

AN EXPERIMENTAL DESIGN STUDY OF JUVENILE DETENTION HEARING
JUDGES' DECISIONS TO ISSUE ORDERS TO COMPEL EVIDENCE OF
COMPLIANCE WITH STATE VACCINATION LAWS

A dissertation submitted in partial fulfillment of the requirements for the degree of
Doctor of Philosophy at George Mason University

by

Anne S. Douds
Juris Doctor
Emory University School of Law, 1994
Bachelor of Arts
Duke University, 1990

Director: David B. Wilson, Professor
Department of Justice, Law and Crime Policy

Fall Semester 2013
George Mason University
Fairfax, VA



This work is licensed under a [creative commons attribution-noncommercial 3.0 unported license](https://creativecommons.org/licenses/by-nc/3.0/).

DEDICATION

This is dedicated to my husband Doug, to my two sons, Gus and Sam, and to my mother-in-law, Judy.

TABLE OF CONTENTS

	Page
List of Tables	vi
List of Figures	vii
Abstract	viii
Introduction and Literature Review	1
Background	1
Prior Relevant Research	3
How Requests for Vaccine Orders Might Be Made	10
Foundation for First Hypothesis: Legal Consent/Legal Custody	15
Foundation for Second Hypothesis: Records Evidence	17
Foundation for Third Hypothesis: Interaction Effect	20
Foundation for Remaining Hypotheses Concerning Judges' Personal Characteristics	21
Foundation for Fourth Hypothesis: Gender	22
Foundation for Fifth Hypothesis: Political Orientation	24
Foundation for Sixth, Seventh, and Eighth Hypotheses: Judicial Role-Orientatation	28
Hypotheses	31
Methods	33
Study Participants	34
Survey Instrument	35
Measures	41
Statistical Analysis	41
Results	43
Results Concerning Research Question: Will Judges Issue Vaccine Orders?	43
Results Concerning First Hypothesis: Consent	44
Results Concerning Second Hypothesis: Records	47
Results Concerning Third Hypothesis: Interaction Effect	47
Results Concerning Fourth Hypothesis: Gender	51

Results Concerning Fifth Hypothesis: Political Ideology	52
Results Concerning Hypothesis Six, Seven, and Eight: Judicial Role Orientation.....	54
Discussion	57
Consent Is Important	57
Records Evidence Is Not Important	63
Consent and Records Do Not Interact As Predicted	65
Gender May Be Important.....	66
Personal Political Ideology May Be Important	66
Judicial Role Orientation May Matter.....	67
Limitations	69
Future Research.....	72
Conclusion.....	75
Appendix A: Background Information on Vaccination Laws	77
Appendix B: Survey Instrument	86
Appendix C: National Center for Juvenile Justice Email	89
Appendix D: Text From Survey Response Box	90
References.....	92

LIST OF TABLES

Table	Page
Table 1. Visual Rendering of Question Design	37
Table 2. Question Bank From Survey.....	38
Table 3. Will Judges Issue Vaccine Order?	44
Table 4. Means and Standard Deviations by Condition for Upon Motion, Judicial Notice, Sua Sponte, and Composite	45
Table 5. ANOVAs for Upon Motion, Judicial Notice, Sua Sponte, and Total (Composite)	46
Table 6. Political Ideology	52
Table 7. ANOVA Including Personal Political Ideology for Total	54
Table 8. Total Response Means When Consent Present and Absent, Based on Personal Political Ideology	54
Table 9. Opinion Questions on Purposes of Juvenile Justice System.....	55
Table 10. Correlations Among Respondents' Role Orientations and Vaccine Decisions.	56

LIST OF FIGURES

Figure	Page
Figure 1. Upon Motion Model	48
Figure 2. Judicial Notice Model.....	49
Figure 3. Sua Sponte Model.....	50
Figure 4. Total Model	51

ABSTRACT

AN EXPERIMENTAL DESIGN STUDY OF JUVENILE DETENTION HEARING JUDGES' DECISIONS TO ISSUE ORDERS TO COMPEL EVIDENCE OF COMPLIANCE WITH STATE VACCINATION LAWS

Anne S. Douds, Ph.D.

George Mason University, 2013

Dissertation Director: Dr. David B. Wilson

Children arrive in the juvenile justice system suffering from a constellation of social and health care issues that predispose them to medical risk. They are far more likely than their peers in the general population to lack their state-mandated vaccines. Policy makers have suggested that juvenile court judges intervene at detention hearings on behalf of juveniles and compel juvenile facilities to obtain vaccines for the children they house. However, prior research suggests that concerns about legal custody and medical authority would impede judicial intervention in vaccine delivery to these children even after they are taken into state custody. This experimental design study tests the significance of legal consent and the availability of medical records to analyze whether those concerns are meaningful hindrances to judicial involvement in vaccine policies. The study further examines judicial respondents' socio-ideological qualities to identify correlations among social and philosophical characteristics with decisions on vaccine policies. The results

indicate that legal consent and judicial ideology exert a statistically significant influence on judicial respondents' decisions on whether to mandate compliance with state vaccines through the powers of the court.

INTRODUCTION AND LITERATURE REVIEW

Background

The law has been clear for more than a century: Government has the duty and the right to protect the health of its people from communicable disease, in particular its more vulnerable populations, through compulsory vaccination laws (*Jacobson v. Commonwealth of Massachusetts*, 1905). Government also has the related right and the duty to enforce compulsory vaccination laws through its courts and to make vaccination a prerequisite for enrollment in public schools (Hodge & Gostin, 2001; Mazzotti & Higgins, 2006; *Zucht v. King*, 1922). At all levels of government, American law recognizes vaccination as a duty and a key component of its public health obligation (Welborn, 2005).

Ironically, children who have the most contact with judicial personnel are least likely to receive their vaccine shots. Youth in juvenile detention proceedings are significantly less likely than their peers in the general public to receive their state-mandated vaccines (Brown, 1993; Crosby et al., 2004; Freed et al., 1993; Renzi, 2004; Tedeschi et al., 2007). They also are more likely to suffer from diseases that can be prevented through vaccination (Forrest et al., 2000, p. 286). Approximately 2.2 million children enter the juvenile justice system each year, and more than 1.6 million children engage in formal juvenile justice proceedings annually (Puzzancherra, 2009;

Puzzancherra & Sickmund, 2008). Under-vaccination among this sizable population reflects a substantial gap in enforcement of vaccine laws, a threat to public health, and a systemic failure to preserve the rights of justice-involved children.¹

According to public health and justice systems researchers, the juvenile detention experience may be the only occasion on which high-risk adolescents encounter professionals in positions to provide them with needed vaccine services (Golzari et al., 2006; Willis et al., 2006). Some argue that the juvenile detention experience creates an opportunity for early intervention among high-risk adolescent populations and provides a unique context in which to develop policy initiatives related to disease prevention and reduction (Freudenberg et al., 2005). Others argue that judicial involvement in vaccine policy and practice represents profound risk to civil liberties and judicial activism run amok (Swendiman & Welborn, 2011).

If, in fact, the juvenile justice system is one of the best, and perhaps the only, occasion on which many adolescents will encounter professionals with the requisite skills and resources to provide them with vaccines (Golzari et al., 2008; Myers & Farrell, 2008), then the questions become (1) Will judges intervene to force juveniles to prove that they have current vaccines, and (2) how, when, and where in the system should those professionals intervene to provide that care?

¹ A full discussion of the fundamental human rights issue inherent in any discussion of providing health care to youth who are in the custody of the government is beyond the scope of this dissertation. However, it should be noted that detained youth have a right to medical care, in particular primary care, guaranteed not only by American case law, but also by Article 24 of the United Nations Convention on the Rights of the Child and the United Nations Rules for the Protection of Juveniles Deprived of Their Liberty.

Policy makers, juvenile and family court judges, and the consensus of the Federal Initiative on Juvenile Justice Health claim that this first, best opportunity to intervene on behalf of juveniles' vaccination needs arises at the detention hearing (Douds, 2013; Office of Juvenile Justice and Delinquency Prevention, 2007).² In contrast, justice facility personnel contend that the institutional and legal limitations described above make the detention hearing an inappropriate occasion to address vaccine issues. This dissertation seeks to provide evidence on those limitations in order to resolve at least part of this dispute.

Prior Relevant Research

In response to growing evidence of under-vaccination among adolescent youth in general, and youth in the juvenile justice systems specifically, the Centers for Disease Control and Prevention (CDC) undertook studies in the mid-2000s of specific vaccination practices within justice facilities to establish the prevalence of under-vaccination and to diagnose potential methods for increasing vaccination rates (Centers for Disease Control and Prevention, 2010, p. 2; Douds, et al., 2008; Douds & Willis, 2010; Greifinger, 2007; Hennessey et al., 2009; Jacobi & Sag, 2005). As part of a broader effort, the CDC entered into an interagency agreement with the Office of Juvenile Justice and Delinquency Prevention (OJJDP) and George Mason University (GMU) to develop data relevant to its adolescent vaccination initiative. GMU was tasked with developing, pretesting, and piloting a question series for the Juvenile Residential Facility Census (JRFC) about the

² This hearing, which is the first court appearance in which an arrested juvenile participates subsequent to arrest, also is called an initial hearing (Hess, 2010).

extent of respondent-facilities' participation in the federally funded Vaccines for Children (VFC) Program.

In that study, I interviewed representatives from 25 facilities in seven states about their vaccine programs, preventive health programs, and their familiarity with the VFC Program (Douds et al., 2007). During the interviews, I asked respondents to explain what problems, if any, they encountered during their daily health care practices, with specific emphasis on their vaccine practices. During those interviews, five themes emerged to explain why juvenile justice facilities would not, or could not, assume responsibility for vaccinating pre-adjudicatory youth: (1) cost, (2) the Health Information Portability and Accountability Act (HIPAA), (3) institutional issues, (4) parental consent or legal authority to vaccinate children, and (5) difficulties in locating and obtaining medical records to substantiate children's vaccination status (Douds, 2013). Each of these objections is explained below, and the last two are the subject of this dissertation.³

Cost. There are at least four components to cost: (1) the cost of the actual serum, its vial, its cap, and the needle; (2) the cost of transporting and/or obtaining the serum, vial, cap, and needle; (3) the cost of storing the shots under appropriate, refrigerated conditions; and (4) labor and administration costs associated with having a nurse or medical professional give and document the injections. The first and second costs are

³ Other researchers concur that legal consent and availability of vaccination records may pose burdens on justice facilities as they attempt to deliver vaccines to youth in their care, but no one has examined whether those burdens are objective realities or the product of subjective interpretation (Centers for Disease Control and Prevention, 2010, p. 2; Crosby et al., 2004; Henderson et al., 2010, p. 496; Sneller et al., 2008, p. S57; Tedeschi et al., 2007).

covered completely by the Vaccines for Children (VFC) Program, a federal entitlement program that delivers vaccines, at no cost, to enrolled juvenile justice providers.⁴

According to data from the 2006 JRFC, 43% of juvenile residential facilities are VFC-enrolled, and the balance are eligible to receive serum and materials from corresponding state-run agencies. The federal VFC and equivalent state programs provide, transport, and deliver the serum and materials at no cost to the facilities. The remaining costs—refrigeration and labor—are included in existing facility budgets. The facilities must have refrigerators on site, and they must have health care professionals on site. Therefore, the cost burden is minimal.

HIPAA. Facility respondents claimed that HIPAA precluded them from exploring juveniles' health status and from accessing their vaccine records. In fact, HIPAA provides an exception for vaccine records (45 C.F.R. § 164.506; 45 C.F.R. § 160.102(a)(3) and § 164.500(a)), indicating that facility personnel are misinformed on this point. This issue could be resolved through education and training, but that topic is beyond the scope of this dissertation.

Redundancy of shots. Facility managers in prior research have expressed concerns that children might receive duplicative, or redundant, shots. They feared that if they administered vaccines to youth in their care without confirming their vaccination status through medical records, the youth might receive a shot that he/she had received

⁴ It should be noted that research establishes that costs in adult facilities are substantial because there is no VFC equivalent for adult inmates (Pisu et al., 2002). I speculate that conventional wisdom amongst justice facility health care professionals holds that there is a substantial cost burden for juvenile residential facilities (JRFs), but the reality is that cost is not an issue for JRFs.

previously. This risk of redundancy implicates two concerns: (1) unnecessary cost and, more fundamentally, (2) alleged medical danger. According to prevailing medical research and the CDC, receiving multiple doses of the same vaccine does not harm people. If a youth received a hepatitis A vaccination from his pediatrician, then received the same shot from a juvenile detention nurse, he would not suffer any adverse consequences. As explained above, the only redundant costs would be administrative; the serum is free. Therefore, the only “danger” arising from duplicative vaccination would be the de minimus state funds expended on the mechanics of administering the shot.

Institutional concerns. More theoretical obstacles identified in prior research are institutional biases inherent to juvenile justice systems that impede vaccination within detention centers. Juvenile justice facilities are charged with maintaining discipline, order, and safety among multiple children in close quarters, while simultaneously providing for children’s health and welfare. While these dual objectives are not necessarily incompatible, the execution of one can interfere with that of the other. This “duality of purpose” can be confounding to facility staff (Melnick et al., 2009). Facility personnel generally perceive preservation of the peace as their primary function, but some also believe that they provide unique opportunities for children to receive rehabilitation and treatment (see Cullen & Gendreau, 1989; Douds et al., 2008). Time and resource constraints are the overarching concerns among facility personnel. They are perplexed as to how to resolve their dual purposes within the time constraints and budgets imposed upon them (Douds et al., 2008). Redressing these institutional concerns would require a paradigm shift among facility staff and their governing bodies, which is difficult

but not impossible to achieve through proper education and training (Duffee & Carlson, 1996; Hammett, et al., 2001; Kusserow, 1991; Taxman & Bouffard, 2003; Taxman et al., 2007). This institutional issue is the topic of another manuscript that is in development and is beyond the scope of this dissertation.

All of the foregoing issues could be remediated through education. The cost and HIPAA concerns identified in the prior research arose from misinformation among justice systems personnel, which could be remedied through some basic training or legal education. Institutional concerns like those articulated by respondents in the prior research are inherent to all societal systems, and they are most effectively addressed through education and training (Greifinger, 2007).

Assuming *arguendo* that the above issues can be redressed through education, training, and awareness, a fundamental research question for this study remains: ***Are juvenile and family court judges willing to intervene to require pre-adjudicatory youth to prove that they have received all of their state-mandated vaccines and are in compliance with compulsory state vaccination laws?*** For purposes of this study, this research question is simplified to ask: ***Are judges willing to issue vaccine orders?*** My prior research and existing literature suggest that the answer is *maybe* (Harris, 2009; Moore & Wakeling, 1997; Yale Law Journal, 1973).

To explore this issue, I asked facility respondents in the prior research whether they thought they could request temporary legal custody from a court for purposes of administering state-mandated vaccines. Interestingly, *every* pretest respondent categorically dismissed this suggestion as unworkable (Douds et al., 2007). They all

explained, in various ways, that judges simply would not “put themselves out there” to get these children vaccinated (Douds et al., 2007). They perceived judges to be self-protective and reluctant to engage in any decision other than requests made within the four corners of legal motions presented at the detention hearings (Douds et al., 2007). I found this perspective fascinating in light of the broad “best interest of the child” standard by which juvenile and family court judges are expected to govern their decision-making (American Bar Association Child Custody and Adoption Pro Bono Project, 2007; Child Welfare Information Gateway, 2010; Kohm, 2008).

This perspective also contradicted positions taken by judges who participated in the 2007 Federal Initiative on Juvenile Justice Health at George Mason University. This national consensus conference brought together representatives from leading juvenile justice organizations from across the nation. The representative for the National Council of Juvenile and Family Court Judges (NCJFCJ), The Honorable Patricia Macias, commented at one point:

I just want to make sure that we don't underestimate the role that the judges can play because we really are at the front line and we are the gatekeepers of the kids coming in but we need information and we need to make sure that the children are assessed appropriately and once they are assessed, we need to know what resources are out there . . . use your judge as a resource to push health agenda. The power of subpoena is great but most of all the concern [sic] the child and getting the child through the system and out appropriately (Office of Juvenile Justice and Delinquency Prevention, 2007).

These apparent inconsistencies among facility-level perspectives and judge-level perspectives suggest a gap in information and research that needs to be addressed. This

dissertation seeks to garner information to respond to the paramount question of whether judges will involve themselves in this issue at all.

Procedurally and hypothetically, judges could issue an order to compel production of evidence that a detained, pre-adjudicatory youth has received all of his/her state-mandated shots. An “order to compel” is a court order requiring that a litigant or third party take some specific action (Federal Rule of Criminal Procedure [F.R.Crim.P.] 17; Federal Rules of Civil Procedure [F.R.C.P.] 26 and 39). The exact mechanisms are different among states, but the general process would be as follows: The judge would issue an order under his/her subpoena power, and he/she would charge someone with the responsibility of providing the court with vaccination records to prove that the youth in question had received all of his/her vaccinations. Again, for purposes of this dissertation, this hypothetical “order to compel” is referred to as a *vaccine order*. Such orders to compel (and thus vaccine orders) are enforceable through the contempt powers of the court (Rule 17(g), F.R.Crim.P.).

The judge would have several options in tailoring any such vaccine orders. He/she could instruct the child or his/her guardian to leave the courthouse and go to the nearest public health facility to obtain all state-mandated vaccines. Because courts are leery of overstepping their judicial bounds into the realm of medical care, it is more realistic that the judge would instruct a parent, guardian, or other appointed representative to provide the court with proof that the juvenile has received all of his/her vaccines. This vaccine order would “compel” the appointee to leave the courthouse and obtain proof of vaccination, either in the form of a certified vaccine record or an affidavit from a health

care provider. If the appointee did not comply with the vaccine order within the specified time, he/she would be in contempt and would be subject to all of the contempt powers of the court, including fines and incarceration.

Note that this vaccine order only requires that the juvenile or his representative provide documents to the court. The entire matter would become moot if the youth provided the court with medical records demonstrating that he/she had all of his/her shots.⁵

As described in Appendix A, compulsory vaccine laws have been fraught with civil liberty objections, with many parents objecting to vaccines for religious, medical, or philosophical reasons. If someone objected to the vaccine order on such grounds, he/she would have an opportunity to present that objection on behalf of the juvenile and be heard by the court either at the time of the decision or at a subsequent hearing (F.R.C.P.). Additionally, there are procedural vehicles through which the juvenile or his/her representative could seek immediate appeal or other judicial review of the vaccine order.⁶

How Requests for Vaccine Orders Might Be Made

There are several means by which this vaccine issue might come before a judge for consideration. An attorney or advocate for the juvenile might file (submit to the court)

⁵ This distinction is important to the design of this study. The variable Records indicates the presence or absence of a document that states that the juvenile is missing at least one state-mandated vaccine. If records are not available, it means that there is no documentary evidence one way or the other. The vaccine order requires that the juvenile produce those records and demonstrate through those records that he/she has received all of his shots.

⁶ Writs of mandamus, interlocutory appeals, and petitions for injunctive relief all provide procedural vehicles for immediate review of decisions like vaccine orders (F.R.C.P.; F.R.App.P.).

a formal oral or written motion to request a vaccine order. Legally speaking, this request would be made “upon motion.” Alternatively, an attorney or advocate might raise the issue informally during a proceeding by simply asking the judge to take judicial notice of relevant vaccine laws.⁷ Or the judge might act on his/her own, or “*sua sponte*,” under the broad discretion provided under the “best interest of the child” standards that dominate juvenile and family court (Kohm, 2008). Each of these procedural techniques would bring the request for a vaccine order before the court. But each intrinsically requires a different level of autonomous action, or discretionary action, by the judge. Each is discussed below (see Kim et al., 2009).

Upon motion. There is a general rule that all requests for relief should be presented to the court through a procedurally sufficient motion (Rule 12, F.R.Crim.P.). In other words, the party who is seeking some form of relief (in this case, a vaccine order) would have to prepare, file, and serve a proper motion for relief (Rule 12(a), F.R.Crim.P.). If a proper motion were filed, then all interested parties would be granted an opportunity to be heard and present evidence on the issue. Judges must rule on all motions properly brought before them (Rule 12(e), F.R.Crim.P.). Therefore, a judicial respondent in this study would understand that he/she would be required by procedural rules to either grant or deny the motion.

Upon taking of judicial notice. In juvenile and family court, the procedural requirements for formal motions often are subsumed by the exigencies of holding court

⁷ For example, the parties might discuss school attendance during the period of incarceration. Vaccines are mandatory prerequisites for school attendance in all jurisdictions, including schools operated within juvenile justice facilities. Therefore, it is conceivable that the child’s vaccination status might become an issue.

on short timelines and urgent matters. Therefore, courts often dispense with procedural formalities and allow for requests for relief to be brought in less traditional formats. One such mechanism is through taking of judicial notice of relevant law then acting thereon. Under these circumstances, judges “will, of [their] own motion or on request of a party, and without the production of evidence, recognize the existence and truth of certain facts ... e.g., the laws of the state” (Black, 1990, p. 848). This type of judicial action, while not extraordinary (Massie, 1905), exceeds the bounds of traditional judicial practice (Keefe, 1950). Courts have been taking judicial notice of the value of vaccines to public health for more than one hundred years (*Jacobson v. Commonwealth of Massachusetts*, 1905, p. 12). Nevertheless, judges who take judicial notice of state vaccination laws arguably are acting *ultra vires*, or outside the scope of their authority, under strict construction of his/her defined responsibilities (Craig, 1998).

Sua sponte. Finally, a *sua sponte* action is an action taken by a judge on his/her own volition, without explicit or implicit reference to any external authority (Black, 1990; Jaffe, 1963). Literally, *sua sponte* means “of their own will” (Merriam-Webster, 2012). While a *sua sponte* order is *ultra vires*, or outside the scope of the procedural tradition, it has precedent (Craig, 1998; Law Essays, 2011). A judge who acts *sua sponte* is not asked by a party to issue the proposed order. Instead, the judge adopts the relief on his or her own and issues an order accordingly. Under the best interests of the child standard, proponents of judicial restraint balk at the notion of *sua sponte* orders, but they acknowledge that *sua sponte* orders are not extraordinary relief. In fact, they lament the “wild frontier” of juvenile justice and the reality that many of the legal rules that apply in

subsequent proceedings are not applicable, or not institutionalized, at this initial stage of litigation (Kohm, 2008).

Taking a different perspective, it may be argued that acting in the “best interest of the child” is a statutory duty imposed on judges, and that issuing an order sua sponte is really issuing an order under the very broad statutory scheme that requires that judges act in children’s best interests. Regardless of whether the discretion is judicial activism run amok or a statutorily created decision-making scheme, detention-hearing judges enjoy almost unfettered discretion in deciding whether to detain a child and what the conditions of detention should be (Kohm, 2008; Schutt & Dannefer, 1988; Zimring, 2005).

