	8	23	74%	-74
Extensive	2	1	33%	3	11	79%	-45
<b>Education</b>							
No GED/HS	7	0	0%	0	1	100%	-100
GED/HS	13	0	0%	7	9	56%	-56
Some college	2	1	33%	4	15	79%	-46
College degree	1	0	0%	2	9	82%	-82
<b>Total</b>	23	1	4%	13	34	72%	-68

eligible life sentences for juvenile convictions in California prisons.<sup>147</sup> The racial disparities observed here are unlikely to be unique to California; national data shows that Black juveniles are disproportionately sentenced to life without the possibility of parole as compared to their white counterparts.<sup>148</sup> In Texas, for example, 100% of juveniles who were sentenced to life without parole were either Black or Latinx.<sup>149</sup>

<sup>147</sup> See MEHTA, *supra* note 5, at 175.

<sup>148</sup> See John R. Mills et al., *Juvenile Life Without Parole in Law and Practice: Chronicling the Rapid Change Underway*, 65 AM. U. L. REV. 535, 579–80 (2016) (finding Black juveniles arrested for murder are about twice as likely to receive juvenile life without parole [JLWOP] sentences as white juveniles arrested for murder).

<sup>149</sup> See *id.* (reporting highly disparate rates of JLWOP sentences on non-white individuals in other states, “including Illinois (81.7% of the JLWOP population; 37.7% of the total population), Louisiana (81.0% of the JLWOP population; 40.7% of the total population), Mississippi (69.1% of the JLWOP population; 42.7% of the total population), North Carolina (88.5% of the JLWOP population; 35.9% of the total population), Pennsylvania (79.5% of the JLWOP population; 22.1% of the total population), and South Carolina (70.3% of the JLWOP population; 36.1% of the total population)”).

### C. Regression Analysis

Thus far, the analysis has considered only the variables that are most obviously legitimate or illegitimate with respect to a measure of rehabilitation. In this section, multivariate regression analysis is used to construct a model that predicts whether parole is granted or denied on the basis of all independent variables that are hypothesized to have a significant influence on the parole decision. Presentation of the regression analysis proceeds in three parts: explanation of interaction effects among independent variables, construction of the model and results of the regression, and discussion of how the results inform arbitrary and capricious analysis.

Before presenting the analysis, it is important to clarify that its purpose is to aid in assessing the fairness of decision-making, not to establish proof that certain variables cause an outcome in any given case. In other contexts, courts have accepted regression analysis as a powerful method for evaluating whether illegitimate factors are significant in explaining variability alongside several different legitimate factors.<sup>150</sup> For this purpose, the set of independent variables used in the regression analysis should include all measurable variables hypothesized to have a substantial influence on outcomes, but need not include every measurable variable that could conceivably influence a decision.<sup>151</sup> For example, in a case concerning whether employment decisions were unfairly influenced by race, the Court considered a regression analysis that considered race, education, tenure, experience, sex, and job title.<sup>152</sup> When a regression analysis has shown that an illegitimate factor is significant in explaining variability in outcomes alongside these other variables, it has not established that an illegitimate factor *caused* an outcome in any individual case. It has, however, established a risk that the illegitimate factors play a causal role in influencing the decisions. The court's inquiry is then to consider other evidence and assess the degree of the risk, and decide whether that degree of risk is acceptable in light of other reasons to trust (or doubt) that decision-makers are exercising discretion fairly.

#### 1. Interactions Among Variables

*Psychologist's Impression.* A consistent finding in prior studies of California lifer parole hearings is that a low risk score on the Comprehensive Risk Assessment (CRA) strongly increases the likelihood of being granted parole.<sup>153</sup> As discussed above, that risk score is determined by a forensic psychologist after an in-person interview and in consideration of the information contained in the candidate's file. At the parole hearing, the Board

---

<sup>150</sup> See, e.g., *Bazemore v. Friday*, 478 U.S. 385, 400 (1986); *ATA Airlines, Inc. v. Fed. Express Corp.*, 665 F.3d 882, 889 (7th Cir. 2011).

<sup>151</sup> See *Bazemore*, 478 U.S. at 400.

<sup>152</sup> See *id.* at 398.

<sup>153</sup> See *Young*, *supra* note 107, at 466; *Caldwell*, *supra* note 15, at 279.

considers all the information that the psychologist had considered, as well as information available only at the hearing (for example, whether the district attorney or the victim opposes parole). A regression analysis on the parole decision, which includes the CRA score as well as all the variables that went into producing the CRA score, introduces multicollinearity<sup>154</sup> with respect to those variables that are considered by both the psychologist and the Board.

To avoid “double counting” information considered by both the psychologist and the Board, this study created “*Psych\_resid*,” a variable intended to isolate the psychologist’s professional impression of the candidate from the effect on the risk score due to the other variables considered by both the psychologist and the Board. To do so, regression analysis was conducted to estimate the CRA score on the basis of known objective information. This regression is referred to as the “CRA model.” The dependent variable in the CRA model is the CRA score, and the independent variables are factors that are considered by, and hypothesized to be significant to, both the psychologist and the Board. The difference between a candidate’s actual CRA score and the estimated score from the CRA model is the *Psych\_resid* variable.<sup>155</sup>

A negative value for *Psych\_resid* indicates that a candidate’s CRA score was lower than one would expect based solely on the objective information; the psychologist’s impression was that the candidate was a lower risk than the average candidate who presents similar case factors. A positive value for *Psych\_resid* indicates that a candidate’s CRA score was higher than one would expect based solely on the objective information; the psychologist’s impression was that the candidate was a higher risk than the average candidate who presents similar case factors. The hypothesis is that a higher positive value for *Psych\_resid* would decrease the likelihood that the Board would grant parole.

*Substance Abuse Programming.* More than three-quarters of the population participated in a program focused on substance abuse, and in most cases the program was Alcoholics or Narcotics Anonymous. The Board asked a question about the Twelve Steps of Alcoholics or Narcotics Anonymous in half of the hearings. For example, at one hearing a commissioner asked a candidate, “How do you work Step 6?”<sup>156</sup> and another asked, “So

---

<sup>154</sup> Multicollinearity means that several variables are collinear as a group. Collinearity is a statistical term used to measure the extent to which two variables move together. For example, consider LSAT scores and the number of hours a student spends studying for the LSAT. If these variables are collinear, then one would expect that additional hours of studying would be associated with higher LSAT scores. If two (or more) different independent variables are collinear, then it becomes difficult for a regression analysis to determine how much each of the variables is impacting the dependent variable. The result may be that the regression analysis would determine both independent variables to be not significant.

<sup>155</sup> The CRA score is a five-level categorical variable, but the regression analysis assumes it to be continuous in order to determine *Psych\_resid*.

<sup>156</sup> California Board of Parole Hearings, Parole Consideration Transcripts (April 2015) (on file with author).

[step] seven is humbly asking God to remove your shortcomings. . . . How is it that you – that you implement that step?”<sup>157</sup> Failure to give an answer that the Board deemed adequate was found in a prior study to significantly reduce the likelihood of being granted parole.<sup>158</sup> In this study, the variable “*Prog\_sub*” was designed to account for an interaction effect between (i) the variables for participation in substance abuse programming and (ii) failure to adequately answer a question about the Twelve Steps. *Prog\_sub* counts a candidate as having participated in substance abuse programming if the candidate participated and did not fail to satisfactorily answer the Twelve Steps question. The Twelve Steps question is thus built into the *Prog\_sub* variable and is not considered independently.

*Crime, Age, and Time-Served.* Given that each candidate in the sample was fourteen to seventeen years old at the time of the crime, there is a strong correlation between a candidate’s current age and the number of years the candidate has served.

The number of years a candidate has served (and likewise a candidate’s current age) also bears some relationship to the nature of the conviction due to structural differences in sentences. The California Penal Code provides that the minimum sentence for murder in the first degree is twenty-five years to life,<sup>159</sup> fifteen years to life for murder in the second degree,<sup>160</sup> seven years to life for attempted murder,<sup>161</sup> and seven years to life for kidnapping for robbery or rape.<sup>162</sup> All else being equal, one would therefore expect that parole candidates convicted of first-degree murder would serve more time before release than other parole candidates. This correlation between conviction and time-served makes it challenging to test two common hypotheses about parole decisions: that candidates with convictions of increased gravity are less likely to be granted parole, and that older candidates (who have thereby served more time) are more likely to be granted parole.<sup>163</sup> The hypotheses pull in opposing directions: a first-degree murder conviction would be hypothesized to make a candidate less likely to be granted parole due to

---

<sup>157</sup> California Board of Parole Hearings, Parole Consideration Transcripts (February 2015) (on file with author).

<sup>158</sup> See Young et al., *supra* note 59.

<sup>159</sup> See CAL. PENAL CODE § 190(a) (West 2000).

<sup>160</sup> *Id.*

<sup>161</sup> See CAL. PENAL CODE § 664 (West 2011).

<sup>162</sup> See CAL. PENAL CODE § 209(b) (West 2006). The minimum sentence for sexual offenses varies depending on the type of offense. See, e.g., CAL. PENAL CODE § 264 (West 2010) (punishment for rape is three to eight years in prison); CAL. PENAL CODE § 209(b) (punishment for kidnapping for rape is seven years to life); CAL. PENAL CODE § 269 (West, 2019) (punishment for aggravated sexual assault of a child is fifteen years to life). The punishment is twenty-five years to life for a habitual sexual offender, but section 3051 of the youth offender parole law does not apply to habitual sexual offenders. See CAL. PENAL CODE § 667.71(b) (West 2019); CAL. PENAL CODE § 3051(h) (West 2018).

<sup>163</sup> See, e.g., Caplan, *supra* note 123.

the gravity of the crime, but also more likely to be granted parole because of the correlative increase in age at the time of the first parole hearing.<sup>164</sup>

Given this issue, instead of considering age or time-served as variables, descriptive statistics were calculated for the number of years that a candidate has served by type of conviction. These data are discussed in detail in Part III.D, *infra*. One important observation from these data is that candidates who are granted parole tend to have served less time than candidates who are denied. This observation led to a hypothesis that after a candidate has served more time than the norm for the conviction, additional time served would not improve the likelihood of parole and could even decrease the likelihood of parole (if, for example, the Board sees older candidates as institutionalized to the prison environment). The variable “*Time\_over*” was created to test this hypothesis. The variable tracks whether a parole candidate who has served less time than the norm for the conviction is more likely to be granted parole than one who has served more time than the norm.<sup>165</sup>

*Place of Incarceration.* CDCR provided data to the author that specifies the level of security in the part of the prison, or prison unit, where a candidate is incarcerated.<sup>166</sup> The security levels of California prison facilities range from minimum security at Level I to maximum security at Level IV. The type of facility where a parole candidate is incarcerated depends largely on their classification score assigned by CDCR; the higher the score, the higher the level of security.<sup>167</sup> Almost all the parole candidates considered in the study began their sentences at maximum-security prisons because, at the time they entered prison, the classification system mandatorily assigned high classification scores on the basis of young age, a life sentence, and a violent

---

<sup>164</sup> Where a candidate had multiple different convictions, the conviction-type was deemed to be the conviction that carried the longest sentence, in accord with the structure of the Youth Offender Parole Law. *See* Cal. CAL. PENAL CODE § 3051 (a). For the purpose of analysis, it was assumed that first-degree murder carries the longest sentence, then second-degree murder, then attempted murder, then sexual offenses, then non-sexual, non-murder offenses. There are exceptions to this general trend, particularly among those convicted for sexual offenses, and those convicted with gun enhancements and gang enhancements, some of which may carry the same sentence as murder in the first degree.

<sup>165</sup> For the purpose of constructing the variable, the norm for a given conviction was the average number of years served among those who were granted parole.

<sup>166</sup> California Department of Corrections and Rehabilitation [CDCR] provided data on both the “housing level” and the “security level” of each candidate. Housing level is a label that CDCR assigns to the prison (or the part of a prison) depending on the security conditions in the facility; ranging from minimum at Level I to maximum at Level IV. Security level refers to the level of security that CDCR assigns to each incarcerated person; security level also ranges from minimum at Level I to maximum at Level IV. For the most part, a person’s security level and housing level are the same. That is, a person who has security Level IV is incarcerated in a part of the prison that is classified as Level IV. In some circumstances, such as a need for particularized medical care or unavailability of bed space, however, a person may be incarcerated at a prison with a housing level that differs from his or her security level. For the purpose of constructing the variable, the housing level was used. There were some cases in which the data from CDCR did not indicate the housing level. In these cases, a candidate was deemed to be at Level IV if he was incarcerated in the Secure Housing Unit (SHU) and/or had a security level of IV.

<sup>167</sup> *See* CAL. CODE REGS., tit. 15, §§ 3375.1, 3377.

conviction.<sup>168</sup> After preliminary classification, a person's classification score increases with disciplinary write-ups and decreases with clean time.<sup>169</sup> A person who accumulated a large number of points for write-ups early in the period of incarceration could remain in a maximum-security prison setting indefinitely, even after serving a decade of continuous clean time.<sup>170</sup> In recent years, CDCR has overhauled its classification scheme for youth offenders, but those changes are not retroactive and did not affect the individuals considered during the time period of this study.<sup>171</sup>

Prior studies of California lifer parole hearings have not considered place of incarceration as an independent variable, but it was included here because it was hypothesized that being incarcerated at a maximum-security prison could have an independent effect on the parole decision. The hypothesis was based on other evidence suggesting that people who live in high-crime, highly policed neighborhoods tend to be perceived as more dangerous due to where they live.<sup>172</sup> Analogously, it was hypothesized that people incarcerated in maximum-security prisons are perceived as more dangerous (relative to other prisoners) due to the environment in which they live.

*Cognitive Deficit.* Research suggests that people with cognitive deficits are at a disadvantage at parole hearings for several reasons, especially because they may struggle to understand and articulate answers to the highly specific questions asked in parole hearings.<sup>173</sup> A variable “*Cog\_deficit*” was constructed that measures whether a person has any one of the following indicators of cognitive deficit: history of special education, diagnosed learning disability, marked difficulty in comprehending questions at the hearing, or a score of eighth grade or below on the test for adult basic education. This variable is likely under-inclusive, given that learning disabilities often go undiagnosed and the score on the test for adult basic education was not provided in 111 of the 426 transcripts. Further, there is overlap between cogni-

---

<sup>168</sup> Until recent years, the points typically added to a youth lifer's preliminary classification score included: fifty-four points for a life sentence and violent crime; two points for being under age twenty-six; two points for never being married; two points for not having a high school degree or equivalent; two points for not having more than six months of employment history; two points for no military service; and additional points for prior juvenile adjudications. See classification sheets on file with author.

<sup>169</sup> See CAL. CODE REGS., tit. 15, §§ 3375.1, 3377.

<sup>170</sup> See *id.*

<sup>171</sup> In 2014, the Legislature passed a statute requiring CDCR to adopt a new youth classification process in which an individualized determination is made as to whether a youth offender should be housed at a lower security institution that “permit[s] increased access to programs and . . . encourage[s] the youth offender to commit to positive change and self-improvement.” CAL. PENAL CODE §2905(b)(2). The law applies to youth offenders currently under the age of twenty-five, and does not apply retroactively to those who are twenty-five or older.

<sup>172</sup> See, e.g., Carl Werthman & Irving Piliavin, *Gang Members and the Police*, in THE POLICE: SIX SOCIOLOGICAL ESSAYS 56, 78–79 (D.J. Bordua ed., 1967); Jeffrey Fagan & Amanda Geller, *Following the Script: Narratives of Suspicion in Terry Stops in Street Policing*, 82 U. CHI. L. REV. 51 (2015).

<sup>173</sup> See Amber Heron, *An Impossible Standard: The California Parole Board Process for Inmates with Cognitive Impairments*, 91 S. CAL. L. REV. 989, 999 (2018).

tive deficit and education level; when *Cog\_deficit* is included in models, it is significant but renders “*Edu*” insignificant. Given that education level is a more reliably measured variable, *Cog\_deficit* is not included in the final regression models, but it is included among the robustness checks in Table E.

## 2. Regression Model

The regression results reported in this subsection show whether and how independent variables influence the parole decision. Two regression models were constructed: the CRA model to isolate the psychologist’s judgment, and the Hearing Result model to determine the variables that have a significant influence on the parole decision. The CRA model is a linear regression with the dependent variable being the CRA score and the independent variables being all the variables that are significant in the Hearing Result model and which could have been considered by the psychologist. It was initially hypothesized that all variables in Appendix Table A would be significant in the Hearing Result model. Construction of the CRA model thus began by including all these variables,<sup>174</sup> aside from those that could not have been considered by the psychologist.<sup>175</sup> Residuals generated from the CRA model were calculated to produce the *Psych\_resid* variable. A logistic regression was then run with the hearing result as the dependent variable and all Table A variables,<sup>176</sup> as well as *Psych\_resid*, as independent variables. Sixteen variables were significant at the 10% level in either the Hearing Result model or the CRA model. Variables that were not significant at the 10% level were removed, and the regressions were run again. Nine outliers were removed from the sample: observations in which parole was granted but the model predicted that the likelihood of being granted parole was less than 5%, observations in which parole was denied but the model predicted that the likelihood of being granted parole was greater than 95%, and one observation in which *Psych\_resid* was more than three standard deviations beyond the mean.

Table 8 below reports the final CRA model and Hearing Result model. Listed are the coefficients and standard errors for each variable, with indication of whether each variable was statistically significant at the 5% level or the 10% level. In addition, Table C in the Appendix reports the odds ratios for each variable in the Hearing Result model.

---

<sup>174</sup> Three variables in Table A were omitted: *CRA* (because it is used to determine *Psych\_resid*), *Age\_current* (because of interaction effect with time-served and conviction type), and *Crime\_max* (because of collinearity with *Crime\_mur1* and *Crime\_sex*).

<sup>175</sup> Opposition from the district attorney or victim, and whether or not the candidate retained an attorney, are facts that pertain only to the hearing and not to the psychologist, so these were not considered in the CRA model. The CRA model also did not consider whether the candidate had arranged for housing and employment if released because these plans are often made after the CRA is conducted but before the parole hearing takes place.

<sup>176</sup> As in note 174, *CRA*, *Age\_current*, and *Crime\_max* were omitted.

