Judgment and Reasoning in Adolescent Decisionmaking

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FEW people believe that five year olds and fifteen year olds think, act or make decisions in the same way. The question is whether and how the law should respond to developmental differences.  

Traditionally, childhood and adulthood have been two dichotomous legal categories, demarcated by the age of majority. This conception has been contested in recent years, as has the premise that all minors are incompetent to make decisions and function as legal actors. Fueled by the controversy over adolescent access to abortion, an advocacy movement has emerged that challenges the authority of parents and the state over the lives of young people. For some advocates, the claims of adolescents to self-determination are a natural extension of the liberal ideology that forcefully emerged in the civil rights movement of the 1960s.

Although this "children's rights" movement is driven by politics and ideology, the case for changing the legal status of minors rests in large part on empirical grounds; indeed, many leading proponents are psychologists. From the start, critics of tradi-
tional policies have turned to child development theory and re-
search to support arguments that children, particularly
adolescents, should be given greater legal autonomy.4 Paternalis-
tic legal treatment is based on the presumption that minors, due
to their immaturity, are incompetent to make their own choices.
This premise, advocates argue, has now been discredited by social
science research and theory that demonstrate that by age fourteen
adolescents are indistinguishable from adults in their decision-
making competence.5 This evidence, it is said, seriously under-
mines the justification for different legal treatment.

The empirical challenge to paternalism raised by advocates
of adolescent rights is important. If legal restrictions of minors
are grounded in erroneous intuitions about their differences from
adults, then the errors should be exposed and the legal policies
reconsidered. My reservations are not about the wisdom of this
project, but about the approach that is used and the conclusions
that are drawn. To be sure, any analysis of how the decisional

4. See, e.g., Wisconsin v. Yoder, 406 U.S. 205, 245 n.3 (1972) (Douglas, J., dissenting in part) (citing psychologists Jean Piaget and Lawrence Kohlberg in arguing that Amish children should have voice in decision of whether they should remain in school). Arlene Skolnick offered an early challenge based on child development research to the empirical assumptions underlying traditional policies. Arlene Skolnick, The Limits of Childhood: Conceptions of Child Development and Social Context, LAW & CONTEMP. PROBS., Summer 1975, at 38, 43.

5. The argument draws on Piaget's stage theory of cognitive development, on Kohlberg's theory of moral development and on a small group of empirical studies that show adolescents and adults to be similar in their ability to engage in a rational decision-making process. For a discussion of the scientific support for adolescent competence, see infra notes 72-90 and accompanying text. For an early exposition of the argument and review of the developmental research relevant to adolescent competency, see Thomas Grisso & Linda Vierling, Minors' Consent to Treatment: A Developmental Perspective, 9 Prof. Psychol. 412 (1978). For a recent summary of this research, see Josephine Gittler et al., Adolescent Health Care Decisionmaking: The Law and Public Policy (June 1990) (unpublished manuscript, prepared for Carnegie Council on Adolescent Development, Washington, D.C.).
and functional abilities of minors affect or should affect their legal status is correctly based on a comparison of the decisionmaking of children of different ages with that of adults. However, two important weaknesses limit the effectiveness of the empirical arguments. First, advocates reach too far in their empirical claims, exaggerating the robustness of evidence that no differences distinguish adults and adolescents in their capacity for rational decisionmaking. Second, the advocates' approach is theoretically flawed, conceiving too narrowly the scope of abilities that are relevant to policymakers in deciding whether adolescents should be distinguished from adults.

Reformers arguing for greater adolescent self-determination have focused on medical decisionmaking, a focus that has been sharpened by the intense interest in adolescent abortion. Thus, informed consent doctrine has shaped the discourse and provided the standard for comparing the capabilities of minors with those of adults. This framework for assessing competence focuses on two aspects of cognitive functioning: the capacity for understanding and the capacity for reasoning. The doctrine, and thus the framework, exclude inquiry into aspects of decisionmaking that have to do with the quality of judgment; an inclination to make "poor" choices does not signify incompetence under informed consent tests. The focus on cognitive processes and the exclusion of outcome-based measures of competence are grounded in a policy goal of protecting adults making medical decisions from excessive state interference.