Matters may be brought before the court under all three of the above-described procedural circumstances. However, the timing of motions also may influence whether the court will grant the requested relief. For example, a motion for division of a retirement account is premature at an emergency hearing in a divorce proceeding. By definition, only urgent matters can be considered at an emergency hearing. Similarly, the juvenile justice system operates so that certain matters are heard at certain times in the legal process. The detention hearing is the first hearing in the juvenile justice process where matters concerning the juvenile’s health and welfare may be considered.

The detention hearing is a constitutionally required court appearance that must occur within 48 hours of a child’s arrest under federal and state law in all jurisdictions (Jones, 2006; Sanborn & Salerno, 2004; see e.g., Official Code of Georgia Annotated, 15-11-46.1 and 15-11-49). As such, it is the first point in the juvenile justice process that is standardized across all jurisdictions by a federal mandate (*County of Riverside v.*

McLaughlin, 1991; *Gerstein v. Pugh*, 1975), and it is the first point in the juvenile justice process where there can be supervised uniformity of process (Sanborn & Salerno, 2004). Prior to the detention hearing, juvenile justice is individualized (American Bar Association, 2011). Arresting officers, intake officers, and detention facility personnel are governed by myriad federal, state, and local laws. Their daily procedures vary with the exigencies of the arrest and detention process. In contrast, the detention hearing is governed by federal law and uniform rules of procedure, ensuring more standardization across jurisdictions.⁸

Unfortunately, the detention hearing also is the point in the judicial process when a youth's legal status is most tenuous and his/her medical records are least available. As described more fully below, youth at detention hearings have not been adjudicated; their legal status has not been transferred away from the person who had legal responsibility for them prior to arrest. Therefore, the court's legal authority to act over them is not established; no one has consented to the court's taking full legal authority over them. Outside of this legal issue, there also remains an administrative or logistical issue: Pre-adjudicatory youths' vaccination records usually do not travel with them on their person, so it is unlikely that their vaccination records will have been obtained in the 48 hours preceding the detention hearing. Both of these concerns are described more fully below and are the substance of the primary inquiry in this dissertation.

⁸ In large part, most jurisdictions in the United States have adopted the Federal Rules of Civil Procedure and Federal Rules of Criminal Procedure as their state rules.

Foundation for First Hypothesis: Legal Consent/Legal Custody

All children are presumed to be in the legal custody, as well as the physical custody, of their parents (English et al., 2008; *Meyer v. Nebraska*, 1923). Parents have legal custody in that they have ultimate decision-making authority over all matters related to their children, unless they are divested of those legal rights by legal action (English et al., 2008; Goldstein, 1977; *Prince v. Massachusetts*, 1944; Wald, 1976). Parents have physical custody in that they have control over, or the right to exert control over, their children's physical being, within certain constitutional limitations (*Wisconsin v. Yoder*, 1972). Legal custody includes the right to make medical decisions for their children (English et al., 2008; Holder, 1985; *Wisconsin v. Yoder*, 1972). In 43 of 50 states, it also includes the general right to make vaccination decisions for their children (Gordon et al., 1997).⁹

The conundrum arises when a child is arrested (Bennett, 1976). After arrest, consent law is a complex quilt of federal law, state law, and administrative regulations (Baskin, 1974; Bennett, 1976; English et al., 2008). Children are in the physical custody of the state: their physical movements and wellbeing are in the hands of the arresting entity and its governing bodies (Triplett et al., 2003). Their legal custody remains with their parents unless and until formal legal action is taken (*Baltimore City Department of Social Services v. Bouknight*, 1990; *In re Jertrude O.*, 1983). All states assume some legal authority over medical matters relating to children, such as the right to screen for sexually transmitted or communicable diseases and the right to administer tetanus shots (Widom

⁹ In some states, "mature minors" may consent on their own behalf to vaccines (Marquez-Lopez, 2006).

& Hammett, 1996). States have vastly different statutory schemes under which consent to medical treatment, including vaccines, can and must be obtained (Jain & Hennessey, 2009). In some jurisdictions, parental consent is required for vaccination; in others, certain children can consent on their own behalf (Golzari et al., 2008; Holder, 1985, p. 133). Only seven states expressly allow minors 13 years and older to consent to vaccination on their own behalf (Centers for Disease Control and Prevention, 2012; Gordon et al., 1997).¹⁰ In many other states, parental consent “should or may be sought,” but if it cannot be obtained, then the facility has the right to consent on behalf of the child. In the remaining states, the child can consent for himself/herself (Henderson et al., 2010, p. 501).

No jurisdiction explicitly recognizes the state’s right to administer any vaccines, other than tetanus, to a child who is in the physical, but not legal, custody of the state. Juvenile facilities, which act as agents of the state, do not have explicit legal authority to make vaccination decisions. Consequently, the legal consent and legal custody issues described above present hurdles to justice facilities’ administration of vaccines to youth over whom they have physical custody (Gordon et al., 1997, p. 259-264; Tedeschi et al., 2007, p. 45).

These types of consent issues can be addressed at initial detention hearings. At those hearings, judges have the authority to exercise their discretion to assert legal custody over youth for any number of reasons, including compulsory health care (Child

¹⁰ These seven states are Alabama, Idaho, Massachusetts, North Carolina, North Dakota, Oregon, and South Dakota. Four additional states allow emancipated minors to consent to vaccination: Arizona, Indiana, West Virginia, and Wisconsin.

Welfare Information Gateway, 2010; Jones, 2006). But judges' legal right to exercise this authority does not necessarily translate into action. Under long-standing legal precedent, parents rights vis à vis their children are fundamental rights that cannot be abrogated without good cause (*Troxel v. Granville*, 2000). On the other hand, the government's duty to preserve the public health, and its rights under the police powers to do so, vest judges with broad discretion to take actions in the public interest (*Prince v. Massachusetts*, 1944, p. 158). Accordingly, the consent component to judges' considerations on a vaccine order is complicated by parental and constitutional privacy issues. Based on jurisprudential doctrine on the relative importance of parental autonomy, it is hypothesized that judges who receive evidence of consent will be more likely to issue vaccine orders. Thus, the first hypothesis tested by this dissertation is: When consent is present, judges are more likely to issue vaccine orders. In other words, consent has a positive, statistically significant influence on the vaccine order decision.

Foundation for Second Hypothesis: Records Evidence

Because the detention hearing is held within 48 hours of incarceration, overworked and under-resourced facility personnel find it either inconvenient or impossible to obtain vaccination records on detained children prior to the hearing (Henderson et al., 2010, p. 496Z). In prior research, facility personnel uniformly cited juveniles' short length of stay as a primary reason that facilities cannot administer vaccines (Douds, 2013). They explained that, administratively, the process of retrieving a child's immunization records takes more than the constitutionally mandated maximum number of hours that a child may be detained without a detention hearing. They

perceived that it is logistically impossible to verify children's vaccination records prior to detention hearings.¹¹

At first blush, this problem would seem easy to solve simply by requiring the facility staff to obtain the vaccination records and deliver them to the detention-hearing judge. Under current practices, this solution is theoretically sound but practically impossible. The temporal obstacle to obtaining vaccination records is embroiled in the larger process by which juvenile medical records are maintained throughout juvenile justice systems. Juvenile justice professionals know that the detention hearing must occur within 48 hours of arrest (*Gerstein v. Pugh*, 1975). However, they also know that their state regulations require that they obtain vaccine and other medical records only for juveniles who are in their facilities for at least 10 days, and some states provide exemptions for up to 30 days. They further know, from experience, that it takes several days for vaccination records requests to be processed, and that requests often stall if the juvenile has recently changed schools, homes, or guardians (Douds, 2013). Finally, juvenile justice professionals know experientially that the majority of children who go to detention hearings will be processed out of the juvenile justice system following that hearing (Crosby et al., 2004; Snyder & Sickmund, 2006). Therefore, they have no professional incentive to obtain the vaccination records prior to the hearing. Moreover, they perceived that, even if they require that staff issue a records request immediately

¹¹ Notably, these administrative issues are not unique to juvenile justice systems. The National Health Disparities Report reveals deeply entrenched, systemic problems with vaccine delivery programs among community health organizations across the country (Agency for Healthcare Research and Quality, 2013; Ogberg & Rinaldi, 2006).

upon each juvenile's admission, the records would not arrive prior to the detention hearing.

An example from Arizona provides further insight. Within five days of when a child is admitted to a juvenile justice facility, the staff must provide immunization records to the education program coordinator within the facility (Maricopa County Detention Task Force, 2008). This regulation states that staff must provide the records, but not that they must take proactive measures to obtain the immunization records. In prior research, facility staff took the position that the law does not apply because they cannot provide something that they do not have (Douds et al., 2007; Maricopa County Detention Task Force, 2008). The staff perceived that the affirmative duty to seek the records does not arise until later, when the statute requires that "immunization records for every juvenile detained more than 15 days, shall be requested by program staff from the parent, guardian, custodian, family physician, school, or other available source" (Maricopa County Detention Task Force, 2008, see B.2.5).

All objections related to the location, regulation, delivery, and confidentiality of the vaccination records could be resolved by a judge, if the judge chose to exercise his or her discretion (Kohl et al., 2007). Through the contempt power, judges have the ability to force juveniles, and/or their representatives, to prove that the juveniles in question have received all of their state-mandated vaccines.¹² In other words, judges could issue orders

¹² As a side note, judges will understand that they could minimize any privacy or HIPAA concerns by acting under the exception to HIPAA described above and/or by having the records produced "under seal." When documents are produced under seal, they can only be viewed by the court or by parties to the action, and it is a punishable offense to release anything that is filed under seal.

that would circumvent the “records obstacles” articulated by facility personnel. The question is: Would they use their discretion in this fashion? This research seeks to answer that question. Under traditional rules of procedure, judges must receive evidence in support of motions (F.R.C.P. 12). Therefore, it is hypothesized that judges who receive records indicating that a juvenile is under-immunized are more likely to issue vaccine orders than those who do not. In other words, vaccination records have a positive, statistically significant influence on the vaccine order decision. Moreover, because evidence is such a critical component of legal practice (Federal Rules of Evidence), it is further hypothesized that judges who receive both proof of consent and records evidence will be significantly more likely to issue vaccine orders than those who receive one, the other, or neither.

Foundation for Third Hypothesis: Interaction Effect

Judges are jurisprudentially constrained from usurping parents’ control over their children’s medical care, unless the judges can justify the intrusion through narrowly drawn terms proscribed by clear parameters (Baskin, 1974). Those parameters may be dictated by the judge, but he/she must ensure that they are objective and legally reasonable (Bennett, 1976). If judges have evidence of parental consent, they have one objective basis on which to make the decision to issue a vaccine order. If they have medical records indicating that the child is missing one of his/her shots, then they also have an objective basis for issuing a vaccine order. However, if they have neither, then they lack an objective basis for issuing the vaccine order. They have no external validation for interfering in this medical issue.

Foundation for Remaining Hypotheses Concerning Judges' Personal Characteristics

Outside of the substantive issues implicated by the Consent and Records, I have a secondary interest in the influence of other, personal, factors on vaccine order decisions. A meaningful body of literature examines whether certain characteristics correlate with decision-making tendencies, including immutable and philosophical qualities (Baum, 2007; Feigenson & Park, 2006; Gilligan & Gilligan, 1982; Gruhl et al., 1981; Koppen & Kate, 1984; Peresie, 2005; Perino, 2006; Pinello, 1999; Sunstein, 2011; Wrightsman, 2006).¹³ Therefore, I collected data and ran correlation analysis on each of these theoretically grounded factors: (a) gender (Collins & Moyer, 2008); (b) race/ethnicity (Annus & Tavits, 2004; Collins & Moyer, 2008; Emmert, 1992); (c) political orientation on a conservative/liberal continuum (Baum, 2007; Perino, 2006; Pinello, 1999; Sunstein, 2011); (d) political climate of jurisdiction (Baum, 2007; Perino, 2006; Pinello, 1999; Sunstein, 2011); and (e) attitudes towards judicial role orientation (Epstein, 2011; Posner, 2008).

Judicial decisions frequently are the result of a combination of legal and non-legal factors (Baum, 2007; Schubert, 1974). Because the juvenile justice system is founded on the “best interest of the child” standard, by which judges are expected to balance children’s best interests with the state’s interest in public safety, there is great room for injection of non-legal factors (Kohm, 2008, p. 343). When the law leaves room for judicial discretion, the non-legal facets of judicial decision-making become more

¹³ A separate body of research examines the influence of litigants’ characteristics on judicial decision-making, but that issue is beyond the scope of this dissertation.

interesting (Drobak & North, 2008; Greenawalt, 1975; Kmiec, 2004). Under the broad discretionary powers of juvenile courts,¹⁴ judges have a wide berth to define their roles and responsibilities vis à vis the children who appear before them. Therefore, this research incorporates preliminary analysis of data on correlations among these characteristics and vaccine order decisions.

Foundation for Fourth Hypothesis: Gender

To the extent that judges exercise discretion in their decision-making, such discretion is not exercised in a vacuum (Baum, 2007; Wrightsman, 2006). Particularly at early stages in juvenile justice proceedings, judges operate in triage mode for most hearings, where they must balance the competing interests of protecting the public, providing for children's welfare, and preserving children's and parents' legal rights (Greenawalt, 1975; Sickmund, 2009). Research suggests that gender, race, and ideologies all influence judges' decisions, regardless of the substance of the case (Annus & Tavits, 2004; Feigenson & Park, 2006; Feld, 1991; Gilligan & Gilligan, 1982; Peresie, 2005; Songer et al., 1994; Welch et al., 1988; Wrightsman, 2006).

This dissertation does not test race as a correlate of decision-making because only two of the respondents to this survey self-identified as caucasian, which prevents meaningful analysis of any racial differences in decision-making.¹⁵ Future research with a

¹⁴ This broad discretion is the subject of much debate, with some analysts condoning a broad, paternalistic approach to juvenile justice, and others condemning it as further evidence that juvenile courts are the Wild West of the judicial system (Kohm, 2008).

¹⁵ It is well established that certain characteristics of juvenile defendants influence the outcomes of their cases (Crosby et al., 2004; Feld, 1990; Feld, 1991; Maltzman et al., 2000). For example, several independent studies find that African American defendants

larger sample should incorporate the extensive literature of racial correlates of judicial decision-making and explore whether race interacts with vaccine order decisions or vaccine policy enforcement (Massie et al., 2002; Muhlhausen, 2004; Rachlinski et al., 2009; Spohn, 1990; Steffensmeier & Britt, 2001; Uhlman, 1978; Walker & Barroe, 1985; Welch et al., 1988; Woolredge, 1998).

Generally speaking, judges' gender impacts their decisions in certain types of cases, but the relationships among gender and other immutable characteristics are complicated (Gruhl et al., 1981; Songer et al., 1994; Songer & Crews-Meyer, 2000). In the civil law context, female judges are more sympathetic to plaintiffs in civil rights cases generally (Collins & Moyer, 2008; Massie et al., 2002) and to victims of sexual harassment and sexual discrimination specifically (Gryski et al., 1986; Peresie, 2005). Researchers further find that gender differences in judicial decision-making become more pronounced once women reach a critical mass at that point in the justice system. In other words, the more women on the bench, the more gender-influenced the decisions become (Collins & Moyer, 2008). In a recent complex study of female judges' decisions that applied critical-mass theory to discern whether women jurists made different decisions than men in three types of cases, Collins and Moyer (2008) observed profound differences between male and female judges' decisions in criminal proceedings.

receive more stringent sentences than white defendants under comparable circumstances (Bushway & Piehl, 2001; Epstein et al., 2007; Feeley & Rubin, 1998; Gibson, 1980; Jordan, 2001; Nagel, 1962; Sisk & Heise, 2005; but see Sampson & Lauritsen, 1997). As described above, this study attempts to mitigate any influence of the hypothetical juvenile's race by using the popular name Michael in the survey.

When the gender of the defendant was included as a variable, the results showed that male judges were less likely to incarcerate female defendants, indicating that the gender dynamic is multifaceted (Coontz, 2000; Gruhl et al., 1981). In Spohn's research on sexual assault cases (1990), female judges issued more severe sentences in felony sexual assault cases. Women also were more conservative, or punitive, on matters of criminal procedure (Massie et al., 2002). That difference flipped in a general misdemeanor court, where male judges were 3.5 times more likely than women to incarcerate offenders (Myer & Jesilow, 1997).

None of the foregoing speaks to how gender might influence judicial implementation of state policies, and none of the research to date examines gender's impact on judicial discretion with regard to vaccination of detained minors. Moreover, there are no data for female juvenile and/or family court judges. This dissertation provides the first pass at testing the hypothesis that women are more likely than men to issue vaccine orders because of the possibility demonstrated through the above literature that they may be more inclined to enforce social policy through judicial decisions. Because there is no compelling evidence on this point, no conclusions can be drawn, but this research will allow for construction of theory upon which to ground future research.

Foundation for Fifth Hypothesis: Political Orientation

In the early stages of research on associations among political ideology and judicial decision-making, researchers analyzed judicial decisions through a stare decisis lens (Horwitz, 1975; Kairys, 1984; Scalia, 1997). They contended that judges make decisions based on law alone, independent of politics, personal morals, religion, or social

affiliations. Under legal formalism, the rule of law prevails, regardless of who makes the decision. In the context of the present study, formal legal rules concerning parental consent and the rules of evidence technically govern vaccine order decisions (English et al., 2008; Federal Rules of Evidence, 2011). Accordingly, judges who issue vaccine orders without parental consent and/or without evidentiary support are issuing orders founded on something other than strict application of existing law (see Drobak et al., 2008).

Legal realists would not be surprised that judges would make vaccine order decisions on the basis of something other than formal law, as they contend that judges' decisions are made in a social context, infused by judges' personal experience, political thought, and sociocultural concerns (Baum, 1998, 2007; Gibson, 1980; Hanssen, 2004; Helmke & Sanders, 2006; Koppen & Kate, 1984; Maguire, 2007; Maltzman et al., 2000; Segal & Spaeth, 2002; Yarbrough, 1982).¹⁶

Realists maintain that political ideology, often defined as an individual's self-identified place on a liberal to conservative political continuum,¹⁷ fundamentally impacts

¹⁶ Several schools of thought on legal realism have evolved, with the attitudinal model percolating to become the dominant school of thought for several decades (Appel, 2011; Cross, 1997; Epstein & Knight, 1998; Segal & Spaeth, 2002). Most recently, theorists have adopted an integrated approach to judicial decision-making, positing that judicial decisions are the product of numerous, and perhaps innumerable, factors, including neuropsychology, emotion, religion, and ethics as correlates of decision-making (Feigenson & Park, 2006; Fischman & Law, 2009; Fliescher, 2008; Friedman, 2006; Peterson, 1985; Wald, 1999; Wiener & Bornstein, 2006). Many of these factors have eluded successful isolation and operationalization and accordingly, are not included in this dissertation (Berman, 1974; Carter, 1989; Greenawalt, 1988; Idleman, 1993).

¹⁷ Some researchers have begun to distinguish between political ideology and judicial philosophy, judicial role orientation, and personal beliefs as correlates of judicial decision-making (Friedman, 2006; Gibson, 1978; Scheb et al., 1989). Moreover, many

judges' decisions analysis (Baum, 2002; Duffee & Maguire, 2007; Gottfredson & Gottfredson, 1988; Pritchett, 1948; Segal & Spaeth, 2002). Across study types, researchers find a significant relationship between ideology and judicial decisions at higher court levels (Baum, 2002; Duffee & Maguire, 2007; Gottfredson & Gottfredson, 1988; Pritchett, 1948; Segal & Spaeth, 2002). Similar findings occur among lower courts among trial court judges' decisions on whether to admit expert witness testimony (Buchman, 2007); how to interpret legislative history (Abramowicz et al., 2005); and how to sentence criminals (Helmke & Sanders, 2006). Although there is no research on detention hearing judges' behavior, research among federal magistrates, who hold court at a procedural level equivalent to juvenile court detention hearing judges, are profoundly influenced by the identity of judges higher in their jurisdictional chain of authority (Boyd & Sievert, in press).

To measure political ideology, researchers traditionally use five-point Likert-scaled questions, with "very conservative" at one end and "very liberal" at the other (Segal & Spaeth, 2002). Accordingly, this dissertation will include in its survey of judges

find that ideology is not well defined across or within studies, which impairs the generalizability of the research (Fischman & Law, 2009; Joondeph, 2008). Recent research finds that "political ideology" is defined in three to ten different ways across various studies (Fischman & Law, 2009; Joondeph, 2008). The University of Hawaii has developed a research center, the Political Ideology Measurement Project, dedicated to resolving this issue (Nixon, 2004). Nevertheless, researchers continue to attempt to assign ideology scores to judges while acknowledging that valuation of those scores is problematic (Boyd & Sievert, in press; Epstein et al., 2007; Federal Judicial Center, 2007; Giles et al., 2001; Poole, 2009). With that said, there is little doubt that something other than strict application of written law occurs at all levels of the justice system, including the trial court level (Baum, 2002; Duffee & Maguire, 2007; Gottfredson & Gottfredson, 1988; Pritchett, 1948; Segal & Spaeth, 2002). This study uses measures identified from the foregoing resources to create measures of ideology and role orientation.

a measure of political ideology using two similarly scaled measures, one for their personal political ideology and one for the ideology of the geographic jurisdiction in which they preside (Appendix B).¹⁸

However, there is no evidence of what impact, if any, political ideology will have on judicial implementation of vaccination policy. Vaccination itself is a philosophically charged issue, with both liberal and conservative thinkers espousing contradictory positions. Some liberals view governments' compulsory vaccination laws as infringements upon civil liberties (see Clements et al., 2006; Hopkins, 2002; Salmon et al., 2003). Some religious conservatives object to compulsory vaccination as invading their right to religious freedom (Coletti, 2004; Hopkins, 2002; Salmon et al., 2003). Parents across the political spectrum have voiced profound, yet medically unsubstantiated, fears about purported links among vaccines and autism (Frombonne, 2006; Parikh, 2008). Objections to vaccination policies arise across the political spectrum, so it is difficult to predict whether political ideology will influence this issue in any measurable way.¹⁹ Moreover, judges who act "liberally" on one issue may act "conservatively" on another (Fischman & Law, 2009). Nevertheless, because vaccines are not a documented responsibility of the judiciary, and because liberal judges tend to be

¹⁸ One question states: "My personal political views would best be described as ..." followed by five choices: very conservative, somewhat conservative, moderate, somewhat liberal, very liberal. Another question states: "The political climate of the jurisdiction in which I preside is ..." followed by the same answer choices.