TABLE 8: CRA MODEL AND HEARING RESULT MODEL

	CRA_Model (Coeff.)	Hearing_Result Model (Coeff.)
<i>Race_Black</i>	0.180*	-0.988**
	-0.1	-0.41
<i>Prog_gen</i>	-0.311**	1.841**
	-0.08	-0.4
<i>Prog_sub</i>	-0.535**	3.711**
	-0.12	-0.79
<i>Prog_gang</i>	-0.12	0.730*
	-0.09	-0.39
<i>Edu</i>	-0.093*	0.322
	-0.06	-0.23
<i>Clean_time</i>	-0.302**	2.360**
	-0.05	-0.3
<i>Total_disc</i>	0.292**	0.155
	-0.05	-0.19
<i>Hx_mental_ill</i>	0.178*	-0.385
	-0.11	-0.49
<i>Initial</i>	0.414**	-1.932**
	-0.12	-0.56
<i>Pris_max</i>	0.320**	-1.561**
	-0.13	-0.59
<i>Time_over</i>	-0.103	-1.441**
	-0.1	-0.43
<i>Crime_sex</i>	0.199	-2.393**
	-0.21	-1.13
<i>Retained</i>		1.237**
		-0.45
<i>Da_opp</i>		-3.493**
		-0.89
<i>Vic_opp</i>		-1.713**
		-0.52
<i>Psych_resid</i>		-1.683**
		-0.24
<i>Constant</i>	2.088**	-6.393**
	-0.19	-1.41
<i>R-square</i>	0.4954	
<i>Adj. R-square</i>	0.4804	
<i>Pseudo R-square</i>		0.633

\* $p < 0.10$ , \*\* $p < 0.05$

The regression models identify sixteen variables that are significant to either the CRA score or the hearing result: six variables are significant to both the CRA score and the hearing result (*Race\_Black*, *Clean\_time*, *Prog\_gen*, *Prog\_sub*, *Pris\_max*, and *Initial*), three variables are significant only to the CRA score (*Total\_disc*, *Edu*, and *Hx\_mental\_ill*), and seven are significant only to the hearing result (*Prog\_gang*, *Time\_over*, *Crime\_sex*, *Retained*, *DA\_opp*, *Vic\_opp*, and *Psych\_resid*). The relative weight of all variables significant to the hearing result is summarized in Table 9 below, using the odds ratios that are reported in Appendix Table C.

TABLE 9: RELATIVE IMPACT OF VARIABLES SIGNIFICANT TO PAROLE DECISION

Increases Likelihood of Parole Grant	Decreases Likelihood of Parole Grant
<b>Very Strong Impact: Each changes odds of parole by 20x or more</b>	
Rehabilitation program focused on substance abuse ( <i>Prog_sub</i> **) More time since last disciplinary write-up ( <i>Clean_time</i> ***)	Psychologist judges to be higher risk ( <i>Psych_resid</i> **) District Attorney opposition ( <i>DA_opp</i> **)
<b>Strong Impact: Each changes odds of parole by 6-15x</b>	
More general participation in rehabilitation programming ( <i>Prog_gen</i> **)	Victim opposition ( <i>Vic_opp</i> **) Convicted of sexual offense ( <i>Crime_sex</i> **) Initial hearing ( <i>Initial</i> **)
<b>Substantial Impact: Each changes odds of parole by 2-5x</b>	
Retained attorney ( <i>Retained</i> **) Rehabilitation program focused on gangs ( <i>Prog_gang</i> *)	Maximum-security prison ( <i>Pris_max</i> **) Served more time than average for conviction ( <i>Time_over</i> **) Race ( <i>Race_Black</i> **)

Several tests were conducted to test the robustness of this model, and results of these tests are included in Appendix Tables D, E, F, and G. Table D and Table E show that adding a variety of variables to the model does not substantially change the significance of the sixteen independent variables

identified as significant in the CRA model or Hearing Result model.<sup>177</sup> Table F shows that the significance of those sixteen variables is also largely insensitive to changes in the way that various variables are constructed (for example, when *Clean\_time* is constructed as a continuous rather than a discrete variable). Table G shows that the model is robust when the sample includes outliers, when the sample includes only candidates convicted of murder, and when the sample includes a randomly selected sample of 75% of the population.

Notably, notwithstanding the legal mandate that the parole board shall give “great weight” to the hallmark features of youth, none of the variables pertaining to a parole candidate’s history as a youth have a statistically significant impact on either the risk assessment score or the parole hearing result.<sup>178</sup> As shown in Tables D and E, none of these variables is statistically significant in the Hearing Result model when added to the model individually or collectively.

### 3. Implications of Regression Results

The regression models show two important findings for analysis of the extent to which parole release decisions may be arbitrary with respect to a measure of rehabilitation. First, the models indicate that variables which are measures of rehabilitation do have a significant and substantial impact on both the risk assessment score and the parole hearing result. As shown in Table 9, two of the four variables with the strongest impact on the parole decision are participation in a substance abuse program (*Prog\_sub*) and time since the last disciplinary write-up (*Clean\_time*). Each of those variables can increase the odds of parole for an average candidate by over 20 times, and each is also significant in the CRA model. Participation in general rehabilitation programs also has a significant and substantial impact on the hearing result and the CRA model, and participation in gang programs is significant to the hearing result. Increased education level also increases the likelihood of a lower CRA score. The significance and strength of these variables provide some evidence that parole decisions are responsive to a measure of rehabilitation.

---

<sup>177</sup> Added variables include factors related to youth history, whether the crime was committed with others, whether the conviction was murder in the first degree, current age, cognitive deficit, and a variable labeled *Bump* which indicates whether the Youth Offender Parole Statute “bumped up” the expected date of the parole hearing by three years or more. The hearing date had been bumped up in this way for 9% of the sample. The *Bump* variable overlapped considerably with whether it was a person’s initial or subsequent hearing (*Initial*); *Bump* was significant in regressions that did not include the *Initial* variable, but it was not significant in regressions that did include the *Initial* variable. The *Initial* variable was selected for use in the final regression because it had more predictive power.

<sup>178</sup> These variables include the candidate’s age at the time of the crime, and whether the candidate, as a juvenile, used drugs or alcohol, committed prior acts of violence, was a member of a gang, was sexually abused, or experienced acute trauma or disadvantage.

The second finding, however, is that a number of variables which appear orthogonal to rehabilitation also exert a very strong impact on the parole decision. The odds of being granted parole are thirty-three times lower if the district attorney opposes, and six times lower if the victim opposes. Being a Black parole candidate, being before the parole board for the first time, and being incarcerated in a maximum-security prison each has a significant and substantial impact on reducing the odds of parole and increases the likelihood of a higher risk score. Further, having been convicted of a sexual offense, having served more time than the norm for the conviction, and not retaining a private attorney have a significant and substantial impact on reducing the odds of parole. None of these variables appear to measure rehabilitation, and their combined impact can match or outweigh the impact of variables that offer some measure of rehabilitation.

To demonstrate the relative impact of these variables, the CRA and Hearing Result models were used to calculate and compare the probability of parole for two hypothetical parole candidates who have comparably strong records of rehabilitation. Call these hypothetical candidates Larry and Sam. Both Larry and Sam have six disciplinary write-ups but none in over twelve years, they have earned a GED and taken some college courses, and participated extensively in general self-help programs, a substance abuse program, and a gang-focused program. They both have some history of mental illness and received a low/moderate score on the CRA. Larry is a Black man incarcerated at a maximum-security prison who did not retain a private attorney and who has served more time than average on his conviction. Sam is a white man in a medium-security prison who retained a private attorney and has served less time than average on his conviction. Both faced opposition from the district attorney at the hearing, but only Larry faced opposition from the victim. The CRA model was used to calculate Sam and Larry's respective *Psych\_resid* values, and the Hearing Result model was used to calculate the predicted likelihood of parole. The Hearing Result predicts that the likelihood of parole being granted for Sam is 99% at either the initial or subsequent hearing, but 13% for Larry at an initial hearing and 34% at a subsequent hearing.

Figures 4, 5, and 6 below use the results of the Hearing Result model to demonstrate variability in the decision outcomes when the level of rehabilitation on the rehabilitation index is held constant but the illegitimate variables of race, attorney, and prior experience differ. The figures were generated by plotting each candidate's likelihood of being granted parole on the y-axis<sup>179</sup> and the rehabilitation level on the x-axis.<sup>180</sup> Linear best-fit trend lines, shaded with a 95% confidence interval, were then respectively drawn for Black candidates and non-Black candidates in Figure 4; for candidates

---

<sup>179</sup> The likelihood of being granted parole was calculated on the basis of the final Hearing Result model.

<sup>180</sup> The rehabilitation level was calculated based on the rehabilitation regression.

with retained attorneys and candidates with appointed attorneys in Figure 5; and for candidates at initial parole hearings and candidates at subsequent parole hearings in Figure 6. If the illegitimate variables had no impact on the likelihood of parole among candidates with comparable levels on the rehabilitation index, the trend lines and associated confidence intervals would overlap. The trend lines diverge in each figure.

FIGURE 4: INFLUENCE OF PRIOR EXPERIENCE APPEARING BEFORE BOARD BY REHABILITATION LEVEL  
(LINEAR TREND LINES WITH 95% CONFIDENCE INTERVAL)

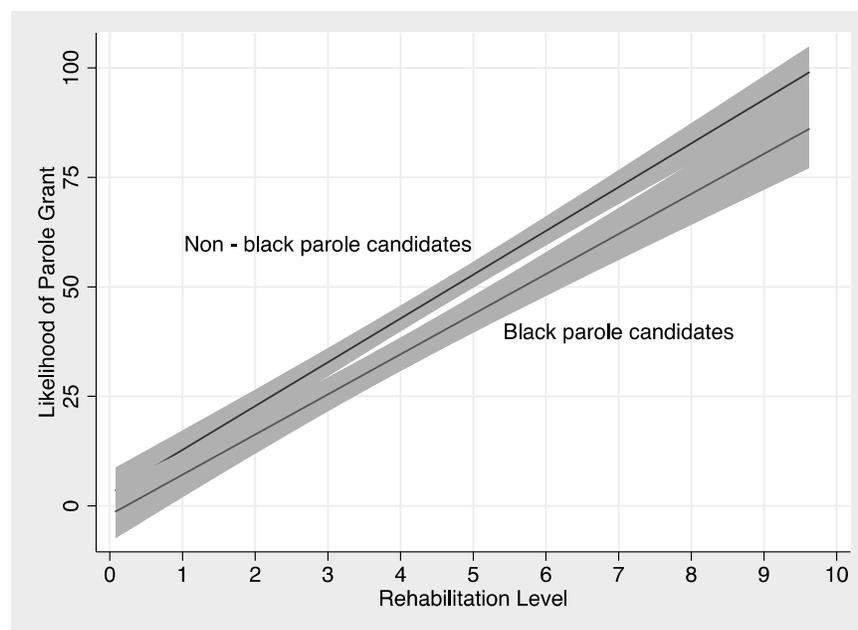


FIGURE 5: INFLUENCE OF RETAINED ATTORNEY ON LIKELIHOOD OF PAROLE BY REHABILITATION LEVEL  
(LINEAR TREND LINES WITH 95% CONFIDENCE INTERVAL)

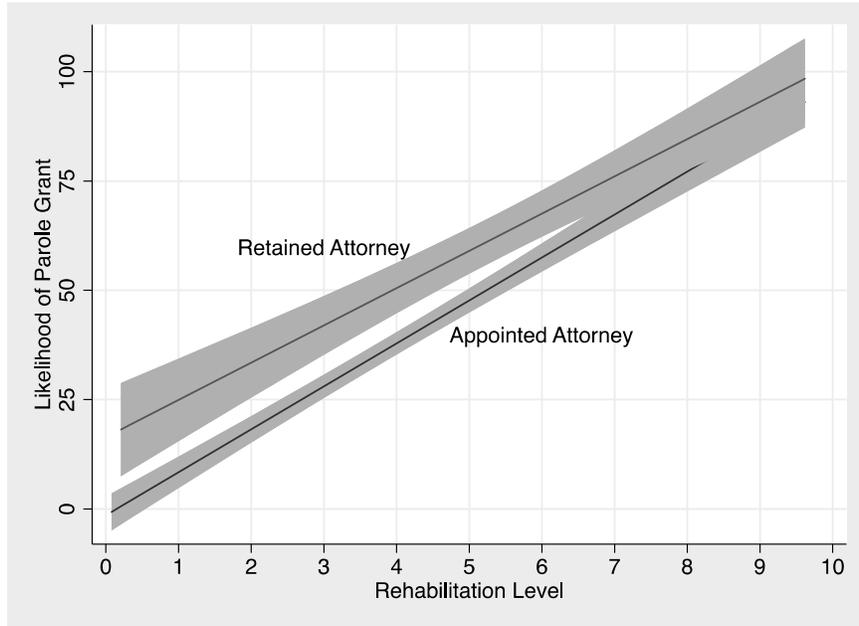


FIGURE 6: LIKELIHOOD OF PAROLE AT INITIAL VS. SUBSEQUENT HEARING  
BY REHABILITATION LEVEL  
(LINEAR TREND LINES WITH 95% CONFIDENCE INTERVAL)

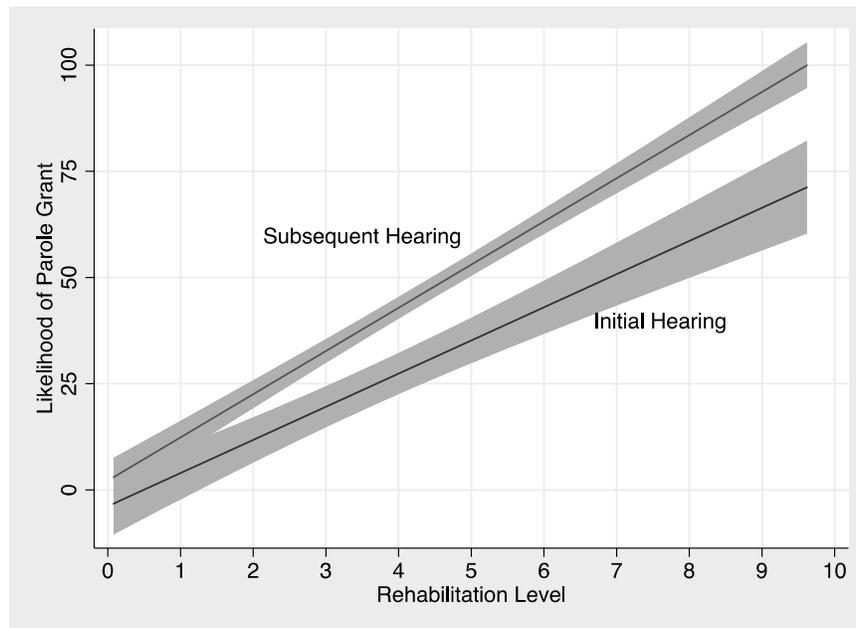


Figure 5 shows that retaining a private attorney tends to improve the likelihood of parole among candidates with a rehabilitation level of 6.5 or lower. Figure 6 shows that, at all rehabilitation levels over 1.5, having no prior experience with the parole board tends to decrease the likelihood of parole.

Figure 4 shows that the trend lines for Black and non-Black candidates diverge among candidates in the mid-range of rehabilitation levels, but overlap among candidates with either low or high levels on the rehabilitation index. A candidate with a rehabilitation level of 5.0 would be more likely than not to be granted parole if he were non-Black, but more likely than not to be denied parole if he were Black; candidates with rehabilitation levels of 8.0 or more, or 3.0 or less have comparable likelihoods of parole regardless of race. This pattern is consistent with what has been called the “liberation” effect; when a decision is not essentially determined by legitimate factors, decision-makers are more “free” to exercise subjective judgment using race or other impermissible factors.<sup>181</sup>

<sup>181</sup> See BALDUS ET AL., *supra* note 142, at 142, 145, 151. A similar divergence pattern in racial trend lines was found by the Baldus study relating race, culpability level, and the predicted probability of a death sentence. Racial disparities did not arise “when the crime was either extremely aggravated or comparatively free from aggravating circumstances,” but did

This study's finding that Black candidates are less likely to be granted parole is consistent with some prior studies of the impact of race on parole hearings.<sup>182</sup> This finding may support a claim that parole decisions are in violation of the Equal Protection Clause of the Fourteenth Amendment. Further empirical and legal research is necessary here, and reserved for future work because it is beyond the scope of this single Article.

#### *D. Time-Served Before Being Granted Parole*

Thus far, the analysis has considered parole decision outcomes during the time period of this study, but it has not investigated how much time candidates tend to serve before being granted parole. Among candidates granted parole in this sample, the shortest period of time served was ten years, and the longest period was forty-three years. The thirty-three year difference here is remarkable. Thirty-three years far exceeds the statutory minimum sentence for murder in the first-degree in California (twenty-five years to life). Thirty-three years is also approximately double the amount of time that any candidate had been alive before being incarcerated.

Some of the difference in this spread of time is attributable to the gravity of the conviction type. As explained above, candidates with graver convictions generally must serve a longer period of time before becoming eligible for the initial parole hearing.<sup>183</sup> Figure 7 illustrates the average time-served by conviction-type among candidates granted and denied parole. Table 9 then reports respective differences between the longest period of time-served and the shortest period of time-served within each conviction-type.

---

arise when the crime fell in the mid-aggravation range. *See also* HARRY KALVEN, JR. & HANS ZEISEL, *THE AMERICAN JURY* 164-67 (1966); MICHAEL R. GOTTFREDSON & DON M. GOTTFREDSON, *DECISION MAKING IN CRIMINAL JUSTICE: TOWARD THE RATIONAL EXERCISE OF DISCRETION* 261 (2d ed. 1988).

<sup>182</sup> *See, e.g.*, Beth M. Huebner and Timothy S. Bynum, *The Role of Race and Ethnicity in Parole Decisions*, 46 *CRIMINOLOGY* 907, 926 (2008); Renée Gobeil and Ralph C. Serin, *Preliminary Evidence of Adaptive Decision Making Techniques Used by Parole Board Members*, 8 *INT'L J. OF FORENSIC MENTAL HEALTH* 97; Heinz et al., *supra* note 11, at 16-17.

<sup>183</sup> *See supra* note 163 and accompanying text.

