

NOTES

Unambiguous Deterrence: Ambiguity Attitudes in the Juvenile Justice System and the Case for a Right to Counsel During Intake Proceedings

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INTRODUCTION

According to the traditional rational choice theory of criminal behavior, people choose to commit crimes in a rational manner.¹ They weigh the costs and benefits and make informed decisions to maximize their utility.² Under this framework, the state can deter crime through two main avenues: increasing the probability of detection and increasing the punishment if caught, both of which increase the total cost of committing a crime.³

Recently, however, behavioral insights have begun to cast doubt on traditional rationality assumptions.⁴ Lab experiments and empirical studies using real-world data have shown that people exhibit bounded rationality.⁵ For example, individuals have limited cognitive capacities and use heuristics—mental shortcuts—to simplify complex decisions.⁶ A clear understanding about when and how these behavioral biases come into play can open up a new range of policy tools and help inform a more accurate model of criminal decisionmaking and deterrence.

One specific behavioral anomaly that is now well recognized in the behavioral economics and psychology literature is ambiguity aversion.⁷ This phenomenon, which is distinct from risk

1. Gary S. Becker, *Crime and Punishment: An Economic Approach*, 76 J. POL. ECON. 169, 176 (1968).

2. *Id.* Utility is a broad concept used by economists to measure preferences. It can be understood to encapsulate monetary payoffs as well as nonmonetary payoffs such as happiness and confidence.

3. *Id.* at 177.

4. See Christine Jolls, Cass R. Sunstein & Richard Thaler, *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471, 1476 (1998) (discussing the differences between actual human behavior and behavior predicted by traditional economic models that assume complete rationality).

5. *Id.* at 1477–78. Bounded rationality is the idea that individuals' rational decisionmaking capabilities are limited.

6. *Id.* at 1477.

7. Elena Kantorowicz-Reznichenko, *Any-Where Any-Time: Ambiguity and the Perceived Probability of Apprehension*, 84 UMKC L. REV. 27, 34 (2015). See generally Selwyn W. Becker & Fred O. Brownson, *What Price Ambiguity? Or the Role of Ambiguity in Decision-Making*, 72 J. POL. ECON. 62 (1964) (illustrating that people are willing to pay a premium to avoid ambiguity); Colin Camerer & Martin Weber, *Recent Developments in Modeling Preferences: Uncertainty and Ambiguity*, 5 J. RISK & UNCERTAINTY 325 (1992) (reviewing empirical tests of ambiguity aversion); Thomas A. Loughran et al., *On Ambiguity in Perceptions of Risk: Implications for Criminal*

aversion,⁸ occurs when an individual must make a cost-benefit analysis using incomplete information regarding the probabilities of future events, such as the likelihood of detection or probability of punishment. Sometimes, rather than relying on an unbiased estimate of the unknown probability, individuals will rely on a pessimistic estimation, overweighting the probability of a negative outcome due to their fear of the unknown. In other words, when there is uncertainty about the probabilities of various outcomes (ambiguity), people may assume that bad outcomes are more likely than they actually are.

A few scholars have already suggested using this aversion to increase deterrence in the criminal context.⁹ They argue that if people are more likely to shy away from decisions that involve uncertain probabilities, making detection and punishment ambiguous—in other words, making the probability of detection and punishment more uncertain—can deter crime.¹⁰ However, this application is not as clear-cut as it might seem.¹¹ Rather than finding ambiguity aversion in all circumstances, research has shown that individuals have a switching point at which they may become ambiguity-seeking under the right circumstances.¹² Ambiguity-seeking behavior is the exact opposite of ambiguity-averse behavior. When ambiguity-seeking individuals make a cost-benefit analysis using incomplete information regarding the probabilities of future events, they rely on an optimistic estimation rather than an unbiased estimation, overweighting the probability of a positive outcome due to their preference for the unknown. This lack of uniform ambiguity attitudes implies that the imposition of ambiguity

Decision Making and Deterrence, 49 CRIMINOLOGY 1029, 1052–53 (2011) (finding ambiguity aversion over low probabilities of losses in the criminal context).

8. For an explanation of this distinction, see *infra* notes 43–44 and accompanying text (defining risk aversion and explaining why risk preferences do not affect the analysis of ambiguity aversion).

9. See, e.g., Alon Harel & Uzi Segal, *Criminal Law and Behavioral Law and Economics: Observations on the Neglected Role of Uncertainty in Deterring Crime*, 1 AM. L. & ECON. REV. 276, 277 (1999) (arguing that introducing ambiguity with respect to the probability of detection and reducing ambiguity with respect to criminal sanctions can increase deterrence); Kantorowicz-Reznichenko, *supra* note 7, at 29–30 (arguing for the adoption of ambiguous police patrols to deter crime).

10. See, e.g., Harel & Segal, *supra* note 9, at 277 (arguing that the best policy for deterrence is to promote “uncertainty with respect to the probability of detection and conviction”).

11. See Anat Horowitz & Uzi Segal, *The Ambiguous Nature of Ambiguity and Crime Control*, 2 N.Y.U. J.L. & LIBERTY 541, 542–43 (2007) (noting that the effect of ambiguity on deterrence may depend on the nature of the ambiguity).

12. See, e.g., Loughran et al., *supra* note 7, at 1052–53 (finding ambiguity-averse behavior over low probabilities of losses in the criminal context and ambiguity-seeking behavior over high probabilities of losses in the criminal context); W. Kip Viscusi & Harrell Chesson, *Hopes and Fears: The Conflicting Effects of Risk Ambiguity*, 47 THEORY & DECISION 153, 153 (1999) (estimating that the underlying crossover probability is around 0.5).

to increase deterrence will work only in some circumstances. In other circumstances, ambiguous punishment and detection may actually increase crime. When that is the case, policies that decrease ambiguity can better serve deterrence purposes.

This Note is the first to apply these insights about ambiguity attitudes to the unique goals and structure of the juvenile justice system. As is the case in the adult criminal justice system, policies that increase the ambiguity of detection or decrease the ambiguity of punishment are promising means for deterring juvenile crime. Therefore, focusing on the circumstances under which juveniles are likely to be ambiguity-seeking, this Note argues that providing juvenile defendants with the right to counsel at intake proceedings, a practice currently employed only by some states,¹³ has the potential to reduce the ambiguity of punishment and deter juvenile crime. Part I presents the typical model of deterrence under traditional rationality assumptions and the impact of considering ambiguity attitudes in this context. Part II applies these behavioral insights to the specific context of the juvenile justice system, starting with an examination of the evidence of ambiguity-averse and ambiguity-seeking behavior among juveniles and progressing to an analysis of the ambiguity that exists in the juvenile justice system and how it can be manipulated to deter juvenile crime. Finally, Part III proposes extending the right to counsel during intake procedures as one way to deter juvenile crime.

I. DETERRENCE AND AMBIGUITY EXAMINED: A TRAJECTORY OF RATIONAL THOUGHT

Deterrence is an important goal of the criminal justice system.¹⁴ In order to understand what policies best serve this goal, it is important to understand how individuals make decisions about whether to commit a crime. Over time, psychological and behavioral insights have expanded our understanding of these types of decisions. This Part will explain the traditional rational choice model of crime and deterrence and discuss how the introduction of behavioral anomalies—specifically, ambiguity attitudes—affect policy implications.

13. See Tamar R. Birckhead, *Closing the Widening Net: The Rights of Juveniles at Intake*, 46 TEX. TECH L. REV. 157, 169–71 (2013) (discussing how some states do not specify whether a juvenile has a right to counsel at this point, some states explicitly only provide the right to counsel once a formal petition has been issued and an initial court date has been set, and a few states handle the issue in a unique way).

14. See Michael Tonry, *Purposes and Functions of Sentencing*, 34 CRIME & JUST. 1, 10 (2006) (“The fundamental purposes and primary function of sentencing are clear, and are the same: to punish criminals and prevent crimes.”).