¹⁹ It will be very interesting in future research to see whether political ideology exerts an influence on vaccine order decisions under the three procedural circumstances: upon motion, judicial notice, and sua sponte, since those three postures reflect different levels of discretion and accordingly, different levels of judicial activism. Judicial activism bears an established relationship to political ideology, so this topic is ripe for future investigation.

more activist than conservative judges, it is speculated that the more liberal a judge is, the more likely he/she will be to issue a vaccine order. Accordingly, this dissertation tests a fourth hypothesis: judges' liberal political ideology bears a positive, statistically significant relationship with their vaccine order decisions.

Foundation for Sixth, Seventh, and Eighth Hypotheses: Judicial Role-Oriented

In recent years, research has suggested that, for reasons other than political ideology or personal motivations, judges are gravitating away from legal formalism and towards behavior grounded in their self-perceived roles as authors of good legal policy (Baum, 2007). According to some researchers, judges act ideologically, but not necessarily politically (Fischman & Law, 2009). They allegedly seem to be less inclined to ask themselves “What does the law require?” and more inclined to ask, “What is the best thing to do jurisprudentially?” They appear to be motivated by an intrinsic desire to do the right thing for the litigants and society, not just to apply established law (Baum, 2007; Posner, 1995; Segal & Spaeth, 2002). Unfortunately, to date scholars have not achieved consensus on how to define or measure judicial ideology (Lammon, 2009). As Fischman and Law (2009) succinctly explain, “[i]t is difficult for scholars to devise appropriate and broadly acceptable measures of judicial ideology when they and their readers have different concepts—or perhaps no coherent concept at all—of “judicial ideology” in mind (p. 136).

Despite the methodological limitations inherent in measures of judicial ideology referenced above, methods that account for state of mind, or intellectual disposition, have

support within the research community (Fischman & Law, 2009, pp. 138-139). Under this school of thought, judges act consistent with their understanding of the philosophically grounded purpose of the juvenile justice system (Johnson & Canon, 1999).²⁰ Judges who think that the juvenile justice system is required to ensure that youth receive vaccines are, according to this line of thought, likely to follow the rule of law and issue vaccine orders (Scalia & Manning, 2012). More interestingly, judges who are driven by policy concerns in addition to legal mandates would be more likely than legal purists to pursue “creative compliance,” whereby they enforce the law not only as written, but as it should be (McBarnet & Whelan, 1991). Accordingly, it is posited that respondents who think that the juvenile justice system should be required to ensure vaccination of youth are more likely than others to issue vaccine orders.

Much has been made within the research community about differences among decisions by judges who are rehabilitation-oriented versus those who are more punitive, or deterrence-oriented (Cullen & Gendreau, 2000). The literature indicates that judges who are more rehabilitative by nature are inclined to pursue treatment-oriented policies (Applegate et al., 1997; Sutliff, 2004).²¹ Conversely, judges who are more deterrence-

²⁰ In the survey for this dissertation, respondents are asked to strongly disagree, somewhat disagree, somewhat agree, or strongly agree with the following two statements: (1) “The juvenile justice system *is required* to provide vaccines to all pre-adjudicatory youth over whom the State exercises physical care, custody, or control,” and (2) “The juvenile justice system *should be required* to provide vaccines to all pre-adjudicatory youth over whom the State exercises physical care, custody, or control.”

²¹ Adrian Raine is one of many researchers who has spearheaded efforts to explain recidivism in relation to physical health (Sutliff, 2004). The relationships among physical health, disease, delinquency, and recidivism are well beyond the scope of this paper. For purposes of this dissertation, it is merely noted that health care has a long-standing relationship with the rehabilitative model of corrections.

oriented tend to focus less on treating offenders and more on incapacitating them (Gendreau et al., 1999). While the conditions of that incapacitation may implicate vaccination, it is speculated that judges who perceive themselves as charged with deterring future crime by punishing present offenders will not be as concerned about providing health care as those judges who perceive the justice system as oriented toward treatment or rehabilitation.

Much like the other potential correlates of vaccine order decisions described above, there is no evidence at this point that respondents who perceive the juvenile justice system to be rehabilitative and/or punitive will be more or less likely to issue vaccine orders. However, based on the existing literature, the sixth and seventh hypotheses of this dissertation posit that judges who think that the juvenile justice system is primarily rehabilitation-oriented are more likely to issue vaccine orders than those who do not, and judges who think that the juvenile justice system is primarily deterrence-oriented are less likely to issue vaccine order than those who do not.

Finally, if judges behave ideologically, and if judges are oriented to act “in the best interest of the child,” then they arguably will be more motivated to issue vaccine orders if they believe that vaccination is good policy and/or if they believe that they have an institutional responsibility to provide care for juveniles. Simply put, if they think vaccines are safe and effective, and they behave ideologically, then they will be more

likely to require juveniles to get their shots than other judges who strictly follow the law.²²

Hypotheses

To recap, I offer the following hypotheses about the influences that consent, records, gender, political ideology, and judicial role orientation exert on a judge's decisions to issue a vaccine order:

1. When consent is present, judges are more likely to issue vaccine orders. In other words, consent has a positive, statistically significant influence on the vaccine order decision.

2. When vaccine records are present, judges are more likely to issue vaccine orders. In other words, vaccine records have a positive, statistically significant influence on the vaccine order decision.

3. The effect of consent on a judge's willingness to issue a vaccine order will be greater when records are present. Conversely, the effect of records will be greater when consent is present. In other words, consent and records will interact such that the presence of both significantly increases the likelihood of a vaccine order whereas the absence of both significantly decreases the likelihood of a vaccine order. That is, the effect of consent (or records) is greater when records (or consent) are present.

4. Female judges are more likely to issue a vaccine order.

²² In the survey for this dissertation, respondents are asked to agree or disagree with the following statement: "The vaccines my state requires for school-age adolescents are safe" (see Appendix B).

5. Liberal judges are more likely to issue a vaccine order. In other words, respondents' personal ideology demonstrates a positive relationship to vaccine order decisions, with liberalism being positively correlated with affirmatively issuing a vaccine order.

6. Judges who perceive that the juvenile justice system should provide vaccines to detained youth are more likely to issue vaccine orders than those who do not.

7. Judges who think that the juvenile justice system is primarily rehabilitation-oriented are more likely to issue vaccine orders than those who do not.

8. Judges who think that the juvenile justice system is primarily deterrence-oriented are less likely to issue vaccine order than those who do not.

METHODS

In this factorial design study, I employed two-way, within subjects ANOVAs to test whether consent and records exert statistically significant influences on vaccine order decisions. I also applied correlational analyses to test whether there are meaningful associations between vaccine order decisions and gender, political ideology, and judicial role orientation.

I collected data through an Internet-based survey of the judicial members of the National Council of Juvenile and Family Court Judges (NCJFCJ) that, in sum, asked whether respondents would issue a court order (vaccine order) under four sets of evidentiary circumstances related to the presence and/or absence of the independent variables consent (evidence that the young man's parents or guardian consent to vaccination) and records (medical records documenting that Michael was missing at least one state-mandated vaccine). Following that inquiry, I requested various points of demographic data, including one question on gender, two questions on political ideology,²³ and four questions on judicial role orientation.²⁴

²³ "The political climate of the jurisdiction in which I preside is" and "My personal political views would best be described as," followed by five response choices: very conservative, somewhat conservative, moderate, somewhat liberal, and very liberal.

²⁴ "(1) The juvenile justice system *is required* to provide vaccines to all pre-adjudicatory youth over whom the State exercises physical care, custody, or control; (2) The juvenile justice system *should be required* to provide vaccines to all pre-adjudicatory youth over whom the State exercises physical care, custody, or control; (3) The primary

Study Participants

The survey (see below) was distributed to all members of the NCJFCJ who provided email addresses to the organization. This voluntary national association of judicial professionals was selected as a convenience sample because of its specific relationship to the topic of inquiry and its willingness to assist in survey distribution (Kelley et al., 2003). Based in Reno, Nevada, the NCJFCJ seeks to “provide all judges, courts, and related agencies involved with juvenile, family, and domestic violence cases with the knowledge and skills to improve the lives of the families and children who seek justice” (NCJFCJ, 2007). At the time of this survey, the NCJFCJ had approximately 1,080 total members and 648 judicial members.²⁵ The survey was distributed to all NCJFCJ who participated in their listserv, but the distribution letter asked that only the judicial members participate. The NCJFCJ does not match its listserv email database with their demographics database, and their confidentiality policy prohibited me from determining how many of the email addresses that received the survey belonged to judicial members. Therefore, it is impossible to determine the total number of eligible persons who received the survey. For the sake of discussion, I assume that all 648 judicial members received the survey. Thirty-one completed the survey, indicating a five percent response rate.²⁶

purpose of the juvenile justice system is to rehabilitate youth; and (4) The primary purpose of the juvenile justice system is to deter youth from committing crime,” followed by four response choices: strongly disagree, disagree, agree, and strongly agree.

²⁵ The NCJFCJ had 1,840 total members at the time of this survey.

²⁶ Surveys of judges have suffered from vastly inconsistent response rates (Ungs & Baas, 1972).

There are no national statistics on the number of juvenile and family court judges in the United States. Having performed extensive research and conducted a telephone interview with the research division of National Commission on Juvenile Justice (NCJJ), I am confident that the number of juvenile and family court judges is not known,²⁷ so I cannot speculate about what portion of juvenile and family court judges in the United States are represented by this sample.²⁸

However, this is not a random sample of the general population. It is a sample of a subgroup of a discrete segment of the judiciary who exercise limited jurisdiction over special topics. They are fairly homogenous in terms of their subject matter jurisdiction, position in the judicial hierarchy, and procedural constraints (see Ungs & Baas, 1972).

Survey Instrument

The survey instrument was designed in accordance with modern principles of web-based survey design and well-settled legal writing customs and is present in full in Appendix C (Couper et al., 2001; Dillman et al., 2009; Volokh, 2007). I pretested the survey among retired judges who are now engaged in the private practice of law and who no longer participate in the NCJFCJ. I also revised the survey to include recommendations from the research arm of the NCJFCJ, the National Center for Juvenile

²⁷ See email exchange with researcher at NCJJ, Appendix C.

²⁸ I speculate that researchers have trouble counting the number of judges who fall into this category because there are innumerable state-specific names for persons who perform this job. In Pennsylvania alone, there are judges, magisterial district judges, referees, juvenile counselors, juvenile administrators, and judicial assistants who are qualified to render binding legal opinions in delinquency matters. Thus, the numeric representativeness of the NCJFCJ sample cannot be known.

Justice (NCJJ)²⁹ (Alpert & McDonald, 2001, p. 70; Diamantopoulos et al., 1994; Krosnick, 1999, p. 539).³⁰

All members of the NCJFCJ received a preliminary email from the NCJFCJ that introduced the research project and the value of the resulting data (Couper et al., 2001). In that email, the NCJFCJ endorsed the project as an important endeavor consistent with the NCJFCJ's mission, which was expected to improve the response rate (Dillman et al., 2009, p. 367). The email then provided a link to the survey website at www.qualtrics.com, which was accessible via a login page that required unique identifier and password combinations (Dillman et al., 2009).

When respondents entered the website, they were routed to an initial greeting page designed to motivate their participation by emphasizing the value of this research and the simplicity of the survey format (Dillman et al., 2009, p. 378). They also were given a click-the-box, printable consent form on this page and a brief orientation (Alpert & McDonald, 2001, p. 69). Once they accepted the terms of the Consent Form, they moved into a series of four questions, the order of which was randomized by a program embedded in the Qualtrics website. Originally, I had asked them to distribute these four

²⁹ For example, pretest respondents who had been members of the judiciary reported that the text box for comments was a critical component in order to obtain respondent buy-in, because judges are accustomed to being able to explain their answers with text, not just yes/no radio buttons. The text box acted as a surrogate judicial opinion form to alleviate judges' concerns about being forced into making a decision without opportunity to explain themselves.

³⁰ For example, the NCJJ reviewers expressed concern about cost as a distracting issue. They worried that respondents would be preoccupied by the potential cost of vaccines, which would divert their attention from the issues of inquiry. Therefore, I modified the Statement of Fact to include a stipulation that vaccines are provided cost-free under state and federal law.

questions using a Latin square ordering. Unfortunately, they did not oblige, and they distributed the conditions of the two-by-two factorial design randomly, which resulted in 23 combinations of the four scenarios.

In two of the four questions, the respondents were told that the file contained “authenticated vaccine records” indicating that Michael was missing at least one of his vaccines,³¹ and in two of the four questions respondents were told that his file “did NOT contain authenticated vaccine records.” In two of the four questions, respondents were told that they “are provided with evidence” of parental or guardian consent, and in two of the four questions, they were told that they “are NOT provided with evidence” of parental or guardian consent. These manipulations created four question stems (Table 1), which were designated Consent Yes/Records Yes; Consent No/Records Yes; Consent Yes/Records No; and Consent No/Records No (Kirk, 1982; McNabb, 2009).

Table 1. Visual Rendering of Question Design

Consent Yes/Records Yes	Consent Yes/Records No
Consent No/Records Yes	Consent No/Records No

³¹ “Authentication” is a legal prerequisite to a judge receiving any documentary evidence (Rule 901, F. R. Evidence). A document is “authenticated” if sufficient evidence has been introduced to “sustain a finding that it is the writing that the proponent of the evidence claims it is” (Black, 1990, p. 132).

Respondents then were presented with a boxed set of three sub-questions (Table 2).³² They were asked to report the likelihood that they would issue a vaccine order under one of three procedural circumstances (upon motion, judicial notice, and sua sponte, described above) using a four-point scale.

Table 2. Question Bank From Survey

	Very Unlikely	Unlikely	Likely	Very Likely
Michael’s advocate had filed a procedurally sufficient motion ³³ requesting the order	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Upon taking of judicial notice of state vaccine laws without a formal motion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sua sponte under the “best interest of the child” standard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

This table appeared beneath each of the four question sets with radio buttons under each response column. Respondents were only allowed to select one answer for each row, which was important for the factorial design (Agresti & Finlay, 1997). “Very unlikely” was valued as one and “very likely” was valued as four.

If respondents answered either “likely” or “very likely” at least once in the question series described above, they were directed to a subsequent question that asked

³² This boxed format, and accompanying radio buttons, have been found to increase respondent satisfaction, increase efficiency, and decrease respondent frustration (Couper et al., 2001, p. 247)

³³ A “procedurally sufficient motion” is a document, prepared in the proper legal format, that has been filed and served in compliance with all requirements such that it cannot be dismissed for lack of procedural sufficiency.

them to explain who they would charge with the responsibility of providing evidence that Michael had complied with state vaccine laws.³⁴ This question was presented in a boxed enclosure and was designed to allow respondents to select all that applied. Because this question provided data relevant to the practical application of any policies that may result from this research, these data will be preserved for future research.

For the two political ideology questions, respondents were asked to describe their personal political ideology and the ideology of their jurisdiction on a five-point scale, including Very Conservative, Somewhat Conservative, Moderate, Somewhat Liberal, and Very Liberal (Domino & Domino, 2006, pp. 140-141). Because there is no consensus on what those terms mean, these labels inherently create imprecision in analyses (see Treier & Hillygus, 2009). Nevertheless, these labels are entrenched in the American political language and commonly accepted as reasonable measures of political ideology, so I use them in this survey (Treier & Hillygus, 2009) (Appendix C).³⁵

The survey also collects responses to four questions that measure judicial role orientation.³⁶ The first question asks whether respondents agree that the juvenile justice

³⁴ If respondents answered only “very unlikely” or “unlikely” to all of the Consent/Records questions, then they were forced to skip this question.

³⁵ To force responses and prevent respondents from satisficing, there were no neutral options (Krosnick, 1999, p. 555), and I included a function that forced respondents to choose only one response (Couper et al., 2001).

³⁶ Respondents were asked to strongly disagree, somewhat disagree, somewhat agree, or strongly agree with the following four statements: (1) The juvenile justice system *is required* to provide vaccines to all pre-adjudicatory youth over whom the State exercises physical care, custody, or control; (2) the juvenile justice system *should be required* to provide vaccines to all pre-adjudicatory youth over whom the State exercises physical care, custody, or control; (3) the primary purpose of the juvenile justice system is to rehabilitate youth; and (4) the primary purpose of the juvenile justice system is to

system is required to provide vaccines, with the word *requires* implying a legal duty. This statement measures the degree to which respondents believe that the juvenile justice system has a mandated obligation to provide vaccines. Theoretically, this measure sheds light on whether respondents, as members of the juvenile justice system, perceive that they have an obligation to ensure that juveniles receive vaccines. This first question asks for their understanding of objective, legal requirements. In contrast, the second statement asks for respondents' subjective opinion on whether the juvenile justice system "should be required" to provide vaccines. In so doing, it provides a measure of what judges "think they ought to do" (Gibson, 1983; Scheb et al., 1989, p. 427). These two measures can be analyzed against the vaccine order decision in order to make preliminary observations about any relationships among objective versus subjective opinions on the purpose of the juvenile justice system as they relate to decisions to issue vaccine orders.

In addition to views on the objective and subjective purposes of the juvenile justice system specific to vaccines, there are possible relationships among philosophical views on the general purposes of the juvenile justice system and specific behavior such as vaccine orders. Prior research suggests that judges who are rehabilitation-oriented are more likely than those who are punishment-oriented to provide non-traditional legal remedies (Cullen & Gendreau, 2000). To begin the exploration of this distinction, the survey asks respondents to agree or disagree with two statements about the "primary purpose" of the juvenile justice system: the questions ask respondents for the extent to

deter youth from committing crime.

which they agree that the juvenile justice system is primarily concerned with rehabilitating youth or deterring future offending.

Finally, the survey collected basic demographic data on respondents to reflect race, gender, and years of experience. Race was measured using the standard federal categories for racial identification, and gender was bivariate. I placed this section at the end of the survey in order to improve the response rate and minimize the risk of alienating respondents who prefer not to disclose personal data (Dillman et al., 2009).

Measures

There were four dependent variables, labeled vaccine order upon motion, vaccine order judicial notice; vaccine order sua sponte, and vaccine order total. Respondents had four opportunities to “issue,” or produce, each of these outcomes under each of the four scenarios designed to manipulate the presence and/or absence of consent and/or records (Table 1). On a scale of one to four, each respondent received one score for vaccine order upon motion, another score for vaccine order judicial notice, and a third score for vaccine order sua sponte. The composite of those three scores gave them their fourth score, for vaccine order total, to reflect the overall likelihood that they would issue a vaccine order under any procedural circumstance.

Statistical Analysis

I used a repeated measures analysis of variance (ANOVA) model to test the effect of consent (yes/no) and records (yes/no) on vaccine orders upon motion, vaccine orders with judicial notice, vaccine orders sua sponte, and the composite vaccine orders total. In

addition to testing the main effect of each factor (consent and records), I examined the possibility of an interactive effect of records and consent. It should be noted that these four outcomes are not independent and are, in fact, highly correlated. Thus, the findings from the four ANOVAs are not independent assessments of the study hypotheses. They do reflect, however, nuanced outcomes for a complex policy question, and they represent meaningful, distinct outcomes in their judicial and substantive context.

To examine the relationship between certain demographic data³⁷ and vaccine order outcomes, I ran correlational analyses of the demographic variables with the vaccine order total composite measure. This ensured that each respondent was included once in the correlational analysis. Finally, I ran follow-up ANOVA tests on the personal political ideology variable to examine the influence it exerted when the model accounted for consent and records. The findings from the above analyses are below.

³⁷ Specifically, I ran correlations for gender, personal political ideology, jurisdictional ideology, and four measures of judicial role orientation described above.

RESULTS

Results Concerning Research Question: Will Judges Issue Vaccine Orders?

Thirty-one respondents received 12 opportunities to indicate whether they would or would not issue one of three vaccine orders³⁸ under the substantive and procedural conditions described above, for a total of 372 occasions on which members of the judiciary decided whether to issue a vaccine order.³⁹ Overall, respondents reported that they would issue vaccine orders 133 out of 372 times, or 36% of the time (Table 3). Interestingly, the frequency with which respondents reported that they would issue vaccine orders was much higher when the motion was brought before them upon motion, the strictly formal, legal manner of bringing a request for relief before the court. At the upon motion level, respondents said that would issue vaccine orders 65%⁴⁰ of the occasions, which is a much higher percentage than at the judicial notice (22%) and sua sponte (19%) levels.⁴¹

³⁸ There are four total dependent variables: vaccine order upon motion, vaccine order judicial notice, and vaccine order sua sponte, and the composite vaccine order total, as described in the Methods section above.

³⁹ Thirty-one respondents received four questions that asked them whether they would issue vaccine orders. Each of those four questions contained three sub-questions ($31 * 4 * 3 = 372$).

⁴⁰ That is, 83 out of 124 occasions.

⁴¹ That is, 27 and 23 out of 124 occasions, respectively.

Table 3. Will Judges Issue Vaccine Order?

	Frequencies	
	Yes	No
Upon Motion	83 (67%)	41 (33%)
Judicial notice	27 (22%)	97 (78%)
Sua sponte	23 (19%)	101 (81%)
Total	133 (36%)	239 (66%)

These findings indicate that a majority of respondents are willing to issue vaccine orders at the upon motion level, but only a minority of respondents are willing to issue such an order under judicial notice of sua sponte conditions.

The hypotheses for this study related to the role that two substantive factors, consent and records, play in decisions on vaccine orders—that is, whether consent or records affect the likelihood of a vaccine order of any type (i.e., upon motion, judicial notice, or sua sponte). I hypothesized that judges’ relative willingness/unwillingness to issue vaccine orders was related to the substantive issues of consent and records and to judges’ personal attributes. Overall, it appears that consent, gender, and two measures of judicial role orientation⁴² are significantly related to decisions on vaccine orders. Records and political ideology are not significant, and there is not a significant interaction effect between consent and records.

Results Concerning First Hypothesis: Consent

⁴² There was a statistically significant, positive relationship among vaccine order outcomes and respondents (1) who thought the juvenile justice system “should” provide vaccines, and (2) who thought that the juvenile justice system is primarily concerned with rehabilitation.

Consistent with the first hypothesis, that consent has a significant effect on vaccine order decisions, the mean scores for issuing vaccine orders are higher when consent is present than when consent is absent for all outcomes (Table 4). Respondents grant vaccine orders more readily when consent is present than when consent is absent, indicating that consent influences the vaccine order decision in a positive way, regardless of the procedural posture.