FIGURE 7: AVERAGE TIME-SERVED BY CONVICTION-TYPE AND PAROLE DECISION

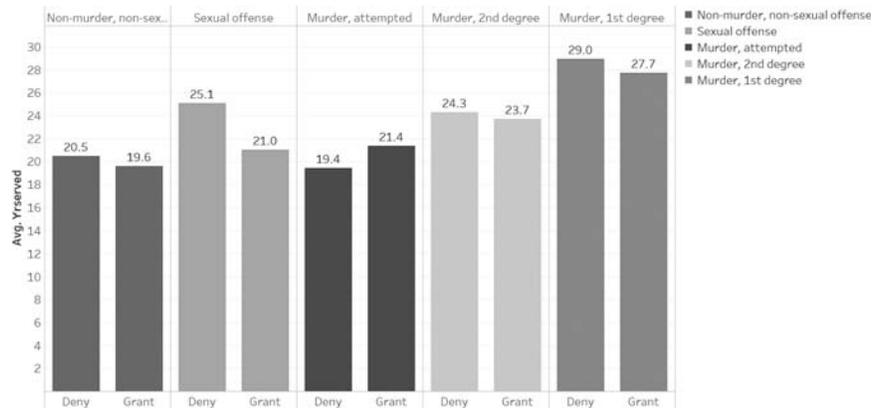


TABLE 10: SPREAD IN TIME-SERVED AMONG CANDIDATES GRANTED PAROLE BY CONVICTION-TYPE

Commitment Offense	Shortest Time-Served	Longest Time-Served	Difference
First-degree murder	19 years	43 years	24 years
Second-degree murder	13 years	28 years	18 years
Attempted murder	10 years	34 years	15 years
Sexual offense	19 years	43 years	24 years
Non-homicide, Non-sexual offense	11 years	35 years	24 years

Figure 7 shows that average time-served does tend to increase with the gravity of the conviction,<sup>184</sup> but Table 10 shows that the spread of time-served within each conviction-type (twenty-one to twenty-four years) exceeds the difference between the mean time-served across convictions. The magnitude of the spread in time-served provides evidence that the cumulative impact of parole decisions over time is both grave and final. Parole Board decisions can make a difference of decades in punishment, determin-

<sup>184</sup> An inverse relationship is found between the gravity of the conviction and the amount of time-served beyond the statutory minimum period for the conviction-type. Among those granted parole, candidates convicted of first-degree murder serve, on average, 2.7 years over the statutory minimum period of incarceration generally imposed for first-degree murder (twenty-five years). Grantees convicted of second-degree murder serve, on average, 8.7 years over the statutory minimum period of incarceration for second-degree murder (fifteen years). Grantees convicted of kidnapping, sexual offenses, or attempted murder tend to serve the most time over their respective statutory minimum periods of incarceration – approximately thirteen to fourteen years over the minimum period (seven years).

ing whether a juvenile will die in prison or have a chance to live as an adult in society. Second, the comparisons across conviction type show that, in practice, the Board is exercising more control over the number of years a person spends in prison than the legislature and the court, which, respectively, set and impose the statutory minimum. In this sense, the back-end release mechanism is more significant than the initial sentence determination; the “tail has begun to wag the dog.”<sup>185</sup>

#### IV. CASE STUDY OF CALIFORNIA PAROLE HEARINGS: PROCESS OF DECISION-MAKING

The quantitative evidence presented above demonstrates a risk that parole-release decisions are inadequately responsive to legitimate variables pertaining to rehabilitation and are unduly responsive to illegitimate variables. On its own, however, this risk is insufficient to conclude that decision-making is failing to treat like cases alike. A qualitative analysis is needed to determine whether the process of decision-making provides sufficient reason to trust that decision-makers are making decisions consistently despite quantitative evidence suggesting the contrary. This section describes the process of parole-release decision-making and argues that the process does not provide a strong reason to trust that parole is consistently granted to those who demonstrated rehabilitation.

##### A. *Traditional Due Process Protections*

Parole hearings do not fall under the legal category of criminal proceedings, but are rather categorized as administrative proceedings.<sup>186</sup> California law provides parole candidates with a number of procedural protections,<sup>187</sup> but the set of procedural rights constitutionally guaranteed at criminal proceedings are not required at parole hearings. There is no right to a jury, to call witnesses, or to cross-examine or confront adverse testimony. There is no right to a hearing in public; hearings take place in prisons where media

---

<sup>185</sup> In parole systems generally, this phenomenon has been observed, criticized, and cited as a ground to reform term-to-life sentences. See Edward E. Rhine et al., *The Future of Parole Release: A Ten Point Plan*, in MICHAEL TONRY, *CRIME AND JUSTICE: REINVENTING AMERICAN CRIMINAL JUSTICE* (2017).

<sup>186</sup> See LAURIE L. LEVENSON, *CALIFORNIA CRIMINAL PROCEDURE*, § 31:19 Parole hearings for life prisoners—Conduct of hearing (“A parole suitability hearing is an administrative proceeding”); *In re Rosenkrantz*, 29 Cal. 4th 616, 653 (2002) (characterizing Board of Parole hearings as “administrative agency within the executive branch”), citing Cal. Pen. Code §§ 3040, 5075 et seq.; see also *In re Sturm*, 11 Cal. 3d 258, 267 (1974); *Greenholtz v. Inmates of Nebraska Penal & Corr. Complex*, 442 U.S. 1, 7 (1979) (characterizing parole-release decision as administrative decision).

<sup>187</sup> See *supra* notes 87–93 (protections include the right to an in-person hearing, notice of that hearing, review of prison file prior to hearing, legal counsel, appointment of legal counsel if parole candidate is indigent, definitive statement of reasons for parole decision, and transcript of hearing).

and members of the public may observe only if a request is approved by the Board.<sup>188</sup> Victims and victims' next of kin have a right to be notified about and attend hearings, but friends, family, or other supporters of the parole candidate have no right to attend hearings and are prohibited from participating in the hearing.<sup>189</sup>

While parole candidates have a right to notice and an in-person hearing before at least one member of the Board, there is no right to appear before the full Board or before the Governor who may reverse the decision made at the hearing.<sup>190</sup> Parole candidates have a right to review evidence that is in their prison file before the hearing,<sup>191</sup> but that right is also limited because the Board may rely on information in a confidential file that cannot be reviewed by either the parole candidate or the district attorney.<sup>192</sup>

The right to an attorney at the parole hearing, and to an appointed attorney if a candidate is indigent, is one of the few procedural rights shared by criminal defendants and parole candidates. California established a statutory entitlement to counsel in 1978<sup>193</sup> as part of comprehensive changes to the sentencing and parole system made after research showed significant arbitrariness in parole decisions.<sup>194</sup> But the right to appointment of counsel is less robust in practice than in theory. Eighty percent of the study sample was represented by appointed counsel, and 20% were represented by retained counsel.<sup>195</sup>

The appointment and payment of counsel is not done through the court, as in criminal proceedings, but through the Board. The Board's fee schedule compensates attorneys at a rate of no more than \$400 total per parole hearing, regardless of the travel distance to the prison, the complexity of the case, or the length of the hearing (which may be over six hours long).<sup>196</sup> No additional funding is provided for communicating or meeting with the client, collecting or investigating documents, contacting friends, family, or poten-

---

<sup>188</sup> See CAL. CODE REGS. tit. 15, §§ 2029.1, 2030.

<sup>189</sup> See CAL. CODE REGS. tit. 15, § 2029.1.

<sup>190</sup> See *In re Arafiles*, 6 Cal. App. 4th 1467, 1480–81 (1992).

<sup>191</sup> See CAL. PENAL CODE § 3041.5 (West); *In re Olson*, 37 Cal. App. 3d 783, 790 (Ct. App. 1974).

<sup>192</sup> See *id.*; *supra* note 96 and accompanying text.

<sup>193</sup> See CAL. PENAL CODE § 3041.7 (West 2015).

<sup>194</sup> See Garber and Maslach, *The Parole Hearing: Decision or Justification?*, 1 LAW & HUMAN BEHAV. 3, 263 (1977); Phillip E. Johnson & Sheldon L. Messinger, *California's Determinate Sentencing Statute: History and Issues*, in DETERMINATE SENTENCING: REFORM OR REGRESSION 261, 263 (1978), <https://scholarship.law.berkeley.edu/cgi/viewcontent.cgi?article=2883&context=facpubs>, archived at <https://perma.cc/6NQK-FZTN>.

<sup>195</sup> See Appendix, Table A.

<sup>196</sup> See *In re Poole*, 2018 WL 3526684 at \*12 (Cal. Ct. App. July 23, 2018) (unpublished) (ordering an evidentiary hearing to consider whether counsel is inadequate based on declarations from parole hearings and information about the compensation rate); see also Attorney Invoice, BPH Form 1076, [http://www.cdcr.ca.gov/BOPH/docs/Invoicing/BPH-1076\\_Attorney\\_Invoice-fillable.pdf](http://www.cdcr.ca.gov/BOPH/docs/Invoicing/BPH-1076_Attorney_Invoice-fillable.pdf), archived at <https://perma.cc/DH4A-UB5H> (showing that attorneys are compensated \$25 for an appointment, \$50 for review of the packet of information compiled by the Board, \$75 for review of the Central-File, \$75 for a client interview, and \$175 for personal appearance at the parole hearing).

tial employers, or filing a writ petition to challenge the decision if parole is denied.<sup>197</sup> The attorney is also not compensated for supplementing the record with mitigating evidence about a client's background or for obtaining expert opinions, such as an opinion from an independent expert in psychology or adolescent development.<sup>198</sup>

Even the rudimentary task of obtaining and reviewing the trial transcript from the underlying conviction is not compensated<sup>199</sup> and generally goes uncompleted.<sup>200</sup> One case provides an example of the value of obtaining and reviewing the trial transcript. In this case, a parole candidate's version of the underlying offense was well supported by testimony at trial, but was inconsistent with facts recorded in police investigation reports upon which the Board relied.<sup>201</sup> When the transcript was not in the record, the Board denied parole on the ground that it found that the candidate's version of the offense was "against the face of reason," and that he therefore lacked insight and credibility.<sup>202</sup> When the transcript was obtained and introduced at a hearing one year later, the Board did not take issue with the candidate's credibility and granted parole.<sup>203</sup>

The quality of advocacy at parole hearings varies widely among both appointed and retained attorneys. Examples of zealous advocacy observed in some transcripts include attorneys raising objections to problematic hearing procedures, giving a closing argument that brings to bear scientific evidence about the juvenile brain and explains how each of the "hallmark features of youth" applies to the client's case, retaining an expert psychologist to evaluate the client and write an evaluation, and introducing trial transcripts which demonstrate clear factual errors in the description of the offense relied upon by the Board. In other cases, attorneys did none of these things. Some attorneys affirmatively argued that their clients should not be granted parole. In one example, an attorney representing the parole candidate stated during closing arguments, "I think it would be disingenuous of me as his attorney to ask for parole."<sup>204</sup> In another case, an attorney stated in his closing argument, "Is he going to participate in antisocial behavior with theft and so

---

<sup>197</sup> See *In re Poole*, 2018 WL 3526684 at \*6.

<sup>198</sup> See *id.*

<sup>199</sup> See *id.*

<sup>200</sup> Parole attorneys told the author that the trial transcript is generally not included in the candidate's prison file, and when the transcript is absent, the Board takes facts about the crime from whatever other documents are in the prison file. These documents typically include police investigation reports, probation reports, and the appellate opinion. See generally California Board of Parole Hearings, Parole Consideration Transcripts (2014-2015) (on file with author).

<sup>201</sup> Author provided legal representation in this case. See California Board of Parole Hearings, Parole Consideration Hearings (February 2016, August 2017) (transcripts on file with author).

<sup>202</sup> See *id.*

<sup>203</sup> See *id.*

<sup>204</sup> See California Board of Parole Hearings, Parole Consideration Hearings (May 2015) (transcript on file with author).

forth . . . Who knows . . . I don't think he's ready today."<sup>205</sup> In a third case, the attorney not only argued that his client should not be granted parole but "would be worth a look at [in] less than ten years."<sup>206</sup>

The use of expert opinions is another area in which traditional procedural protections are curtailed for parole candidates. There is no qualification procedure for introducing expert reports,<sup>207</sup> and California courts have not recognized a right for parole candidates to confront adverse expert reports through cross-examination.<sup>208</sup> The primary expert opinions used in parole decisions are the CRA reports completed by the Board's forensic psychologists prior to the hearing. In one case, the hearing panel relied on a CRA report even after acknowledging that the parole candidate had correctly identified seven factual errors in the CRA—including a false assertion that he had a prior sexual assault in his record, a statement that he had no GED despite the presence of a GED certificate in his file, and the wrong name of the victim.<sup>209</sup>

The lack of an opportunity to exclude evidence or depose forensic psychologists is also markedly limiting with respect to challenging the reliability and legality of the methods psychologists use in the CRAs. The CRAs use a risk assessment instrument called the Historical-Clinical-Risk Management-20, Version 3 (HCR-20-V3)<sup>210</sup> which purports to estimate the likelihood of future violence based on factors correlated with violence in studies on mental health patients and adult offenders.<sup>211</sup> The reliability of this instrument as applied to juvenile lifers is unknown; none of the studies used to design or empirically validate this instrument were conducted on juvenile

---

<sup>205</sup> See California Board of Parole Hearings, Parole Consideration Hearings (February 2015) (transcript on file with author).

<sup>206</sup> See *id.*

<sup>207</sup> See *In re Buenrostro*, No. B264275, 2017 WL 780877, at \*12 (Cal. Ct. App. Feb. 28, 2017) ("In determining suitability for parole, the California Code of Regulations provides that the Board, and therefore the Governor, must consider '[a]ll relevant, reliable information' (§ 2402, subd. (b)) in evaluating whether 'an inmate *continues* to pose an unreasonable risk to public safety.' (*In re Lawrence*, 190 P.3d 535, 560 (2008)). There is no statement in the Constitution or Penal Code curtailing the Governor's and Board's ability to determine what is 'relevant' and 'reliable' information." Cf. *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 597 (1993).

<sup>208</sup> See *In re Arafiles*, 6 Cal. App. 4th 1467, 1480 (1992) (right to confront adverse witnesses applies to decisions to revoke parole after a prisoner has been released, but has not been extended to decisions to grant or deny parole).

<sup>209</sup> See California Board of Parole Hearings, Parole Consideration Hearings (April 2015) (transcript on file with author). Since the time period of this study, litigation has led to changes in the process for appealing errors in the CRA. See *Johnson v. Shaffer*, No. 212CV1059KJMACP, 2017 WL 4475915, at \*10 (E.D. Cal. Oct. 6, 2017); Isard, *supra* note 98, at 1234.

<sup>210</sup> See *supra* note 135.

<sup>211</sup> See Douglas et al., *Historical-Clinical-Risk Management-20, Version 3 (HCR-20V3): Development and Overview*, 13 INT'L J. OF FORENSIC MENTAL HEALTH 2, 93–108 (2014); see also Douglas et al., *HCR-20 Violence Risk Assessment Scheme: Overview and Annotated Bibliography* (2008), <http://kdouglas.files.wordpress.com/2006/04/annotate10-24nov2008.pdf>, archived at <https://perma.cc/22E2-7JQX>; Isard, *supra* note 98, at 1244.

offenders or people who have served long periods of time in prison.<sup>212</sup> The instrument may actually put juvenile offenders at a disadvantage vis-à-vis adult offenders because it uses young age at the time of the crime and a limited history of employment as factors indicating a relatively higher risk of future violence.<sup>213</sup> These concerns may make the instrument inadmissible under a state law which mandates that risk assessment instruments used at youth offender parole hearings must take into account the diminished culpability of youth and the hallmark features of youth.<sup>214</sup> Without the ability to make motions challenging the admissibility of expert opinion, however, these concerns go largely unheard.

Finally, California lifer parole decisions are subject to judicial review under state law.<sup>215</sup> A candidate who is denied parole may seek review by filing a habeas corpus petition; however, there is no right to appointment of counsel to do so,<sup>216</sup> and the cost of hiring an attorney to file a petition is prohibitive for the vast majority of juvenile lifers.<sup>217</sup> Further, the court's review is "extremely deferential" to the Board, and does not assess the substantive merits of the decision.<sup>218</sup> The court may reverse a decision to deny parole and send it back to the parole board for a new decision,<sup>219</sup> but only if there is nothing in the record which provides "some evidence," which has been interpreted as a "modicum of evidence" of current dangerousness.<sup>220</sup> The gravity of the underlying crime cannot "in and of itself" provide some evidence of current dangerousness.<sup>221</sup> The gravity of the crime can, however, provide evidence of current dangerousness if some other evidence in the record indicates that the crime remains probative of whether a person is a

---

<sup>212</sup> See Manchak et al., *Utility of the Revised Level of Service Inventory (LSI-R) in Predicting Recidivism After Long-Term Incarceration*, 32 LAW & HUM. BEHAV. 477, 478 (2008). The author and research assistant investigated samples of all studies that the designers of the HCR-20 have cited as providing empirical validation for the HCR-20. See Douglas et al., *HCR-20 Violence Risk Assessment Scheme*, *supra* note 135. The samples included people who committed crimes and/or acts of violence as adults. None explicitly included people whose only crimes were committed as juveniles and who had served a decade or more in prison.

<sup>213</sup> See Douglas et al., *Historical-Clinical-Risk Management-20*, *supra* note 135, at 98.

<sup>214</sup> See CAL. PENAL CODE § 3051(f) (West 2017).

<sup>215</sup> See *In re Lawrence*, 190 P.3d 535, 547 (2008).

<sup>216</sup> See *In re Poole*, No. A154517, 2018 WL 3526684, at \*8 (Cal. Ct. App. July 23, 2018), *reh'g denied* (Aug. 21, 2018), *review denied* (Nov. 14, 2018).

<sup>217</sup> Conversation with California parole attorney.

<sup>218</sup> See *In re Rosenkrantz*, 59 P.3d 174, 210 (Cal. 2002) (judicial review of parole decisions is "extremely deferential and reasonably cannot be compared to the standard of review involved in undertaking an independent assessment of the merits or in considering whether substantial evidence supports the findings").

<sup>219</sup> See *In re Prather*, 234 P.3d 541, 544 (Cal. 2010) (when court grants petition for habeas corpus and reverses Board decision to deny parole, remedy is for Board to conduct a new parole hearing).

<sup>220</sup> See *In re Shaputis II* 265 P.3d 253, 267 (Cal. 2011) (proper inquiry for court reviewing decision to deny parole is to determine whether whole record "discloses some evidence—a modicum of evidence—supporting the determination that the inmate would pose a danger to the public if released on parole").

<sup>221</sup> See *In re Lawrence*, 190 P.3d 535, 555 (2008).

continuing threat to public safety.<sup>222</sup> For example, a finding that a parole candidate lacks sufficient insight into the underlying crime can establish a rational nexus between the crime and the candidate's current mental state which allows the crime to be considered as evidence of current dangerousness.<sup>223</sup> Research indicates that, in practice, some appellate courts give the Board more deference than others.<sup>224</sup> But among the courts that hew closely to the letter of the law stated in the "extremely deferential" standard, decisions to deny parole are reversed only in exceptional cases, where a parole candidate has a spotless record and the resources to file a strong petition.<sup>225</sup>

### B. Decision-Making Body

The Board's organizational structure, particularly the fact that most parole decisions are made by one member of the Board, creates a risk of idiosyncratic decision-making. Aside from the small number of cases reversed by the full Board or the Governor, the vast majority of the decisions were made by a single commissioner in consultation with a deputy commissioner.<sup>226</sup> The term "Board" is therefore somewhat misleading in describing the decision-making body at individual parole-release hearings. This small decision body stands in contrast to parole boards in other states, which have five or six members making each decision together,<sup>227</sup> and in even starker contrast to a jury of twelve people in criminal cases. Part of the value of a multi-member decision-making body, whether a jury or multi-member parole board, is that the deliberative process protects against any single individual's opinion being decisive. Placing the decision primarily in one person's hands carries a greater risk that decisions will differ based on the

---

<sup>222</sup> See *id.*; see also *In re Shaputis I*, 190 P.3d 573, 584 (2008) (aggravated nature of crime constituted evidence of current dangerousness to uphold where parole candidate was found to lack insight into a long history of violence).