A. Laying the Foundation: The Traditional Deterrence Model

The traditional rational choice theory of crime, developed by Gary Becker in 1968, asserts that criminals are rational actors and make decisions to commit crimes in response to incentives.¹⁵ Specifically, the theory predicts that criminals will weigh the benefit of committing the crime against the potential detriment of being caught and punished.¹⁶

To illustrate, consider a risk-neutral individual,¹⁷ Adam, who is deciding whether to commit a crime. Under the traditional economic model, rational-actor Adam would be fully informed about the benefits and costs of the criminal activity, the probability of detection, and the punishment for detection; he would make whatever decision maximizes his utility.¹⁸ For example, say that Adam knows the average utility payoff from committing the crime and getting away with it is ten, and the average utility payoff from not committing the crime is zero.¹⁹ He also knows that there is a fifty percent chance of detection if he commits the crime. If he is caught, he will still receive an average utility payoff of ten, but it will be more than offset by a punishment²⁰ that decreases his utility by eighteen on average. In this case, Adam will choose to commit the crime, because the expected payoff of one from committing the crime is greater than the reward of zero from choosing not to.²¹

According to this model, the state can deter criminal activity by either increasing the probability of detection or increasing the amount

15. Becker, *supra* note 1, at 176.

16. *Id.* at 177. Alternatively, criminals might be acting out of uncontrollable emotional impulses. See Bruce E. Kaufman, *Emotional Arousal as a Source of Bounded Rationality*, 38 J. ECON. BEHAV. & ORG. 135, 141–42 (1999) (noting that the legal system recognizes the emotional element of crime by creating rules such as the heat of passion defense). Notions of limited cognitive abilities and bounded rationality may also cast doubt on this traditional model. See *infra* Section I.B.

17. Risk neutrality is often, though not always, an assumption of traditional rational choice models. A risk-neutral individual is one who is indifferent between guaranteed payoffs and lotteries with an equivalent expected payout. Uzi Segal & Alex Stein, *Ambiguity Aversion and the Criminal Process*, 81 NOTRE DAME L. REV. 1495, 1518–19 (2006).

18. See Jolls, Sunstein & Thaler, *supra* note 4, at 1476 (noting that a completely rational individual would obtain the optimal amount of information and use that information to maximize utility). In reality, an individual's utility will likely be affected by their specific preferences and circumstances. For the sake of clarity, I have simply assigned a hypothetical numerical utility value to each outcome.

19. I assume that if Adam chooses not to commit the crime, there is no chance of a wrongful conviction.

20. Of course, a more realistic example would also include a probability of punishment. This complication is introduced later on. See *infra* Section I.B.2.

21. $0.5(10) + 0.5(10 - 18) = 1 > 0$.

of punishment upon detection.²² For example, if the state increased the probability of detection in this case to seventy-five percent, Adam would choose not to commit the crime, because the expected payoff of negative three and one-half from committing the crime is less than the payoff of zero he receives from not committing the crime.²³ Similarly, if the state increased the punishment so that Adam would suffer a penalty of twenty-two in terms of utility upon detection, he would choose not to commit the crime, because the expected payoff of negative one from committing the crime is less than the payoff of zero from not committing the crime.²⁴ Indeed, a great deal of research has investigated these aforementioned general predictions, finding abundant support for the proposition that increasing the probability of detection will deter crime and more limited support for the proposition that increasing punishments will deter crime.²⁵

B. Behavioral Insights: The Recent Introduction of Ambiguity

Recently, psychological research and behavioral economics theory have begun to cast doubt on some of the traditional rationality assumptions.²⁶ According to behavioral models of crime, criminals, like all humans, act in predictable ways but exhibit bounded rationality.²⁷ This means that they have limited cognitive abilities, exhibit biases, and utilize heuristics.²⁸ Many of these heuristics and biases have been documented through experiments and empirical research, and some of them provide insights about possible methods of deterrence.²⁹

22. Becker, *supra* note 1, at 177.

23. $0.25(10) + 0.75(10 - 18) = -3 < 0$.

24. $0.5(10) + 0.5(10 - 22) = -1 < 0$.

25. See Daniel S. Nagin, *Deterrence in the Twenty-First Century*, 42 CRIME & JUST. 199, 213–42 (2013) (reviewing the existing deterrence literature and discussing potential explanations for the disparity in empirical support); see also Michael K. Block & Vernon E. Gerety, *Some Experimental Evidence on Differences Between Student and Prisoner Reactions to Monetary Penalties and Risk*, 24 J. LEGAL STUD. 123, 123 (1995) (finding that prisoners are more strongly deterred by increased probabilities of detection and students are more strongly deterred by harsher punishments); Rafael Di Tella & Ernesto Schargrodsky, *Do Police Reduce Crime? Estimates Using the Allocation of Police Forces After a Terrorist Attack*, 94 AM. ECON. REV. 115, 115 (2004) (finding that a greater police presence leads to greater deterrence); Horst Entorf & Hannes Spengler, *Crime, Prosecutors, and the Certainty of Conviction*, 39 EUR. J.L. & ECON. 167, 192 (2015) (finding that greater dismissal of cases leads to less deterrence).

26. See Jolls, Sunstein & Thaler, *supra* note 4, at 1476 (discussing the differences between actual human behavior and behavior predicted by traditional economic models that assume complete rationality).

27. *Id.* at 1476, 1478.

28. *Id.* at 1477.

29. *Id.* at 1476–77, 1522, 1538.

One such behavioral anomaly is ambiguity aversion. This phenomenon occurs when a person conducts cost-benefit analyses with incomplete information about the probabilities of various outcomes, like detection and punishment. Rather than relying on unbiased estimates of the probabilities, people will often make pessimistic predictions due to their distaste for uncertainty.

This Section will further explain what ambiguity aversion is and discuss how it impacts the range of possible deterrence policies. Then, this Section will explain why the most promising deterrence policies involve increasing the ambiguity of detection or decreasing the ambiguity of punishment.

1. What Is Ambiguity Aversion and How Does It Impact Deterrence?

Daniel Ellsberg, the economist who first considered the possibility of ambiguity aversion, explained the phenomenon using the following hypothetical experiment, the Ellsberg paradox.³⁰ In his experiment, Ellsberg envisioned presenting participants with two opaque urns that contain red and black balls. He would tell participants that urn A contains one hundred balls, but the proportion of balls that are red and black are unknown. Therefore, urn A could contain a hundred red balls, a hundred black balls, or any combination in between. He would also tell participants that urn B contains one hundred balls, fifty of which are red and fifty of which are black. Traditional economic assumptions predict that individuals would be indifferent between betting that a red ball will be drawn from urn A and betting that a red ball will be drawn from urn B.³¹ However, Ellsberg posited that the majority of participants would actually prefer to bet that a red ball will be drawn from urn B, because they do not have complete information about the probabilities of the various outcomes if

30. Daniel Ellsberg, *Risk, Ambiguity, and the Savage Axioms*, 75 Q.J. ECON. 643, 650–69 (1961).

31. *Id.* at 651. To illustrate why another choice would be rationally inconsistent, consider what must be true about an individual who prefers to bet on a red ball from urn A. This individual must believe that it is more likely a red ball will be drawn from urn A than urn B. In addition, since this person has the same information regarding black balls, he or she should also prefer to bet that a black ball will be drawn from urn A rather than urn B. This second preference would imply that the person believes it is more likely a black ball will be drawn from urn A than urn B. However, these two beliefs are contradictory; since the probability of a red or a black ball being drawn from urn B is fifty percent, these two beliefs require the probabilities of drawing a red ball from urn B and drawing a black ball from urn B to sum to more than one hundred. Similarly, the beliefs of an individual who prefers to bet on a red ball from urn B would imply that the sum of the probabilities of drawing a red ball from urn A and drawing a black ball from urn A is less than one hundred.

they choose urn A—in other words, there is ambiguity.³² Therefore, he predicted that ambiguity aversion would lead individuals to be more pessimistic about their odds with urn A and shy away from the ambiguous choice.³³ Since Ellsberg's seminal paper, other researchers have conducted his hypothetical experiment and verified that the majority of respondents exhibit ambiguity aversion.³⁴

To illustrate the impact that ambiguity aversion can have on deterrence, consider Beth, a risk-neutral and ambiguity-averse individual deciding whether to commit a crime. Beth, like Adam, knows the average payoffs from committing the crime and getting away with it and from not committing the crime. She also knows the average penalty for detection. However, unlike Adam, Beth is unsure about the probability of detection if she commits the crime.³⁵ Beth knows that she will get an average utility payoff of ten from committing the crime and getting away with it and an average utility payoff of zero from not committing the crime.³⁶ She knows that if she is caught, she will still receive an average utility payoff of ten, but it will be more than offset by a punishment that decreases her utility by twenty on average. She also knows that there is either a sixty percent chance or a forty percent chance of detection, with equal probability.³⁷