Table 4. Means and Standard Deviations by Condition for Upon Motion, Judicial Notice, Sua Sponte, and Composite

Variable	Condition		Consent					
			Means			Standard Deviation		
			Yes	No	Total	Yes	No	Total
Upon Motion	Records	Yes	3.06	2.58	2.82	1.07	1.20	1.14
		No	3.00	2.56	2.78	1.22	1.16	1.19
		Total	3.03	2.57	2.80	1.15	1.18	1.17
Judicial Notice	Records	Yes	2.23	1.50	1.87	1.06	0.57	0.82
		No	2.03	1.71	1.87	1.11	0.78	0.95
		Total	2.13	1.61	1.87	1.09	0.68	0.89
Sua Sponte	Records	Yes	2.16	1.47	1.82	1.13	0.68	0.91
		No	1.90	1.58	1.74	1.11	0.85	0.98
		Total	2.03	1.53	1.78	1.12	0.77	0.95
Total	Records	Yes	2.51	1.87	2.19	0.95	0.70	0.83
		No	2.33	1.97	2.15	0.98	0.84	0.91
		Total	2.42	1.92	2.17	0.97	0.77	0.87

n=31

As importantly, analysis of the variance (ANOVA) among these means indicates that the differences between the means for consent yes versus no are significant at the $p < 0.05$ level across all procedural settings: Upon motion [$F(1,92) = 8.49$, $p < 0.01$]; judicial notice [$F(1,89) = 4.71$, $p = 0.03$]; sua sponte [$F(1,89) = 5.35$, $p = 0.02$]; and total

[$F(1,89) = 9.07, p < 0.01$] (Table 5). These findings indicate that consent is a material concern to respondents as they contemplate vaccine order decisions, regardless of the mechanism by which they receive the request for vaccine orders. When viewed in connection with the data from Table 4 showing a positive relationship between consent and vaccine orders, these findings support Hypothesis One, which posits that legal consent exerts a positive, statistically significant influence on vaccine order decisions.

Table 5. ANOVAs for Upon Motion, Judicial Notice, Sua Sponte, and Total (Composite)⁴³

		Partial SS	df	MS	F	Prob>F
Upon Motion	Consent	3.06	1	3.06	8.49	<0.01
	Records	0.05	1	0.05	0.13	0.72
	Consent by Records	0.00	1	0.00	0.00	0.97
	Subject	134.10	31	4.33	11.99	<0.01
	Error	33.20	92	0.36		
Judicial Notice	Consent	1.61	1	1.61	4.71	0.03
	Records	0.36	1	0.36	1.05	0.31
	Consent by Records	0.92	1	0.92	2.70	0.10
	Subject	67.80	30	2.26	6.60	<0.01
	Error	30.48	89			
Sua Sponte 2.31	Consent	1.61	1	1.61	5.35	0.02
	Records	0.03	1	0.03	0.09	0.76
	Consent by Records	0.70	1	0.70	2.31	0.13
	Subject	83.09	30	2.77	9.19	<0.01
	Error	26.83	89	0.30		
Total	Consent	2.07	1	2.07	9.07	<0.01
	Records	0.03	1	0.03	0.15	0.70
	Consent by Records	0.37	1	0.37	1.61	0.21
	Subject	70.73	30	2.38	10.32	<0.01
	Error	20.34	89	0.23		

* $p < 0.01$; $n = 31$

⁴³ I did not include a variable to reflect the order in which the questions were delivered because sensitivity testing revealed that order did not have a demonstrable effect on the model.

Results Concerning Second Hypothesis: Records

Unlike consent, records do not exhibit a meaningful influence on vaccine order decisions. The mean scores preliminarily suggest, even without any additional testing, that records are not influencing respondents' decisions on vaccine orders (Table 4). Moreover, ANOVA analysis indicates that there is not a statistically significant difference for the records factor at any procedural level: Upon motion [$F(1,92) = 0.13, p = 0.72$]; judicial notice [$F(1,89) = 1.05, p = 0.31$]; sua sponte [$F(1,89) = 0.09, p = 0.76$]; and total [$F(1,89) = 0.15, p = 0.70$] (Table 5). These results do not support Hypothesis Two, which said that records would bear a positive, statistically significant influence on vaccine order decisions.

Results Concerning Third Hypothesis: Interaction Effect

Hypothesis Three asserted that consent and records would have a compounding effect upon one another, whereby the effect of consent would be greatest when records also were present and that the negative influence of the absence of consent would be greatest when records also were absent. This hypothesis is not supported by the evidence.

The ANOVA tests reveal no statistically significant effect for an interaction under any of the procedural conditions (Table 5 Consent By Records): Upon motion [$F(1,92) = 0.00, p = 0.97$]; judicial notice [$F(1,89) = 2.70, p = 0.10$]; sua sponte [$F(1,89) = 2.31, p = 0.13$]; and total [$F(1,89) = 1.61, p = 0.21$] (Table 5). The visual renderings of the

relationships in Figures 1, 2, 3, and 4 further demonstrate that there is no meaningful interaction effect. Moreover, these visual renderings suggest that the influence of records may be opposite of what was hypothesized under at least two circumstances; the influence of records was higher when consent was absent than when consent was present under the judicial notice, sua sponte, and total models (Figures 2, 3, and 4).

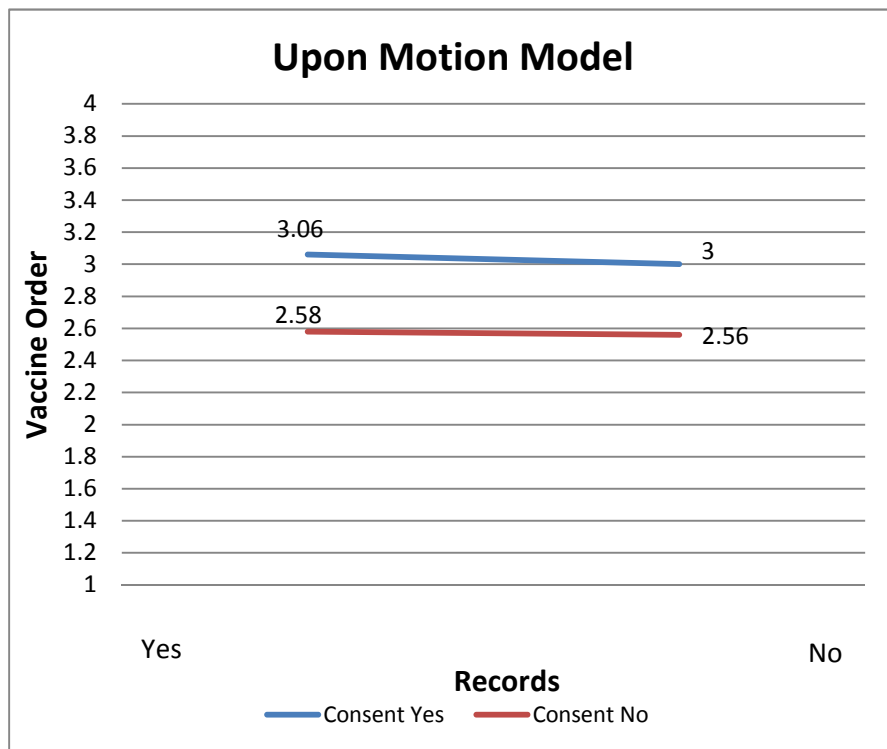


Figure 1. Upon Motion Model

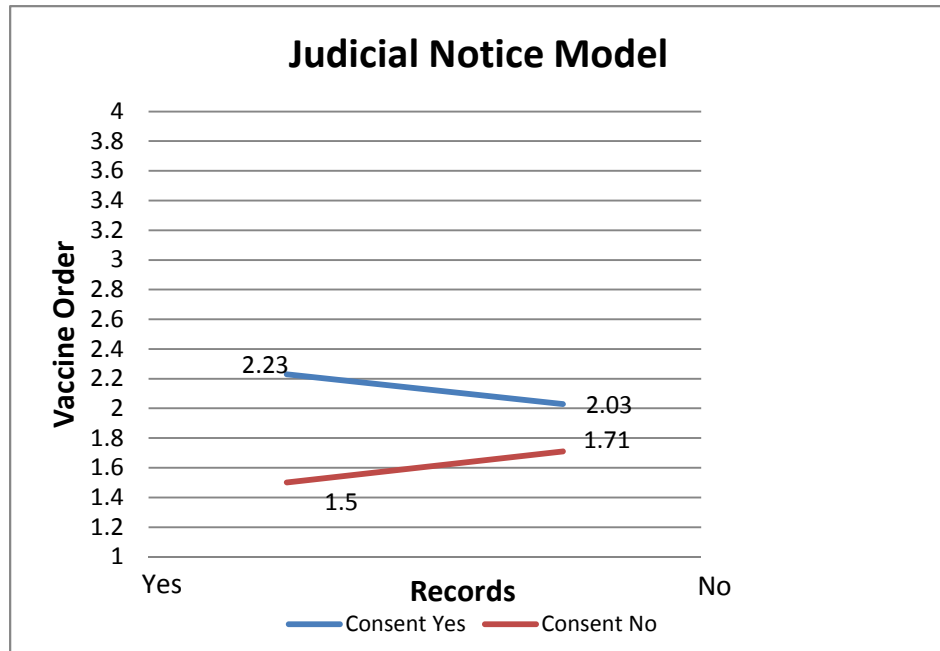


Figure 2. Judicial Notice Model

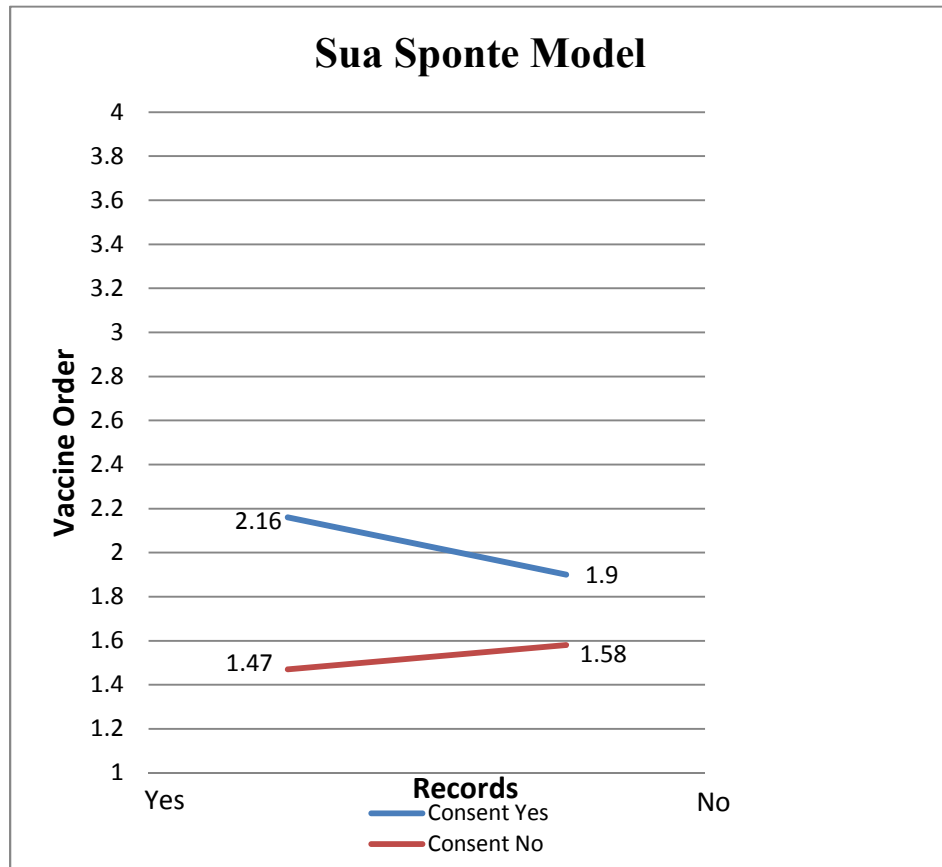


Figure 3. Sua Sponte Model

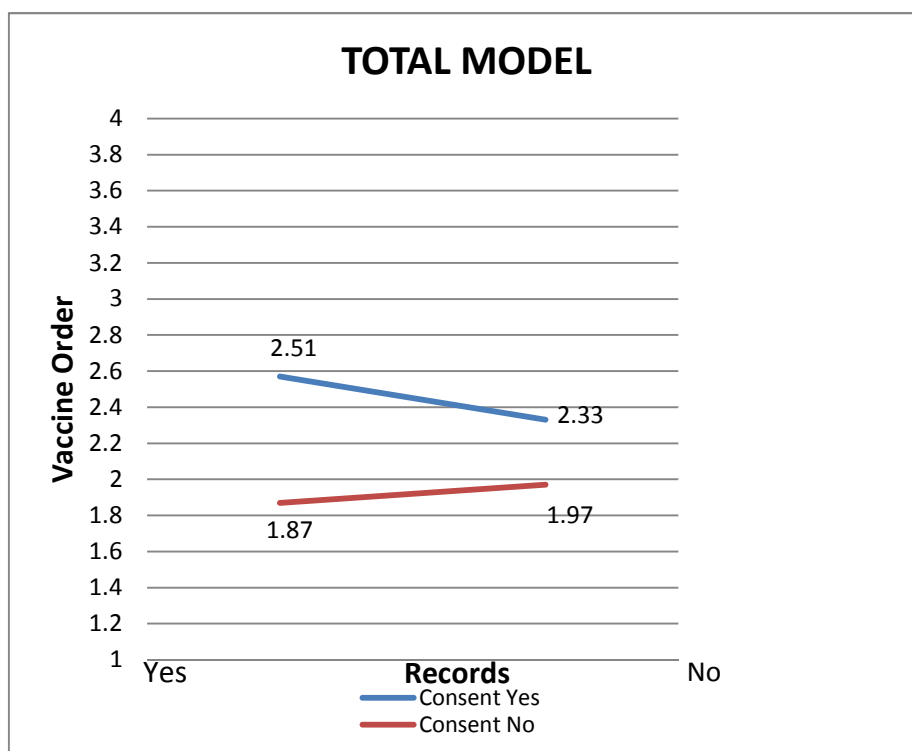


Figure 4. Total Model

Results Concerning Fourth Hypothesis: Gender

Consistent with Hypothesis Four, gender demonstrates a statistically significant relationship with vaccine order decisions [$r = 0.49$, $p < 0.01$], with women more likely than men to issue a vaccine order. However, there are no data that speak to the reasons for this relationship, so no conclusions can be drawn. Moreover, because of the small sample size, this finding should be interpreted with caution.⁴⁴ These data shall provide

⁴⁴ Future research should examine whether any effect for gender is impacted by the procedural posture of the matter. In other words, as the procedural status moves from upon motion to the more discretionary judicial notice and sua sponte, does gender increase or decrease in significance? This inquiry would provide meaningful material for researchers who examine the impact of gender on discretionary judicial decision-making.

foundational data for future research on the role gender plays in judges' health policy decisions.

Results Concerning Fifth Hypothesis: Political Ideology

Respondents are a racially homogenous group of 17 men and 14 women who perceive themselves to be less conservative than the jurisdictions in which they preside. A plurality of respondents (43%) describe themselves as politically “moderate” (Table 6). None of the respondents describe themselves as “very conservative” politically, and 17% describe themselves as “somewhat conservative.” Thirty percent describe themselves as “somewhat liberal,” and 10% describe themselves as “very liberal.”

Table 6. Political Ideology

	Very Conservative	Somewhat Conservative	Moderate	Somewhat Liberal	Very Liberal
Personal Ideology	0% n=0	17% n=5	43% n=14	30% n=9	10% n=3
Jurisdictions' Ideology	40% n=13	20% n=6	27% n=8	10% n=3	3% n=1

Characteristic	Correlation Coefficient	Significance Value
Political climate of jurisdiction	0.00	0.9956
Personal political ideology	-0.31	0.1082

*Each respondent has one composite score for “vaccine decisions” calculated as the average of respondents' four values for the upon motion, judicial notice, sua sponte, and total outcomes.

Of interest is whether political ideology affects the relationship between consent and the likelihood of issuing a vaccine order. To examine the influence of political

ideology more meaningfully, I included personal ideology in a secondary ANOVA test (Table 7) and examined the means for when consent was present and absent under each category of personal political ideology (Table 8). These findings reiterate that political ideology is significant to vaccine order outcomes under all procedural circumstances: Upon motion [$F(1,86) = 9.77, p < 0.01$]; judicial notice [$F(1,83) = 4.82, p < 0.01$]; sua sponte [$F(1,83) = 5.46, p < 0.01$]; and total [$F(1,83) = 6.65, p < 0.01$]. The significance of consent is greatest for respondents whose political ideology is most liberal (note that political ideology is a continuous variable). Based on comparison of the means, it appears that more conservative judges are not likely to issue vaccine orders under any circumstances. In contrast, more liberal judges are significantly more likely to issue vaccine orders if consent is present than if consent is not present. While these findings should be interpreted with caution because of the small sample size and because of the limitations inherent to measures of ideology described above, these findings provide initial data, or pilot data, for future study of the influence of political ideology on trial-level judicial decisions.

Table 7. ANOVA Including Personal Political Ideology for Total⁴⁵

	Partial SS	df	MS	F	Prob>F
Consent	0.00	1	0.00	0.00	0.95
Records	0.07	1	0.07	0.23	0.57
Consent By Records	0.38	1	0.38	1.48	0.19
Political Ideology	2.89	1	0.96	6.65	<0.01
Consent By Ideology	2.18	1	0.73		0.03
Subject	57.77	25	2.29	9.59	<0.00
Error	20.00	80	0.22		

n=31

Table 8. Total Response Means When Consent Present and Absent, Based on Personal Political Ideology

	Consent Available		Consent Not Available	
	Mean	Standard Deviation	Mean	Standard Deviation
Very Liberal (3)	2.67	1.67	1.88	0.70
Somewhat Liberal (9)	3.06	0.95	2.06	0.76
Moderate (12)	2.14	0.74	1.79	0.62
Somewhat Conservative (5)	1.83	0.87	1.73	0.96
Very Conservative (0)	NA	NA	NA	NA

*using Total, aggregated responses
n=29

Results Concerning Hypothesis Six, Seven, and Eight: Judicial Role Orientation

When asked about the juvenile justice system’s obligation to provide vaccines to detained, pre-adjudicatory youth, only a quarter (25%) of respondents believe that the juvenile justice system is required to provide vaccines to these children, and only 42%

⁴⁵ I did not include a variable to reflect the order in which the questions were delivered because sensitivity testing revealed that order did not have a demonstrable effect on the model.

believe that they should be required to provide vaccines to detained, pre-adjudicatory youth (Table 9). Finally, the majority of respondents (88%) believe that the juvenile justice system’s “primary purpose . . . is to rehabilitate youth.” A smaller majority (58%) also believe that the “primary purpose of the juvenile justice system is to deter youth” (Table 9).

Table 9. Opinion Questions on Purposes of Juvenile Justice System

	Strongly Disagree	Disagree	Agree	Strongly Agree
Is required to provide vaccines	7 (22%)	16 (53%)	8 (25%)	0 (0%)
Should be required to provide vaccines	7 (22%)	11 (35%)	8 (25%)	5 (16%)
Primary purpose is rehabilitation	1 (3%)	3 (9%)	12 (40%)	15 (48%)
Primary purpose is deterrence	1 (3%)	12 (39%)	14 (45%)	4 (13%)

In part, the data support Hypotheses Six, Seven, and Eight, which posited that certain indicia of judicial role orientation bear significant relationships to vaccine order decisions (Table 10). The data reveal a statistically significant relationship between respondents’ decision to issue vaccine orders and their opinions on whether juvenile justice systems are required by state law to administer vaccines, whereby respondents who believe that the juvenile justice system must provide vaccines are significantly more likely to issue vaccine orders [$r = 0.60, p < 0.01$]. Similarly, respondents who believe that the juvenile justice system should be required by state law to administer vaccines are significantly more likely to issue vaccine orders [$r = 0.56, p < 0.01$].

Table 10. Correlations Among Respondents' Role Orientations and Vaccine Decisions

Description of Orientation	Correlation Coefficient	Significance Value
Are required to administer vaccines	0.60	0.0005
Should be required to administer vaccines	0.56	0.0015
Rehabilitation is primary purpose	0.33	0.0814
Deterrence is primary purpose	0.17	0.3913

There is not a significant relationship between issuing vaccine orders and the personal belief that “the primary purpose of the juvenile justice system is to rehabilitate youth” [$r = 0.33$, $p = 0.08$], and there is not a corresponding relationship between vaccine order and the opinion that “the primary purpose of the juvenile justice system is to deter youth from committing crime” [$r = 0.17$, $p = 0.39$].

Acknowledging that the meaning of these results must be interpreted with great care due to the small sample size and interrelatedness of the outcome measures, these data still provide meaningful information upon which to draw preliminary conclusions about the effects of consent and ideology on vaccine order decisions, and these data provide foundational food for thought in the evolving research on ideological and attitudinal correlates of judicial decision-making.

DISCUSSION

Based on the foregoing data, it appears that the availability of legal consent (parental consent), role orientation, and political ideology are material to judges' decisions on whether to issue vaccine orders. Documentary evidence of medical records is not important, and it does not seem that the political climate of judges' jurisdictions matters in these decisions. Each of these factors is discussed below in terms of the specific findings of this study, as well as the larger meaning these findings have in terms of implementation of health care within correctional settings and judicial decision-making. Moreover, these data provide food for thought on the inner workings of the under-examined process by which judges make decisions at pre-adjudicatory hearings and the role those legal factors such as consent and non-legal factors such as ideology play in juvenile court judges' decision-making processes.

Consent Is Important

“Consent” is one of the most convoluted concepts under the law. In criminal law contexts, consent connotes an excuse, an explanation for otherwise illegal conduct. If someone consents to sexual intercourse, there is no rape. If someone consents to have a telephone conversation recorded, there is no wiretapping. In the civil law context, consent indicates authority or acquiescence. If someone consents to the terms of a contract, his/her behavior is governed by the terms of that agreement. If someone consents to

participation in a randomized controlled trial, then the researcher has authority to conduct experiments involving that person (although research participants are free to withdraw their consent). In the context of medical care for minors, parents' consent translates to legal authority, or legal custody, to provide medical care for that minor.

Although consent is a relevant consideration arising from parents' fundamental, constitutional right to be relatively free from governmental interference in the care of their children, it is not a mandatory prerequisite to the exercise of courts' powers. If parental consent is not available, or if it is not provided, then judges who want to take action on behalf of the subject child must invoke a discretionary exception to the laws requiring parental consent. Several discretionary exceptions may exist, but they all fall within the auspices of judges' discretionary authority under the "best interest of the child" standard (Kohm, 2008).