<sup>223</sup> See *In re Shaputis I*, 190 P.3d at 580.

<sup>224</sup> See Charlie Sarosy, *Parole Denial Habeas Corpus Petitions: Why the California Supreme Court Needs to Provide More Clarity on the Scope of Judicial Review*, 61 UCLA L. REV. 1134, 1171 (2014) (compiling appellate court opinions regarding challenges to parole denials and finding thirty-six cases in which the court applied the extremely deferential standard; also finding twenty-one cases in which the court applied a less deferential standard).

<sup>225</sup> See generally *id.* at Table 5 (finding that among the thirty-six cases in which the appellate court applied the extremely deferential standard, the court reversed the parole decision in only four instances).

<sup>226</sup> California's parole statute indicates that the hearing panel is to consist of at least one commissioner, but that it is the Legislature's intent that, when there is "no backlog of inmates awaiting hearings," the hearings shall be conducted by a panel of three or more members, the majority of which are commissioners. See CAL. PENAL CODE § 3041 (West 2017).

<sup>227</sup> See, e.g., Alaska, <http://www.correct.state.ak.us/Parole/pdf/handbook.pdf>, archived at <https://perma.cc/DS2K-P6PR>; Colorado, <https://www.colorado.gov/pacific/paroleboard/faq-0>, archived at <https://perma.cc/95K5-W6VC>; Georgia, [https://www.schr.org/files/parole\\_handbook.pdf](https://www.schr.org/files/parole_handbook.pdf), archived at <https://perma.cc/4W4L-DCG8>; Mississippi Miss. Code. Ann. § 47-7-13 (West); Oklahoma, [https://www.ok.gov/ppb/Parole\\_Process/index.html](https://www.ok.gov/ppb/Parole_Process/index.html), archived at <https://perma.cc/E45Z-WDAP>.

idiosyncrasies of one decision-maker to the next.<sup>228</sup> Differences in commissioners' respective grant rates reflect some of this variability: transcripts analyzed in this study showed that one commissioner granted parole in 14% of the fourteen hearings she presided over, whereas another commissioner granted parole in 74% of the twenty-three hearings she presided over. Another concern about having a sole member of the Board make these decisions is that this unilateral structure limits the extent to which the decision-maker is representative of the community. Although the California statute requires that commissioners reflect the racial, sexual, economic, and geographic diversity of California, this diversity is not reflected in any given case because only one member makes the decision alone.<sup>229</sup>

These concerns could be mitigated by the Board's decision-review process, but the operation of that process in practice is not particularly promising. After the panel present at the hearing makes a decision, the Board's internal Decision Review Unit reviews decisions and may recommend a modification to the decision.<sup>230</sup> If a modification is recommended, the matter is referred to the full Board, which may rescind or overturn the decision en banc.<sup>231</sup> The matter is referred to the Governor who has the authority to reverse the decision in all and only murder cases.<sup>232</sup> While the Board and Governor have authority to modify the decision in either direction, in this study set they used this power only to reverse decisions granting parole. In this study set, an estimated 5% of decisions to grant parole were reversed by the Board en banc, and 11% of decisions to grant parole were reversed by the Governor.<sup>233</sup> The unidirectional nature of review by both the full Board and the Governor suggests that the review process functions not as an impartial check on fairness across decisions, but rather as an additional barrier to being granted parole.

An additional concern about the structure of the decision-making body is its susceptibility to political influence. Lifer parole hearings are conducted by Board commissioners who the Governor appoints for three-year terms,<sup>234</sup> and due to the periodic nature of appointment, the Governor can change the entire composition of the Board within the four-year gubernatorial term. In addition to appointment power, the Governor can also exert power over the Board by reversing its decisions to grant parole in murder cases. Governors have varied considerably in the rate at which they reverse Board decisions; for example, Governor Davis reversed 97% of the Board's decisions to grant

---

<sup>228</sup> See generally *Spaziano v. Florida*, 468 U.S. 447, 489 (1984) (sentencing decisions made by a body of jurors are more reflective of community values than decisions made by a single judge).

<sup>229</sup> See CAL. PENAL CODE § 5075 (West 2018).

<sup>230</sup> See CAL. CODE REGS., tit. 15, § 2041(h).

<sup>231</sup> See *id.* The Board may reverse or rescind a decision on the basis of an error of law, an error of fact, or new information. See CAL. CODE REGS., tit. 15, § 2042.

<sup>232</sup> See Cal. Const. art. V, § 8.

<sup>233</sup> See *supra* notes 115 and 116.

<sup>234</sup> See CAL. PENAL CODE § 5075 (West 2018).

parole, whereas in 2015, Governor Brown reversed 14% of the Board's decisions to grant parole.<sup>235</sup>

The sensitivity to political pressure is heightened by the structural balance of risks in play at parole hearings. Given that public opinion is not sympathetic to parole candidates (and that parole candidates are often disenfranchised), there is little to lose in the court of public opinion by denying parole. On the other hand, politicians, as well as Board members, have a great deal of political capital to lose by granting parole to a candidate; there is always a risk that the person will later commit a crime, and if that happens, public opinion can turn against the decision-makers.<sup>236</sup> As California Supreme Court Justice Moreno has put the point, "The Board's commissioners . . . have little to gain and potentially much to lose by granting parole, and accordingly, the incentive to give only pro forma consideration to the parole decision is strong."<sup>237</sup>

### C. Substantive Legal Standard

The legal standard at parole hearings is shaped primarily by statute and is further informed by administrative regulations and case law. The parole statute provides that the Board "shall normally" grant parole after a parole candidate has served the minimum period of incarceration required by the sentence,<sup>238</sup> unless the Board determines that the candidate "continues to pose an unreasonable risk to public safety."<sup>239</sup> The Board follows administrative regulations that set forth, among other things, lists of reasons that generally support finding a candidate suitable or unsuitable for parole.<sup>240</sup> In interpreting the parole statute, the California Supreme Court has made clear that while the administrative regulations provide guidance, the ultimate question is whether the parole candidate poses a current danger to the community; if the Board finds that the candidate is not currently dangerous, parole must be granted.<sup>241</sup> The facts of the crime and any pre-conviction history prior to the crime cannot, on their own, support a denial of parole.<sup>242</sup> Such

---

<sup>235</sup> See Young et al., *supra* note 59, at 269.

<sup>236</sup> See Alexander K. Mircheff, In Re *Dannenberg: California Forgoes Meaningful Judicial Review of Parole Denials*, 39 LOY. L.A. L. REV. 907, 939 n.222 (2006), citing Jean Arnold, *California's Secret Judges*, S.F. CHRON., Aug. 20, 2000, at A1 ("Since 1988, when ads featuring Willie Horton, a furloughed Massachusetts convict who wrought havoc on a young couple, sabotaged the presidential prospects of Michael Dukakis, California governors have feared that one wrongly paroled felon could wipe out a lifetime of strategic political planning.").

<sup>237</sup> *In re Dannenberg*, 104 P.3d 783, 809 (Cal. 2005) (Moreno, J., dissenting) (internal citations omitted).

<sup>238</sup> See CAL. PENAL CODE § 3041 (a)(2) (West 2017).

<sup>239</sup> See *In re Lawrence*, 190 P.3d 535, 560 (Cal. 2008).

<sup>240</sup> See CAL. CODE REG., tit. 15, § 2402 (2001).

<sup>241</sup> See *In re Lawrence*, 190 P.3d at 554 (current dangerousness is the "overriding" question for the Board).

<sup>242</sup> See *id.* at 563–64.

facts can, however, support a denial of parole if the parole candidate is found to lack insight into the crime, or if there is another rational nexus between the crime and current attitudes or recent conduct.<sup>243</sup>

Importantly, this legal standard is designed to focus the Board's attention on current dangerousness. As an initial matter, this legal standard of dangerousness is remarkably vague. As discussed *infra* at Part V.B, the lack of specificity permits officials to interpret the standard in ways that lead to inconsistent outcomes across cases.<sup>244</sup> Discussion of disciplinary history in parole hearing transcripts provides a concrete example of how the breadth and ambiguity in the Board's governing standard on dangerousness permits commissioners to differ widely in their assessments. For example, one hearing panel in 2015 asked over ten questions regarding a disciplinary write-up for possession of a cellphone in 2012.<sup>245</sup> It was the candidate's only disciplinary write-up since 1996, and there was no evidence of any write-ups for violent conduct mentioned in the transcript. The candidate explained that he used the cellphone to cope with disappointment after being denied parole at the previous hearing. In the decision to deny parole, the commissioner cited the disciplinary write-up as a reason for denial, stating: "[Y]ou know when you can have something minor happen like that and you do what you did, you become unpredictable. Because the rules and regulations in here, you're under 24/7. When you get into the community, it's not 24/7."<sup>246</sup> In contrast, a hearing panel in 2014 had a very different response to a person who had a disciplinary write-up for possession of a cellphone in 2012, and who had a prior disciplinary write-up in 2011.<sup>247</sup> The hearing panel asked two questions regarding the write-up for possession of a cellphone and granted parole. In the reasons for decision, the commissioner stated: "You've remained disciplinary-free – it hasn't been too long, so a little over a year, 2012 . . . with the cell phone, but of note is that you've had no violence-related violations."<sup>248</sup>

A second problem posed by the overarching legal standard of "dangerousness" is that it tends to focus the Board on the aim of predicting future conduct, and, as discussed *supra* at Part II.B.1, this predictive aim is distinct from the aim of evaluating whether a candidate has demonstrated rehabilitation. This difference poses a problem with respect to juvenile lifers, but that

---

<sup>243</sup> See *In re Shaputis*, 190 P.3d 573, 584–85 (Cal. 2008).

<sup>244</sup> See *Johnson v. United States*, 135 S. Ct. 2551, 2556–57 (2015) ("The prohibition of vagueness in criminal statutes 'is a well-recognized requirement, consonant alike with ordinary notions of fair play and the settled rules of law,' . . . these principles apply not only to statutes defining elements of crimes, but also to statutes fixing sentences."); see also *Furman v. Georgia*, 408 U.S. 238, 256 (1972) (Douglas, J., concurring).

<sup>245</sup> See California Board of Parole Hearings, Parole Consideration Hearing (March 2015) (transcript on file with author).

<sup>246</sup> *Id.*

<sup>247</sup> See California Board of Parole Hearings, Parole Consideration Hearing (October 2014) (transcript on file with author).

<sup>248</sup> *Id.*

problem could theoretically be addressed by the Youth Offender Parole Law's mandate that the Board shall "give great weight to" the diminished culpability of youth, the hallmark features of youth, and to subsequent growth and maturity.<sup>249</sup> This mandate has a potential to act as a safeguard that focuses the Board's decision-making on evaluating improvement in behavior from childhood to adulthood; that is, on demonstrated rehabilitation. As explained below, however, the "great weight" mandate does not appear to be functioning this way in practice.

First, the phrase "great weight" is too vague to act as a reliable safeguard. When the California legislature used this phrase in a statute in a different context, the California Supreme Court held that the phrase was, on its own, too vague to be applied consistently, and set forth a more specific interpretation.<sup>250</sup> The Court has yet to specify the meaning of "great weight" in the context of juvenile lifer parole, but it granted a petition for review that is likely to address that question in 2019.<sup>251</sup>

Second, there is an underlying conceptual tension between the Board's existing regulations for granting parole and the "great weight" mandate. Under the Board's existing regulations, a history of being abused and living in a criminogenic environment as a child are factors that tend to favor denying parole.<sup>252</sup> The reasoning is that some research on adult offenders shows a correlation between these factors and violent conduct. The Board treats these factors as evidence to predict that a person is more likely to commit future violence, and thus less suitable for parole. In contrast, the law flowing from *Miller* is clear that a history of abuse, a criminogenic environment, and negative peer influence are mitigating factors in considering culpability and the appropriate sentence for a juvenile.<sup>253</sup> Under this law coupled with basic considerations of fairness, evidence of a horrific childhood should not be a reason to deny parole. A person can do nothing to change his childhood history; it would be non sequitur to say that a person with a horrific childhood has, in virtue of that childhood, failed to demonstrate rehabilitation as an adult.

---

<sup>249</sup> See CAL. PENAL CODE § 4801(c) (2018).

<sup>250</sup> See *People v. Martin*, 42 Cal. 3d 437 (1986); see also *People v. Martin*, 210 Cal. Rptr. 468, 477 (1985) (Kline, J., dissenting), *vacated*, 42 Cal. 3d 437 (1986) (explaining if left unexplained by the court, the formulation of "great weight" is "too vague to be meaningfully and consistently applied" and its ambiguity is destined to "devitalize . . . the basic concept of equal justice").

<sup>251</sup> See *In re Palmer*, 238 Cal. Rptr. 3d 59, 71 (2019) (unpublished), *review granted*, *In re Palmer*, 433 P.3d 1 (Cal. 2019). The Court of Appeals opinion in that case held that giving "great weight" means granting parole unless there is substantial evidence of countervailing considerations and the Board satisfactorily explains that evidence. See *In re Palmer*, 238 Cal. Rptr. 3d 59, 74 (2018). Another appellate decision has clarified that giving "great weight" to the mitigating facts of youth and subsequent growth and maturity means more than providing "lip service" to these factors. See *In re Poole*, 24 Cal. App. 5th 965 (2018).

<sup>252</sup> See CAL. CODE OF REGS., tit. 15, § 2402 (c).

<sup>253</sup> See *Miller v. Alabama*, 567 U.S. 460, 471 (2012); see also *People v. Gutierrez*, 58 Cal. 4th 1354, 1389 (2014).

This tension between the Board's regulations and the *Miller* factors is unresolved. The result in practice is that in any given case, a member of the Board may unilaterally decide to use evidence of a horrific childhood as favoring either a grant or a denial of parole. A history of abuse, trauma, or other instability in childhood was cited as a reason supporting the denial of parole in 59% of the Board's decisions to deny parole. For example, in justifying a parole decision, a commissioner stated: "You were an individual per Subsection C3 who possessed an unstable and tumultuous social history. This is evidenced by your relationship with family members, your mother subjecting you to physical and emotional abuse, [and] her drug and alcohol addictions. You being subjected to group homes at an early age, foster homes, you dropping out of school at the tenth grade, living a transient lifestyle [sic]." In another case, however, a commissioner used the same type of evidence to support a decision to grant parole, stating: "[We saw] the instability you had in your social history. You had limited control over your environment. You could not remove yourself from that environment, obviously, because you were only 16 years old."<sup>254</sup>

In addition, the governing legal standard is vague in how it treats the Board's assessment of insight among juvenile lifers. As discussed *supra*, Part II.B, insight is a term used by the Board to describe the degree to which a person has taken responsibility for past criminal conduct and has understood his own particular causative factors that led to that conduct.<sup>255</sup> Insight has been criticized as a vague and ambiguous concept in the general California parole context, but its ambiguity is heightened in the juvenile lifer context. The requirement that a candidate clearly understand and articulate his particular "causative factors" is in tension with recognition that juvenile's brains are not fully developed, so their behavior is more likely to be impulsive and thus less explicable. In explaining why children do what they do, the explanation may be incomplete without saying that kids are kids—they are often not thinking about what it is that they are doing.<sup>256</sup> To put it simply: for a child, a decent answer to the question, "What were you thinking?" is often, "Clearly I wasn't."

In some cases, parole commissioners do not fault candidates if they say there is no complete explanation for their conduct because they were a youth at the time. In other cases, however, commissioners fault such candidates' incomplete explanations for behavior as showing a lack of insight, or on

---

<sup>254</sup> California Board of Parole Hearings, Parole Consideration Hearing (May 2015) (transcript on file with author).

<sup>255</sup> See *supra* note 124 and accompanying text.

<sup>256</sup> See *Miller*, 567 U.S. at 471–72 ("developments in psychology and brain science continue to show fundamental differences between juvenile and adult minds—for example, in 'parts of the brain involved in behavior control' . . . [there are] findings of transient rashness, proclivity for risk, and inability to assess consequences") (citing *Graham*, 560 U.S. at 68 (2010)).

grounds that their conduct was worse because their motives were trivial.<sup>257</sup> For example, one commissioner stated: “we couldn’t say you’re still a current unreasonable risk of danger today at 42, because you were unable to explain to us at 13 why you decided to become a criminal street gang member.” In contrast, another candidate was faulted for lacking insight into why, at age 38, he did not give a complete explanation for why he joined a gang at age 13. The candidate, who had grown up on the streets of South Central Los Angeles, explained that gang members all around him pressured him to join and that joining the gang was a foolish thing to do. In denying parole, the commissioner reasoned that this explanation was insufficient, saying: “Why? What were the causative factors? What got you to do that? . . . frankly, sir, I was looking more towards, ‘I was self-centered. I was selfish. I was only thinking about my own needs, nobody else’s. I was a monster in my community.’”<sup>258</sup>

Given the vagueness and inherent tensions underlying the Board’s guiding standards, they are ill equipped to help the Board make decisions that are consistent with respect to a measure of rehabilitation. These inadequate standards, in conjunction with the relatively weak procedural protections and the structure of the decision-making body, provide little reason to believe that parole will be consistently granted to those who demonstrate comparable rehabilitation.

## V. CONSTITUTIONAL QUESTIONS

If the California juvenile lifer parole system continues to operate as it did during this study period, it is arguably unconstitutional on the three grounds described below. To be clear, these are all arguments that the system as a whole is unconstitutional due to evidence of arbitrariness in decision-making. In addition to these arguments, individuals may have arguments that their continued incarceration violates the Eighth Amendment on proportionality grounds.<sup>259</sup> Omitted from discussion here is an argument under the Equal Protection clause of the Fourteenth Amendment that could be based on the evidence of racial disparity in parole decisions. As stated *supra*, this argument is reserved for future research because its complexity demands attention beyond the scope of this Article.

---

<sup>257</sup> The Board’s administrative regulations state that the offense tends to favor denying parole especially when the motive is “inexplicable or very trivial in relation to the offense.” CAL. CODE OF REGS., tit. 15, § 2402(c)(1)(E). At some hearings, the lack of a motive for the crime was not cited as a reason tending to favor a denial of parole, but rather as evidence that the crime resulted from youthful impulsivity. But at other hearings, the same recklessness and impulsivity at the time of the crime was cited as a reason to deny parole.

<sup>258</sup> California Board of Parole Hearings, Parole Consideration Hearing (September 2014) (transcript on file with author).

<sup>259</sup> See, e.g., *In re Palmer*, 245 Cal. Rptr. 3d 708 (Cal. Ct. App. 2019).