32. *Id.*

33. *Id.*

34. See, e.g., Mohammed Abdellaoui, Aurélien Baillon, Laetitia Placido & Peter P. Wakker, *The Rich Domain of Uncertainty: Source Functions and Their Experimental Implementation*, 101 AM. ECON. REV. 695, 703–04 (2011) (conducting the Ellsberg experiment on university students to represent one source of ambiguity); Yoram Halevy, *Ellsberg Revisited: An Experimental Study*, 75 ECONOMETRICA 503, 504 (2007) (conducting the Ellsberg experiment to test various behavioral models of ambiguity aversion). For a discussion of earlier implementations of the Ellsberg experiment, see Stephen G. Dimmock, Roy Kouwenberg & Peter P. Wakker, *Ambiguity Attitudes in a Large Representative Sample*, 62 MGMT. SCI., 1363, 1364, 1368, 1370 (2016) (measuring ambiguity aversion with a representative household survey in the Netherlands); Kenneth R. MacCrimmon & Stig Larsson, *Utility Theory: Axioms Versus 'Paradoxes'*, in EXPECTED UTILITY HYPOTHESES AND THE ALLAIS PARADOX 333 (Maurice Allais & Ole Hagan eds., 1979); Stephen G. Dimmock, Roy Kouweberg, Olivia S. Mitchell & Kim Peijnenburg, *Ambiguity Aversion & Household Portfolio Choice: Empirical Evidence* 1 (Nat'l Bureau of Econ. Research, Working Paper No. 18743, 2013) (eliciting ambiguity preferences through an online survey with more than three thousand respondents).

35. The analysis would be similar if Beth was unsure about the probability of punishment. For the sake of this hypothetical, punishment is assumed to automatically follow detection. I also assume there is no chance of a wrongful conviction if Beth chooses not to commit the crime.

36. These are just hypothetical numbers that I have made up for illustrative purposes, and there is no chance of a wrongful conviction if Beth chooses not to commit the crime.

37. This form of ambiguity, the possibility of two distinct probabilities, was first used by Einhorn and Hogarth to more accurately model the type of ambiguity people face in real life. See Hillel J. Einhorn & Robin M. Hogarth, *Decision Making Under Ambiguity*, 59 J. BUS. S225, S226–30 (1986).

Ambiguity-neutral individuals, like Adam, would simply calculate the expected probability of getting caught, which is fifty percent.³⁸ Then, using this unbiased estimate of the probability, they would calculate the expected payoff from committing the crime, which is zero.³⁹ Based on this calculation, ambiguity-neutral individuals like Adam would be indifferent between committing the crime and not committing the crime. However, Beth will be more pessimistic about the probability of getting caught and punished. Her ambiguity aversion makes her nervous about not having complete information, so she will overweight the chances of a bad outcome. This will make the expected utility from not committing the crime greater than the expected utility from committing the crime, and Beth will choose not to commit the crime.

The introduction of ambiguity aversion does not only change Beth's decision process; it also changes the policies that the state can implement to deter her. The state can still utilize the traditional deterrence methods of increasing the probability of detection or the severity of the punishment to deter Adam and Beth, but it can also deter Beth from committing crime by increasing the amount of ambiguity surrounding detection.⁴⁰ For instance, randomizing police patrols might make it harder for criminals to predict the probability of detection and deter them from committing crimes.⁴¹ This policy is likely to be cheaper than those required to deter Adam, such as hiring more officers, incarcerating more criminals, or extending prison sentences.⁴² The less information individuals like Beth have about the probability of detection, the more pessimistic they will be about the payoffs from crime, leading them to commit fewer crimes overall.

It is important to note that the introduction of risk aversion, which is distinct from ambiguity aversion,⁴³ does not change this analysis. A risk-averse individual, one who prefers guaranteed payoffs to gambles,⁴⁴ will choose to commit crimes less often than a risk-neutral individual, because he or she will not like the fact that his or her payoff from committing the crime is uncertain. This distaste for uncertainty

38. $0.5(0.4) + 0.5(0.6) = 0.5$.

39. $0.5[0.6(10) + 0.4(10 - 20)] + 0.5[0.4(10) + 0.6(10 - 20)] = 0$.

40. See Harel & Segal, *supra* note 9, at 277 (recognizing the existence of ambiguity aversion and arguing that introducing ambiguity with respect to the probability of detection and reducing ambiguity with respect to criminal sanctions can increase deterrence); Kantorowicz-Reznichenko, *supra* note 7, at 29–30 (recognizing that the existence of ambiguity aversion creates room to deter crime with ambiguous police patrols).

41. Kantorowicz-Reznichenko, *supra* note 7, at 29–30.

42. *Id.* at 27–29.

43. Segal & Stein, *supra* note 17, at 1518.

44. *Id.* at 1518–19.

about payoffs, however, is independent of a distaste for uncertainty about probabilities (i.e., ambiguity). Therefore, if a risk-averse individual is ambiguity-neutral, he or she will act like a more cautious Adam. If a risk-averse individual is ambiguity-averse, he or she will act like a more cautious Beth. In either case, holding the risk level constant, the policy options available to the state remain the same: it can increase the probability of detection, which will deter individuals like Adam and Beth, increase the probability of punishment, which will deter individuals like Adam and Beth, or introduce uncertainty about the probabilities, which will only deter individuals like Beth.

2. The Ambiguous Role of Ambiguity Aversion in Criminal Deterrence

Ellsberg's prediction that people prefer to face unambiguous future prospects is an oversimplification of true attitudes.⁴⁵ Rather than having consistent preferences towards ambiguity, recent research has shown that individuals' attitudes change based on the underlying probability of the future outcome and whether the outcome represents a gain or loss.⁴⁶ The traditional Ellsberg experiment cannot capture this complexity, because it only considers preferences over gains and holds the underlying probability of winning at fifty percent.⁴⁷

To see why relaxing these two design choices changes the outcome, consider the following decisions, which Viscusi and Chesson used in an experiment designed to measure ambiguity preferences.⁴⁸ First, pretend that you are a business owner trying to decide on which of two beaches to locate your restaurant, and you consult two experts about the potential for storm damage. The experts agree that there is a thirty percent chance of storm damage in the next decade if you locate on beach A. However, one expert thinks that there is only a twenty percent chance of storm damage if you locate on beach B, and the other expert thinks that there is a forty percent chance of storm damage if you locate on beach B. If you are like most of the business owners surveyed by Viscusi and Chesson, you would choose to locate on beach A, where there is less ambiguity.⁴⁹ Instead, consider the situation where both experts agree that there is a seventy percent chance of storm damage if you locate on beach A and disagree about whether there is a sixty percent or eighty percent chance of storm damage if you locate on

45. See Horowitz & Segal, *supra* note 11, at 550 (arguing that policy recommendations that do not take into account "the recent studies in economics and psychology" are "overly simplistic").

46. Viscusi & Chesson, *supra* note 12, at 157.

47. Ellsberg, *supra* note 30, at 650–51.

48. Viscusi & Chesson, *supra* note 12, at 158–60.

49. *Id.* at 167–68.

beach B. In this case, if you are like the majority of business owners surveyed by Viscusi and Chesson, you would chose to locate on beach B, the beach with more ambiguity.⁵⁰

Conversely, most individuals make the exact opposite choice when the future event being considered is a gain rather than a loss. When facing a low probability of a gain, people tend to be ambiguity-seeking, and when facing a high probability of a gain, they tend to be ambiguity-averse.⁵¹ While the underlying probability at which individuals switch from ambiguity-averse to ambiguity-seeking likely depends on the underlying circumstances, Viscusi and Chesson estimate that people become ambiguity-seeking when the underlying probability of a loss exceeds fifty percent.⁵²

This dynamic reaction to ambiguity has real implications for deterrence policies in the criminal justice system. To see why this is the case, consider a more realistic version of the decision made by Beth. Cory, a dynamically ambiguity-averse individual, is deciding whether to commit a crime. He, like Beth, knows the average utility payoff from committing the crime and getting away with it is ten, the average utility payoff from not committing the crime is zero, and the punishment for the crime will reduce his utility by twenty on average.⁵³ However, whereas punishment accrued to Beth automatically upon detection, Cory knows that two events must precede punishment in his case: the police will need to catch him, and a prosecutor will need to convict him in court or convince him to plead guilty. Empirical evidence confirms the intuition that Cory thinks about these events separately.⁵⁴ Rather than multiplying the probabilities and simplifying the problem he faces, Cory will consider the probabilities independently; he will contemplate the probability of getting caught and, separately, consider the fact that if the police catch him, he will face some probability of punishment.⁵⁵

Typically, Cory is not aware of the exact probability of either event—detection or punishment; there is ambiguity.⁵⁶ However, he knows that in both cases, he is facing a loss. Detection is bad, because it makes him face a new event where he might be punished, and

50. *Id.* at 159, 167–68.