Arguably, compulsory state vaccine laws dictate that, under state policy, it is in children's best interests that they receive state-mandated vaccines, both to prevent disease and to facilitate regular school attendance. Judges are charged with upholding state law, but also with preserving federal, constitutional rights such as the right to privacy in parenting affairs (Baskin, 1974; Bennett, 1976; *Meyer v. Nebraska*, 1923). In other words, they have dual and potentially conflicting obligations: to uphold state vaccine laws and to uphold parental consent laws. Because of this tension among judges' traditional duties to uphold constitutional law, judges' responsibilities to enforce state law, and judges' discretionary abilities to enforce state policy under the best interest of the child standard, I predicted that consent would be material and a statistically

significant influence on respondents' vaccine order decisions. These data support that hypothesis. Consent demonstrated a statistically significant influence on vaccine order decisions.

When consent was present, respondents were more likely to issue vaccine orders than when consent was absent. Under all procedural circumstances in this research, consent exhibited a statistically significant influence on vaccine orders, which is consistent with more than a century of litigation involving parental rights (Goldstein, 1977; *Jacobson v. Commonwealth of Massachusetts*, 1905). Translating those findings to the broader judicial and policy worlds, these data suggest that consent specifically, and parental rights generally, are significant considerations when judges weigh whether to intervene in pre-adjudicatory youths' preventive health care.⁴⁶

Legal consent is a formal legal construct. As noted above, strict interpretation of the formal law demands that judges act only when they have confirmed that they have legal consent to do so. Statutory, formal law requires legal consent. Judges who adhere to the statutes and act only when they have legal consent are acting in accordance with the jurisprudential tradition of legal formalism. They are applying the law as written, not interpreting the law.

Judges who act without legal consent (or in the absence of legal consent) are exercising their discretionary authority under the common law. Common law, or case-

⁴⁶ Text collected from the comment boxes within this survey further indicate that parental rights were a concern to respondents. For example, one respondent explained his/her reluctance to issue a vaccine order as follows "I am loathe to order immunizations, but I do order the parents to meet with a pediatrician who can explain the dangers" (Appendix B).

made law, is not legislatively enacted, and thus reflects a less formal form of law. Judges who invoke their discretion are not following the black letter of the law; they are interpreting their authority under the common law “best interest of the child” standard. They are applying the law as they deem appropriate, not as formally documented on the books. In other words, judges who act in the absence of consent are acting more in accord with the legal realism school of thought.

If one accepts my argument that legal consent reflects a formal legal construct and that formalism requires adherence to formal law, then these data begin to speak to the extent to which judges behave more consistently with the legal formalism or the legal realism school of thought. Again, the sample size is too small to draw firm conclusions, but these findings provide credible pilot data for a larger study of formalism versus realism using legal consent as one of the variables. These data find that a formal construct is significant to decision-making. Subsequent findings consistent with these findings would suggest that formalism is not dead, as asserted by academics in the realism school.

Turning to the policy implications of these data: If one accepts my argument outlined above that the best, first opportunity to vaccinate the maximum number of youth in the juvenile justice system arises at the pre-adjudicatory hearing, then policies and practices should be tailored to anticipate the apparent obstacles presented by the need to obtain parental consent. Arguably, these data may suggest that the judicial system is not the most efficient avenue for reaching pre-adjudicatory youth because parental consent (as described above) is too hard to obtain, and these data indicate that it is a statistically

significant factor when judges decide whether to require pre-adjudicatory youth to get their shots.

On the other hand, these data may mean that policy makers need to think more carefully about practices they can craft, or legislation they can pursue, that would secure legal authority for the state to administer vaccines to pre-adjudicatory youth. Taking the latter point first, these data support the proposition that, if states want to ensure that pre-adjudicatory youth are vaccinated, then the state could pass legislation that grants temporary medical/legal custody to justice facilities for purposes of obtaining youths' vaccines, much like the exception that currently exists for tetanus vaccines and screenings for sexually transmitted diseases (STDs).

It would not be practical to mandate that all detention centers obtain parental consent at the time juveniles are admitted to their facilities. Juveniles' parents often are not present in juveniles' lives (Forrest et al., 2000). Many of them are single parents who work excessive hours (Luman et al., 2003). Others are psychologically or mentally unavailable due to a variety of co-morbid conditions, including mental illness, poverty, and homelessness (Freudenberg et al., 2005). Because so many juveniles enter the justice system without having a parent involved in the process, it might be prohibitively difficult for justice facility personnel to locate juveniles' parents, communicate the need for legal consent to provide vaccines, and document that consent in a manner that would be admissible in court. As problematically, courts generally do not accept written statements as evidence unless they are notarized, and courts often require live testimony (F.R. Evidence 803), rendering this avenue an administrative impossibility.

In light of the foregoing, I surmise that this issue of parental consent to vaccination requires legislative intervention. If states legislate that juvenile justice facilities can assume legal custody of pre-adjudicatory youth for purposes of confirming those adolescents' vaccination status, and possibly for purposes of ensuring that those youth obtain the shots necessary to come into compliance with state vaccination laws, then the entire parental consent/legal custody issue becomes moot. State legislatures could grant juvenile justice facilities legal custody to administer vaccines. Admittedly, this proposal invokes other concerns, including civil liberty issues and political palatability (Newby, 2009; Salmon et al., 2003). Nevertheless, these findings provide food for thought as policy makers continue to digest the best methods for ensuring the health of the country's juveniles as well as the health of the public.

Finally, a hybrid solution might be available. State legislatures could grant state juvenile courts jurisdiction over certain public health matters. Under the states' police powers to preserve the general welfare, states could grant courts legal custody, or subject matter jurisdiction, to explore the vaccine status of juveniles who appear before them. In essence, the state legislatures would be creating a state mandate to ensure vaccination of pre-adjudicatory youth and using the courts as an enforcement arm. As with the above proposal, the political mine field of mandating controversial injections among vulnerable populations might render this solution a non-starter (Frombonne, 2006), but alternatives for addressing consent issues must be explored if policy makers wish to increase vaccination among detained youth and promote the public health.

Records Evidence Is Not Important

Originally, I hypothesized that records evidence would be as important as legal consent because, much like legal consent, the court has a statutory duty to take jurisdiction only over matters that are properly before it. Juvenile court judges are likely to know that all juvenile justice detention centers in the United States are required by state law to maintain medical and vaccination records on juveniles who are in their care (Kentucky Department of Juvenile Justice, 2012; Swendiman & Welborn, 2011). Judges who interpret the law strictly maintain that they cannot take action on behalf of a party unless there is an established need for the court to intervene. If “Michael” is before the court, but there is no evidence that he is missing any of his shots, then the matter of vaccination has not been brought before the court. Judges who fall into the legal formalism camp would not inject themselves into the vaccine issue if there was no evidentiary basis to do so. It is only through the exercise of discretionary powers that a judge could take action with regard to vaccines when there is no documentary evidence of the need for vaccines.

Again, like the situation with legal consent, judges who want to pursue the vaccine issue in the absence of medical records evidence must interpret their duties under the “best interest of the child” standard as including the discretionary responsibility to confirm juveniles’ vaccine status. In accordance with the legal realism school of thought, judges who act under this discretionary authority are interpreting their duties under the common law instead of following the formal, statutorily enacted rules of evidence.

In addition to this tension between strict and discretionary action that is inherently implicated by the records variable, I speculated that records would be a material factor because of my prior research on this issue. Facility personnel in prior research perceived that the administrative realities of managing juvenile detention facilities impede execution of the legislated requirement that they maintain juveniles' vaccine records. Due to the exigencies and tight timelines of judicial and criminal process, it is administratively difficult for juveniles' medical records to travel with them throughout the juvenile justice system (Douds et al., 2008).

The legislative imperative to maintain youths' records in a comprehensive and current status implies a state-level concern for documentation of medical needs (Mason, 2004). Detention hearings for pre-adjudicatory youth, such as the hypothetical Michael in this survey, occur in state courts. State court judges are agents of the state. Under agency theory, I assumed a priori that medical documentation would be important to state court judges' decisions on vaccine orders (Boyd & Sievert, in press). Additionally, judges do not like to operate in an information or evidentiary vacuum (Jones, 2006; see *Juvenile Court Trial Manual*, 2012). They are most comfortable making decisions based on evidence, not policy (Center for Effective Public Policy, 2010). Therefore, I surmised that they would be reluctant to render vaccine orders without evidence of a documented medical need for vaccines.

But records were not significant in this study. Contrary to what I hypothesized, availability of vaccination records did not bear a meaningful relationship to respondents' vaccine order outcomes under any procedural circumstances. The differences in the

means were not only statistically insignificant; they were almost nonexistent. These data indicate a disconnect between what facility personnel from prior research perceived to be important to execution of vaccine policies and what respondents/judges identified as important to their decisions on enforcement of those policies.

These findings are inconsistent with theories founded in legal formalism. Under traditional, formal law, judges do not seek out evidence; they rule upon evidence put before them. For legal formalists, the logical syllogism would be clear: “Judges make decisions based on law. The law says that judges must base their decisions on evidence. Without evidence, judges cannot act. Therefore, without medical records, judges cannot act.” Applied to this research, records would be significant to respondents’ decisions on vaccine orders. Because the data demonstrate that records are not significant, there appear to be something more than formal, legal considerations at play in these outcomes.

Consent and Records Do Not Interact As Predicted

Originally, I speculated that the “something else” arises from the interplay of consent and records. I thought that the presence of both consent and records would exert a compounding effect, making judges exponentially more likely to issue vaccine orders when both legal factors were present. Yet the statistical findings on the interaction effect do not support this hypothesis, either. Because the data were not statistically significant and the sample size was small, the original hypothesis cannot be accepted. However, the observed pattern of results implies the need for further research of this issue because the visual renderings of these findings in Figures 2, 3 and 4 suggest that the effect of consent may be influenced by the presence or absence of records.

Gender May Be Important

Consistent with other research that finds gender-based differences in judicial decision-making, gender exhibited a statistically significant influence on the vaccine orders (Collins & Moyer, 2008; Coontz, 2000; Gruhl et al., 1981). In this research, women are more likely to issue vaccine orders. There is nothing in these data that explains why gender influenced the outcome, only that it did. If respondents perceive access to vaccines as a civil rights issue as other researchers have, then these findings accord with prior research that suggests a relationship between judges' gender and civil rights actions (Collins & Moyer, 2008).

Gender was the only immutable characteristic on which the survey collected enough data to perform meaningful analysis. Race was considered as a potentially important factor, but the respondents in this study were overwhelmingly caucasian. Again, future research with a larger sample size could examine additional demographic correlates of decision-making, and these findings provide the pilot data to support that research.

Personal Political Ideology May Be Important

There is a relationship between respondents' political ideology and vaccine orders, with self-described liberal judges more likely to issue vaccine orders than self-described conservative judges, but only when consent is present. These results indicate that consent and personal political ideology may interact to affect vaccine order decisions, but not in the manner I originally hypothesized. It appears that, if these data are

reliable, then conservative judges generally will not issue vaccine orders at all, and liberal judges will only issue vaccine orders if consent is available.

Although it is not statistically significant, this relationship is of sufficient magnitude that it might not be attributed to chance. Philosophically, the vaccine order decision does not fall definitively within an either “liberal” or “conservative” course of action (Clements et al., 2006; Colgrove, 2006). For example, among the judges who participated in pretesting the survey, the vaccine order was perceived to be either a paternalistic action, which is more consistent with liberal perspectives on the role of the judiciary, or a public health measure to prevent communicable disease, which some say reflects a more conservative perspective (Parikh, 2008). These data call for further analysis to explore political ideology in the context of vaccine orders. To advance the body of research more thoroughly, future study of this question should expand the inquiry beyond vaccines and into a larger investigation into the relationship between political ideology and preventive correctional health care.

Judicial Role Orientation May Matter

The survey inquired into respondents’ opinions on whether justice systems have a legal duty to vaccinate youth and whether justice systems should have a legal duty to vaccinate youth. Not surprisingly, respondents who believe that state law requires that juvenile justice systems vaccinate custodial youth were more likely to issue vaccine orders than those who do not believe that the justice system bears this responsibility. This result is consistent with judges’ duty to enforce state law, regardless of the underlying issue.

More interestingly, respondents who thought that the juvenile justice system should be required to vaccinate youth are more likely to issue vaccine orders, indicating that their personal views on the ethical obligations of the justice system impact their vaccine order decisions. Among these respondents, there is a statistically significant relationship between opinions on the theoretical responsibilities of the justice system and respondents' judicial conduct. Consistent with modern theories on judicial decision-making that are founded in legal realism, respondents appear to incorporate their ideological, theoretical opinions on what juvenile justice should do into their vaccine order decisions (Baum, 2007; Kim et al., 2009). In a larger context, this finding supports the notion that something other than legal decision-making operates on judicial decisions. Although the sample was small, the effect size suggests that this influence is important and indicative of a broader phenomenon.

Respondents also were asked whether they perceive the justice system as being rehabilitation-oriented and/or deterrence-oriented. Respondents who believe that the juvenile justice system predominantly is concerned with rehabilitating juveniles are more inclined to issue vaccine orders than those who said that rehabilitation is not a primary purpose of the juvenile justice system. The correlation is statistically significant, which indicates a reliable relationship and may suggest that respondents perceive vaccination to be related to rehabilitation. It again appears that ideology influences their outcomes (Baum, 2007).

On the other hand, there is not a reliable relationship between deterrence-orientation and vaccine orders. Respondents who say that the justice system's primary

responsibility is to deter youth from crime are not statistically more or less likely to issue vaccine orders. These data lead to secondary questions that deserve further analysis: Do judges perceive vaccines to be a tool for rehabilitation? Do judges' opinions on the value of rehabilitation influence their decisions on other preventive health care services? What is the relationship between rehabilitation and health care in justice systems?

Limitations

Respondent issues. Respondents were a convenience sample selected because of its clear and specific relationship to the topic of inquiry (Kelley et al., 2003). The extent to which this sample represents the entire population of juvenile and family court judges cannot be known. Much like the American Bar Association and other volunteer organizations for legal professionals, members of the NCJFCJ self-select to membership. That self-selection process inevitably includes selection bias; thus, the generalizability should be qualified to reflect that respondents represent judicial professionals who elect to participate in a national professional organization. With that said, the NCJFCJ is the largest professional organization in the nation. Nothing in its mission statement, publications, or activities suggests patent bias.

Sample size. As explained above, I originally intended to close the survey after 30 days in order to meet self-imposed timelines. Unfortunately, the response rate for the survey was extremely low initially. The 12 responses I had received were useless without more data. Therefore, I left the survey open for an additional 30 days. I also conferred with the researchers with the research division of the NCJFCJ to discuss their perspectives on the low response rate and their recommendations for improving it. The

NCJFCJ researchers speculated that the response rate was low for two reasons: First, they launched several surveys in spring 2011. Additionally, they had experienced a controversial turnover in leadership that may have left members feeling disengaged from the organization and thus less likely to become involved in surveys promoted by the new leadership. In an attempt to redress the situation, the researchers and I decided to establish a kiosk at the group's annual meeting in March and promote the survey at that convention. Ultimately, 31 respondents completed all questions in the survey. Seventy-four commenced the survey, but 43 ceased participation after they completed the informed consent form but before moving onto the first substantive question. I speculate that these non-respondents were not judges because they stopped at the point at which the salutation reads "Good morning, Your Honor." All calculations below are based on the 31 respondents.

Age of "Michael." The survey simply describes the hypothetical, pre-adjudicatory juvenile as an "adolescent." His age was not provided for two reasons. First, providing a specific age might impede the external validity of the study by limiting the generalizability of the study to a specific age. Second, the age at which shots are required for school attendance is different among states. By using the term *adolescent*, the survey does not create unnecessary confusion about the legal age of requirement for the shots, and the term will be readily understood in the same fashion by all respondents.

Definitions of independent variables. Both consent and records are artificial constructs designed to be proxies for complex legal and medical components of the broader issues surrounding vaccination of detained youth. For example, this study relies

solely on express parental consent as the proxy measure for legal custody. This definition may limit the generalizability of the data because it begs the question: What if the parents cannot be located? Many children in the juvenile justice system are repeat offenders, circulating through the courts and juvenile facilities more than once per year. As explained above, they also often come from homes where parents are not meaningfully present in their lives. Their parents may not be aware of, or involved in, the judicial process. If judges have interacted with them before, judges may know in advance that parental consent is a practical impossibility. If they know that parental consent is not an option, then they may demonstrate less concern for parental rights and more concern for “best interest” objectives. The study at hand did not examine the relationships among parental consent, repeat offender status, and parental presence in the juveniles’ lives. That is a separate study, but this research informs that discussion and provides foundational data for building that analysis.

Similarly, the survey’s initial question stem may inject bias that could reduce the likelihood that respondents would find records to be significant in their decisions. In the introductory language, the questions asked whether judges would issue an “order to compel.” As defined above, an order to compel is a court order requiring that someone provide something to the court. In this case, an order to compel would require someone to provide Michael’s vaccination records to the court. I fear that the nature of the relief, the order to compel, may have given respondents an opportunity to satisfice. Their internal decision-making dialogue could rationalize the demand for records as nothing more than an administrative remedy. In reality, the demand for the records is a demand for

compliance with state law. Nonetheless, the order to compel described in this survey does not explicitly state that it is a demand for compliance with state law. It only says that the order to compel is a demand for production of records, which is a limitation that could be remedied in replication.

However, a conversation at the NCJFCJ annual meeting in July 2011 leads me to believe that the survey's description of the order to compel may not have injected bias. At the meeting, two respondents were present during my presentation of these data. As one explained, "If you want me to issue an order compelling some kid to show me he got his shots, you've got to give me a good reason. Show me he needs them." The other respondent concurred. In other words, those two respondents/judges thought records were an important issue and that records were a reasonable prerequisite to a request for an order to compel production of proof of compliance with state vaccination laws. Their subsequent conversation revealed that they did not perceive the order to compel as "kicking the can down the road."

Future Research

This research undertook to answer complex questions about the interactions of legal factors, such as consent and records, and non-legal factors, such as political ideology and role orientation, with judges' decisions on vaccine orders. Moreover, vaccine orders are a politically charged issue in this hyper-political culture where immunization carries multiple subtexts. These data would benefit from deeper analysis with a larger sample size. Specifically, future research should examine:

1. The significance of consent in the “real world.” In this hypothetical, “Michael” is a new character, presented to the respondents in a cultural and social vacuum. In real judicial practice, many children are repeat offenders who appear before judges multiple times. As described above, these children’s parents often are not meaningfully involved in their lives due to drug addiction, homelessness, or incarceration (Forrest et al., 2000). The meaning of parental consent should be explored in operation perhaps through observational research on how judges handle claims for enforcement of parental rights when a juvenile is a repeat offender.

2. Additional research on the significance of consent could be conducted through a controlled experiment in which advocates seek court permission to pursue vaccination of incarcerated youth and manipulating whether the advocates provide or do not provide evidence of parental consent.

3. Records were not found to be significant to respondents’ decisions. For policy makers and clinicians such as those working to promote universal vaccination within the CDC, future research should examine how to streamline records management. Some states maintain comprehensive vaccine registries. If records are, in fact, a barrier to vaccination of pre-adjudicatory youth, then perhaps implementation research on how to access electronic medical records from detention facilities would be helpful.

4. To advance knowledge on the relative importance of procedural posture on judicial decision-making, additional analyses could be performed on these data to test the differences in the marginal means between each procedural level. For example, the marginal mean for when consent was present and received Upon Motion was 3.03. The

marginal mean for when consent was present and received through Judicial Notice was 2.13. The difference in this mean, and in the marginal means for all other combinations of outcomes and procedural levels, could be tested to examine whether the differences are significant. If they are significant, then the data could inform discussions on the influence of the scope of discretion on judicial decisions.

5. Respondents' feedback from the text boxes within the survey implies that the description of the procedural status of "Michael's" case may have influenced their decisions.⁴⁷ The detention hearing that occurs within 48 hours of arrest and detention was chosen on purpose to reflect the point in the justice system when the greatest number of children have the opportunity to come into contact with a judge. For policy purposes, the question that I explored was whether this narrow window of opportunity, the detention hearing, was a viable venue through which to enforce vaccination policies judicially.

⁴⁷ One of these respondents explained that he/she answered "very unlikely" for all questions "because of the pre-adjudication stage of the case at a hearing to decide whether the juvenile should be detained or released. It is neither the time nor the place to decide the issue. It might turn into the place at a later stage in the proceedings. I strongly agree with compulsory vaccination laws and am generally unsympathetic with parents who 'do not believe' the science behind vaccinations. As long as people choose to live in communities where they come into contact with other people there should be a limit on their ability to breed contagions." Another respondent counseled that "[v]accination is not a pre-adjudication issue in a delinquency case (unless as a public health concern if the minor is to be detained in custody with other people in close proximity). It might become an issue at a dispositional or sentencing hearing, or in a neglect petition against the parent/guardian, but still the parent or guardian has the right to due process before any order would be issued for vaccination, and such an order would likely direct the parent/guardian to get the minor vaccinated. With an advocate's motion, the issue might come up sooner but there still would have to be a hearing if the parents did not consent to the vaccination."

However, respondents' feedback suggests that the procedural prematurity of raising the issue at the detention hearing, rather than a subsequent hearing of broader substantive scope, gave respondents concern. Accordingly, future research on policy implementation should explore other points in the judicial process at which vaccinations could be addressed.

6. Future research also should test the relationships among ideology, gender, and procedural posture. For example, if there is a statistically significant difference between decisions made upon motion and decisions made with judicial notice, what is the source of that difference? Future research could test what role, if any, ideology, race, and gender may contribute.

7. This survey measured respondents' political ideology as well as the extent to which respondents perceived the juvenile justice system to be "rehabilitative." There were non-significant yet noticeable relationships among political ideology and vaccine order outcomes. Additional measures for political ideology and rehabilitative orientation could be included and compared to decisions on vaccines and other preventive health measures. Although this inquiry runs far afield of the current research, it is consistent with the body of literature on the role health care plays in rehabilitation and the international discussion on the responsibilities of justice systems to rehabilitate incarcerated persons through health care (Doek, 2003).

Conclusion

Prior to this dissertation, no one in the research community had examined factors that influence judicial decisions on vaccination or other preventive health care policies at

the trial, and there was little research on judicial behavior in preliminary legal proceedings. Therefore, it is not surprising that this dissertation raises more questions than it answers. These data indicate that consent is important, but they beg additional consideration of the influence of the nature of other evidence about parental availability and the procedural context in which evidence is presented. In addition, the socio-ideological characteristics of judges should be explored further to dissect what is occurring in the complex arena of judicial decision-making on politically volatile health care issues such as vaccination. Hopefully, these data will inspire further analysis of these issues and advance the research community's understanding of both judicial decision-making and judicial implementation of legislated health care policies.