*A. Cruel and Unusual Punishment, as Applied*

The Supreme Court has only once held that a system of punishment violates the Eighth Amendment if it is applied in an arbitrary and capricious manner. This holding came in 1972, when the Supreme Court struck down the death penalty as unconstitutional in *Furman v. Georgia*.<sup>260</sup> After explaining the *Furman* line of cases below, this Part argues that the evidence provided in this study shows that juvenile lifer parole decisions are as arbitrary and capricious as death penalty decisions were in *Furman*. Insofar as the analogy between death penalty sentences and parole-release decisions is apt, the California juvenile lifer parole system would violate the Eighth Amendment as applied.

Justice Douglas's opinion in *Furman* explained why a punishment that is applied in an arbitrary and capricious manner violates the Eighth Amendment.<sup>261</sup> He showed that the Amendment has roots in English law that prohibited wide variation in fines for the same offenses.<sup>262</sup> As Justice Douglas explained, "The high service rendered by the cruel and unusual punishment clause is to require legislatures to write penal laws that are evenhanded, nonselective, and nonarbitrary, and to require judges to see to it that general laws are not applied sparsely, selectively, and spottily to unpopular groups."<sup>263</sup> Justice Douglas emphasized that the principle of equal treatment under law is implicit in the Eighth Amendment; it is cruel and unusual to apply a penalty to those "whom society is willing to see suffer though it would not countenance general application of the same penalty across the board."<sup>264</sup>

In *Furman*, the court was presented with evidence that legitimate factors could not adequately explain why some defendants received the death penalty whereas others received non-capital sentences. Justice White highlighted the lack of a "meaningful basis for distinguishing the few cases in which [death] is imposed from the many cases in which it is not."<sup>265</sup> Justice Brennan echoed this conclusion, stating that "[n]o one has yet suggested a rational basis that could differentiate . . . the few who die from the many who go to prison."<sup>266</sup> The Justices also relied on evidence that illegitimate reasons like race and class appeared to influence capital sentencing outcomes. Justice Douglas discussed a Texas study which found that poor people with limited education were over-represented in the class of people who

---

<sup>260</sup> Each of the five justices concurring in the *Furman* decision wrote a separate opinion; three justices maintained that the death penalty violated the Eighth Amendment in its application, and two justices reasoned that the death penalty violated the Eighth Amendment both on its face and as applied.

<sup>261</sup> See *Furman*, 408 U.S. at 242–43 (Douglas, J., concurring).

<sup>262</sup> See *id.*

<sup>263</sup> *Id.* at 256.

<sup>264</sup> *Id.* at 245.

<sup>265</sup> *Id.* at 313 (White, J., concurring).

<sup>266</sup> *Id.* at 294 (Brennan, J., concurring).

were executed, and that, among pairs of co-defendants, there were several instances in which Black co-defendants were sentenced to death whereas white co-defendants were given non-capital sentences.<sup>267</sup> Justice Marshall cited the fact that of all people executed across the country since 1930, 1,751 were white and 2,066 were African-American.<sup>268</sup>

No member of the plurality claimed that empirical evidence offered proof that death penalty decisions were motivated by illegitimate reasons like race or class, but they each agreed that the evidence showed a risk that decisions were arbitrary.<sup>269</sup> The next question was whether the gravity of this risk established an Eighth Amendment violation. The Justices considered the gravity of the risk in light of the process by which death penalty decisions were made. They relied on the fact that, at that time in Georgia, jurors were “wholly unguided by standards” when deciding whether to impose death sentences.<sup>270</sup> Given this decision procedure, the justices reasoned that there was an unacceptably high risk that death penalty decisions were made arbitrarily, and struck down the death penalty sentencing scheme as unconstitutional in application.

In the wake of *Furman*, Georgia and other states amended their death penalty statutes to include a number of provisions designed to function as safeguards against arbitrary decision-making. In *Gregg*, the Court held that the safeguards in Georgia’s amended statute allowed the death penalty to be reinstated at that time.<sup>271</sup> The Court did not bestow “permanent approval on the Georgia system. It simply held that the State’s statutory safeguards were assumed sufficient to channel discretion without evidence otherwise.”<sup>272</sup> That assumption was challenged in *McCleskey*, in which the defendant relied upon an empirical study conducted by David Baldus which showed that a defendant was 4.3 times more likely to receive the death penalty in Georgia if the victim was white rather than Black.<sup>273</sup> The majority and dissent agreed that although the Baldus study did not prove that racial bias played a causal role in any individual case, it did establish a risk that the race of the victim influenced death penalty decisions.

The majority and dissent in *McCleskey* vehemently disagreed, however, on whether the degree of risk shown by the study was acceptable when considered in light of existing statutory safeguards. In an opinion that several scholars have criticized as the Court’s worst mistake since *Plessy v. Ferguson*,<sup>274</sup> the majority held that the risk of racial bias shown by the study was

---

<sup>267</sup> See *id.* at 251–52 (Douglas, J., concurring).

<sup>268</sup> See *id.* at 364 (Marshall, J., concurring).

<sup>269</sup> See *id.* at 368.

<sup>270</sup> *Id.* at 295 (Brennan, J., concurring) (citing *McGautha v. California*, 402 U.S. 183, 196–208 (1971)).

<sup>271</sup> See *Gregg v. Georgia*, 428 U.S. 153, 206–07 (1976).

<sup>272</sup> *McCleskey v. Kemp*, 481 U.S. 279, 338 (1987).

<sup>273</sup> See *id.* at 287.

<sup>274</sup> See *Plessy v. Ferguson*, 163 U.S. 537 (1896). See, e.g., John H. Blume & Sheri Lynn Johnson, *Unholy Parallels Between McCleskey v. Kemp and Plessy v. Ferguson: Why Mc-*

not high enough to violate the Eighth Amendment.<sup>275</sup> Emphasizing the robustness of the procedural protections instituted post-*Furman*, the majority held that the Baldus study was not strong enough evidence to shake the presumption that jurors exercised discretion in a non-biased manner.<sup>276</sup> In contrast, the dissent maintained that the presumption of fairness should be rebuttable on the basis of the preponderance of the evidence, and that the Baldus study met that standard.<sup>277</sup>

The court did not have any statistical evidence when it decided *Furman*, but in *EQUAL JUSTICE AND THE DEATH PENALTY* (1990), David Baldus and his co-authors provide statistical measures of the extent to which Georgia death penalty decisions tracked (or failed to track) levels of culpability in the pre-*Furman* era as compared to the years following *Gregg* and preceding *McCleskey* [the post-*Gregg* era].<sup>278</sup> The Baldus team coded information from thousands of murder cases and death penalty decisions, and constructed a culpability index that measured relative culpability among death penalty defendants. Then they plotted the actual death penalty decisions along their constructed index of culpability. Figure 3 in Part V.A, *supra*, used an analogous technique by constructing a rehabilitation index and plotting actual parole-release decisions along that index.

In the pre-*Furman* era, the Baldus team found that 61% of death-sentence cases had a lower culpability level than “normal” life-sentenced cases (i.e. they had culpability levels lower than the ninety-fifth percentile of life-sentence cases).<sup>279</sup> This finding means that the majority of the people who were sent to death (specifically 61% of them) did not appear to be any more culpable than people who normally received life sentences. Whatever was making the difference between whether a person received life or death, it did not appear to be culpability. In the post-*Gregg* era, however, the Baldus study found that the majority of people sentenced to death did appear to be more culpable than those who normally received life. Specifically, 29% of people sentenced to death had culpability levels lower than the ninety-fifth percentile of cases in which a life sentence was imposed.<sup>280</sup>

On this measure, the California juvenile lifer parole system more closely resembles the pre-*Furman* Georgia death penalty system than it does the post-*Gregg* system. The data in Figure 3 shows that among the full set of

---

Cleskey (*Still Matters*), 10 OHIO ST. J. CRIM. L. 37, 63 (2012); Stephen B. Bright, *Discrimination, Death, and Denial: The Tolerance of Racial Discrimination in Infliction of the Death Penalty*, in *FROM LYNCH MOBS TO THE KILLING STATE* 211, 236 (Charles J. Ogletree, Jr. & Austin Sarat, eds., 2006); Bryan Stevenson, *Keynote Address by Mr. Bryan Stevenson*, 53 DEPAUL L. REV. 1699, 170 (2004).

<sup>275</sup> See *McCleskey*, 481 U.S. at 313.

<sup>276</sup> See *id.*

<sup>277</sup> See *id.* at 337–38 (Brennan, J., dissenting).

<sup>278</sup> See *supra* note 142.

<sup>279</sup> See BALDUS ET AL., *supra* note 142, at 80–83. The calculation is based on a set of 292 cases, forty-four of which were given the death penalty.

<sup>280</sup> See *id.* at 91. The calculation is based on a set of 483 cases, 112 of which were given the death penalty.

426 candidates, 48% of denied candidates had rehabilitation levels at or above the rehabilitation levels of normal grantees. Among the more selective set of 334 candidates who had rehabilitation levels over 1.0, 74% of denied candidates had rehabilitation levels at or above normal grantees.

To determine whether the evidence of inconsistency here rises to the level of arbitrary and capricious decision-making under the Eighth Amendment, the process by which parole decisions are made needs to be evaluated and compared to the process by which death penalty decisions are made. Parole-release decisions at juvenile lifer parole hearings are made without clear standards and without most of the procedural protections available at a death penalty trial. As discussed *supra*, parole hearings are conducted behind closed doors, witnesses cannot be called, and decisions are made by one commissioner and a deputy rather than a jury. The process for making parole-release decisions does not—as it did in *McCleskey*—provide confidence that decisions are non-arbitrary *in spite of* the pattern of arbitrariness observed in quantitative analysis of outcomes. On the contrary, as in *Furman*, the process of decision-making here seems to *confirm* the pattern of arbitrariness in outcomes. Accordingly, there is a strong argument that juvenile lifer parole decisions in California are arbitrary and capricious as applied under the Eighth Amendment. The remedy for such a violation would be to establish clear standards to govern juvenile lifer parole decisions, as well as to improve procedural protections. These remedies, discussed in Part VI would also address the other constitutional deficiencies under the Fourteenth Amendment as described below.

### B. *Void for Vagueness*

A criminal statute violates the Fifth Amendment guarantee of due process if it is written in so vague a manner that “it fails to give ordinary people fair notice of the conduct it punishes, or [is] so standardless that it invites arbitrary enforcement.”<sup>281</sup> Courts have generally invoked this constitutional protection, referred to as the void-for-vagueness doctrine, in striking statutes that either define the elements of crimes or set sentences in vague terms.<sup>282</sup> While the parole statute at issue in California is not technically a statute that imposes a sentence, it functionally operates in that manner because it determines whether a person will serve less than twenty years in prison or more than forty years in prison.<sup>283</sup> A functional rather than formalistic reading of the statute would therefore subject it to scrutiny under the Fifth Amendment void for vagueness doctrine. Regardless of whether Fifth Amendment scru-

---

<sup>281</sup> *Johnson v. United States*, 135 S. Ct. 2551, 2556–57 (2015) (citing *Kolender v. Lawson*, 461 U.S. 352, 357–58 (1983)).

<sup>282</sup> *Id.* at 2557.

<sup>283</sup> See *supra* Table 10: Spread in Time-Served Among Candidates Granted Parole by Conviction-Type.

tiny applies, the statute would be subject to scrutiny under the Fourteenth Amendment's due process clause.<sup>284</sup>

The Court has explained that a core value underlying the void for vagueness doctrine, under either the Fifth or Fourteenth Amendment, is to prevent arbitrary and discriminatory enforcement by ensuring that laws provide explicit standards to those who apply them. "A vague law impermissibly delegates basic policy matters to policemen, judges, and juries for resolution on an ad hoc and subjective basis, with the attendant dangers of arbitrary and discriminatory application."<sup>285</sup> Given that parole board members effectively decide whether a person will serve under twenty years rather than upwards of four decades in prison, "parole board members" should be included in the list alongside police, judges, and juries.

The study above provides evidence that the length of time a person spends in prison, or whether the person is ever released from prison, is not determined by explicit standards that are applied in the same way across cases. Rather, release is determined by individual Board member's assessments under a vague "current dangerousness" standard, which is complicated by an equally vague requirement to give "great weight" to the mitigating factors of youth. The breadth of the term "dangerousness" as used by the Board stands in contrast to the more narrowly specified meaning of dangerousness in other parts of California law. Other parts of California law define dangerousness as a substantial risk of committing violence or causing physical harm to one's self or others; under that definition, uncertainty about whether a person will comply with rules is not "dangerousness."<sup>286</sup> As discussed *supra* at Part IV.C, one Board member may find a parole candidate dangerous only if he poses a threat of violence to others,

---

<sup>284</sup> See *Grayned v. City of Rockford*, 408 U.S. 104, 107 (1972) (anti-picketing ordinance void for vagueness under Fourteenth Amendment).

<sup>285</sup> *Id.* at 108–09.

<sup>286</sup> In *Conservatorship of Hofferber*, 28 Cal. 3d 161, 176 (1980), the California Supreme Court recognized a common thread in the meaning of "dangerousness" across various California statutes: that dangerousness involved a risk of harming others. The Court recognized this meaning across a wide variety of statutes: "§1800 [extended commitment of Youth Authority inmate 'physically dangerous to the public' because of 'mental or physical deficiency, disorder, or abnormality']; §5304 [90-day civil commitment of one who has attempted or inflicted physical harm 'and who, as a result of mental disorder, presents an imminent threat of substantial physical harm to others']; §6300 [MDSO defined as one whose 'mental defect, disease, or disorder' predisposes him to sexual offense 'to such a degree that he is dangerous to the health and safety of others']; §6316.2 [extended commitment of MDSO whose mentally disordered propensity for sex offenses presents a 'substantial danger of bodily harm to others']; §6500 [commitment of mentally retarded person who is a 'danger to himself or others']." Reviewing these various specifications of dangerousness, the Court decided to adopt a definition of dangerousness in *Hofferber* that required finding that a person "represents a substantial danger of physical harm to others." *Id.* at 176–77. Further, while not using the term "danger," Proposition 47 defines "an unreasonable risk to public safety" as an unreasonable risk of committing "eight types of particularly serious or violent felonies, known colloquially as 'super strikes.'" *But see* *People v. Valencia*, 3 Cal. 5th 347, 354 (2017) (affirming "unreasonable risk to public safety" as standard judges are to use in deciding petitions for resentencing under Proposition 36).

whereas in another hearing a Board member may find a candidate dangerous because of a lack of predictability about whether a candidate will comply with all the technical rules of parole.

As discussed *supra* at Part III, the study offers evidence that, in the absence of clear standards, there is a substantial risk that officials are engaging in arbitrary and discriminatory decision-making. Of critical importance here is the fact that Black candidates face significantly lower prospects of parole when disciplinary history and participation in programs are held constant,<sup>287</sup> and when a regression is run that accounts for fifteen other variables.<sup>288</sup> In addition, candidates who lack funds to hire private attorneys face lower prospects of parole, and there is reason to believe that this impact is magnified among those with cognitive deficits or less than a high-school level of education.<sup>289</sup> And at a higher level of abstraction, the people who are far more likely to have received life sentences as juveniles in the first place, and therefore be subject to the discretion of the parole board, are people of color who were growing up as children in the country's most deeply impoverished neighborhoods.<sup>290</sup>

We would do well to remember here the words of Justice Douglas in holding that vagrancy laws were void for vagueness: “[Vagrancy statutes] are nets making easy the roundup of so-called undesirables. But the rule of law implies equality and justice in its application . . . . The rule of law, evenly applied to minorities as well as majorities, to the poor as well to the rich, is the great mucilage that holds society together.”<sup>291</sup> Here it appears that law, unevenly applied, is not glue that is holding society together, but is instead contributing to a barrier that keeps those deemed undesirable apart.

### C. Procedural Due Process

Following its jurisprudence established in *Greenholtz*, the Supreme Court has held that the due process clause of the Fourteenth Amendment applies to California's parole statute, but that it requires only minimal protections that are already offered at California parole hearings (an in-person hearing and a statement of reasons).<sup>292</sup> The amount of process that is constitutionally required in juvenile lifer parole decisions, however, should be higher than the baseline articulated in *Greenholtz*.<sup>293</sup>

---

<sup>287</sup> See *supra* Table 1, Table 2.

<sup>288</sup> See *supra* Table 8.

<sup>289</sup> See *supra* Table 4, Figure 5.

<sup>290</sup> See MEHTA, *supra* note 5 at 21–24.

<sup>291</sup> *Papachristou v. City of Jacksonville*, 405 U.S. 156, 171 (1972).

<sup>292</sup> See *Swarthout v. Cooke*, 562 U.S. 216, 219 (2011).

<sup>293</sup> See Matthew Drecun, *Cruel and Unusual Parole*, 95 TEX. L. REV. 707, 733 (2017) (arguing that procedural protections should be more robust at parole hearings for people who were juveniles at the time of the crime).

To determine what procedural protections are needed under the due process clause, courts use the *Mathews v. Eldridge* three-part balancing test.<sup>294</sup> The test looks to the nature of the private interest at stake, the extent to which procedures can reduce the risk of error in decisions, and the public interest at stake. On the basis of the first factor, the liberty interest among juvenile lifers is more pressing than that of the petitioners in *Greenholtz* because release for juvenile lifers entails not only liberty from prison, but their very first and only opportunity to live as an adult in society—including the opportunity to vote, to own property, to work for a living wage, to live with a partner, and to have children. Further, in *Greenholtz*, prisoners before the parole board were seeking early release from sentences that were valid regardless of the availability or structure of parole-release. In contrast, whether or not juvenile life sentences are constitutional depends directly on the availability of release on parole. Juvenile lifers are not seeking the privilege of early release, but are expecting fulfillment of the Eighth Amendment’s promise that they will be released if they demonstrate rehabilitation.<sup>295</sup> In this sense, the private interest at stake at juvenile lifer hearings is not only an interest in liberty, but an interest in not being subjected to prolonged unconstitutional punishment.<sup>296</sup>

In addition to considering the gravity of this liberty interest, the *Mathews* test also requires weighing the public’s interest and the likelihood that procedures would reduce the risk of error in decision-making. A problem arises, as it did in *Greenholtz*, in assessing the risk of error: how does a court determine “error” in any given parole decision when the standards for granting parole are so broad and amorphous?

First, the proposal for reform advanced below is not that parole decisions should remain ungoverned by clear standards but nevertheless be subject to robust procedural protections. Rather, the argument is that the study shows a need for clear standards to be established at juvenile lifer parole

---

<sup>294</sup> See *Mathews v. Eldridge*, 424 U.S. 319, 335 (1976) (“[I]dentification of the specific dictates of due process generally requires consideration of three distinct factors: First, the private interest that will be affected by the official action; second, the risk of an erroneous deprivation of such interest through the procedures used, and the probable value, if any, of additional or substitute procedural safeguards; and finally, the Government’s interest, including the function involved and the fiscal and administrative burdens that the additional or substitute procedural requirement would entail.”)