51. *Id.* at 157.

52. *Id.* at 153; *cf.* Loughran et al., *supra* note 7, at 1052–53 (using an experiment that is not able to pin down the exact crossover point but finding that respondents are ambiguity-seeking in the criminal context when the underlying probability of punishment is low (twenty percent) and ambiguity-seeking when the underlying probability of punishment is high (eighty percent)).

53. These are just hypothetical numbers that I have made up for illustrative purposes, and there is no chance of a wrongful conviction if Cory chooses not to commit the crime.

54. Horowitz & Segal, *supra* note 11, at 552–54.

55. *Id.* at 553.

56. *Id.* at 554.

punishment is bad, because it decreases his utility. He also knows that the probability of detection is low and the probability of punishment upon detection is high.⁵⁷ Therefore, his dynamic ambiguity preferences mean that he prefers less ambiguous detection and more ambiguous punishment.

This more realistic example illustrates why a blanket policy introducing ambiguity to deter crime may not be effective. Rather than trying to increase ambiguity at all times, the state can best deter crime by increasing the ambiguity of detection or decreasing the ambiguity of punishment.

Of course, the effectiveness of policies that manipulate ambiguity to deter crime will depend on the portion of individuals—specifically, potential criminals—that exhibit various ambiguity preferences as well as their various reactions to changes in ambiguity. A policy that increases the ambiguity of detection will succeed in reducing total crime levels as long as the deterrent effect it has on ambiguity-averse individuals outweighs the countereffect it has on ambiguity-seeking individuals.⁵⁸ Similarly, a policy that decreases the ambiguity of punishment will succeed in reducing total crime levels as long as the deterrent effect it has on ambiguity-seeking people outweighs the countereffect it has on ambiguity-averse people.

Therefore, while the existing literature indicates that policies increasing the ambiguity of detection and decreasing the ambiguity of punishment are the most likely to deter crime, a more accurate assessment of the effectiveness of such policies would require empirical investigation of whether potential criminals react to ambiguity differently than the rest of the population, what the crossover point from ambiguity-averse to ambiguity-seeking behavior is in the criminal context, and whether potential criminals' reactions are symmetric across increases and decreases in ambiguity.

The remaining parts will apply these insights about dynamic ambiguity preferences to the specific case of the juvenile justice system and propose the extension of a right to counsel during intake procedures as one way to deter crime by decreasing the ambiguity of punishment.

II. AMBIGUITY AND THE JUVENILE JUSTICE SYSTEM

While a few scholars have previously applied the behavioral insights discussed above to the adult criminal context, no one has

57. *Id.* at 553–54.

58. The cost-benefit analyses of ambiguity-neutral individuals will not be affected by this kind of policy.

extended the insights to the unique goals and structure of the juvenile justice system. This Part aims to fill that void by asking whether juveniles react differently to ambiguity aversion and analyzing how increased deterrence through the manipulation of ambiguity can help the juvenile justice system meet its unique goals. Ultimately, this Part identifies where ambiguity does and does not exist within the current structure of the juvenile justice system and considers how that ambiguity might be influencing juveniles' decisionmaking.

A. Ambiguity Aversion as It Applies to Juveniles: Are Kids Different?

Since this Note's ultimate goal is to apply the insights about ambiguity aversion to the context of the juvenile justice system and propose a policy that could help deter juvenile crime, it is natural to consider differences between the way juveniles and adults react to ambiguity. However, the literature in this area is almost nonexistent.⁵⁹ There are only a handful of psychological and economic experiments that have even attempted to elicit ambiguity preferences from children, and most of these studies suffer from small sample sizes.⁶⁰ This Section summarizes their results and methodologies, ultimately concluding that children's average ambiguity attitudes are not meaningfully different from those of adults.

Li and two coauthors conducted an experiment ("Li experiment") where they compared a sample of kids, ages eight to nine, with a sample of young adults, ages nineteen to twenty-seven.⁶¹ They presented the participants with visual representations of ambiguity (bars with varying amounts of certain colors that represent different potential outcomes) and elicited their preferences by asking them which bars they preferred and how much they would be willing to pay to have certain bars over others.⁶² In a similar experiment ("Tymula experiment"), Tymula and six coauthors compared a group of teenagers, ages twelve to seventeen, with a group of adults, ages thirty to fifty,

59. See Rosa Li et al., *Children Do Not Exhibit Ambiguity Aversion Despite Intact Familiarity Bias*, 5 FRONTIERS PSYCHOL. 1519, 1519 (2014) ("[T]here is a paucity of studies investigating how ambiguity aversion emerges and changes across development.").

60. See, e.g., *id.* at 1519–21 (measuring the ambiguity preferences of thirty-four children); Agnieszka Tymula et al., *Adolescents' Risk-Taking Behavior is Driven by Tolerance to Ambiguity*, 109 PROC. NAT'L ACAD. SCI. 17135, 17136 (2012) (measuring the ambiguity preferences of thirty-three adolescents).

61. Li et al., *supra* note 59, at 1519–21. Participants were recruited from the Raleigh-Durham-Chapel Hill area of North Carolina. *Id.* at 1526.

62. *Id.* at 1521–22.

using the same visual representations to elicit ambiguity preferences.⁶³ The Li experiment concluded that children, on average, did not exhibit ambiguity aversion.⁶⁴ Conversely, the Tymula experiment did find some evidence of ambiguity aversion but concluded that adolescents are less ambiguity-averse than adults.⁶⁵ The major limitation of both of these studies is that they used small samples. The Tymula experiment only involved thirty-three adolescent participants,⁶⁶ and the Li experiment only recruited forty-two children, eight of whom the authors excused from the experiment for not being able to grasp the concept of ambiguity, resulting in a final sample of only thirty-four children.⁶⁷

Luckily, there is one study with a larger sample size.⁶⁸ Sutter and three coauthors conducted a survey (“Sutter survey”) of 661 children in Austrian schools, ages ten to eighteen, and elicited their ambiguity preferences through a modification of the traditional Ellsberg paradox.⁶⁹ The authors presented children with choices between betting on the Ellsberg urns and getting a sure payoff.⁷⁰ By changing the monetary value of each option, the authors were able to simultaneously measure risk and ambiguity attitudes.⁷¹ They found that “the clear majority” of the children in their sample was ambiguity-averse.⁷² Therefore, while the existing empirical evidence is mixed, the largest survey of juveniles indicates there is a significant percentage who are ambiguity-averse.

There are no studies that consider the dynamic nature of juvenile ambiguity preferences or try to elicit an underlying probability level at which juveniles become ambiguity-seeking. This Note applies the findings from the Sutter survey and assumes that juveniles respond to ambiguity in a manner similar to adults. The empirical support for this assumption is admittedly limited, and further research in this area is needed. However, none of the existing studies found that juveniles are ambiguity-seeking. This indicates that, at worst, the policies

63. Tymula et al., *supra* note 60, at 17136. Participants were recruited from New York City and New Haven, Connecticut. *Id.* at 17139.

64. Li et al., *supra* note 59, at 1522–23.

65. Tymula et al., *supra* note 60, at 17136–39.

66. *Id.* at 17136.