APPENDIX A: BACKGROUND INFORMATION ON VACCINATION LAWS

Ever since the small pox epidemic of the early 1990s, federal law has maintained government's right and duty under its police powers to protect public health through vaccination policies (*Jacobson v. Commonwealth of Massachusetts*, 1905; *Lawton v. Steele*, 1894; *Zucht v. King*, 1922). Under the doctrine of *parens patriae*, the state may compel vaccination of children, even in the face of religious objections by parents, for the overarching purpose of protecting the public health (*Prince v. Massachusetts*, 1944; Welborn, 2005). In addition to the legal mandate, public policy statements from all leading health care organizations call for universal, effective vaccination practices (American Academy of Pediatrics Committee on Adolescence, 2001; Centers for Disease Control and Prevention, 2010; Delgado & Humm-Delgado, 2009; Diekema, 2005; Freudenberg et al., 2005; Golzari et al., 2008; Greifinger, 2007, p. 5; Hennessey et al., 2009; Myers & Farrell, 2008). Within the context of justice systems, recent research also establishes the efficacy of vaccines for preventing communicable diseases among prison populations (Centers for Disease Control and Prevention, 2010; Charuvastra et al., 2001).

Because communicable diseases disproportionately impact persons of minority racial and ethnic backgrounds (Belenko et al., 2009; Forrest et al., 2000), and those from lower socio-economic brackets (Fitzgibbon, 2004), the federal Healthy People 2010 Report recognizes vaccination as a key component of its plan to eliminate health

disparities within American society (Healthy People, 2010). All jurisdictions in the United States now maintain compulsory vaccination laws under which children must receive certain vaccines before they can attend public school or participate in certain activities (Centers for Disease Control and Prevention, 2010; Jain et al., 2008).⁴⁸ On a more theoretical level, international and domestic policy makers perceive vaccines as a universal measure of peoples' more general access to preventive health care and a measurable proxy for public health generally (Gostin, 2001; Rosenbaum, 1992).

Although compulsory vaccination generally is an established component of American law, the jurisprudence and academic literature surrounding its development illustrates the controversial evolution of the policy (*Jacobson v. Commonwealth of Massachusetts*, 1905; Marks, 1999, p. 400; Salmon et al., 2003). State and federal compulsory vaccination laws have survived legal attacks founded in First Amendment religious objections (*Employment Division v. Smith*, 1990); Fourteenth Amendment due process and equal protection objections (Feikien et al., 2000; Salmon et al., 1999); and medical objections, including the recent controversy alleging relationships among vaccines and autism (Judicial View, 2010). However, as a result of the courts' decisions in these matters, vaccination laws now incorporate opt-out clauses that allow for parents

⁴⁸ The Advisory Committee on Immunization Practices (ACIP) of the CDC recommends three vaccines for all adolescents at age 11: The one-dose Tdap (tetanus-diphtheria, acellular pertussis vaccine), one-dose MCV-4 (meningococcal vaccine), and the HPV series (human papilloma vaccine series). The ACIP also recommends that adolescents begin receiving "catch-up" vaccines for any shots missed during early childhood, including the three-dose hepatitis B vaccine, the two-dose hepatitis A series, the polio series, the varicella series (chicken pox), PPV (pneumococcal polysaccharide), and the MMR series (measles-mumps-rubella). This research did not consider influenza vaccines. Flu shots must be administered every year, so they are not a good outcome measure for research of this type.

to refuse vaccines for their children if they can satisfy a court that they have compelling religious or philosophical objections to vaccination (Coletti, 2004; Ford et al., 2009; Salmon et al., 2006). Outside of these narrow exceptions, regardless of the foregoing, compulsory vaccination is a fundamental component of American law and American public health policy (Centers for Disease Control and Prevention, 2010; Welborn, 2005).

More fundamentally, as trustees of their children's welfare, parents are expected to provide adequate health care for their children or be subject to governmental intervention in their parenting affairs (Holder, 1985; *Prince v. Massachusetts*, 1944, p. 308). When the government is acting in loco parentis for children under the doctrine of parens patriae, the government has a duty to secure health care for those children (Baskin, 1974; see Poncz, 2007, p. 281). That duty invokes a responsibility and a right to pursue vaccines on behalf of children who are in the legal care of government (*Cude v. State*, 1964; see Gostin, 2001; *Horn v. Commonwealth of Kentucky*, 1995; Poncz, 2007, p. 281).

Vaccines in Juvenile Justice Systems

This duty also extends to the more than 2.1 million children who pass through juvenile justice custody each year (Puzzancherra, 2009; Puzzancherra & Sickmund, 2008; *Youngberg v. Romeo*, 1982), 1.6 million of whom participate in formal court proceedings related to their arrests (Puzzancherra & Sickmund, 2008; Snyder & Sickmund, 1999).⁴⁹ Juveniles who are adjudicated delinquent are in the legal and physical custody of the state. As such, their health and welfare is the state's responsibility. The children who

⁴⁹ Strikingly, on a reference date in 2004, there were 30 million children incarcerated, under arrest, on probation, on parole, or under some other form of juvenile court jurisdiction (Stahl et al., 2007).

have been arrested, but not adjudicated, are in the physical custody/care of the state, but their parents' legal custody of them remains intact. Therefore, the majority of the children in juvenile justice are in the legal custody of their parents and the physical custody of the state, which creates a potential decision-making conundrum.

Correlates of Under-Vaccination Among Youth in Juvenile Justice Systems

Detained juveniles are among the most socially, medically, and legally underserved members of society (American Academy of Pediatrics Committee on Adolescence, 2001; Golzari et al., 2006; Guthrie et al., 2002). They are less likely than their peers in the general population to receive preventive health care and much more likely to be lacking in state-mandated vaccines (Brown, 1993; Builes et al., 2006; Crosby et al., 2004; Feinstein et al., 1998; Renzi, 2004; Tedeschi et al., 2007). For example, in one Connecticut study, over half of detained youth were under-vaccinated (Sneller et al., 2008, S58-S59). Similarly, in a pilot project in Georgia, Sneller et al., reported that 31 facilities throughout the state had an immediate need for 16,000 vaccine doses over a two-year period (2008). In other words, detained youth were lacking 16,000 shots. In contrast, the CDC reports that 80-90% of adolescents in the general population have received all of their state-mandated vaccines (Jain et al., 2009). Comparing that data to vaccine coverage among the general population, the disparity is obvious.

Compounding the situation, juvenile detention facilities are under-prepared to provide vaccines, which increases juveniles' risk for under-vaccination. In the first study of HPV vaccine practices in juvenile justice settings, Henderson et al. found that 14 states do not offer HPV vaccines in juvenile facilities at all, and an additional 10 do not offer

the shots due to perceived problems revolving around legal consent issues (2010, p. 2). In the 2006 Juvenile Residential Facility Census, 46% of facilities reported that they did not provide any vaccines to any residents across all vaccine types (Read & O’Cummings, 2010). Only 13.3% reported that they provided at least one type of vaccine to at least some of their residents some of the time.

By virtue of their race, ethnicity, socioeconomic demographics, communities of origin, and risky behaviors, juveniles arrive in justice facilities at high risk for being under-vaccinated (Brown, 1993; Builes et al., 2006; Crosby et al., 2004; Feinstein et al., 1998; Renzi, 2004; Sneller et al., 2008; Tedeschi et al., 2007). Studies over the past twenty years consistently reveal that minority children from low-income families and/or from socioeconomically disadvantaged communities are at greater risk than their more affluent peers for being under-vaccinated (Alitucker et al., 2006; Forrest et al., 2000; Li et al., 2007; Mazzotti & Higgins, 2006; Snyder & Sickmund, 2006).

Race and Ethnicity

Race is perhaps the most documented correlate for risk of under-vaccination (Mazzotti & Higgins, 2006; Snyder & Sickmund, 2006; Soler, 2002). Race also is a well-established risk-correlate for juvenile justice involvement. Although persons of racial or ethnic minorities comprise one-third of the total general population, they represent two-thirds of incarcerated populations (Myers & Farrell, 2008, citing Mazzotti & Higgins, 2006). Minority youth represent half of all arrests for violent crime, one-third of all property crime arrests, one-third of all delinquency cases, and two-thirds of the total incarcerated youth population (Myers & Farrell, 2008; Puzancherra, 2009; Snyder &

Sickmund, 2006). Total delinquency rates for minorities are more than double those of Caucasian children (Puzzancherra & Sickmund, 2008, p.18, finding rates of 108.4/1000 for African American youth versus 44.4/1000 for white youth).

Minority over-representation increases as children move through justice systems, with increasingly disproportionate representation at every stage of the judicial and incarceration process (Poe-Yamagata & Jones, 2000, pp. 8-15; Puzzancherra, 2009; Puzzancherra & Sickmund, 2008; Snyder & Sickmund, 2006). For example, African American and Hispanic youth receive more formalized treatment and more severe dispositions in delinquency proceedings than their Caucasian counterparts, even when accounting for the severity of the offense (Bussiere & Burrell, 2006; Puzzancherra & Sickmund, 2008). In one study, African Americans were six times more likely than Caucasians in similar circumstances to be incarcerated (Poe-Yamagata & Jones, 2000). They also are far more likely to be sentenced to out of home placement (Puzzancherra & Sickmund, 2008, p. 15).

Participants in this study may or may not understand the issues revolving around disproportionate minority contact with justice system and within justice facilities. In an effort to control for any racial or ethnic bias, the survey in this study uses the name Michael, the most popular male name of the past 100 years, for the hypothetical juvenile whose vaccination status is at issue.⁵⁰

Socioeconomic Correlates

⁵⁰ <http://www.ssa.gov/oact/babynames/top5names.html>.

Youth in juvenile justice facilities are more likely to come from single parent, low-income homes and to lack health insurance (Fitzgibbon, 2004; Forrest et al., 2000; Golzari et al., 2006; Li et al., 2007; McCord, 1991; Morris et al., 2002; Snyder & Sickmund, 2006). Researchers have found that insurance status, parents' education, and number of children in the household significantly impact vaccine coverage among children (Ghosh et al., 2007). Although each of these characteristics is linked with risk for under-vaccination, poverty demonstrates one of the larger influences and remained significantly related to under-vaccination in research that controlled for maternal age, race, education, and number of children in the household (Ghosh et al., 2007). In another study, multivariate analysis revealed that insurance status interacts with poverty, race, ethnicity, and mother's employment status to increase children's risk of being under-immunized (Santoli et al., 2004).

Community of Origin

Similarly, children who lacked a "medical home"⁵¹ (a consistent source of continuous care) were found to be at significantly higher risk for being under-vaccinated, even when accounting for socio-demographic characteristics (American Academy of Pediatrics Committee on Adolescence, 2001; Forrest et al., 2000; Freed et al., 1993; Smith et al., 2009; Snyder & Sickmund, 2006). Children who have a medical home are

⁵¹ A "medical home" is a place where children receive the majority of their medical care, such as a primary care physician's office or a pediatrician's office. Children who change homes and/or school systems frequently often do not have an identifiable place where they receive their medical care. Instead, they tend to rely upon emergency rooms or free clinics, which do not sustain comprehensive medical records on children like those maintained by a pediatrician or other provider of a medical home (American Academy of Pediatrics Committee on Adolescence, 2001).

more likely to receive preventive health care and to have their health care monitored over time, and they have a substantially greater chance of receiving their full schedule of vaccines than children who do not see a primary doctor on a regular basis (Freed et al., 1993). Similarly, children from communities lacking in social and health care infrastructure also are at high risk for under-vaccination (Forrest et al., 2000; Freed et al., 1993; Smith et al., 2009).

Justice-involved youth, who suffer from the above-described compounding risk factors, are at even greater risk to lack a medical home than other children in the general population (American Academy of Pediatrics Committee on Adolescence, 2001; London & Myers, 2006; Williams, 2006). Families without a medical home often use emergency departments as their primary health care provider; emergency rooms do not monitor immunization status or routinely administer vaccines (Freed et al., 1993).

Risky Behaviors

Finally, children in justice systems are more likely than their peers in more affluent communities to engage in risky sexual behaviors that predispose them to vaccine-preventable diseases (Belenko et al., 2009; Feldman et al., 2004; Forrest et al., 2000; Morris et al., 1995). These behavioral factors also correlate with increased risk for being under-vaccinated (Ghosh et al., 2007; Santoli et al., 2004; Schneider et al., 2010).

It can be surmised that justice-involved youth are at high risk for under-vaccination by virtue of their home life, their community life, their lack of access to preventive health care, and the high-risk behaviors. They accordingly represent one of the greatest challenges and greatest opportunities for improving the health of high-risk youth

and the public health of justice systems. In light of the foregoing, vaccination practices in juvenile justice settings implicate broad issues of social and racial justice. American jurisprudence touts the judiciary as the last, best resort for resolving social and racial inequities in American society (Bybee, 2013). This dissertation acknowledges those disparities in the context of vaccination practices among juveniles, then explores whether the courts truly are a practical solution to this entrenched, multifaceted problem of providing health care to the least of our society.

APPENDIX B: SURVEY INSTRUMENT

Survey Content

The survey was delivered electronically by Qualtrics, so the format below is adapted from the website.

Good morning, Your Honor. Thank you for participating in this survey that is intended to assess judges' **willingness to issue an order to compel production of proof of compliance** with state **compulsory vaccination laws** under certain **evidentiary** and **procedural** circumstances. Your responses will provide invaluable data that will be used to conduct the **first-ever analysis** of the relationship among **judges' decision-making and vaccination of pre-adjudicatory adolescents**. I plan to present aggregate results of this study at your annual conference. I will keep all individual responses and data strictly confidential. I know that your participation in this study will not benefit you directly. However, it will provide a meaningful contribution to policy research on judicial decision-making and health care delivery to juveniles. Your comments and feedback are welcome and appreciated.

First, please review the Informed Consent Form and indicate whether you agree to participate. You then will be able to proceed with this short survey that will take approximately 15 minutes to complete. Thank you in advance for your assistance. Please feel free to contact me if you have questions (Anne S. Douds, adouds@gmu.edu or 717-816-8292).

INFORMED CONSENT

RESEARCH PROCEDURES

This factorial design study is being conducted to advance the body of empirical data on the impact of certain kinds of evidence and judicial philosophies with regard to enforcement of state vaccination laws among of youth involved in the juvenile justice system. If you agree to participate, you will be asked to complete the attached survey, which consists of approximately 25 questions. It should take you approximately 15 minutes to complete.

Risks

There are no foreseeable risks for participating in this research.

Benefits

There are no benefits to you as a participant other than to further research in the area of judicial practices in juvenile justice.

Confidentiality

The data in this study will be confidential. Your confidentiality will be maintained as follows: (1) your name will not be included on the surveys and other collected data; (2) a code will be placed on the survey and other collected data; (3) through the use of an identification key, the researcher will be able to link your survey to your email address; (4) only the researcher will have access to the identification key; (5) the web site and database will be hosted on separate servers; (6) the separate servers and databases will be secured behind a firewall; (7) the servers will be Linux/Apache, updated with latest security patches; (8) all software will be updated with all available patches as they become available; (9) the MySQL 4.1 database will be password-protected, accessible to the administrator only; (10) the database will be accessed using an account with the least privileges

necessary; (11) all data will be validated upon submission; and (12) the web site and all data will be encrypted via SSL (secure sockets layer) and 128/256-bit encryption. The survey will be accessible only via a login page that will require unique user/password combinations. All passwords will be case-sensitive, 8-20 characters, requiring both numbers and letters. While it is understood that no computer transmission can be perfectly secure, reasonable efforts will be made to protect the confidentiality of your transmission.

Participation

Your participation is voluntary, and you may withdraw from the study at any time and for any reason. If you decide not to participate or if you withdraw from the study, there is no penalty or loss of benefits to which you are otherwise entitled. There are no costs to you or any other party.

This research is being conducted Anne S. Douds, J.D. of George Mason University. You also may contact David B. Wilson, Ph.D., of the Justice, Law and Crime Policy Program. Ms. Douds may be reached at (717) 816-8292, and Dr. Wilson may be reached at (703) 993-8486 for questions or to report a research-related problem. You also may call the George Mason University Office of Research Subject Protections at 703-993-4121 if you have questions or comments regarding your rights as a participant in the research. This research has been reviewed according to George Mason University procedures governing your participation in this research.

George Mason University Human Subjects Review Board has waived the requirement for a signature on this consent form. However, if you wish to sign a consent form, please contact Ms. Douds at adouds@gmu.edu or at (717) 816-8292.

Please click below to indicate if you consent to participate in this survey.

Yes.

No.

BEGINNING OF SURVEY

The following four questions ask you to consider four hypothetical scenarios about an adolescent who appears in your court. In each scenario, the statement of law and statement of facts are the same, but the information in each of the four versions of the youth's file is different. You will be provided with an opportunity to explain your decisions after the final question in this section.

STATEMENT OF LAW: The Centers for Disease Control and Prevention recommends that all school-age children receive vaccine shots that are designed to prevent measles, mumps, rubella, diphtheria, tetanus, and pertussis (whooping cough). Many states also require vaccines against influenza, hepatitis, meningitis, and H1N1. All 50 states and the District Columbia have compulsory vaccination laws for adolescents that itemize which of these vaccine shots are required for public school attendance in that jurisdiction. Please assume that all references to "vaccines" in these questions refer to the vaccines that are required under your state's compulsory vaccination laws.

STATEMENT OF FACTS: Last evening, an adolescent named Michael was charged with a delinquent offense, arrested, and taken into police custody in your jurisdiction. Michael was taken to the juvenile detention center in your jurisdiction that houses pre-adjudicatory youth. He is appearing in your court this morning for his detention hearing (his initial court appearance).

[**SCENARIO #1**] Michael's court file contains authenticated vaccine records indicating that he is missing at least one of his vaccine shots, and you are provided with evidence that his parents or legal guardian consent to vaccination. How likely would you be to issue an order to compel Michael, or a legally appropriate designee of your choosing, to provide evidence that Michael has received all of his vaccines under each of the following procedural circumstances:

[**SCENARIO #2**] Michael's court file contains authenticated vaccine records indicating that he is missing at least one of his vaccine shots, but you are NOT provided with evidence that his parents

or legal guardian consent to vaccination. How likely would you be to issue an order to compel Michael, or a legally appropriate designee of your choosing, to provide evidence that Michael has received all of his vaccines under each of the following procedural circumstances:

[SCENARIO #3] Michael’s court file does NOT contain authenticated vaccine records indicating that he is missing at least one of his vaccine shots, but you are provided with evidence that his parents or legal guardian consent to vaccination. How likely would you be to issue an order to compel Michael, or a legally appropriate designee of your choosing, to provide evidence that Michael has received all of his vaccines under each of the following procedural circumstances:

[SCENARIO #4] Michael’s court file does NOT contain authenticated vaccine records indicating that he is missing at least one of his vaccine shots, and you are NOT provided with evidence that his parents or legal guardian consent to vaccination. How likely would you be to issue an order to compel Michael, or a legally appropriate designee of your choosing, to provide evidence that Michael has received all of his vaccines under each of the following procedural circumstances:

EACH SCENARIO IS FOLLOWED BY THE FOLLOWING QUESTION STEM AND CHOICE BANK:

	Very Unlikely	Unlikely	Likely	Very Likely
Michael’s advocate had filed a procedurally sufficient motion ⁵² requesting the order	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Upon taking of judicial notice of state Vaccine Laws without a formal motion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<i>Sua sponte</i> under the “best interest of the child” standard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Whom would you hypothetically designate as the person(s) responsible for providing evidence to the court that the adolescent has received all of his vaccines? Please check all that apply.

The juvenile justice system **is required** to provide Vaccines to all pre-adjudicatory youth over whom the State exercises physical care, custody, or control

The juvenile justice system **should be required** to provide Vaccines to all pre-adjudicatory youth over whom the State exercises physical care, custody, or control.

The primary purpose of the juvenile justice system is to rehabilitate youth.

The primary purpose of the juvenile justice system is to deter youth from committing crime.

The Vaccines my state requires for school-age adolescents are safe.

The political climate of the jurisdiction in which I preside is:

My personal political views would best be described as

⁵²A “procedurally sufficient motion” is a document, prepared in the proper legal format, which has been filed, and served in compliance with all requirements such that it cannot be dismissed for lack of procedural sufficiency.

APPENDIX C: NATIONAL CENTER FOR JUVENILE JUSTICE EMAIL

From: "Hunter Hurst" <hhurst@ncjfcj.org>
To: asd12@psu.edu
Sent: Monday, August 13, 2012 9:27:18 AM
Subject: Re: Email from website:

Hi Anne,

Thank you for contacting us through our website.

We get this question from time to time. There is no organization I am aware of that compiles a decent estimate in this regard or maintains a current listing. The primary issues complicating compiling such a list have to do with defining "judge". In some states, particularly in rural places magistrates or commissioners here juvenile matters, but may be very muck akin to an appointed or district judge in the scope of their authority in another state.

The closest ongoing data collection trying to identify key juvenile justice stakeholders, including judges in each county in the country is National Director of Children, Youth & Families Services

In the past, I believe they were able to query the system by type of stakeholder and might sell electronic extracts "mailing lists" based on those types.

Please let me know if I can be of any further assistance,

Hunter

On 8/12/2012 9:32 AM, askncjj@ncjfcj.org wrote:

First Name:: Anne
Last Name:: Douds
Position: University/College Instructor
Email:: asd12@psu.edu
Phone:: [678-327-8981](tel:678-327-8981)
State:: PA

Your Question: I need to know an estimate of how many juvenile court judges there are in the United States. Could you point me to some resources? I am trying to estimate a sample size for a survey. Thanks so much!