<sup>295</sup> See *Russell & Denholtz*, *supra* note 3; *Hawkins v. N.Y. State Dep’t of Corr. & Cmty. Supervision*, 30 N.Y.S. 3d 397, 400–01 (N.Y. App. Div. 2016); *Atwell v. State of Florida*, 197 So. 3d 1040, 1050 (Fla. 2016); *Hayden v. Keller*, 134 F. Supp. 3d 1000, 1009 (E.D.N.C. 2015); *Greiman v. Hodges*, 79 F. Supp. 3d 933, 940, 944 (S.D. Iowa 2015).

<sup>296</sup> At stake in juvenile lifer parole hearings is also compliance with the Eighth Amendment. If a rehabilitated juvenile lifer is denied, the denial means both a loss of expected liberty as well as continued incarceration that violates the Eighth Amendment. In this way, parole decisions are subject not only to due process scrutiny under the Fourteenth Amendment, but also to what has been called “super due process” scrutiny under the Eighth Amendment. See *Russell*, *supra* note 4, at 416–17.

hearings.<sup>297</sup> When those standards are in place, more robust procedural protections will be called for under a traditional application of the *Mathews* inquiry.<sup>298</sup>

Second, even without a particularized standard of rehabilitation, the study above has certainly provided evidence of a risk of error in decisions. The risk is that decisions are being influenced by factors such as race and ability to hire a private attorney that are unrelated to rehabilitation. The risk is also that decisions are based on false information. For example, candidates who are denied based on confidential information have no idea whether the information in the confidential file is true or false. Transcripts showed evidence of parole board members relying on statements in police reports that were flatly contradicted by sworn trial testimony,<sup>299</sup> on CRA reports that contain multiple factual errors,<sup>300</sup> and which rely on a risk assessment tool that has not been validated on a population of people whose criminal history is limited to crimes as juveniles.<sup>301</sup> The procedural protections described below would reduce the risk of these types of errors.

## VI. A STONE OF HOPE: REFORMING THE PAROLE PROCESS

This section outlines three types of reforms that the legislature or the parole board itself could take to improve consistency in parole decision-making. Three basic types of reforms are proposed below: cabining discretion, improving the exercise of discretion, and establishing oversight over discretion. These proposals draw upon the study presented above, the history of parole reform in other jurisdictions, and scholarship on how other administrative agencies have improved consistency in decision-making. Notably, the reforms are not mutually exclusive; a legislature, or the parole board, could adopt one, some, or all of the reforms. Further, these reforms need not

---

<sup>297</sup> A potential objection might be that rehabilitation is such an amorphous concept that it is in fact impossible to establish particularized standards that a parole board could apply in an objective way. The objection may be correct in that perfect standards are likely impossible, but in Justice Brennan's words, "[t]he impossibility of perfect standards [does not] justify making no attempt whatsoever to control lawless action." Legislatures and courts have constructed objective standards of correctness in areas where the underlying concepts are no less complex than rehabilitation: culpability, causation, and intent, to name just a few. These standards are constructed not because the underlying concepts have a neatly discernable structure that legislators and judges can aptly capture, but because standards are needed to assure evenhanded treatment from one party to the next.

<sup>298</sup> See Kimberly Thomas & Paul Reingold, *From Grace to Grids: Rethinking Due Process Protections for Parole*, 107 CRIM. L. & CRIMINOLOGY 213 (2017) (arguing that the minimal procedural protections required in *Greenholtz* would be insufficient under the Due Process Clause in jurisdictions that have since adopted more clearly objective standards for parole-release decisions).

<sup>299</sup> See *supra* note 201 and accompanying text.

<sup>300</sup> See *supra* note 209 and accompanying text.

<sup>301</sup> See generally California Board of Parole Hearings, Parole Consideration Transcripts (2014-2015) (on file with author).

be limited to juvenile lifer parole decisions, but could extend to parole-release decisions generally.

#### A. *Cabin Discretion*

The first and most expansive technique for reform is to cabin the sheer amount of discretion that agency adjudicators wield. Cabining discretion was the primary mode of reform that many parole boards took in response to hard-hitting criticism in the 1970s.<sup>302</sup> Evidence at the time indicated that parole board decisions were arbitrary in the sense that they were either irrational (based on no criteria), or were influenced by racial or class bias.<sup>303</sup> The federal Parole Board initially responded to this criticism by adopting a Guideline Table which determined how much time a person should serve in prison before being released on parole; the amount of time was based on the seriousness of the offense and a “salient factor score” (which was in turn based on the age, criminal history, and static data points about parole candidates that were statistically correlated with successful completion of parole).<sup>304</sup> The parole board was required to release people from prison during the timeframes set in the Guideline Table, and could depart from those timeframes based on stated aggravating or mitigating factors which included institutional misconduct, participation in rehabilitation programs, and the underlying offense.<sup>305</sup> After several years, the federal parole system was abolished in favor of adopting a determinate sentencing scheme, but several states continue to operate their parole systems with this type of guideline structure.

Applying this approach in the context of juvenile lifer parole decisions, however, is more challenging than it may appear. The federal parole guideline system operated in the context of a sentencing scheme in which judges set a minimum and a maximum period of time and allowed parole to be granted at any point within that range.<sup>306</sup> In cases where the gravity of the crime was at its peak and the sentence permitted incarceration for the duration of natural life, the Guidelines were notably silent; they stated no period

---

<sup>302</sup> See *supra* note 11 and accompanying text.

<sup>303</sup> See *supra* note 11; Rhine et al., *supra* note 12; Joan Petersilia, *Parole and Prisoner Reentry in the United States*, 26 CRIM. & JUST. 479, 491 (1999); Johnson & Messinger, *supra* note 194.

<sup>304</sup> See Goldberger, et al., *Parole Release Decisionmaking and the Sentencing Process*, 84 YALE L.J. 810 (1975) (“[a] primary purpose of instituting the Guidelines was to structure discretion and thereby reduce inequality of treatment”). Some states, such as New York, began adopting similar guideline frameworks in the late 1970s. See, e.g., VERA INSTITUTE OF JUSTICE, FINAL REPORT ON PAROLE DECISION-MAKING PROJECT SUBMITTED TO NYS DEPARTMENT OF CORRECTIONAL SERVICES, Section VI (1978) (describing study of parole-release decisions in context of newly adopted preliminary guideline framework).

<sup>305</sup> Goldberger et al., *supra* note 304, at 837.

<sup>306</sup> *Id.* at 887.

of time at which release should be granted.<sup>307</sup> The context of life with the possibility of parole sentences present a different type of question for a parole board—because natural life until death is accepted as the maximum justified sentence, the question is not just when to release, but whether to release at all.

Three proposals follow for cabining parole-board discretion in the context of life with the possibility of parole sentences. The proposals all have a similar structure in that they would all establish a presumptive-maximum parole-release date. That is, a point in time at which the sentence does not technically expire, but a very strong presumption of release from prison takes hold. The parole board would retain broad discretion to grant or deny parole prior to the presumptive-maximum date, but when a person reaches the presumptive-maximum, the parole board would have extremely limited discretion to deny release. For example, once a person has reached the presumptive maximum, the parole board would be required to grant release unless there is clear and convincing evidence that the person poses a threat of grave physical injury to others that cannot be managed in a non-custodial setting. Instituting a presumptive maximum would be particularly advantageous in addressing the problem observed in Part III.D, that the parole board currently exercises more power over how much time is served than the legislature, the judge, or the jury. The three proposals below offer different methods for setting the presumptive maximum.

The first suggestion is to set the presumptive maximum based on an individual's completion of clear and measurable milestones for rehabilitation. For example, the presumptive maximum could be defined as the point at which an individual has completed some defined number and type of rehabilitation programs. Or it could be defined as the point at which an individual has completed programs and has served some baseline number of months without a disciplinary write-up. This suggestion seems most apt in the context of juvenile lifer parole decisions where the law directs release based upon a demonstration of rehabilitation.<sup>308</sup> In setting presumptive release dates on the basis of rehabilitation milestones, care must be taken to structure them in a way that does not favor any one racial group over another. For example, if Latinx candidates were found to be disproportionately incarcerated in maximum-security facilities that tend to have less access to rehabilitation programs, then to define milestones on the basis of program completion would intentionally perpetuate racially disparate treatment. The milestones would need to be altered to take those disparities into account, unless or until the disparities are eliminated in the underlying prison environment.<sup>309</sup>

---

<sup>307</sup> See PIERCE O'DONNELL, MICHAEL J. CHURGIN & DENNIS E. CURTIS, TOWARD A JUST AND EFFECTIVE SENTENCING SYSTEM: AGENDA FOR LEGISLATIVE REFORM 24 (1977).

<sup>308</sup> See *supra* at Part I.

<sup>309</sup> For example, in this study set, if rehabilitation milestones were defined as having a low score on a risk assessment, Black candidates would be at a marked disadvantage. Whereas

A concern with setting presumptive maximum dates based on rehabilitation milestones is that the method may not restrict discretion, but rather relocate it from the parole board into the hands of correctional officers. Given the control that these officers exercise over disciplinary reports and access to rehabilitation programs, they may have substantial influence over whether a given candidate is able to complete the milestones.<sup>310</sup> To ensure fairness at this level, heightened procedural protections would be needed at disciplinary hearings, and in decisions about whether to allow or deny access to programs. Further, constant monitoring of outcomes would be needed to discern whether racial or other illegitimate disparities emerge over time.

A second proposal is to set the presumptive maximum based solely on the minimum parole eligibility date. For example, the presumptive maximum could be the point at which a person has served in excess of 110% of their minimum time-served. Or, the presumptive maximum could be set as equal to the minimum parole-release eligibility dates.<sup>311</sup> An advantage of this approach is its uniformity, but a disadvantage is that in a state where minimum eligibility dates are mandated by statute, the approach relies heavily on both the quality of those statutes and prosecutors who have discretion to charge different crimes that carry different mandatory minimum sentences. In some cases, minimum parole eligibility dates may be exceedingly harsh given the facts of a particular crime, the person's culpability, or individual mitigating factors. This concern is particularly acute among juveniles who have been sentenced to long mandatory-minimum terms without any consideration to their diminished culpability at sentencing. As described *supra* at Part VI some of the cases observed in the set of transcripts underscored this concern.

A third proposal is to set the presumptive maximum at the sentencing hearing based on an individualized proportionality judgment about the gravity of a crime in a given case.<sup>312</sup> Trial judges are better situated than a parole

---

48% of non-Black candidates received a low score on the risk assessment, only 31% of Black candidates received a low score on the risk assessment. If however, milestones were defined as having the following combination of variables—at least three years without a disciplinary write-up, participation in at least four different types of rehabilitation programming, and completion of a GED or other high school equivalency—then it is not apparent that any racial group would be clearly disadvantaged. The racial distribution within the set of candidates who meet these criteria (they are the 286 individuals considered in Table 6) mirrors the racial distribution of the full sample; no one racial group is substantially over- or under-represented. If the Board were to have granted parole to all candidates whose records of behavior met these “rehabilitation milestones,” the process would have been highly responsive to demonstrated rehabilitation and racial disparity would have been markedly reduced.

<sup>310</sup> Cf. Heinz et al., *supra* note 11, at 18 (“One might well question whether it is desirable for the Parole Board’s discretion to be delegated to quite junior employees of the Department of Corrections, some of whom may be poorly qualified, and who make their decisions at a low level of visibility without any sort of mandatory, regularized procedures.”)

<sup>311</sup> Taking a different approach, the Sentencing Project’s Campaign to End Life Sentences advocates for a twenty-year maximum across the board. See CAMPAIGN TO END LIFE IMPRISONMENT, <https://endlifeimprisonment.org/>, archived at <https://perma.cc/Q4NG-US5L> (last visited June 16, 2019).

<sup>312</sup> Cf. *In re Butler*, 4 Cal. 5th 728, 732 (2018). Prior to legislative change in 2014 and 2015, the California Board of Parole Hearings set “base terms” that were intended to provide

board (or the legislature) to make proportionality judgments about the crime because judges have greater expertise in proportionality analysis and are more proximate to the facts of the crime. David Ball has convincingly argued that if parole-release decisions have anything to do with proportionality judgments about the crime, the Sixth Amendment requires the right to have a jury find facts that are relied upon in making such judgments.<sup>313</sup> Building on this insight, a system could be devised in which juries or judges, with the fact-finding help of juries, set presumptive-maximums. A principled approach would be to allow juries or judges to set the presumptive-maximum parole date either above or beyond the legislated minimum period for parole-eligibility. If such an approach were adopted, considerable attention would be needed to monitor and manage the use of discretion in this context; although judges and juries make decisions in the context of more robust procedural protections than parole boards, they are certainly not immune from wielding discretion in an arbitrary fashion.

### B. *Improve the Exercise of Discretion*

Almost all of the suggestions to cabin discretion described above would leave the parole board with broad discretion for release decisions among those who have not yet reached the presumptive maximum. The reforms described below would improve the board's ability to exercise discretion fairly in such cases.

Perhaps the most immediate way to improve exercise of discretion is to clarify the legal standard that the parole board is expected to apply. As discussed *supra* at Part IV.C, the current statutory standard is vague and the administrative regulations listing suitability factors are in deep tension with the statutory requirement to consider the hallmark features of youth as mitigating factors. Once the standard is clarified, the adoption of a structured decision-making framework could also be useful. Such a framework would require board members to proceed through a number of steps and rate candidates on the basis of various factors before coming to a decision.<sup>314</sup>

---

“uniform terms for offenses of similar gravity and magnitude.” The purpose of the base term was to indicate a point in time when the prisoner had served his or her proportionate sentence, and could on that ground petition a court to find that additional punishment would be disproportionate. In practice, the base terms did not function in this way because the Board did not set the term until after a person had been found suitable for parole.

<sup>313</sup> See Ball, *supra* note 60, at 934.

<sup>314</sup> Research on parole boards in Kansas, Ohio, and Connecticut shows that frequent training and feedback would be needed to assist decision-makers in applying the framework in a consistent fashion. See Ralph Serin and Renee Gobeil, *Analysis of the Use of the Structured Decisionmaking Framework in Three States*, U.S. DEPARTMENT OF JUSTICE NATIONAL INSTITUTE OF CORRECTIONS (September 2014), <https://info.nicic.gov/nicrp/system/files/028408.pdf>, archived at <https://perma.cc/4NWK-4HS7>.

Increased procedural protections could also improve the quality of advocacy and the accuracy of information considered at parole hearings.<sup>315</sup> The examples of inadequate legal representation described *supra* at Part IV.A, highlight the need to increase resources available for appointed counsel at parole hearings. Additional procedural protections could include providing funds for independent experts,<sup>316</sup> allowing witnesses<sup>317</sup> and cross-examination, recognizing a right to confrontation and a right to holding the hearing in a public forum, conducting hearings annually, and precluding reliance on confidential information. Several states already provide some of these rights.<sup>318</sup>

Increasing the parole board's independence from the Governor's office could help it exercise discretion in a way that is less swayed by the political tide. Rescinding the Governor's authority to reverse parole decisions would be an important first step in this regard. In addition, a policy could require that some parole board members be appointed by state entities other than the Governor. For example, in South Dakota, the Governor appoints three parole board members, the attorney general appoints three parole board members, and the supreme court appoints three members.<sup>319</sup> Further bi-partisanship could be encouraged by a requirement that appointments be made by both the majority leader and the minority leader in the state senate and state house of representatives. Alternatively, the board could consist of administrative law judges.

Additional reforms could reduce the influence of idiosyncratic decision-making. For example, a policy could require that three or more members of the Board be present at every hearing,<sup>320</sup> and that they bring expertise from a variety of different professional backgrounds. A different approach would be to create a procedure akin to jury selection by which a different board is formed in each case to reflect the community into which the candidate would potentially be entering. Another option might be to institute a

---

<sup>315</sup> Some have argued that nothing short of the full panoply of criminal procedural protections are needed. Taking such an approach would essentially transform the parole process into second-look sentencing proceedings, which is what the Model Penal Code on sentencing advises. See Russell, *supra* note 4, at 430; MODEL PENAL CODE: SENTENCING §§ 6.11A(h), 305.6.

<sup>316</sup> In Massachusetts, for example, a Superior Court is authorized to allow payment for an expert witness to assist juvenile lifer parole candidates where an expert is needed to "explain the effects of the individual's neurobiological immaturity and other personal circumstances at the time of the crime, and how this information relates to the individual's present capacity and future risk of reoffending." *Diatchenko v. Dist. Attorney for Suffolk Dist.*, 471 Mass. 12 (2015).

<sup>317</sup> In Wyoming, for example, prison staff can provide in-person testimony about a parole candidate's growth over time. See JORGE RENAUD, GRADING THE PAROLE RELEASE SYSTEMS OF ALL 50 STATES (Feb. 26, 2019), [https://www.prisonspolicy.org/reports/grading\\_parole.html](https://www.prisonspolicy.org/reports/grading_parole.html), archived at <https://perma.cc/PA3M-GERN>.

<sup>318</sup> See Russell & Denholtz, *supra* note 3, at 1133–34.

<sup>319</sup> See S.D. CODIFIED LAWS § 24-13-1.

<sup>320</sup> For example, a three-member panel is required at juvenile lifer parole hearings in Louisiana. See Russell & Denholtz, *supra* note 3, at 1133.

system of peer-to-peer evaluation, which has been shown to reduce inconsistency in other contexts of discretionary agency decision-making.<sup>321</sup> For example, at the end of each month, the board could analyze its decisions and find sets of cases in which candidates were similarly situated on a variety of pertinent variables but received different decision-outcomes. The parole board members who participated in those decisions could then compare differences in how they asked questions in the hearing, how they weighed various pieces of information in making their decision, and whether the differences in decisions were justified or not.

*C. Establish Oversight and Accountability  
over the Exercise of Discretion*

Research on decision-making in the context of the United States Social Security Administration has shown that robust judicial review of agency adjudications can help to identify errors in individual cases, clarify legal standards, and also provide “problem-oriented” oversight that can identify entrenched problems within agency administration.<sup>322</sup> If judicial review is to provide a meaningful check on parole board discretion, at least two reforms would be needed. First, appointment of counsel to file for judicial review would be needed in order to make review available to the majority of parole candidates who are indigent and lack developed skills in self-representation. Second, the standard of review would need to be less deferential to the parole board than the current standard, which requires the court to uphold a denial of parole wherever the record contains “any modicum of evidence” of current dangerousness.<sup>323</sup> Changing this “any modicum of evidence” standard to the “substantial evidence” standard that is used in the Social Security context would be a step in the right direction.<sup>324</sup> In January 2019, the California Supreme Court granted review in a case that presents the question of whether a heightened standard of judicial review is required in review of juvenile lifer parole decisions.<sup>325</sup>

The conjunction of California law and the Eighth Amendment arguably require *de novo* judicial review of juvenile lifer parole decisions. California law requires that agency decisions which affect a fundamental and vested

---

<sup>321</sup> See Daniel E. Ho, *Does Peer Review Work? An Experiment of Experimentalism*, 69 STAN. L. REV. 1, 13 (2017) (evidence from randomized controlled trial on food safety inspections shows that “peer review can reduce the arbitrariness of decisionmaking”).