67. Li et al., *supra* note 59, at 1521–22.

68. See Matthias Sutter et al., *Impatience and Uncertainty: Experimental Decisions Predict Adolescents' Field Behavior*, 103 AM. ECON. REV. 510, 513, 515 (2013) (conducting a survey of 661 adolescents).

69. *Id.*

70. *Id.* at 515.

71. *Id.*

72. *Id.* at 517.

suggested in this Note would have no effect on juvenile crime; they are very unlikely to lead to increased levels of juvenile crime.

*B. Rehabilitative Deterrence: Ambiguity and
the Goals of the Juvenile Justice System*

The central goal of the juvenile justice system has, for the most part, always been rehabilitation.⁷³ Progressive reformers founded the system at the end of the nineteenth century when the common sentiment was that children were less blameworthy, had a larger capacity for rehabilitation, and were less deserving of the harsh punishments imposed by the adult criminal justice system.⁷⁴ The first juvenile justice systems, set up on a state-by-state basis, were designed to provide children with the upbringing they deserved—one that would prepare them to be law-abiding and productive citizens.⁷⁵

Once the system was instituted nationwide, however, reality painted a much dimmer picture. The flexible procedures, which were intended to cater to the individual circumstances of children in need, limited the due process rights courts afforded those children.⁷⁶ In the 1960s, the Supreme Court began formalizing the juvenile justice system, because it recognized the need for procedures to protect the rights of juvenile defendants.⁷⁷ In 1980, Congress also got involved, aiming to remedy flagrant abuses of power during the detention stage by passing the Criminal Rights of Institutionalized Persons Act, which gave the Attorney General authority to remedy “egregious or flagrant conditions” that deprive inmates of their “rights, privileges, or immunities secured or protected by the Constitution or laws of the United States.”⁷⁸

73. See BARRY C. FELD, *JUVENILE JUSTICE ADMINISTRATION IN A NUTSHELL* 1–2 (W. Acad. Publ'g, 3d ed. 2014) (“[T]he juvenile court [was created] as an informal welfare system and a diversionary alternative to the criminal process. Rather than punishing young offenders for their crimes, juvenile court judges made dispositions in the child’s ‘best interests’ and the state functioned as *parens patriae*, as a surrogate parent.”).

74. *Id.* at 1, 5.

75. *Id.* at 5–6.

76. See *In re Gault*, 387 U.S. 1, 18 (1967) (“Juvenile Court history has again demonstrated that unbridled discretion, however benevolently motivated, is frequently a poor substitute for principle and procedure.”).

77. FELD, *supra* note 73, at 285–86; see *In re Winship*, 397 U.S. 358, 368 (1970) (holding that proof beyond a reasonable doubt is a requirement during the adjudicatory stage of a delinquency proceeding); *In re Gault*, 387 U.S. at 31–59 (holding that, in proceedings that determine delinquency with a potential consequence of incarceration, the right to notice, the right to counsel, the right to confrontation, and the right against self-incrimination will be afforded to juveniles).

78. 42 U.S.C. § 1997(a) (2012). The abuses Congress sought to remedy included youths suffering broken jaws, fractured eye sockets, and cut faces; youths being forcibly injected with

Even today, it is unrealistic to think that participation in the juvenile justice system is a positive experience in a child's life. Empirical evidence suggests that juveniles who serve time in a criminal facility are more likely to go on to commit crimes as adults.⁷⁹ Thus, deterrence has become an important goal of the juvenile justice system. Deterring juvenile crimes before they occur prevents juveniles from being taken out of school and put into a system that actually has the potential to make them worse off. It also prevents any harm that the crimes would have caused to victims, making society better off.

C. The Prevalence of Ambiguity in the Juvenile Justice System

In the adult criminal justice system, the probability of detection is low and the probability of being punished after detection is high.⁸⁰ Additionally, it is clear that more ambiguity exists surrounding detection than punishment.⁸¹ The public typically does not have access to information about where the police will patrol, the methods they will use, and precisely how they will divide up their resources. Rather, the public's knowledge about the probability of detection generally stems from experience, anecdotal evidence, and information that police departments choose to release, probably in an effort to deter criminal activity in a certain area or during a certain time by informing the public of a higher-than-usual likelihood of detection. Once in court, however, the process by which an individual is convicted is extremely regulated. Information about this formal process is publically available, and, thanks to crime shows like *Law and Order*, the majority of the public understands the procedures, at least at a general level. Therefore, based on the insights about dynamic ambiguity attitudes, states have correctly set up the adult criminal justice system to

antipsychotic drugs; youths being set up to fight gang rivals in bloody brawls by prison guards; and youths being stripped naked and hog-tied in solitary confinement. See Douglas E. Abrams, *Reforming Juvenile Delinquency Treatment to Enhance Rehabilitation, Personal Accountability, and Public Safety*, 84 OR. L. REV. 1001, 1001–02 (2005).

79. See, e.g., Thomas A. Loughran et al., *Estimating a Dose-Response Relationship Between Length of Stay and Future Recidivism in Serious Juvenile Offenders*, 47 CRIMINOLOGY 699, 711–12 (2009) (finding that juveniles who were sentenced to incarceration rather than probation had higher re-arrest rates and finding no correlation between length of incarceration and re-arrest rates); Juley Myner et al., *Variables Related to Recidivism Among Juvenile Offenders*, 42 INT'L J. OFFENDER THERAPY & COMP. CRIMINOLOGY 65, 76 (1998) (finding that length of first incarceration is positively correlated with number of subsequent offenses).

80. Horovitz & Segal, *supra* note 11, at 553–54.

81. *Id.* at 555–56 (“Police investigations are usually conducted under a thick veil of secrecy . . . [However], the public nature of the criminal trial serves not only to protect defendants from malicious prosecution, but also to educate the public about the criminal law and its method of enforcement.”).

maximize deterrence.⁸² Criminals face an ambiguous, low probability of a loss at the detection stage, and they face an unambiguous, high probability of a loss at the conviction stage, making crime a much less attractive endeavor.

While it might seem at first glance that the juvenile justice system is the same—after all, it is modeled after the adult criminal justice system—there are some subtle distinctions that could have quite a large impact on deterrence. This Section will analyze those distinctions, beginning with the detection stage and concluding with the conviction stage, which will provide the basis for the subsequent policy recommendation.

1. Getting Caught: Ambiguity and Detection in the Juvenile Justice System

Juveniles face a higher likelihood of detection than adults, because children’s behavior is monitored more frequently. At school, teachers supervise juveniles during class, hall monitors and sometimes even police officers monitor juveniles between classes,⁸³ and school officials are allowed to search students’ property more easily.⁸⁴ In addition, many school officials who detect students committing crimes implement zero-tolerance policies and report that behavior to the local authorities, perpetuating the system commonly referred to as the “school-to-prison pipeline.”⁸⁵ At home, parents typically monitor their children to keep them out of trouble or hire a caregiver to do the same. In some cases, parents even report wrongdoings by their children to the police in order to teach them a lesson about accountability.⁸⁶ Therefore, in addition to the possibility of direct detection by the police, juveniles face indirect detection through reports by adult authority figures.

Even children who skip school regularly and whose parents monitor them less frequently face a higher probability of detection than

82. *Id.* at 554–56.

83. See *What Is the School-to-Prison Pipeline?*, ACLU.ORG, <https://www.aclu.org/issues/juvenile-justice/school-prison-pipeline> (last visited Oct. 11, 2016) [<https://perma.cc/N9WZ-4CTE>] (discussing the presence of police officers in schools).

84. See *New Jersey v. T.L.O.*, 469 U.S. 325, 341–42 (1985) (holding that a search of a student by a school official does not violate the Fourth Amendment if it is based upon reasonable suspicion at the time of its inception that the “student has violated or is violating either the law or the rules of the school,” and the search is “reasonably related in scope to the circumstances which justified the interference in the first place”).

85. *What Is the School-to-Prison Pipeline?*, *supra* note 83.