--

Hunter Hurst IV
Research Associate · [\(412\) 246-0842](tel:412-246-0842)
National Center for Juvenile Justice
(research division of the NCJFCJ)
3700 South Water Street, Suite 200 · Pittsburgh, PA · 15203
www.ncjj.org · www.NCJFCJ.org

APPENDIX D: TEXT FROM SURVEY RESPONSE BOX

Text Response
<p>All of my answers are "very unlikely" because of the pre-adjudication stage of the case at a hearing to decide whether the juvenile should be detained or released. It is not the time nor the place to decide the issue. It might turn into the place at a later stage in the proceedings. I strongly agree with compulsory vaccination laws and am generally unsympathetic with parents who "do not believe" the science behind vaccinations. As long as people choose to live in communities where they come into contact with other people, there should be a limit on their ability to breed contagions.</p>
<p>Detention hearings are not the appropriate time to consider non-detention issues.</p>
<p>For me this is a school issue, not a public health issue. I believe I should always get involved if there are issues which keep a child out of school, and I have ordered that a child obtain vaccinations when not in school. If the school is not enforcing their rules, I do not believe I should be issuing mandates solely for the sake of public health.</p>
<p>Generally I expect attorneys to be the guardian of the best interests of their clients. This relates to that interest.</p>
<p>Generally this is not an issue or event relevant to the matters at hand in most juvenile cases.</p>
<p>I am loathe to order immunizations, but I do order the parents to meet with a pediatrician who can explain the dangers, and allow them to provide me with a doctor of their choosing for the other side,.</p>
<p>I assumed that the vaccination was at issue for school attendance or detention. I would not generally consider the issue of vaccination in a misdemeanor juvenile detention case. It has arisen in Welfare cases and I have mandated vaccinations of children who were not vaccinated that had been taken by the State and placed in foster care to comply with state law.</p>
<p>In 26 years I never had this issue raised, nor expect it to happen.</p>
<p>In NYS the Family Court is one of limited jurisdiction. A youth appearing before this court in a juvenile delinquency matter is governed by laws different from child protective cases. While NYS has compulsory vaccination laws they pertain to public school eligibility only. Youth may be in private school, youth and family may have religious objections to vaccinations, they may have constitutional objections, they may have different positions from one another. If this issue were related to the JD proceeding somehow, I would order an investigation by the local child protective agency. This has</p>

never come up before me in my 20 plus years on the bench in FC.

I will forward comments via email. Thank your for allowing me to review.

I would have chosen others but was unable to do so. I would take information from parents and legal guardians as well.

My answers would differ in a dependency case. However, in a delinquency case, I would not act sua sponte I don't think, unless some mandate is issued by the State Supreme Court.

My responses reflect that the child is not before the Court on an issue which would provide the Court with the platform to order the child to submit to vaccination.

Our records do not require proof of vaccinations unless the facility nurse believes there is a possible problem for other kids in the detention facility.

See note above re problems with your previous question.

The last question asked that I check all that apply. The instrument allowed only one selection. I would have selected others.

The last question wouldn't let me check more than one response. Who I would designate would depend on the circumstances, and would be the parent, attorney or foster parent.

Vaccination is not a pre-adjudication issue in a delinquency case (unless as a public health concern if the minor is to be detained in custody with other people in close proximity.) It might become an issue at a dispositional or sentencing hearing, or in a neglect petition against the parent/guardian, but still the parent or guardian has the right to due process before any order would be issued for vaccination, and such an order would likely direct the parent/guardian to get the minor vaccinated. With an advocate's motion, the issue might come up sooner but there still would have to be a hearing if the parents did not consent to the vaccination.

REFERENCES

- Abramowicz, M., & Tiller, E. H. (2005). *Judicial citation to legislative history: Contextual theory and empirical analysis*. Chicago: Northwestern University School of Law.
- Agency for Healthcare Research and Quality. (2013). *2010 National healthcare disparities reports*. (Publication #11-0005). Rockville, MD: Agency for Healthcare Research and Quality. Retrieved March 10, 2013, from <http://www.ahrq.gov/research/findings/nhqrdr/nhdr10/index.html>.
- Agresti, A., & Finlay, B. (1997). *Statistical methods for the social sciences*. Upper Saddle River, NJ: Prentice Hall.
- Alitucker, K. W., Bullis, M., Close, D., & Yovanoff, P. (2006). Different pathways to juvenile delinquency: Characteristics of early and late starters in a sample of previously incarcerated youth. *Journal of Child and Family Studies*, *15*, 479-492.
- Alpert, G. P., & McDonald, J. M. (2001). Police use of force: An analysis of organizational characteristics. *Justice Quarterly*, *18*(2), 393-409.
- American Academy of Pediatrics Committee on Adolescence (2001). Health care for children and adolescents in the juvenile correctional care system. *Pediatrics* *107*(4), 799-803.
- American Bar Association Child Custody and Adoption Pro Bono Project and ABA Center on Children and the Law. (2007). *A judges' guide: Making child-centered decisions in custody cases*. Retrieved December 12, 2012, from http://apps.americanbar.org/legalservices/probono/childcustody/judges_guide.pdf.
- American Bar Association. (2011). *ABA standards for criminal justice: Treatment of prisoners* (3rd ed.). Washington, DC: American Bar Association.
- Annus, T., & Tavits, M. (2004). Judicial behavior after a change of regime: The effects of judge and defendant characteristics. *Law & Society Review*, *38*(4), 711-736.
- Appel, P. (2011). Wilderness, the courts, and the effect of politics on judicial decision-making. *Harvard Environmental Law Review*, *35*, 275.

Applegate, B. K., Cullen, F. T., & Fisher, B. S. (1997). Public support for correctional treatment: The continuing appeal of the rehabilitative model. *The Prison Journal*, 77(3), 237-258.

Baltimore City Dept. of Social Services v. Bouknight, 493 U.S. 549 (1990).

Baskin, S. J. (1974). State intrusion into family affairs: Justifications and limitations. *Stanford Law Review*, 26(6), 1383-1409.

Baum, L. (1998). *The puzzle of judicial behavior*. Ann Arbor: University of Michigan Press.

Baum, L. (2002). *American courts: Process and policy* (5th ed.). Independence, KY: Cengage Learning.

Baum, L. (2007, March). *Motivation and judicial behavior: Expanding the scope of inquiry*. Presented at the workshop, Exploring the Judicial Mind, University of Virginia, Charlottesville, VA.

Belenko, S., Jalbert, L., & Volkow, N. D. (2009, March). Implementing effective substance abuse treatment in the criminal justice system. Congressional briefing March 27, 2009. Accessed March 25, 2013, at <http://search.apa.org/search?facet=allcontributors%3aBelenko%2c%20Steven&query=belenko>.

Bennett, R. (1976). Allocation of child medical care decision-making authority: A suggested interest analysis. *Virginia Law Review*, 62(2), 285-330.

Berman, H. J. (1974). *The interaction of law and religion*. Nashville, TN: Abingdon Press.

Black, H. C. (1990). *Black's Law Dictionary* (6th ed.). Eagan, MN: West Publishers, 848.

Boyd, C. L., & Sievert, J. (in press). Unaccountable justice? The decision making of magistrate judges in the federal district courts. *Justice System Journal*.

Brown, R. (1993). Health needs of incarcerated youth. *Bulletin of the New York Academy of Medicine*, 70(3), 206.

Buchman, J. (2007). The effects of ideology on federal trial judges' decisions to admit scientific expert testimony. *American Politics Research*, 35(5), 671-693.

Builes, B., Weinbaum, C., Schefer, A., Jacques-Carroll, L., Chiancone, J., Gallagher, C., Washington, M., & Fishbein, D. (2006). Enrollment in and use of the Vaccines for Children Program among juvenile residential facilities. Retrieved March 4, 2013, from <http://cdc.confex.com/cdc/nic2006/recordingredirect.cgi/id/1916>.

Bushway, S., & Piehl, A. M. (2001). Judging judicial discretion: Legal factors and racial discrimination in sentencing. *Law and Society Review*, 35(4), 733-764.

Bussiere, A., & Burrell, S. (2006). *Improving access to Medi-Cal for youth in the juvenile justice system*. San Francisco: Youth Law Center.

Bybee, K. J. (2013). All judges are political—except when they are not: A response. *Law and Social Inquiry*, 38(1), 215-221.

Carter, S. L. (1989). The religiously devout judge. *Notre Dame Law Review*, 64, 932.

Center for Effective Public Policy. (2010). *A framework for evidence-based decision making in local criminal justice systems* (3rd ed.). Silver Spring, MD: Center for Effective Public Policy.

Centers for Disease Control and Prevention. (2010). *Archived teen vaccination coverage: 2010 national immunization survey—teen*. Retrieved January 12, 2012, from <http://www.cdc.gov/vaccines/who/teens/vac-coverage/vac-coverage-2010.html>.

Centers for Disease Control and Prevention. (2012). *Vaccines for children program*. Retrieved January 12, 2012, from <http://www.cdc.gov/vaccines/programs/vfc/index.html>.

Charuvastra, A., Stein, J., Schwartzapfel, B., Spaulding, A., Horowitz, E., Macalino, G., & Rich, J.D. (2001). Hepatitis B vaccination practices in state and federal prisons. *Public Health Reports*, 116, 203-209.

Child Welfare Information Gateway, U.S. Department of Health and Human Services. (2010, March). Determining the best interests of the child: Summary of state laws. Retrieved February 12, 2011, from www.childwelfare.gov/systemwide/laws_policies/statutes/best_interest.cfm.

Clements, C. J., Greenough, P., & Shull, D. (2006). How vaccine safety can become political: The example of polio in Nigeria. *Current Drug Safety*, 1, 117-119.

Coletti, S. (2004). Taking account of partial exemptors in vaccination law, policy, and practice. *Connecticut Law Review*, 36, 1342-1391.

Colgrove, J. (2006). The ethics and politics of compulsory HPV vaccination. *New England Journal of Medicine* 355, 2389-2391.

Collins, T., & Moyer, L. (2008). Gender, race, and intersectionality on the federal appellate bench. *Political Research Quarterly*, 61(2), 219-227.

Coontz, P. (2000). Gender and judicial decisions: Do female judges decide cases differently than male judges? *Gender Issues*, 18(4), 59-73.

County of Riverside v. McLaughlin, 500 U.S. 44 (1991).

Couper, M. P., Traugott, M. W., & Lamias, M. J. (2001). Web survey design and administration. *Public Opinion Quarterly*, 65(2), 230-253.

Craig, P. (1998). Ultra vires and the foundations of judicial review. *The Cambridge Law Journal*. 57(1), 63-90.

Crosby, R., Salazar, L. F., DiClemente, R. J., Yarber, W. L., Caliendo, A. M., & Staples-Horne, M. (2004). Health risk factors among detained adolescent females. *American Journal of Preventive Medicine* 27, 404-410.

Cross, F. B. (1997). Political science and the new legal realism: A case of unfortunate interdisciplinary ignorance. *Northwestern University Law Review*, 92, 251- 255.

Cude v. State, 237 Ark. 927 (1964).

Cullen, F. T., & Gendreau, P. (1989). The effectiveness of correctional treatment: Reconsidering the “nothing works” debate. In L. Goodstein & D. L. MacKenzie (Eds.), *The American prison: Issues in research and policy*. New York: Plenum Press.

Cullen, F. T., & Gendreau, P. (2000). Assessing correctional rehabilitation: Policy, practices, and prospects. In *Policies, Processes and Decisions of the Criminal Justice System* (vol. 3). Washington, DC: U. S. Department of Justice.

Delgado, M., & Humm-Delgado, D. (2009). Health and health care in the nation’s prisons. Plymouth, U.K.: Rowman & Littlefield.

Diamantopoulus, A., Reynolds, N., & Schlegelmilch, B. (1994). Pretesting in questionnaire design: The impact of respondent characteristics on error detection. *Journal of the Market Research Society* 36(4), 295-313.

Diekema, D. S. (2005). Responding to parental refusals of immunization of children. *Pediatrics* 115, 1428-1431.

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, mail, and mixed mode surveys: The tailored design method*. Hoboken: Wiley & Sons.

Doek, J. E. (2003). Protection of children's rights and the United Nations Convention on the Rights of the Child: Achievements and challenges. *St. Louis University Public Law Review* 22, 235.

Domino, G., & Domino, M. L. (2006). *Psychological testing: An introduction*. New York: Cambridge University Press.

Douds A. (2013). Equal protection under vaccine laws? Under review at *Journal of Correctional Health Care*.

Douds, A., Stevens, H., Gallagher, C., & Mehlman-Orozco, K. (2007). Immunization obstacles at the local level: How juvenile justice facilities and county public health perceive the problem. Retrieved March 4, 2013, from <http://cdc.confex.com/cdc/nic2007/recordingredirect.cgi/id/2076>.

Douds, A., Stevens, H., Melman-Orozco, K., Willis B., Stokley, S., Gallagher, C. (2008). Validation of vaccine decision-making algorithm. Unpublished manuscript.

Douds, A., & Willis, B. C. (2010). Ne'er the twain shall vaccinate: Survey data reveal the disconnect among community health organizations and juvenile residential facilities. Unpublished manuscript.

Drobak, J. N., & North, D. C. (2008). Understanding judicial decision-making: The importance of constraints on non-rational deliberations. *Journal of Law and Policy*, 26, 131.

Duffee, D. E., & Carlson, B. E. (1996). Competing value premises for the provision of drug treatment to probationers. *Crime & Delinquency*, 42(4), 574-592.

Duffee, D. E., & Maguire, E. R. (Eds.). (2007). *Criminal justice theory: Explaining the nature and behavior of criminal justice*. New York: Routledge.

Emmert, C. F. (1992). An integrated case-related model of judicial decision making: Explaining state supreme court. *The Journal of Politics*, 54(2), 543-552.

Employment Division v. Smith, 494 U.S. 872 (1990).

English, A., Shaw, F. E., McCauley, M. M., & Fishbein, D. B. (2008). Legal basis of consent for health care and vaccination for adolescents. *Pediatrics*, 121, S85-S87.

Epstein, L. (2011). A realistic theory of judicial behavior. In L. Epstein, W. M. Landes, & R. A. Posner (Eds.), *The behavior of federal judges: A theoretical and empirical study of rational choice*. Cambridge: Harvard University Press.

Epstein, L., & Knight, J. (1998). *The choices justices make*. Washington, DC: CQ Press.

Epstein, L., Martin, A. D., Segal, J. C., & Westerland, C. (2007). The judicial common space. *Journal of Law, Economics, and Organization*, 23, 303-325.

Federal Judicial Center. (2007). Federal judges biographical database. Retrieved March 4, 2013, from <http://www.fjc.gov/public/home.nsf/hisj>.

Federal Rule of Criminal Procedure (F. R. Crim. P.), 17.

Federal Rules of Appellate Procedure (F. R. App. P).

Federal Rules of Civil Procedure (F. R. C. P.), 26 and 39.

Federal Rules of Evidence (F. R. Evidence), 2011.

Feeley, M. M., & Rubin, E. L. (1998). *Judicial policymaking and the modern state*. New York: Cambridge University Press.

Feigenson, N., & Park, J. (2006). Emotions and attributions of legal responsibility and blame: A research review. *Law and Human Behaviour*, 30(2), 143-161.

Feikin, D. R., Lezotte, D. C., Hamman, R. F., Salmon, D. A., Chen, R. T., & Hoffman, R. E. (2000). Individual and community risks of measles and pertussis associated with personal exemptions to immunizations. *Journal of the American Medical Association* 284(24), 3145-3150.

Feinstein, R. A., Lampkin, A., Lorish, C. D., Klerman, L. V., Maisiak, R., & Oh, M. K. (1998). Medical status of adolescents at time of admission to a juvenile detention center. *Journal of Adolescent Health*, 22, 190-196.

Feld, B. C. (1990). The transformation of the juvenile court. *Minnesota Law Review*, 75, 691.

Feld, B. C. (1991). Justice by geography: Urban, suburban, and rural variations in juvenile justice administration. *Journal of Criminal Law and Criminology*, 82, 156.

Feldman, G. M., Sorvillo, F., Cole, B., Lawrence, W. A., & Mares, R. (2004). Seroprevalence of Hepatitis C among a juvenile detention population. *Journal of Adolescent Health* 35, 505-508.

Fischman J. B., & Law, D. S. (2009). What is judicial ideology, and how should we measure it? *Journal of Law and Policy*, 29(123), 133-211.

- Fitzgibbon, J. (2004). Health care for adolescents in juvenile facilities: Increasing needs for adolescent females. *Journal of Pediatric and Adolescent Gynecology*, 17(1), 3.
- Fleischer, M. (2008). Judicial decision making under the microscope: Moving beyond politics versus precedent. *Rutgers Law Review*, 60(4), 919-969.
- Ford, C. A., English, A., Davenport, A. F., & Stinnett, A. J. (2009). Increasing adolescent vaccination: Barriers and strategies in the context of policy, legal, and financial issues. *Journal of Adolescent Health* 44, 568-574.
- Forrest, C. B., Tambor, E., Riley, A. W., Ensminger, M. E., & Starfield, B. (2000). The health profile of incarcerated male youths. *Pediatrics*, 105, 286-291.
- Freed, G. L., Bordley, W. C., Clark, S. J., & Konrad, T. R. (1993). Reactions of pediatricians to a new Centers for Disease Control recommendation for universal immunization of infants with hepatitis B vaccine. *Pediatrics*, 91(4), 699-702.
- Freudenberg, N., Daniels, J., Crum, M., Perkins, T., & Richie, B. (2005). Coming home from jail: The social and health consequences of community reentry for women, male adolescents, and their families and communities. *Public Health Matters*, 95(10), 1725-1736.
- Friedman, B. (2006). Taking law seriously. *Perspectives on Politics*, 4, 261- 262.
- Frombonne, E. (2006). Autism and immunization. In *Encyclopedia on early childhood development*. Montreal: Centre of Excellence for Early Childhood Development. Retrieved December 12, 2012, from <http://www.child-encyclopedia.com/Pages/PDF/FombonneANGxp.pdf>.
- Gendreau, P., Goggin, C., & Smith, P. (1999). The forgotten issue in effective correctional treatment: Program evaluation. *International Journal of Offender Therapy and Comparative Criminology* 43, 180-187.
- Gerstein v. Pugh, 420 U.S. 103, 1975.
- Ghosh, T. S., Patnaik, J. L., Bennett, A., Trefren, L., & Vogt, R. L. (2007). Assessment of missing immunizations and immunization-related barriers among WIC populations at the local level. *Public Health Reports* 122, 602-606.
- Gibson, J. L. (1978). Judges' role orientations, attitudes, and decisions: An interactive model. *The American Political Science Review*, 72(3), 911-924.

- Gibson, J. L. (1980). Environmental constraints on the behavior of judges: A representational model of judicial decision making. *Law and Society Review*, 14(2), 343-370.
- Gibson, J. L. (1983). Judges' role orientations, attitudes, and decisions: An interactive model. *The American Political Science Review*, 72(3), 911-924.
- Giles, M. W., Hettinger, V. A., & Peppers, T. (2001). Picking federal judges: A note on policy and partisan selection agendas. *Political Research Quarterly* 54(3), 623-641.
- Gilligan, C., & Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Cambridge, MA: Harvard University Press.
- Goldstein, J. (1977). Medical care for the child at risk: On state supervision of parental autonomy. *The Yale Law Journal*, 86(4), 645-670.
- Golzari, M., Hunt, S. J., & Anoshiravani, A. (2006). The health status of youth in juvenile detention facilities. *Journal of Adolescent Health*, 38(6), 776-782.
- Golzari, M., Hunt, S. J., & Chamberlain, L. J. (2008). Role of pediatricians as advocates for incarcerated youth. *Pediatrics*, 121(2), e397-e398.
- Gordon, T. E., Zook, E. G., Averhoff, F. M., & Williams, W. W. (1997). Consent for adolescent vaccination: Issues and current practices. *The Journal of School Health*, 67(7), 259-264.
- Gostin, L. O. (2001). Public health, ethics, and human rights: A tribute to the late Jonathan Mann. *Journal of Law, Medicine & Ethics* 29(2), 121-130.
- Gottfredson, D. M., & Gottfredson, S. D. (1988). Stakes and risks in the prediction of violent criminal behavior. *Violence and Victims*, 3(4), 247-262.
- Greenawalt, K. (1975). Discretion and judicial decision: The elusive quest for the fetters that bind judges. *Columbia Law Review*, 75(2), 359-399.
- Greenawalt, K. (1988). *Religious convictions and political choice*. New York: Oxford University Press.
- Greifinger, R. B. (Ed.). (2007). *Public health behind bars*. New York: Springer Publishing.
- Gruhl, J., Spohn, C., & Welch, S. (1981). Women as policy makers: The case of trial judges. *American Journal of Political Science*, 25(2), 308-322.

- Gryski, G., Main, E., & Dixon, W. (1986). Models of state high court decision-making in sex discrimination cases. *Journal of Politics*, 48, 143-155.
- Guthrie, B. J., Hoey, E., Ravoira, L., & Kintner, E. (2002). Girls in the juvenile justice system: Leave no girl's health un-addressed. *Journal of Pediatric Nursing*, 17(6).
- Hammett, T. M., Roberts, C., & Kennedy, S. (2001). Health-related issues in prisoner reentry. *Crime and Delinquency*, 47(3), 390-409.
- Hanssen, F. A. (2004). Is there a politically optimal level of judicial independence? *The American Economic Review*, 94(3), 712-729.
- Harris, K. M. (2009). *The national longitudinal study of adolescent health: Waves I and II, 1994–1996; Wave III, 2001–2002; Wave IV, 2007–2009*. Chapel Hill, NC: Carolina Population Center, University of North Carolina at Chapel Hill.
- Healthy People, 2010. Washington, DC: U. S. Department of Health and Human Services. Retrieved March 4, 2013, from <http://www.healthypeople.gov/2020/default.aspx>.
- Helmke, G., & Sanders, M. S. (2006). Modeling motivations: A method for inferring judicial goals from behavior. *The Journal of Politics*, 68(4), 867-878.
- Henderson, C. E., Rich, J. D., & Lally, M. A. (2010). HPV practices among juvenile justice facilities in the United States. *Journal of Adolescent Health*, 46(5), 495-498.
- Hennessey, K. A., Kim, A. A., Griffin, V., Collins, N. T., Weinbaum, C. M., & Sabin, K. (2009). Prevalence of infection with hepatitis B and C viruses and co-infection with HIV in three jails: A case for viral hepatitis prevention in jails in the United States. *Journal of Urban Health* 86(1), 93-105.
- Hess, J. E. (2010). *Interviewing and interrogation for law enforcement*. (2nd ed.). New Providence, NJ: Matthew Bender & Co.
- Hodge, J. G., & Gostin, L. O. (2001). *School vaccination requirements: Historical, social, and legal perspectives*. Baltimore, MD: Center for Law and the Public's Health.
- Holder, A. R. (1985). *Legal issues in pediatrics and adolescent medicine*. New Haven: Yale University Press.
- Hopkins, W. G. (2002). Probabilities of clinical or practical significance. *Sportscience*, 6, 201.
- Horn v. Commonwealth of Kentucky, 94-SC-421-DG, 1995.

Horwitz, M. J. (1975). The rise of legal formalism. *The American Journal of Legal History*, 19(4), 251-264.

Idleman, S. C. (1993). The role of religious values in judicial decision making. *Indiana Law Journal*, 68(2), 433-487.

Idleman, S. C. (2005). The concealment of religious values in judicial decisionmaking. *Virginia Law Review*, 515-534.

In re Jertrude O., 56 Md.App. 83, 466 A.2d 885 (1983).