<sup>322</sup> See, e.g., Jonah B. Gelbach & David Marcus, *Rethinking Judicial Review of High Volume Agency Adjudication*, 96 TEX. L. REV. 1097, 1101 (2018).

<sup>323</sup> Cf. Charlie Sarosy, *Parole Denial Habeas Corpus Petitions: Why the California Supreme Court Needs to Provide More Clarity on the Scope of Judicial Review*, 61 UCLA L. REV. 1134, 1184 (2014) (arguing for a standard of review that is less deferential to the parole board).

<sup>324</sup> See, e.g., Morton Denlow, *Substantial Evidence Review in Social Security Cases as an Issue of Fact*, 28 J. NAT'L ASS'N ADMIN. L. JUDICIARY 29, 35 (2008).

<sup>325</sup> See *In re Palmer*, 433 P.3d 1 (Cal. 2019).

right are reviewed by the court using a de novo standard.<sup>326</sup> In 1988, the California Supreme Court held that this de novo standard does not apply to parole-release decisions because the interest in parole-release is not fundamental and vested.<sup>327</sup> This holding, however, would not control in the context of juvenile lifer parole decisions given the recent development of Eighth Amendment caselaw, discussed *supra* at Part I. Parole-release is a fundamental and vested right for a person who is serving a life sentence for a juvenile crime and who has demonstrated rehabilitation as an adult. Where such an individual has in fact demonstrated rehabilitation as an adult, the decision to deny parole and subject her to continued incarceration violates the Eighth Amendment. The decision about whether she has in fact demonstrated rehabilitation is therefore a decision that impacts a fundamental and vested right, namely the constitutional right against cruel and unusual punishment. Under state law, the decision should therefore be reviewed by a court de novo.<sup>328</sup>

Even under a de novo standard, however, judicial review is limited because it is not equipped to identify system-wide deficiencies that are not apparent in any individual case, nor is it equipped to identify deficiencies in processes that precede decisions. For example, if rehabilitation programs were not reasonably available to some candidates throughout their period of incarceration, or if members of one racial group were more likely to be written up for prison disciplinary violations, these issues would be unlikely to appear on the face of a challenge to an individual parole decision. A holistic review of the system, however, could bring such issues to light if they do exist. Qualitative and quantitative review of decisions by an independent agency could be useful in investigating these types of systemic issues.<sup>329</sup> For example, a policy could require the parole board to record specific data points about each case (similar to the data points recorded by coding transcripts), and the California State Auditor<sup>330</sup> or the Office of the Inspector General<sup>331</sup> could be charged with assessing patterns in the data, making qualitative observations at hearings, and issuing public reports with an eye to

---

<sup>326</sup> See *Bixby v. Pierno*, 4 Cal. 3d 130, 143 (1971).

<sup>327</sup> See *In re Powell*, 45 Cal. 3d 894, 903 (1988).

<sup>328</sup> See also Russell, *supra* note 4, at 427 (“Allowing appellate review of a parole board’s finding of unsuitability is critical to enforcing *Graham*’s meaningful opportunity requirement because it would allow reversal of decisions that were not made in a meaningful or accurate manner.”).

<sup>329</sup> See, e.g., Mariano-Florentino Cuéllar, *Auditing Executive Discretion*, 82 NOTRE DAME L. REV. 227, 240–49 (2006) (describing limits of judicial review of administrative agencies and recommending oversight by independent agencies); Kathleen G. Noonan, Charles F. Sabel & William H. Simon, *Legal Accountability in the Service-Based Welfare State: Lessons from Child Welfare Reform*, 34 LAW & SOC. INQUIRY 523, 564 (2009) (describing how qualitative review of a random sample of cases by teams of agency officials and outsiders has improved quality of discretionary decision-making in child welfare context).

<sup>330</sup> *What Is the Audit Process?*, CALIFORNIA STATE AUDITOR, [https://www.auditor.ca.gov/aboutus/audit\\_process](https://www.auditor.ca.gov/aboutus/audit_process), archived at <https://perma.cc/Z3MQ-P7L5> (last visited Mar. 10, 2019).

<sup>331</sup> *Office of the Inspector General*, OIG.CA.GOV, <https://www.oig.ca.gov/>, archived at <https://perma.cc/P38Z-7XR4> (last visited Mar. 10, 2019).

uncovering potential inequities and proposing reforms. An additional benefit would be that such an agency could also gather and analyze post-release data to identify community resources and in-prison programs that are conducive to helping people become contributing members of society upon release.

## VII. CONCLUSION

Although the above measures are designed to improve the consistency of decisions with respect to rehabilitation, they will not address all concerns about the constitutionality of life sentences imposed on the basis of juvenile convictions. The study here has focused on identifying and proposing a remedy to just one way in which these sentences may fail to be constitutional. In concluding, I briefly summarize a few of the other pressing concerns about these sentences which, although beyond the scope of this Article, call for future research and potential litigation.

First, this study did not consider the question of whether a sentence of life with the possibility of parole is disproportionate when imposed upon a juvenile in the first place. Parole hearing transcripts revealed a number of cases in which a parole candidate had received a mandatory sentence of life with the possibility of parole on the basis of a conviction that would not appear to warrant such a sentence, and which a judge likely would not have imposed if the judge had been authorized to impose an alternative sentence on the basis of the diminished culpability of juveniles. As an example, one of the parole candidates in this sample was serving a life sentence for a kidnapping conviction based on the following facts: while high on drugs at age 16, the parole candidate had forced an elderly woman into a car, made her drive down the street to a supermarket to cash a check, and then got scared and ran away when the woman went into the supermarket.<sup>332</sup> This individual was denied parole primarily on the basis of his record of conduct in prison, but there is a strong moral argument that serving time in an adult prison, let alone a life sentence in adult prison, is disproportionate to his culpability and offense.<sup>333</sup> The Board, however, could not consider that argument because, unlike a judge at sentencing or re-sentencing, it does not have the authority or expertise to make determinations of culpability or proportionality.<sup>334</sup>

Cases such as these suggest that even if the parole process is reformed to provide a meaningful opportunity for release, that opportunity should not absolve the judiciary of its responsibility to review whether mandatory sentences imposed on juveniles are disproportionate to a given individual's culpability. Some state court opinions have accordingly held that the oppor-

---

<sup>332</sup> See California Board of Parole Hearings, Parole Consideration Hearing (January 2015) (transcript on file with author).

<sup>333</sup> Cf. *People v. Dillon*, 34 Cal. 3d 441, 489 (1983).

<sup>334</sup> Cf. *In re Palmer*, 245 Cal. Rptr. 3d 708, 712, 722 (Cal. Ct. App. 2019)

tunity for release on parole does not render moot a claim for re-sentencing on the basis of a juvenile's diminished culpability.<sup>335</sup> The California Supreme Court, however, has held that "a meaningful opportunity to obtain release" renders moot a juvenile's claim that a mandatory sentence of life with the possibility of parole is necessarily unconstitutional.<sup>336</sup> To be clear, however, a California court may still vacate a sentence as unconstitutional if a person is repeatedly denied parole and serves an excessive period of time that is disproportionate to the severity of the offense and the individual's culpability.<sup>337</sup>

A second pressing concern which this study has not addressed is that juvenile parole candidates may lack adequate access to quality rehabilitation programs which are critical to demonstrating rehabilitation. Transcripts discussed numerous occasions in which critical programs did not exist in facilities; where programs did exist, they were often unavailable to candidates who were frequently transferred from one prison to another and, with each transfer, were placed at the bottom of long waitlists. Many programs discussed in transcripts were run via correspondence or by prisoners themselves; only 20% of candidates in this sample had participated in a program with a professional therapist, despite the fact that most candidates had experienced trauma as children. Two-thirds of the candidates who reported sexual abuse as children did not report having any therapy during their years of incarceration. These facts simply scratch the surface, and more research is needed to both assess the problem of inadequate rehabilitation programs and to develop solutions.<sup>338</sup>

For this reason and others, the above proposal to reform parole-release decision-making is offered not as a solution, but as a "stone of hope." Part of that hope is believing that creative solutions can be found, that further research can help diagnose problems, and that law and policy will move toward fairness in sentencing, prison programming, and parole.

---

<sup>335</sup> The Mississippi Supreme Court considered the question of the proper remedy for de facto life without parole cases in *Parker v. State*, 119 So. 3d 987, 999 (Miss. 2013). The state's attorney general, and the dissenting justices, urged that juveniles with de facto life without parole should simply be made eligible for parole after serving 10 years in prison. Emphasizing that the legislature has vested sentencing authority in the trial court, the majority refused the proposal to "create a ten-year minimum mandatory sentence . . . [doing so] would be to remove the consideration from the sentencing authority, circumventing the *Miller* mandate of individualized sentencing for a minor convicted of murder." *Id.* See also *State v. Ragland*, 836 N.W.2d 107, 119 (Iowa 2013) (executive commutation of the youth offender's sentence "to a term of years did not affect the mandatory nature of the sentence or cure the absence of a process of individualized sentencing considerations mandated under *Miller*"); *State v. Lyle*, 854 N.W.2d 378, 404 (Iowa 2014) (holding mandatory minimum sentences as applied to juveniles unconstitutional under the state constitution).

<sup>336</sup> See *People v. Franklin*, 63 Cal. 4th 261, 286 (2016).

<sup>337</sup> See *In re Palmer*, 245 Cal. Rptr. 3d 708, 717 (Cal. Ct. App. 2019).

<sup>338</sup> One promising proposal is to make trauma-informed therapy available to all juvenile lifers. The California legislature is currently considering a pilot program that would do so. See Assembly Bill 620 "Prisoners: Trauma-Focused Programming" (introduced Feb. 14, 2017).

## APPENDIX

<b>Appendix</b>	.....
Table A:	Descriptive Statistics with Hearing Results
Table B:	Regression for Rehabilitation Index
Table C:	Odds Ratios for Hearing Result Model
Table D:	Robustness Checks with Added Youth Variables
Table E:	Robustness Checks with Added Crime and Other Variables
Table F:	Robustness Checks with Changes to Variable Definitions
Table G:	Robustness Checks with Changes to Sample

Table A: Descriptive Statistics with Hearing Results

	<i>Total</i>	<i>% of Sample</i>	<i>Denied</i>	<i>Granted</i>	<i>% Granted</i>
<b>Total</b>	426	100%	250	176	41%
<b>Race/Ethnicity of parole candidate</b>					
Black [Race_black]	151	35%	104	47	31%
Latinx	135	32%	70	65	48%
Other	61	14%	29	32	52%
White	79	19%	47	32	41%
Pearson chi2(3) = 12.2114 Pr = 0.007					
NOTE: California Department of Corrections and Rehabilitation categorizes each person into one of the following racial/ethnic groups: Black, Hispanic, white, and other ("other" includes Chinese, Vietnamese, Filipino, American Indian, and Laotian). "Latinx" is used here in lieu of "Hispanic."					
<b>Current age [Age_current]</b>					
20-29	7	2%	5	2	29%
30-39	156	37%	82	74	47%
40-49	193	45%	120	73	38%
50-59	68	16%	42	26	38%
60+	2	0%	1	1	50%
Pearson chi2(4) = 4.1779 Pr = 0.382					
Mean = 42.18; Stdev = 6.56; Median = 41					
<b>Comprehensive risk assessment score [Psych]</b>					
Low [0]	180	42%	47	133	74%
Low/moderate [1]	17	4%	9	8	47%
Moderate [2]	193	45%	158	35	18%
Moderate/high [3]	3	1%	3	0	0%
High [4]	33	8%	33	0	0%
Pearson chi2(4) = 147.1212 Pr = 0.000					
<b>Time since last disciplinary write-up [Clean_time]</b>					
0 to 2 years [0]	90	21%	84	6	7%
3 to 5 years [1]	103	24%	74	29	28%
6 to 11 years [2]	131	31%	63	68	52%
12 years or more [3]	102	24%	29	73	72%
Pearson chi2(3) = 96.4885 Pr = 0.000					
NOTE: Difference between the hearing year and the year of the last write-up for a serious rules violation ("115"). If there were zero write-ups, the total number of years served is used. The distribution of the number of years is skewed right, and categorical variables (0, 1, 2, 3) were calculated by dividing the sample into quartiles.					

Table A: Descriptive Statistics with Hearing Results

	<i>Total</i>	<i>% of Sample</i>	<i>Denied</i>	<i>Granted</i>	<i>% Granted</i>
<b>Total disciplinary write-ups [Total_disc]</b>					
0 to 3 [0]	103	24%	38	65	63%
4 to 7 [1]	107	25%	57	50	47%
8 to 14 [2]	107	25%	73	34	32%
15 or more [3]	109	26%	82	27	25%
Pearson chi2(3) = 37.7887 Pr = 0.000					
NOTE: Sum of all serious rules violation (“115”s) within the candidate’s entire period of incarceration. The distribution of the total number of write-ups is skewed right, and categorical variables (0, 1, 2, 3) were calculated by dividing the sample into quartiles.					
<b>General rehabilitation programming [Prog_gen]</b>					
Minimal [0]	50	12%	48	2	4%
Moderate [1]	266	62%	160	106	40%
Extensive [2]	110	26%	42	68	62%
Pearson chi2(2) = 48.0225 Pr = 0.000					
NOTE: Calculated by taking the sum of extent of program participation in the following categories: vocation, victim awareness, anger management, religious, philanthropic, youth-focused, cognitive therapeutic, arts or sports, and general self-help. Within each category, a candidate’s extent of participation was measured as 0 (none), 1 (minimum), 2 (moderate), 3 (extensive). The sums for extent of participation in programs across these categories was normally distributed. Categorical variables were then assigned as follows: 0 (sum is one standard deviation below the mean); 1 (sum within one standard deviation of the mean); 2 (sum is one standard deviation above the mean).					
<b>Rehabilitation program focused on substance abuse [Prog_sub]</b>					
No [0]	78	18%	74	4	5%
Yes [1]	348	82%	176	172	49%
Pearson chi2(1) = 51.5681 Pr = 0.000					
NOTE: Participation in any program that focuses on substance abuse, such as Alcoholics/Narcotics Anonymous, CDCR’s Substance Abuse Treatment program (SAP), Al-Anon, Celebrate Recovery, and White Bison (designed for Native-Americans). Participation was counted as “No” if candidate did a 12 Step program, and failed to answer a question about one of the 12 Steps.					
<b>Rehabilitation program focused on gangs [Prog_gang]</b>					
No [0]	231	54%	158	73	32%
Yes [1]	195	46%	92	103	53%
Pearson chi2(1) = 19.6356 Pr = 0.000					

Table A: Descriptive Statistics with Hearing Results

	<i>Total</i>	<i>% of Sample</i>	<i>Denied</i>	<i>Granted</i>	<i>% Granted</i>
<b>Education level attained [Edu]</b>					
No GED or HS degree [0]	45	11%	36	9	20%
GED or HS degree [1]	196	46%	128	68	35%
GED/HS and college courses [2]	128	30%	68	60	47%
GED/HS and college degree [3]	57	13%	18	39	68%
Pearson chi2(3) = 30.8816 Pr = 0.000					
<b>Incarcerated in maximum security conditions [Prison_max]</b>					
No [0]	339	80%	178	161	47%
Yes [1]	87	20%	72	15	17%
Pearson chi2(1) = 26.1314 Pr = 0.000					
NOTE: "Maximum security" indicates Level IV housing level. If housing level unknown, designated as "maximum security" if security Level IV or SHU housing. <i>See</i> footnote 167.					
<b>History of mental illness [Hx_mental_ill]</b>					
No [0]	332	78%	181	151	45%
Yes [1]	94	22%	69	25	27%
Pearson chi2(1) = 10.7773 Pr = 0.001					
NOTE: Includes past or present diagnosis of any of the following: schizophrenia, bipolar disorder, depression, major mental disorder not otherwise specified, anxiety disorder, post-traumatic stress disorder.					
<b>Initial or subsequent parole hearing [Initial]</b>					
Subsequent [0]	340	80%	184	156	46%
Initial [1]	86	20%	66	20	23%
Pearson chi2(1) = 14.4934 Pr = 0.000					
<b>Served more time than norm relative to crime [Time_over]</b>					
No [0]	203	48%	106	97	48%
Yes, equal or more time [1]	223	52%	144	79	35%
Pearson chi2(1) = 6.6927 Pr = 0.010					
<b>Retained attorney [Retained]</b>					
No [0]	341	80%	218	123	36%
Yes [1]	85	20%	32	53	62%
Pearson chi2(1) = 19.3850 Pr = 0.000					
NOTE: Where retained is coded as "No," parole candidates were represented by attorneys on list of panel attorneys appointed by the Board during study period (and in one case parole candidate proceeded pro se).					