86. Lisa Belkin, *Calling the Cops on Your Child*, N.Y. TIMES (Mar. 24, 2009, 8:13 AM), http://parenting.blogs.nytimes.com/2009/03/24/calling-the-cops-on-your-child/?_r=0 [<https://perma.cc/8AJH-VMYY>].

adults. Police officers are more likely to stop and question juveniles, especially during the day when they should be in school, and juveniles can be charged with status offenses—crimes that can only be committed by juveniles—as well as traditional crimes.⁸⁷

Even though it is clear that juveniles face a higher probability of detection than adults, there is evidence that the majority of juvenile crimes still go undetected.⁸⁸ Therefore, based on Viscusi and Chesson's estimation of when individuals become ambiguity-seeking rather than ambiguity-averse in the loss domain, juveniles will still be ambiguity-averse with respect to detection.⁸⁹

Juveniles also face less ambiguous detection, because their days are very routine. For the most part, school officials, parents, and babysitters are not trying to randomize their behavior and catch kids misbehaving in new and novel ways. In fact, schools will often publish and distribute their policies about searching lockers, using metal detectors, and introducing drug-sniffing dogs.⁹⁰ Since juveniles face these same detection methods on a regular basis, they are likely to have a good idea about the probability of detection.

2. Being Convicted:

Ambiguity and Punishment in the Juvenile Justice System

It is not immediately clear whether the probability of punishment in the juvenile justice system is greater than or less than

87. Some examples of status offenses are truancy, minor in possession, and running away from home.

88. For example, the 1997 National Longitudinal Survey of Youth estimates that fifty-two percent of youth ages fourteen to fifteen have tried alcohol, and three percent of youth reported having carried a handgun in the past month. Office of Juvenile Justice & Delinquency Prevention, *Offending by Juveniles*, OJJDP STATISTICAL BRIEFING BOOK (Sept. 30, 2009), <http://www.ojjdp.gov/ojstatbb/offenders/qa03502.asp?qaDate=19990930> [https://perma.cc/LP28-XAM8]. Since there are about 73.5 million youths (age fourteen to fifteen only) living in the United States, if these estimates are correct, that means around 38.2 million youths (age fourteen to fifteen only) have tried alcohol, and 2.2 million youths have carried a gun in the past month. Office of Juvenile Justice & Delinquency Prevention, *Juvenile Population Characteristics*, OJJDP STATISTICAL BRIEFING BOOK (Oct. 1, 2015), <http://www.ojjdp.gov/ojstatbb/population/qa01104.asp?qaDate=2014> [https://perma.cc/4MCL-4XM2]. In contrast, in 2004, the police only arrested 53,300 juveniles for liquor law violations, and only arrested 20,700 juveniles for weapons violations. Office of Juvenile Justice & Delinquency Prevention, *Law Enforcement and Juvenile Crime*, OJJDP STATISTICAL BRIEFING BOOK (Dec. 13, 2015), <http://www.ojjdp.gov/ojstatbb/crime/qa05101.asp?qaDate=2014> [perma.cc/5SCT-WDEX].

89. See Viscusi & Chesson, *supra* note 12, at 153 (estimating the crossover probability to be around 0.5).

90. See, e.g., *Campus Search and Seizure Policy*, SCH. ARTS & ENTERPRISE, http://www.thesae.k12.ca.us/apps/pages/index.jsp?uREC_ID=231597&type=d&pREC_ID=533746 (last visited Oct. 11, 2016) [https://perma.cc/L62A-9S7U] (discussing the school's policies for all types of searches and seizures of student property).

that in the adult criminal justice system. There are two main distinctions between the systems that cut in opposite directions.

First, the informality of the juvenile justice system, along with its rehabilitative goals, may lead prosecutors to pursue fewer cases than in the adult criminal justice system.⁹¹ For example, the intake procedure that occurs in the juvenile justice system provides an opportunity for cases to be dismissed before formal charges are even filed. Intake is an informal process that juveniles usually go through after they are arrested, and often, the juvenile does not even have the right to counsel at this stage.⁹² The intake officer is usually a probation officer, and he or she will ask the juvenile a series of questions about what happened and about the juvenile's background and criminal history.⁹³ The intake officer may also have access to some relevant documents, such as a complaint statement or the child's school records.⁹⁴ Based on the officer's subjective opinion about the child and the situation, the officer can decide to dismiss the case, deal with it informally—usually by having the child agree to informal supervision or referring them to a diversion program run by the juvenile court that focuses on education and rehabilitation, or recommend that the prosecutor formally process the case.⁹⁵

However, if a prosecutor decides to formally pursue a juvenile case, the juvenile may be more likely to accept a plea bargain than an adult defendant. Of course, plea bargains are always attractive because they typically involve less punishment than a judge would impose if a

91. See Kathleen Michon, *Juvenile Delinquency: What Happens in a Juvenile Case?*, NOLO, <http://www.nolo.com/legal-encyclopedia/juvenile-delinquency-what-happens-typical-case-32223.html> (last visited Oct. 11, 2016) [<https://perma.cc/YJ8E-K2KE>] (“In an average year, about twenty percent of the cases referred to a juvenile court intake officer are dismissed . . .”). While it is hard to come up with a comparable figure from the adult criminal justice system, it is likely that the percent is lower given the prosecutor's greater interest in retribution. For a discussion of reasons why an adult case might be dismissed, see Lauren Baldwin, *Getting a Criminal Charge Dismissed*, CRIMINAL DEF. LAWYER, <http://www.criminaldefenselawyer.com/resources/criminal-defense/criminal-defense-case/charge-dismissal-court.htm> (last visited Oct. 11, 2016) [<https://perma.cc/9TPR-NH8T>].

92. See Birkhead, *supra* note 13, at 165–71 (discussing how some states do not specify whether a juvenile has a right to counsel at this point, some states explicitly only provide the right to counsel once a formal petition has been issued and an initial court date has been set, and a few states handle the issue in a unique way). A complete discussion of the constitutional concerns related to this issue is beyond the scope of this Note. For a review of arguments for and against a right to counsel at intake, see *id.* at 166–71.

93. See Michon, *supra* note 91 (discussing factors the intake officer might consider).

94. See *id.*

95. *Id.*

jury finds the juvenile guilty during adjudication (trial).⁹⁶ In the juvenile justice system, however, plea offers may be even more tempting, because prosecutors, who are considering the rehabilitative goals of the system, may offer more lenient plea deals than they would in the adult criminal justice system.⁹⁷ Therefore, the probability that a juvenile is punished may be higher than that of an adult, because even those juveniles who might be acquitted during adjudication are likely to accept plea bargains if they are risk-averse.⁹⁸

While the precise relationship between the probabilities of punishment in the adult and juvenile justice systems is unclear, it is likely that there is not enough of a difference to greatly change the attitudes juveniles have towards ambiguity of punishment. Based on Viscusi and Chesson's estimate of when individuals are ambiguity-averse and ambiguity-seeking in the loss domain, prosecutors would need to pursue less than half of their cases before juveniles would become ambiguity-averse with respect to punishment.⁹⁹ Therefore, even if juveniles' greater propensity to accept plea bargains does not cancel out the increased likelihood that a prosecutor does not pursue a juvenile case, the underlying probability of punishment is likely large enough that juveniles will be ambiguity-seeking with respect to punishment.¹⁰⁰

Finally, juveniles face more ambiguous punishment than adults. This ambiguity stems from the design of the system, which allows diversion and resolution of cases at almost every stage, provides more flexibility so that similar cases are not as likely to be treated similarly, does not always provide the juvenile court with exclusive jurisdiction, and is covered in a veil of secrecy in order to protect the privacy of juveniles.

The juvenile justice system provides an array of possible case resolutions, extending beyond those available in the adult criminal justice system.¹⁰¹ At the intake stage, intake officers decide whether to

96. See Robert E. Shepherd, Jr., *Plea Bargaining in Juvenile Court*, 23 CRIM. JUST. 61, 63 (2008) (discussing the increasing use of mandatory minimums and three strikes law in the juvenile system).

97. See *id.* at 62 ("The National District Attorneys Association Prosecution Standard 19.2 Juvenile Delinquency, paragraph D, defines the prosecutor's role in plea negotiations in juvenile court as being 'governed by both the interests of the state and those of the juvenile'").

98. There is some evidence that juveniles exhibit risk aversion. Sutter et al., *supra* note 68, at 517 (finding that the majority of a large sample of juveniles exhibit risk aversion as well as ambiguity aversion).