Jacobi, T., & Sag, M. (2005). Taking the measure of ideology: Empirically measuring Supreme Court cases. *The Georgetown Law Review*, 98(1), 1-75.

Jacobson v. Commonwealth of Massachusetts, 197 U.S. 11 (1905).

Jaffe, L. L. (1963). Suits against governments and officers: Sovereign immunity. *Harvard Law Review*, 1-39.

Jain, N., & Hennessey, K. (2009). Hepatitis B vaccination coverage among U. S. adolescents: National immunization survey—teens. *Journal of Adolescent Health*, 44(6), 561-567.

Jain, N., Stokley, S., & Yankey, D. (2008). Vaccination coverage among adolescents aged 13-17 years—United States 2007. *Centers for Disease Control and Prevention—Morbidity and Mortality Weekly Report*, 57(40), 1100-1103.

Johnson, C. A., & Canon, B. C. (1999). *Judicial policies: Implementation and impact*. 2nd ed. Washington, DC: Congressional Quarterly Press.

Jones, W. G. (2006). Working with the courts in child protection. Washington, DC: U. S. Department of Health and Human Services Administration for Children and Families Child Welfare Information Gateway. Retrieved May 11, 2011, from <http://www.childwelfare.gov/pubs/usermanuals/courts/chapterfour.cfm>.

Joondeph, B. W. (2008). The many meanings of “politics” in judicial decision making. *University of Missouri-Kansas City Law Review* 77, 347-379.

Jordan, W. S. (2001). Judges, ideology, and policy in the administrative state: Lessons from a decade of hard look remands of EPA rules. *Administrative Law Review*, 55(45).

The Judicial View (2010). Vaccine act lawsuit claims reduced immune reactions lead to herpes: Doe v. Secretary of the Department of Health and Human Services, Case No.

- XX-XXXV (Fed. Cl., Jul. 26, 2010). Accessed March 25, 2013, http://judicialview.com/Court-Cases/Expert_Witness/Vaccine-Act-Lawsuit-Claims-Reduced-Immune-Reactions-Lead-to-Herpes/25/13292.
- Juvenile Court Trial Manual, 2012. Retrieved March 4, 2013 from http://www.alicel.org/index.cfm?fuseaction=publications.bookpage&book_code=BK50K.
- Kairys, D. (1984). Law and politics. *George Washington Law Review*, 52(243).
- Keefe, L. M. (1950). *U.S. Patent No. 2,529,083*. Washington, DC: U.S. Patent and Trademark Office.
- Kelley, K., Clark, B., Brown, V., & Sitiza, J. (2003). Good practice in the conduct and reporting of survey research. *International Journal of Quality Health Care*, 15(3), 261-266.
- Kentucky Department of Juvenile Justice. (2012). Retrieved March 4, 2013, from <http://djj.ky.gov/>.
- Kim, P. T., Schlanger, M., Boyd, C. L., & Martin, A. D. (2009). How should we study district judge decision-making? *Journal of Law & Policy* 29, 83-112.
- Kirk, R. E. (1982). *Experimental design* (2nd ed.). Belmont, CA: Brooks/Cole Publishing Company, 489-569.
- Kmiec, K. D. (2004). The origin and current meanings of "judicial activism." *California Law Review*, 92(5), 1441-1477.
- Kohl, K. S., Gidudu, J., Bonhoeffer, J., Braun, M. M., Buettcher, M., Chen, R. T., & Marcy, S. M. (2007). The development of standardized case definitions and guidelines for adverse events following immunization. *Vaccine*, 25(31), 5671.
- Kohm, L. M. (2008). Tracing the foundations of the best interest of the child standard in American jurisprudence. *Journal of Law and Family Studies*, 10(336), 337-376.
- Koppen, P. J., & Kate, J. T. (1984). Individual differences in judicial behavior: Personal characteristics and private law decision-making. *Law and Society Review*, 18(2), 225-248.
- Krosnick, J. A. (1999). Survey research. *Annual Review of Psychology*, 50(1), 537-567.

- Kusserow, R. P. (1991). *Services integration: A twenty-year retrospective*. Washington, DC: Office of Inspector General, United States Department of Health and Human Services.
- Lammon, B. D. (2009). What we talk about when we talk about ideology: Judicial politics scholarship and naive legal realism. *John's Law Review*, 83, 231.
- Law Essays, The doctrine of ultra vires. (2011). Accessed March 25, 2013, from <http://www.law-essays-uk.com/resources/sample-essays/corporate-law/doctrine-of-ultra-vires.php>.
- Lawton v Steele, 152 U.S. 133 (1894).
- Li, S. T., Nussbaum, K. M., & Richards, M. H. (2007). Risk and protective factors for urban African-American youth. *American Journal of Community Psychology* 39, 21-35.
- London, A. S., & Myers, N. A. (2006). Race, incarceration, and health: A life-course approach. *Research on Aging* 28, 409-422.
- Luman, E. T., McCauley, M. M., Shefer, A., & Chu, S. Y. (2003). Maternal characteristics associated with vaccination of youth children. *Pediatrics* 111, 1215-1218.
- Maguire, S. A. (2007). Precedent and procedural due process: Policymaking in the federal courts. *University of Detroit Mercy Law Review*, 84, 99-109.
- Maltzman, F., Spriggs II, J. F., & Wahlbeck, P. J. (2000). *Crafting law on the Supreme Court: The collegial game*. Cambridge: Cambridge University Press.
- Maricopa County Detention Task Force. (2008). *Juvenile justice services: JDTF links/documentation*. Retrieved February 12, 2011, from <http://www.azcourts.gov/jjsd/JuvenileDetentionTaskForce/JDTFDocumentation.aspx>.
- Marks, S. P. (1999). Common strategies for health and human rights: From theory to practice. *Health and Human Rights* 4, 397-403.
- Marquez-Lopez, D. D. (2006). Not so gray anymore: A mature minor's capacity to consent to medical treatment. *Health Law Perspectives*, 10/31/2006. Retrieved March 7, 2013, from [http://www.law.uh.edu/healthlaw/perspectives/2006/\(DM\)MatureMinor.pdf](http://www.law.uh.edu/healthlaw/perspectives/2006/(DM)MatureMinor.pdf).
- Mason, J. (2004). *Confidentiality in juvenile delinquency proceedings*. Chapel Hill, NC: University of Chapel Hill School of Government.
- Massie, E. C. (1905). Reform of our land laws. *Virginia Law Register*, 359-373.

Massie, T., Johnson, S. W., & Gubala, S. M. (2002, April). *The impact of gender and race in the decisions of judges on the United States Court of Appeals*. Presented at the Midwest Political Science Association Annual Meeting, Chicago, Illinois.

Mazzotti, V., & Higgins, K. (2006). Public schools and the juvenile justice system: Facilitating relationships. *Intervention in School and Clinic, 41*(5), 295-301.

McBarnet, D., & Whelan, C. (1991). The elusive spirit of the law: Formalism and the struggle for legal control. *The Modern Law Review, 54*(6), 848-873.

McCord, J. (1991). Family relationships, juvenile delinquency, and adult criminality. *Criminology, 29*(3), 397-417.

McNabb, D. E. (2009). *Research methods for political science: Quantitative and qualitative approaches*. Armonk, NY: M. E. Sharpe, Inc.

Melnick, G., Ulaszek, W. R., Lin, H. J., & Wexler, H. K. (2009). When goals diverge: Staff consensus and the organizational climate. *Drug and Alcohol Dependence, 103*, S17-S22.

Merriam-Webster Collegiate Dictionary. (2012). New York: Merriam-Webster.

Meyer v. Nebraska, 262 U.S. 390 (1923).

Moore, M. H., & Wakeling, S. (1997). Juvenile justice: Shoring up the foundations. *Crime and Justice, 22*, 253-301.

Morris, R. E., Anderson, M. M., & Knox, G. W. (2002). Incarcerated adolescents' experiences as perpetrators of sexual assault. *Archives of Pediatrics and Adolescent Medicine, 156*(8), 831.

Morris, R. E., Harrison, E. A., Knox, G. W., Tromanhauser, E., Marquis, D. K., & Watts, L. L. (1995). Health risk behavioral survey from 39 juvenile correctional facilities in the United States. *Journal of Adolescent Health 17*, 334-344.

Muhlhausen, D. B. (2004). *The determinants of sentencing in Pennsylvania: Do the characteristics of judges matter? A report of the Heritage Center for Data Analysis*. Washington, DC: Heritage Foundation.

Myer, J., & Jesilow, P. (1997). *"Doing justice" in the people's court: Sentencing by municipal court judges*. Albany, NY: State University of New York Press.

- Myers, D. M., & Farrell, A. F. (2008). Reclaiming lost opportunities: Applying public health models in juvenile justice. *Children and Youth Services Review, 30*, 1559-1170.
- Nagel, S. S. (1962). Testing relations between judicial characteristics and judicial decision-making. *The Western Political Quarterly, 15*(3), 425-437.
- National Council of Juvenile and Family Court Judges (NCJFCJ). (2007). Mission, vision, and diversity statement. Retrieved March 10, 2013, from <http://www.ncjfcj.org/about/mission-vision-and-diversity-statement>.
- Newby, K. (2009). HPV vaccine: Pros and Cons. *The Ohio State University Extension Fact Sheet: Family and Consumer Sciences*. Columbus, OH: The Ohio State University.
- Nixon, D. C. (2004). Political ideology measurement project. Retrieved March 10, 2013, from University of Hawaii, David C. Nelson website: <http://www2.hawaii.edu/~dnixon/PIMP/index.htm>.
- Office of Juvenile Justice and Delinquency Prevention, & Office of the United States Surgeon General. (2007, March). *Federal initiative on juvenile justice health*. Proceedings of meeting at George Mason University.
- Official Code of Georgia Annotated (O. C. G. A.). (2010). 15-11-46.1 and 15-11-49.
- Ogberg, C. N., & Rinaldi, M. (2006). Pediatric health disparities. *Current Problems in Pediatric and Adolescent Health Care 36*, 251-268.
- Parikh, R. K. (2008). Fighting for the reputation of vaccines: Lessons from American politics. *Pediatrics, 121*, 621-623.
- Peresie, J. L. (2005). Female judges matter: Gender and collegial decision making in the federal appellate courts. *The Yale Law Journal, 114*(7), 1759-1790.
- Perino, M. A. (2006). Law, ideology and strategy in judicial decision-making: Evidence from securities fraud actions. *Journal of Empirical Legal Studies, 3*(3), 497-524.
- Peterson, S. A. (1985). Neuropsychology: Cognition and political thinking. *Political Psychology, 6*(3), 495-518.
- Pinello, D. R. (1999). Linking party to judicial ideology in American courts: A meta-analysis. *Justice Systems Journal, 20*:219.
- Pisu, M., Meltzer, M. I., & Lyerla, R. (2002). Cost-effectiveness of hepatitis B vaccination of prison inmates. *Vaccine, 21*(3-4), 312-321.

- Poe-Yamagata, E., & Jones, M. (2000). *And justice for some*. New York: National Council on Crime and Delinquency.
- Poncz, E. (2007). Rethinking child advocacy after Roper v. Simmons: Kids are just different and kids are like adults advocacy strategies. *Cardozo Public Law, Policy, and Ethics Journal*, 6, 273.
- Poole, K. (2009). Estimating a basic space from a set of issue scales. *American Journal of Political Science* 42, 954-993. Retrieved March 4, 2013, from <http://voteview.com/basic.htm>.
- Posner, R. (1995). *Overcoming law*. Boston, MA: Harvard University Press.
- Posner, R. (2008). *How judges think*. Boston, MA: Harvard University Press.
- Prince v. Massachusetts, 321 U.S. 158 (1944).
- Pritchett, H. C. (1948). *The Roosevelt court: A study in judicial politics and values*. New York: Macmillan.
- Privacy Rule, Public Welfare, Department of Health and Human Services, 45 C.F.R. § 160.102(a) (3) and § 164.500(a) (2009).
- Puzzancherra, C. (2009). Juvenile arrests 2008. *Juvenile Justice Bulletin* (December). Retrieved December 12, 2012, from <https://www.ncjrs.gov/pdffiles1/ojdp/228479.pdf>.
- Puzzancherra, C., & Sickmund, M. (2008). *Juvenile court statistics*. Pittsburgh: National Center for Juvenile Justice.
- Rachlinski, J. J., Johnson, S. L., Wistrich, A. J., & Guthrie, C. (2009). Does unconscious racial bias affect trial judges? *Notre Dame Law Review*, 84(3), 1195-1246.
- Read, N., & O’Cummings, M. (2010). Fact sheet: Juvenile justice facilities. Washington DC: National Evaluation and Technical Assistance Center for the Education of Children and Youth Who Are Neglected, Delinquent, or At Risk (NDTAC). Accessed March 25, 2013, at http://www.neglected-delinquent.org/nd/docs/factSheet_facilities.pdf.
- Renzi, N. (2004). *Caring for America’s forgotten children: Formulating policies and programs to improve HIV and STD prevention education in juvenile justice facilities*. Washington DC: Association of State and Territorial Health Officials.
- Rosenbaum, S. (1992). Rationing without justice: Children and the American health system. *University of Pennsylvania Law Review*, 140(5), 1859-1880.

Rule 12, Federal Rules of Criminal Procedure.

Rule 17(g), Federal Rules of Criminal Procedure.

Salmon, D. A., Haber, M., Gangarosa, E. J., Phillips, L., Smith, N., & Chen, R.T. (1999). Health consequences of religious and philosophical exemptions from immunization laws: Individual and societal risks of measles. *Journal of the American Medical Association*, 282(1), 47-53.

Salmon, D. A., Smith, P. J., Navar, A. M., Pan, W., Omer, K. Y., & Saad B. (2003). Measuring immunization coverage among preschool children: Past, present, and future opportunities. *Epidemiologic Reviews*, 28, 27-40.

Salmon, D. A., Teret, S., MacIntyre, C., Salisbury, D., Burgess, M., & Halsey, N. (2006). Compulsory vaccination and conscientious or philosophical exemptions: Past, present, and future. *The Lancet*, 367, 436-442.

Sampson, R. J., & Lauritsen, J. L. (1997). Racial and ethnic disparities in crime and criminal justice in the United States. *Ethnicity, Crime and Immigration* 21, 311-374.

Sanborn, J. B., & Salerno, A. W. (2004). *The juvenile justice system: Law and process*. Cary, NC: Roxbury Publishing.

Santoli, J. M., Huet, N. J., Smith, P. J., Barker, L. E., Rodewald, L. E., Inkelas, M., Olson, L. M., & Halfon, N. (2004). Insurance status and vaccination coverage among U.S. preschool children. *Pediatrics* 113, 1959-1964.

Scalia, A. (1997). *A matter of interpretation: Federal courts and the law*. Princeton, NJ: Princeton University Press.

Scalia, A., & Manning, J. F. (2012). A dialogue on statutory and constitutional interpretation. *George Washington Law Review*, 80, 1610-1889.

Scheb, J. M., II, Unga, T. D., & Hayes, A. L. (1989). Judicial role orientations, attitudes and decision making: A research note. *The Western Political Quarterly*, 42(3), 427-435.

Schneider, W., Smith, S., Walters, D., & Cooper J. L. (2010). Promoting young children's health and development: Taking stock of state policies. Brief for National Center for Children in Poverty. Retrieved March 10, 2013, from http://nccp.org/publications/pub_941.html.

Schubert, G. (1974). *The judicial mind revisited*. New York: Oxford University Press.

- Schutt, R. K., & Dannefer, D. (1988). Detention decisions in juvenile cases: JINS, JDs, and gender. *Law and Society Review*, 22:3, 509-520.
- Segal, J., & Spaeth, H. (2002). *The Supreme Court and the attitudinal model revisited*. New York: Cambridge University Press.
- Sickmund, M. (2009). Delinquency cases in juvenile court, 2005. *Drugs*, 17, 20.
- Sisk, G. C., & Heise, M. (2005). Judges and ideology: Public and academic debates about statistical measures. *Northwestern University Law Review*, 99(2), 743-804.
- Smith, P. H., Lindley, M. C., Shefer, A., & Rodewald, L. E. (2009). Underinsurance and adolescent immunization delivery in the United States. *Pediatrics* 124, S515-S521.
- Sneller, V. P., Fishbein, D. B., Weinbaum, C. M., Lombard, A., Murray, P., & McLaurin, J. A. (2008). Vaccinating adolescents in high-risk settings: Lessons learned from experiences with hepatitis B vaccine. *Pediatrics*, 121, S55-S62.
- Snyder, H., & Sickmund, M. (1999). *Juvenile offenders and victims: 1999 national report*. Washington, DC: Office of Juvenile Justice and Delinquent Prevention.
- Snyder, H., & Sickmund, M. (2006). *Juvenile offenders and victims: 2006 national report*. Washington, DC: Office of Juvenile Justice and Delinquent Prevention.
- Soler, M. (2002). Health issues for adolescents in the justice system. *Journal of Adolescent Health*, 31, 321-333.
- Songer, D. R., & Crews-Meyer, K. (2000). Does judge gender matter? Decision making in state supreme courts. *Social Science Quarterly*, 81, 750-62.
- Songer, D. R., Davis, S., & Haire, S. (1994). A reappraisal of diversification in the federal courts: Gender effects in the courts of appeals. *Journal of Politics* 56, 425-439.
- Spohn, C. (1990). Decision making in sexual assault cases: Do black and female judges make a difference? *Women and Criminal Justice*, 2(1), 83-105.
- Stahl, A. L., Puzzanchera, C., Livsey, S., Finnegan, T. A., Tierney, N., & Snyder, H. N. (2007). *Juvenile Court Statistics 2003-2004*. Washington DC: U. S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.
- Steffensmeier, D., & Britt, C. L. (2001). Judges' race and judicial decision making: Do black judges sentence differently? *Social Science Quarterly*, 82(4), 759-764.

Sunstein, C. R. (2011). Empirically informed regulation. *University of Chicago Law Review*, 78, 1349.

Sutliff, U. (2004). Nutrition key to aggressive behaviour. *University of Southern California News*, November 16, 2004. Retrieved March 10, 2013, from <http://www.usc.edu/uscnnews/stories/10773.html>.

Swendiman, K. S., & Welborn, A. (2011). *Mandatory vaccinations: Precedent and current laws*. Washington, DC: Library of Congress, Congressional Research Service.

Taxman, F. S., & Bouffard, J. A. (2003). Drug treatment in the community: A case study of system integration issues. *Federal Probation*, 67:2.

Taxman, F. S., Perdoni, M. L., & Harrison, L. D. (2007). Drug treatment services for adult offenders: The state of the state. *Journal of Substance Abuse Treatment*, 32(3), 239-254.

Tedeschi, S. K., Bonney, L. E., Manalo, R., Mayer, K. H., Shepardson, S., Rich, J. D., & Lally, M. A. (2007). Vaccination in juvenile correctional facilities: State practices, hepatitis B and the impact on anticipated sexually transmitted infection vaccines. *Public Health Reports*, 122, 44-48.

Treier, S., & Hillygus, S. (2009). The nature of political ideology in the contemporary electorate. *Public Opinion Quarterly*, 73(4), 679-703.

Triplett, R. A., Gainey, R. R., & Sun, I. Y. (2003). Institutional strength, social control and neighborhood crime rates. *Theoretical Criminology*, 7(4), 439-467.

Troxel v. Granville, 530 U.S. 57 (2000).

Uhlman, T. M. (1978). Black elite decision making. *American Journal of Political Science*, 22, 884-889.

Ungs, T. D., & Baas, L. R. (1972). Judicial role perceptions: A Q-technique study of Ohio judges. *Law and Society Review*, 6(3), 343-366.

Uses and Disclosures for Treatment, Payment, and Health Care Operations, Public Welfare, Department of Health and Human Services, 45 C.F.R. § 164.506 (2009).

Volokh, A. (2007). Choosing interpretive methods: A positive theory of judges and everyone else. *New York University Law Review*, 83, 769.

- Wald, P. (1976). State intervention on behalf of “neglected” children: Standards for removal of children from their homes, monitoring the status of children in foster care, and termination of parental rights. *Stanford Law Review*, 28(4), 623-706.
- Wald, P. (1999). A response to Tiller and Cross. *Columbia Law Review*, 99, 235.
- Walker, T., & Barroe, D. (1985). The diversification of the federal bench: Policy and process ramifications. *Journal of Politics*. 47, 598-617.
- Welborn, A. A. (2005). *Mandatory vaccinations: Precedent and current law*. Washington, DC: Library of Congress Congressional Research Service. Retrieved December 12, 2012, from <http://oai.dtic.mil/oai/oai?verb=getRecord&metadataPrefix=html&identifier=ADA469034>.
- Welch, S., Combs, M., & Gruhl, J. (1988). Do black judges make a difference? *American Journal of Political Science*. 32(1), 126-136.
- Widom, R., & Hammett, T.M. (1996). *HIV/AIDS and STD in juvenile facilities*. Washington, DC: National Institute of Justice, U. S. Department of Justice.
- Wiener, R. L., & Bornstein, B. H. (2006). Emotion in legal judgment and decisionmaking. *Law and Human Behaviour*, 30(2), 231-248.
- Williams, J. H. (2006). Addressing incarcerated adolescents’ psychological and physical health service needs. *Journal of Adolescent Health*, 38, 638-640.
- Willis, B. C., Builes, B. E., Coleman-King, S. M., Weinbaum, C. M., & Fishbein, D. B. (2006). Why immunize adolescents in juvenile residential facilities? *Corrections Today*, 54.
- Wisconsin v. Yoder, 406 U.S. 205 (1972).
- Woolredge, J. D. (1998). Analytical rigor in studies of disparities in criminal case processing. *Journal of Quantitative Criminology*, 14(5), 155-179.
- Wrightsmann, L. S. (2006). *The psychology of the Supreme Court*. New York: Oxford University Press.
- Yale Law Journal. (1973). Parens patriae and statutory vagueness in the juvenile court. *The Yale Law Journal*, 82(4), 745-771.
- Yarbrough, T. E. (1982). The judge as manager: The case of Judge Frank Johnson. *Journal of Policy Analysis and Management*, 1(3), 386-400.

Youngberg v. Romeo, 457 U.S. 307 (1982).

Zimring, F. E. (2005). *American juvenile justice*. New York: Oxford University Press.

Zucht v. King, 260 U.S. 174 (1922).

CURRICULUM VITAE

Anne S. Douds grew up in Georgia. She attended Duke University, where she received her Bachelor of Arts in Political Science in 1990. She went on to receive her Juris Doctor Degree with Honors from Emory University School of Law in 1994. She then received her Doctorate in Justice, Law and Crime Policy from George Mason University in 2012. She teaches Criminal Justice at the Pennsylvania State University.