Table A: Descriptive Statistics with Hearing Results

	<i>Total</i>	<i>% of Sample</i>	<i>Denied</i>	<i>Granted</i>	<i>% Granted</i>
<b>Opposition from district attorney [Da_opp]</b>					
No [0]	46	11%	6	40	87%
Yes [1]	380	89%	244	136	36%
Pearson chi2(1) = 44.3077 Pr = 0.000					
<b>Opposition from victim or victim next of kin [Vic_opp]</b>					
No [0]	356	84%	210	146	41%
Yes [1]	70	16%	40	30	43%
Pearson chi2(1) = 0.0822 Pr = 0.774					
<b>Confirmed job offer [Job_offer]</b>					
No [0]	187	44%	120	67	36%
Yes [1]	239	56%	130	109	46%
Pearson chi2(1) = 4.1370 Pr = 0.042					
<b>Arranged residence in transitional living facility [Res_trans]</b>					
No [0]	88	21%	68	20	23%
Yes [1]	338	79%	182	156	46%
Pearson chi2(1) = 15.8042 Pr = 0.000					
<b>Arranged residence with family or friends [Res_fam]</b>					
No [0]	115	27%	70	45	39%
Yes [1]	311	73%	180	131	42%
Pearson chi2(1) = 0.3099 Pr = 0.578					
<b>Age at time of crime [Agecrime]</b>					
14	3	1%	0	3	100%
15	19	4%	13	6	32%
16	189	44%	106	83	44%
17	215	50%	131	84	39%
Pearson chi2(3) = 5.9782 Pr = 0.113					
<b>Childhood history of drug or alcohol abuse [Youth_drugsalc]</b>					
No [0]	57	13%	27	30	53%
Yes [1]	369	87%	223	146	40%
Pearson chi2(1) = 3.4761 Pr = 0.062					

Table A: Descriptive Statistics with Hearing Results

	<i>Total</i>	<i>% of Sample</i>	<i>Denied</i>	<i>Granted</i>	<i>% Granted</i>
<b>Childhood history of violence prior to offense [Youth_priorv]</b>					
No [0]	113	27%	59	54	48%
Yes [1]	313	73%	191	122	39%
Pearson chi2(1) = 2.6578 Pr = 0.103					
NOTE: Includes any violent conduct regardless of whether there was an adjudication.					
<b>Childhood history of street gang activity or affiliation [Youth_gang]</b>					
No [0]	145	34%	87	58	40%
Yes [1]	281	66%	163	118	42%
Pearson chi2(1) = 0.1567 Pr = 0.692					
<b>Childhood history of acute trauma and/or disadvantage [Youth_unstable]</b>					
No [0]	180	42%	101	79	44%
Yes [1]	246	58%	149	97	39%
Pearson chi2(1) = 0.8520 Pr = 0.356					
NOTE: Indicates whether three or more of the following applied: victim of physical abuse at home, victim of verbal or emotional abuse at home, witness to violence at home, witness to violence in community outside of home, direct victim of crime or violence outside home environment, family or friends direct victims of crime or violence, substance abuse in home, homelessness, dropped out of school, suicide attempts, foster care, neglected by caretakers, uncategorized disadvantage or trauma.					
<b>Sexually abused as a child [Youth_sex]</b>					
No [0]	360	85%	216	144	40%
Yes [1]	66	15%	34	32	48%
Pearson chi2(1) = 1.6561 Pr = 0.198					
<b>Controlling offense [Crime_max]</b>					
Non-murder, non-sexual offense [0]	19	4%	14	5	26%
Sexual offense [1]	15	4%	13	2	13%
Attempted murder [2]	41	10%	24	17	41%
Murder in 2nd degree [3]	174	41%	97	77	44%
Murder in 1st degree [4]	177	42%	102	75	42%
Pearson chi2(4) = 7.3085 Pr = 0.120					
<b>Conviction included murder in first degree [Crime_mur1]</b>					
No [0]	249	58%	148	101	41%
Yes [1]	177	42%	102	75	42%
Pearson chi2(1) = 0.1399 Pr = 0.708					

Table A: Descriptive Statistics with Hearing Results

	<i>Total</i>	<i>% of Sample</i>	<i>Denied</i>	<i>Granted</i>	<i>% Granted</i>
<b>Conviction included some sexual offense [Crime_sex]</b>					
No [0]	405	95%	232	173	43%
Yes [1]	21	5%	18	3	14%
Pearson chi2(1) = 6.6557 Pr = 0.010					
<b>Offense committed with others [Crime_peer]</b>					
No [0]	107	25%	61	46	43%
Yes [1]	319	75%	189	130	41%
Pearson chi2(1) = 0.1656 Pr = 0.684					
NOTE: Indicates whether candidate had co-defendant(s) or crime partner(s), committed the crime on behalf of a gang, or was directly influenced by others in the commission of the crime.					

Table B: Regression for Rehabilitation Index

	Coeff. (Std. Err.)
Clean_time	1.154**
	-0.136
Progscore	1.572**
	0.2640124
Edu	.491**
	0.154
Constant	-4.846**
	0.510
Pseudo R-square	0.297
N	426
**p<0.05	

NOTE: The Progscore variable differs from the Prog\_gen variable in Table A. Progscore is calculated by taking the sum of extent of participation in programs in all categories: substance abuse, gang, vocation, victim awareness, anger management, religious, philanthropic, youth-focused, cognitive therapeutic, arts or sports, and general self- help. Within each category, a candidate's extent of participation was measured as 0 (none), 1 (minimum), 2 (moderate), 3 (extensive). The sums for extent of participation in programs across these categories were normally distributed. Categorical variables were then assigned as follows: 0 (sum is one standard deviation below the mean); 1 (sum within one standard deviation of the mean); 2 (sum is one standard deviation above the mean).

Table C: Odds Ratios for Hearing Result Model

	Hearing_Result Model (Odds Ratio; Std. Error)
Race_black	0.372** -0.154
Prog_gen	6.304** -2.498
Prog_sub	40.88** -32.25
Prog_gang	2.075* -0.811
Edu	1.379 -0.317
Clean_time	10.59** -3.135
Total_disc	1.168 -0.22
Hx_mental_ill	0.68 -0.334
Initial	0.145** -0.0805
Pris_max	0.210** -0.125
Time_over	0.237** -0.101
Crime_sex	0.0914** -0.104
Retained	3.446** -1.559
Da_opp	0.0304** -0.027
Vic_opp	0.180** -0.0933
Psych_resid	0.186** -0.0454
Constant	0.002** 0.002
Pseudo R-square	0.633

\* p<0.10, \*\* p<0.05

Table D: Robustness Checks with Added Youth Variables

	Youth_drugsalc	Youth_Priorv	Youth_gang	Youth_unstable	Youth_sex	Age_crime	Youth_all†
Race_black	-0.989**	-0.883**	-0.973**	-0.994**	-0.981**	-0.982**	-0.901**
	-0.41	-0.42	-0.42	-0.41	-0.41	-0.41	-0.43
Prog_gen	1.803**	1.853**	1.837**	1.833**	1.819**	1.871**	1.852**
	-0.39	-0.4	-0.4	-0.4	-0.4	-0.4	-0.41
Prog_sub	3.727**	3.741**	3.714**	3.738**	3.711**	3.768**	3.881**
	-0.79	-0.79	-0.79	-0.8	-0.79	-0.8	-0.81
Prog_gang	0.727*	0.838**	0.778*	0.728*	0.745*	0.744*	0.831*
	-0.39	-0.4	-0.42	-0.39	-0.39	-0.39	-0.43
Edu	0.326	0.326	0.308	0.323	0.317	0.315	0.314
	-0.23	-0.23	-0.24	-0.23	-0.23	-0.23	-0.24
Clean_time	2.338**	2.403**	2.355**	2.359**	2.344**	2.370**	2.394**
	-0.29	-0.3	-0.3	-0.3	-0.29	-0.3	-0.31
Total_disc	0.159	0.164	0.155	0.153	0.157	0.149	0.18
	-0.19	-0.19	-0.19	-0.19	-0.19	-0.19	-0.19
Hx_mental_ill	-0.378	-0.495	-0.401	-0.385	-0.427	-0.383	-0.491
	-0.49	-0.5	-0.5	-0.49	-0.49	-0.49	-0.51
Initial	-1.877**	-1.964**	-1.937**	-1.914**	-1.917**	-1.937**	-1.965**
	-0.55	-0.56	-0.56	-0.56	-0.56	-0.55	-0.56
Pris_max	-1.497**	-1.553**	-1.535**	-1.555**	-1.580**	-1.586**	-1.593**
	-0.59	-0.59	-0.59	-0.59	-0.6	-0.59	-0.61
Time_over	-1.433**	-1.506**	-1.462**	-1.454**	-1.428**	-1.429**	-1.514**
	-0.43	-0.44	-0.43	-0.43	-0.43	-0.43	-0.44
Crime_sex	-2.387**	-2.298**	-2.419**	-2.377**	-2.494**	-2.463**	-2.368**
	-1.13	-1.11	-1.15	-1.12	-1.14	-1.15	-1.15
Retained	1.209**	1.224**	1.239**	1.242**	1.237**	1.256**	1.257**
	-0.45	-0.46	-0.45	-0.45	-0.45	-0.45	-0.46
Da_opp	-3.468**	-3.574**	-3.497**	-3.498**	-3.492**	-3.411**	-3.520**
	-0.88	-0.89	-0.89	-0.89	-0.89	-0.89	-0.9
Vic_opp	-1.667**	-1.757**	-1.709**	-1.716**	-1.713**	-1.730**	-1.768**
	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.53
Psych_resid	-1.661**	-1.703**	-1.683**	-1.685**	-1.683**	-1.691**	-1.716**
	-0.24	-0.25	-0.24	-0.24	-0.24	-0.25	-0.25
Added variable	-0.278	-0.546	-0.120	-0.058	0.335	-0.111	NA
	-0.58	-0.43	-0.450	-0.38	-0.49	-0.31	NA
Constant	-6.120**	-6.094**	-6.295**	-6.357**	-6.391**	-4.745	-3.851
	-1.47	-1.42	-1.430	-1.43	-1.41	-5.06	-5.1

\* p<0.10, \*\* p<0.05; N=417; † Youth\_all includes all youth variables in this table as dependent variables

Table E: Robustness Checks with Added Crime and Other Variables

	Crime_peer	Crime_mur1	Age_current	Bump	Cog_deficit
Race_black	-0.995**	-0.992**	-0.986**	-0.973**	-1.003**
	-0.41	-0.41	-0.42	-0.41	-0.42
Prog_gen	1.834**	1.837**	1.903**	1.817**	1.882**
	-0.4	-0.4	-0.41	-0.4	-0.4
Prog_sub	3.731**	3.704**	3.820**	3.688**	3.645**
	-0.79	-0.79	-0.81	-0.79	-0.79
Prog_gang	0.743*	0.741*	0.702*	0.724*	0.734*
	-0.39	-0.4	-0.4	-0.39	-0.39
Edu	0.321	0.321	0.336	0.328	0.237
	-0.23	-0.23	-0.23	-0.23	-0.24
Clean_time	2.362**	2.357**	2.387**	2.357**	2.449**
	-0.3	-0.3	-0.3	-0.3	-0.31
Total_disc	0.167	0.153	0.191	0.161	0.157
	-0.2	-0.19	-0.2	-0.19	-0.19
Hx_mental_ill	-0.394	-0.381	-0.387	-0.401	-0.261
	-0.49	-0.49	-0.49	-0.49	-0.5
Initial	-1.925**	-1.937**	-2.011**	-1.742**	-2.040**
	-0.56	-0.56	-0.57	-0.61	-0.57
Pris_max	-1.569**	-1.559**	-1.601**	-1.576**	-1.661**
	-0.6	-0.59	-0.6	-0.59	-0.6
Time_over	-1.450**	-1.438**	-1.249**	-1.426**	-1.467**
	-0.43	-0.43	-0.54	-0.43	-0.44
Crime_sex	-2.407**	-2.378**	-2.369**	-2.239*	-2.591**
	-1.14	-1.14	-1.16	-1.18	-1.16
Retained	1.236**	1.235**	1.283**	1.259**	1.202**
	-0.45	-0.45	-0.46	-0.46	-0.45
Da_opp	-3.504**	-3.499**	-3.413**	-3.500**	-3.460**
	-0.89	-0.89	-0.89	-0.89	-0.88
Vic_opp	-1.707**	-1.714**	-1.700**	-1.707**	-1.819**
	-0.52	-0.52	-0.52	-0.52	-0.53
Psych_resid	-1.684**	-1.682**	-1.718**	-1.686**	-1.717**
	-0.24	-0.24	-0.25	-0.24	-0.25
Added variable	-0.105	0.048	-0.026	-0.694	-1.256**
	-0.44	-0.38	-0.040	1.23	-0.51
Constant	-6.329**	-6.390**	-5.772**	-6.362**	-6.186**
	-1.43	-1.41	-1.910	-1.41	-1.41

\* p&lt;0.10, \*\* p&lt;0.05; N=417

Table F: Robustness Checks with Changes to Variable Definitions

	A (Prog)	B (Prog)	C (Prog)	D (Disc)	E (Disc)	F (CRA)	G (CRA)
Race_black	-1.015**	-1.065**	-0.889**	-0.877**	-0.862**	-0.685*	-0.745**
	-0.42	-0.4	-0.38	-0.39	-0.4	-0.41	-0.35
Prog_gen	1.841**	0.408**	2.185**	1.667**	1.712**	1.318**	1.236**
	-0.4	-0.07	-0.41	-0.37	-0.38	-0.38	-0.31
Prog_sub	3.285**			3.617**	3.587**	2.811**	2.283**
	-1			-0.77	-0.77	-0.74	-0.6
Prog_gang	0.758*			0.698*	0.706*	0.527	0.603*
	-0.4			-0.38	-0.39	-0.39	-0.33
Edu	0.338	0.390*	0.527**	0.175	0.233	0.166	0.239
	-0.23	-0.23	-0.22	-0.23	-0.24	-0.23	-0.2
Clean_time	2.368**	2.275**	2.175**	1.970**	2.876**	1.852**	1.683**
	-0.3	-0.28	-0.27	-0.26	-0.38	-0.26	-0.21
Total_disc	0.176	0.29	0.153	0.24	0.192	0.646**	0.091
	-0.19	-0.19	-0.18	-0.17	-0.21	-0.21	-0.16
Hx_mental_ill	-0.354	-0.465	-0.452	-0.523	-0.546	-0.086	-0.291
	-0.49	-0.49	-0.47	-0.48	-0.49	-0.49	-0.4
Initial	-1.968**	-1.893**	-1.834**	-1.872**	-1.898**	-1.235**	-1.586**
	-0.56	-0.54	-0.51	-0.55	-0.55	-0.54	-0.45
Pris_max	-1.647**	-1.513**	-1.568**	-1.320**	-1.311**	-1.021*	-1.340**
	-0.6	-0.58	-0.57	-0.58	-0.59	-0.59	-0.52
Time_over	-1.424**	-1.473**	-1.473**	-1.274**	-1.318**	-1.614**	-1.032**
	-0.43	-0.42	-0.4	-0.41	-0.43	-0.43	-0.36
Crime_sex	-2.436**	-1.823	-2.219**	-2.452**	-2.521**	-2.058*	-1.11
	-1.13	-1.15	-1.05	-1.03	-1.02	-1.12	-0.98
Retained	1.232**	1.093**	1.014**	1.080**	1.096**	1.237**	0.962**
	-0.45	-0.43	-0.42	-0.44	-0.45	-0.45	-0.4
Da_opp	-3.514**	-3.671**	-3.573**	-2.924**	-3.162**	-3.493**	-2.629**
	-0.89	-0.86	-0.81	-0.79	-0.85	-0.89	-0.66
Vic_opp	-1.724**	-1.350**	-1.365**	-1.720**	-1.755**	-1.713**	-0.629
	-0.52	-0.49	-0.47	-0.5	-0.51	-0.52	-0.41
Psych_resid	-1.700**	-1.591**	-1.525**	-1.510**	-1.547**		
	-0.25	-0.23	-0.220	-0.23	-0.23		
Added variable	-4.018**					-1.683**	
	-1.08					-0.24	
Constant	-6.024**	-5.562**	-2.900**	-8.050**	-7.682**	-2.880**	-4.057**
	-1.52	-1.26	-0.990	-1.53	-1.52	-1.31	-1.1

\* p&lt;0.10, \*\* p&lt;0.05

**A:** Prog\_sub is measured as participation in any substance abuse program regardless of how 12 Step question is answered. 12step\_f is added as an independent variable measuring failure to answer the 12 Step question.

**B:** Prog\_gen is measured as the raw sum of participation in all categories of rehabilitation programming (including substance abuse and gang program). Prog\_sub and prog\_gang are not used as independent variables.

**C:** Similar to B, except Prog\_gen is converted to a score based on whether a candidate's raw sum is one stdev below mean (0), within one stdev of mean (1), or one stdev above the mean (2).

**D:** Clean\_time is measured as the square root of the number of years since the last write-up for a serious disciplinary violation. Total\_disc is measured as the square root of the total number of write-ups.

**E:** Clean\_time is measured as the log of the number of years since the last write-up for a serious disciplinary violation. Total\_disc is measured as the log of the total number of write-ups.

**F:** Psych\_resid is not used. The raw CRA score is added as an independent variable.

**G:** Neither the Psych\_resid variable nor the CRA variable are used.

Table G: Robustness Checks with Changes to Sample

	A (Outliers)				
	Included)	B (Murder)	C (Random)	D (Random)	E (Random)
Race_black	-0.503	-1.187**	-1.313**	-1.174**	-0.622
	-0.35	-0.48	-0.49	-0.52	-0.49
Prog_gen	1.161**	2.278**	1.689**	2.675**	1.977**
	-0.31	-0.47	-0.45	-0.56	-0.48
Prog_sub	3.057**	3.722**	2.708**	4.432**	3.761**
	-0.67	-0.85	-0.91	-0.98	-0.94
Prog_gang	0.581*	0.717	0.42	0.322	0.895**
	-0.33	-0.44	-0.45	-0.49	-0.45
Edu	0.355*	0.344	0.502*	0.379	0.479*
	-0.2	-0.26	-0.28	-0.28	-0.27
Clean_time	1.589**	2.451**	2.388**	2.736**	2.314**
	-0.21	-0.34	-0.35	-0.41	-0.33
Total_disc	0.044	0.301	0.221	-0.038	0.156
	-0.17	-0.22	-0.22	-0.22	-0.23
Hx_mental_ill	-0.654	-0.401	-0.361	-0.136	-0.276
	-0.42	-0.59	-0.54	-0.66	-0.58
Initial	-1.255**	-2.079**	-1.777**	-2.027**	-1.669**
	-0.45	-0.69	-0.63	-0.79	-0.62
Pris_max	-1.048**	-1.492**	-1.978**	-2.009**	-1.526**
	-0.51	-0.7	-0.68	-0.79	-0.74
Time_over	-0.925**	-1.690**	-1.348**	-1.559**	-1.355**
	-0.36	-0.5	-0.49	-0.53	-0.52
Crime_sex	-1.925**	-0.939	-4.514**	-3.020**	-4.100**
	-0.96	-1.68	-1.84	-1.31	-1.81
Retained	0.930**	1.205**	1.384**	1.709**	1.098**
	-0.38	-0.52	-0.51	-0.63	-0.51
Da_opp	-2.657**	-3.606**	-4.365**	-4.197**	-2.575**
	-0.74	-1.12	-1.11	-1.03	-0.92
Vic_opp	-1.280**	-1.627**	-1.743**	-2.892**	-1.429**
	-0.44	-0.56	-0.76	-0.59	
Psych_resid	-1.213**	-1.866**	-1.668**	-1.958**	-1.648**
	-0.19	-0.29	-0.27	-0.33	-0.28
Constant	-4.567**	-7.025**	-4.774**	-7.760**	-7.963**
	-1.19	-1.74	-1.600	-1.75	-1.77
Pseudo R-square	0.5332	0.6489	0.6285	0.6668	0.6307
N	426	342	313	313	313

\* p&lt;0.10, \*\* p&lt;0.05

**A:** All nine outliers included in sample. Outliers are observations in which parole was granted but the model predicted that the likelihood of being granted parole was <5%, and observations in which the parole was denied but the model predicted that the likelihood of being granted parole was >95%.

**B:** Sample includes only observations where there was a conviction of first or second degree murder.

**C-E:** Sample includes a random sample of 75% of the 426 observations. Three different random samples were taken.