99. Viscusi & Chesson, *supra* note 12, at 153. This is a slight oversimplification; they may actually be able to pursue slightly more than half of their cases, because some cases will proceed to adjudication and result in acquittal. However, I do not believe that this number of cases is high enough to meaningfully change my predictions.

100. See *id.* (estimating the crossover probability to be around 0.5).

101. See Michon, *supra* note 91 (explaining the possible paths that a juvenile case might take).

dismiss the case, deal with the case informally—usually by having the child agree to informal supervision or referring them to a diversion program run by the juvenile court which focuses on education and rehabilitation—or recommend that the prosecutor formally process the case.¹⁰² Even if the prosecutor goes forward with the case, diversion can happen at any point before adjudication.¹⁰³ Diversion proceedings look a lot like the informal proceedings that occur at the intake stage; the juvenile will usually appear before a probation officer or a judge, and, though the court does not enter formal charges against the child, the child usually must agree to some sort of disposition—typically rehabilitative in nature.¹⁰⁴ For example, the court might require the juvenile to attend counseling, pay a fine, enter probation, or perform community service.¹⁰⁵ If the juvenile does not complete the required activity, the judge retains jurisdiction over the case.¹⁰⁶

In the absence of diversion, a juvenile may, like an adult defendant, decide to enter into a plea bargain. As mentioned previously, prosecutors in the juvenile justice system are likely to offer more lenient plea deals, because they consider the best interests of the child as well as the retribution goals of the state.¹⁰⁷ The last resort, just like in the adult criminal justice system, is adjudication.¹⁰⁸ This wide array of possible outcomes makes punishment very ambiguous in the juvenile justice system.

The fact that states do not clearly define the procedures at each stage of a juvenile case serves to increase the ambiguity even more. For example, it is often unclear at which points in the process juveniles have a right to counsel.¹⁰⁹ Additionally, different states afford juveniles different amounts of protection, and the Supreme Court has stated that it will intervene only to require states to provide additional protections when the benefits children receive outweigh the costs of formality to the

102. *Id.*

103. *See id.* (explaining diversion).

104. *Id.*

105. *Id.*

106. *Id.*

107. *See* Shepherd, *supra* note 96, at 62 (“The National District Attorneys Association Prosecution Standard 19.2 Juvenile Delinquency, paragraph D, defines the prosecutor’s role in plea negotiation in juvenile court as being ‘governed by both the interests of the state and those of the juvenile’”).

108. *See* Michon, *supra* note 91 (explaining the possible paths that a juvenile case might take).

109. *See* Birckhead, *supra* note 13, at 169–71 (discussing how some states do not specify whether a juvenile has a right during the pre-adjudication stage, some states explicitly only provide the right to counsel once a formal petition has been issued and an initial court date has been set, and a few states handle the issue in a unique way).

state in terms of preventing the state from achieving its benevolent goals.¹¹⁰

Every state allows transfer of certain serious juvenile cases to the adult criminal justice system.¹¹¹ These statutes are often very complex and may involve the discretion of a judge or prosecutor,¹¹² making punishment even more ambiguous.

Finally, many states afford juveniles the right to private adjudication and sealed records.¹¹³ While these rights are helpful to juveniles in terms of protecting their privacy and allowing them to fully reintegrate into society without the stigma of a public criminal record,¹¹⁴ they also increase the ambiguity of punishment. There is no juvenile version of *Law and Order*, and most children have no knowledge of juvenile justice procedures or the likelihood of punishment.

These differences between the juvenile and adult criminal justice systems have meaningful implications for optimal deterrence policies. While there are some differences in the underlying probabilities of detection and punishment, these are likely not enough to change the nature of juveniles' ambiguity attitudes. In the juvenile justice system, the probability of detection is still low and the probability of punishment after detection is still high. Therefore, the average juvenile will be more likely to commit a crime if they face unambiguous detection and ambiguous punishment.¹¹⁵ The state can achieve maximum deterrence with the exact opposite. However, unlike the adult criminal justice system, where there is already a great deal of ambiguity surrounding detection and punishment is fairly unambiguous,¹¹⁶ the juvenile justice system has room to improve deterrence by either increasing the ambiguity of detection or decreasing the ambiguity of punishment. The next Part will suggest providing a

110. *See In re Winship*, 397 U.S. 358, 365–68 (1970) (balancing the benefits to the juvenile of having charges brought against them proven beyond a reasonable doubt against the need for the state to maintain flexibility in the juvenile system).

111. FRANKLIN E. ZIMRING, *AMERICAN JUVENILE JUSTICE* 139 (2005).

112. *See* FELD, *supra* note 73, at 216–21 (discussing the three most common transfer methods: legislative offense exclusion, judicial waiver, and prosecutorial direct file).

113. *See* Office of Juvenile Justice & Delinquency Prevention, *Juvenile Justice Reform Initiatives in the States 1994–1996*, OJJDP.GOV, http://www.ojjdp.gov/pubs/reform/ch2_i.html (last visited Oct. 12, 2016) [<https://perma.cc/PT2W-WEQ7>] (discussing state attitudes toward privacy regarding juvenile proceedings and records).

114. *See id.* (“State laws and judicial norms were established with the understanding that the preservation of the privacy of juveniles adjudicated in the juvenile court is a critical component of the youth’s rehabilitation.”).

115. *See* Viscusi & Chesson, *supra* note 12, at 157 (finding that individuals are ambiguity-averse with respect to large risks and ambiguity-seeking with respect to small risks).

116. Horovitz & Segal, *supra* note 11, at 554–56.

right to counsel at intake proceedings as one promising mechanism for decreasing the ambiguity of punishment.

III. DECREASING AMBIGUITY TO INCREASE DETERRENCE: A RIGHT TO COUNSEL DURING INTAKE

As discussed in the previous Part, there is room for the juvenile justice system to deter more crimes by either increasing the ambiguity of detection or decreasing the ambiguity of punishment. Since literature about ambiguity and deterrence in the adult criminal justice system has tended to focus on policies that increase the ambiguity of detection, this Part will discuss a policy to decrease the ambiguity of punishment—the provision of a right to counsel to juveniles during intake procedures. This Part describes how this policy will affect juveniles’ decisionmaking and how states might implement such a policy.

A. How a Right to Counsel Can Deter Juvenile Crime

Providing juveniles with a right to counsel will decrease the ambiguity of punishment in two ways: First, it will force intake officers to behave in a more consistent manner by providing oversight through defense attorneys who can compare the outcomes of similar cases.¹¹⁷ It will also cause juveniles to behave in a more consistent manner since an experienced attorney can inform them of their rights and give them advice about the system.¹¹⁸ This will decrease the odds that a case’s outcome is determined by the anxiety or impatience of a child rather than their likely guilt or need for rehabilitation. Together, these changes will make the probability of punishment much more stable.

To see that this is the case, consider Dana, a fifteen-year-old girl in the ninth grade.¹¹⁹ Dana has an unblemished disciplinary record but is struggling academically. Hoping to get back at the popular girls at school who have been bullying her, Dana is thinking about scaring them by starting a rumor that another student will conduct a school shooting. Dana knows that if she goes through with the plan and is caught by the

117. See Marsha Levick & Neha Desai, *Still Waiting: The Elusive Quest to Ensure Juveniles a Constitutional Right to Counsel at All Stages of the Juvenile Court Process*, 60 RUTGERS L. REV. 175, 205 (2007) (arguing that a right to counsel at all stages is necessary to “prevent arbitrary extensions of placement”).

118. See *id.* (“[A] juvenile’s emotional, psychological and cognitive deficits leave her ill-equipped to conduct her own representation and protect her own rights without the assistance of counsel.”).

119. This hypothetical is loosely modeled after a case described by Tamar R. Birkhead, which is loosely based on several cases handled by the North Carolina Juvenile Justice Clinic. Birkhead, *supra* note 13, at 158–60.

student resource officer, the officer will inform the police that she made a false report of violence. Then, a juvenile probation officer will review that complaint and conduct an intake interview. In the state where Dana lives, the intake officer will not investigate the case but will decide whether she belongs in the system by considering her family background, her performance in school, and her answers to questions. Dana has no right to counsel during this interview and has no right to appeal the decision of the intake officer. Dana knows that the probability of having her case dismissed at this stage is very small, but the exact size of the probability is ambiguous, because it depends on the officer and his or her subjective opinions about what makes a child deserving of a second chance. Therefore, Dana is facing an ambiguous and high probability of punishment.

Now consider Eddy. He also has an unblemished disciplinary record but is failing algebra. His friends dare him to start a rumor about a school shooting by posting an anonymous threat on Facebook. Eddy knows that if he is caught by the student resource officer, the officer will tell the police that he made a false report of violence. However, Eddy's situation is different than Dana's, because he lives in a state that provides him the right to an attorney during the intake process. Eddy knows that his attorney will give him advice about which questions to answer and that the intake officer will likely treat all cases in a similar manner. Eddy, like Dana, knows that intake officers do not dismiss very many cases. Therefore, if he goes through with the crime and is caught, he faces an unambiguous and high probability of punishment—he knows that there is only a very small chance the intake officer will look so favorably upon his background and situation that he will decide to dismiss the case.

Assuming these juveniles have typical ambiguity preferences, Dana is more likely to go through with the crime than Eddy. The ambiguity that Dana faces surrounding detection is increased by the fact that she does not have a right to legal representation. That ambiguity gives her more hope about the possibility that the intake officer will dismiss her case. Eddy, on the other hand, knows that he will face a more streamlined process due to the presence of his attorney. He has little hope that the intake officer will treat his case any differently than the average case, which the officer does not dismiss. Implementing a policy that provides juveniles a right to counsel can therefore be an effective tool for deterring juvenile crime.

B. How a Right to Counsel Can Be Implemented

Whether a juvenile is entitled to counsel during intake procedures often turns on whether a court considers the intake process to be a “critical stage” of the juvenile proceeding.¹²⁰ In turn, this will often depend on whether the legislature in the state has enacted a law to prevent the use of statements made during intake at adjudication proceedings.¹²¹ When protections are in place, courts have usually found that intake is not a critical stage.¹²² When no protections are in place, courts have disagreed about whether intake is a critical stage.¹²³ However, there is nothing that prevents state legislatures from providing juveniles with the right to counsel at intake, regardless of courts’ determinations about whether intake is a critical stage; in fact, some states have done just that.¹²⁴

The arguments made in this Note provide a justification for this type of legislation that is independent of the traditional fairness concerns. Courts’ legal analysis of whether intake procedures are a critical stage of a juvenile proceeding falls short of considering all of the potential costs and benefits of providing juveniles with a right to counsel. As illustrated in the previous Section, the right to counsel has the potential to deter juvenile crime by decreasing the ambiguity surrounding punishment. Therefore, even if it is not constitutionally required, states should consider providing juveniles with the right to counsel at intake to further the goals of the juvenile justice system.

One potential concern with this proposed solution is that the cost of implementation may outweigh the benefits.¹²⁵ Indeed, implementation may be costly—the state would need to provide counsel at all intake proceedings. Since public defenders are already overworked in many states, this cost is nontrivial.¹²⁶ While a complete

120. *Id.* at 167.

121. *Id.* For a discussion of the states that have enacted such laws, see Lourdes M. Rosado & Riya S. Shah, *Protecting Youth from Self-Incrimination when Undergoing Screening, Assessment and Treatment Within the Juvenile Justice System*, JUVENILE LAW CTR. (Jan. 2007), http://www.jlc.org/sites/default/files/publication_pdfs/protectingyouth.pdf [<https://perma.cc/55MB-MRDU>].

122. Birkhead, *supra* note 13, at 168; *see, e.g., In re Frank H.*, 337 N.Y.S.2d 118, 123–24 (N.Y. Fam. Ct. 1972) (holding that intake proceedings are not a critical stage, because juveniles already have the protection of the exclusionary rule).

123. Birkhead, *supra* note 13, at 169.

124. *See, e.g.,* ALA. CODE § 12-15-202(a)(3) (2013) (requiring that a juvenile and their guardian be advised by the intake officer of the right to be represented by counsel); ARK. CODE ANN. § 9-27-316(a)(1) (2013) (requiring that a child be advised of a right to counsel at all stages).

125. *See In re Frank H.*, 337 N.Y.S.2d at 123 (arguing that “requir[ing] counsel at intake would be an intolerable burden on an already overburdened court”).

126. *See* Donald J. Farole, *A National Assessment of Public Defender Office Caseloads*, JUST. RES. & STAT. ASS’N ANN. MEETING (Oct. 28, 2010), <http://www.jrsa.org/events/conference/>

cost-benefit analysis is outside the scope of this Note, the fact that some states have already adopted legislation that provides juveniles the right to counsel at intake illustrates that the proposed solution is not likely to be prohibitively expensive. The benefits to be weighed against the costs will depend on factors such as societal values, costs of crime, and the precise ambiguity attitudes of potential juvenile defendants.

Those who have resisted the provision of counsel at the intake stage have supported their position by arguing that counsel will overly formalize the process, making it less able to serve its rehabilitative purpose.¹²⁷ This idea relies on a vision of the intake process as an informal conversation between the intake officer and the child, where the intake officer gets to know the child and decides what is in his or her best interest in terms of rehabilitation. However, deterrence itself can serve a rehabilitative function by decreasing recidivism.¹²⁸ Therefore, while it is probably true that the provision of a right to counsel would formalize the system, this Note contends that formalization is a virtue. The increase in formality will decrease ambiguity and deter juvenile crime. In addition, the experiences of the few states that have implemented this policy illustrate that increased formality is unlikely to cripple the juvenile justice system.¹²⁹

Finally, the success of the solution proposed in this Note relies on the assumption that juveniles are informed about the system they face when they decide to commit a crime. If states decide to give juveniles the right to counsel at intake, but juveniles are not aware of this change or do not understand how it will affect them, juveniles will neither change their decisionmaking nor be deterred from committing crimes. This is admittedly an important limitation. However, if states are implementing the right to counsel at intake with the intent to deter juvenile crime, they can address this limitation by publicizing the change in the media and encouraging schools to inform students about the procedures of the juvenile justice system. Once defense attorneys become part of the intake process, they will also begin informing clients

presentations-10/Donald_Farole.pdf [<https://perma.cc/5ZE3-Q9NB>] (finding that “four of seventeen state program reporting complete data had a sufficient number of attorneys to meet caseload standards” and “about one in four county-based public defender offices had a sufficient number of attorneys to meet caseload standards”).

127. See Birckhead, *supra* note 13, at 178–80 (summarizing the main arguments against a right to counsel at intake).

128. See Tamar R. Birckhead, *Delinquent by Reason of Poverty*, 38 WASH. U. J.L. & POL'Y 53, 97–99 (2012) (reviewing research that found the criminogenic effects of juvenile court intervention are seven times higher for children charged with minor crimes as compared to children who were not subjected to juvenile court intervention).

129. For a discussion of the states that have enacted such laws, see Rosado & Shah, *supra* note 121.

who can spread the word to other juveniles that may be contemplating criminal behavior. Therefore, while a lack of knowledge is an important limitation, it may be possible to overcome.

CONCLUSION

While the central focus of the juvenile justice system has historically been rehabilitation, the realities of the current system make policies that increase deterrence extremely valuable. This Note uses insights from behavioral economics and psychology to highlight a potential new avenue for deterrence policies in the juvenile justice system. Assuming that juveniles react to ambiguity in a manner similar to adults, they will more likely commit crime if detection is unambiguous and punishment is ambiguous.¹³⁰ Thus, policies that increase the ambiguity of detection and decrease the ambiguity of punishment will deter juveniles from committing crimes. Specifically, this Note advocates that states afford juveniles a right to counsel during intake to decrease the ambiguity of punishment and deter crime. Some states have already adopted this policy,¹³¹ illustrating that it is not prohibitively expensive and is unlikely to cripple the flexible procedures that are a defining quality of the juvenile justice system. Therefore, even putting aside the fairness concerns that may weigh in favor of granting juveniles a right to counsel at intake, this Note illustrates that such a policy, when properly advertised, can be an efficient way to deter juvenile crime.

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130. See Viscusi & Chesson, *supra* note 12, at 157 (summarizing the empirical findings that adults are ambiguity-averse with respect to large risks and ambiguity-seeking with respect to small risks).

131. For a discussion of the states that have enacted such laws, see Rosado & Shah, *supra* note 121.

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