In contrast, the state's relationship to children is characterized by deep and pervasive paternalism. This paternalistic norm rests not only on skepticism about the capacity of minors to engage in rational decisionmaking, but also on the belief that the quality of youthful decisions is affected by the immaturity of their

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6. See William Gardner et al., Asserting Scientific Authority: Cognitive Development and Adolescent Legal Rights, 44 Am. Psychologist 895, 895 (1989) (detailing deficiencies in advocates' claim that social science research supports conclusion that adolescent decisionmaking competence is similar to that of adults).

7. Reasoning, according to informed consent doctrine, connotes decision-making through a rational process.

8. Good judgment is measured in part by the reasonableness of outcomes. Decisions that promote life, health and welfare are often described as reflecting good judgment.

9. It is of course true that, in many contexts, legal policy toward adults is also paternalistic. Autonomy is often restricted to reduce social cost. Indeed, informed consent standards also have a utilitarian rationale. For a discussion of the customary balancing of autonomy with social costs, see infra notes 118-20 and accompanying text.
judgment. The narrow conception of adolescent competence implicit in the informed consent framework is of limited usefulness, therefore, because it does not respond to important concerns underlying paternalistic policies.

A more useful framework for analyzing adolescent decision-making and comparing the capacity and performance of adolescents with that of adults would focus on outcomes as well as processes and incorporate judgment as well as reasoning and understanding. One goal of this article is to delineate how some developmentally linked traits and responses might influence decisionmaking in important ways that are obscured under the informed consent framework. For example, adolescents and adults are assumed to differ in their temporal perspective, attitude toward risk, impulsiveness and in the value attached to peer influence and personal appearance. Empirical study examining whether and in what ways these factors help to differentiate between the decisionmaking of adults and minors is currently sparse. Additional systematic investigation can surely contribute to a more comprehensive account of adolescent decisionmaking capacity.

In Part I of this article, I describe the deeply paternalistic stance of contemporary legal policy toward minors and argue that even regulation that respects self-determination fits comfortably into this framework. This paternalistic framework, however, ultimately rests on the premise that adults and minors are different. If minors and adults are more alike than we have supposed, then the justification for a protective stance is weakened. Part II therefore examines the current empirical support for a policy of adolescent self-determination. I argue that the recent analysis of adolescent competence is focused too narrowly, because the discourse has centered on informed consent to make medical decisions. To assist in policy development, comparison between adults and minors should also encompass aspects of decisionmaking involving judgment. In Part III, I examine the concept of judgment in order to determine how developmentally-linked traits might affect decisionmaking in different contexts. Drawing on cognitive theory and research, I suggest some directions for future research to improve our understanding of how adolescents function as decisionmakers and legal actors. In Part IV, I analyze how a richer understanding of adolescent decisionmaking might

10. For a discussion of these differences, see infra notes 126-79 and accompanying text.
inform legal policy, and how, in a world of imperfect information, policy choices are shaped primarily by different normative perspectives.

I. The Paternalistic Framework

Paternalism permeates the legal treatment of minors. A strong presumption persists that the important decisions affecting children's lives will be made by others, either their parents or the state; that minors are entitled to support and protection by both their parents and the state; and that they should be less accountable than adults for both choices and conduct. Although minors may become legal adults for some discrete purposes before\textsuperscript{11} and occasionally after\textsuperscript{12} their eighteenth birthday, this milestone—the age of majority—is a critically important legal event, a bright line that separates childhood from adulthood.\textsuperscript{13} The bright line has blurred a bit in recent years, and challenges to the powerless status of minors, particularly adolescents, have increased. Arguments for rethinking an approach that treats childhood as a monolithic legal category are supported by the unassailable evidence that adolescents do not act or think like young children.\textsuperscript{14}

\textsuperscript{11} At age 16, a minor can obtain a license to operate a motor vehicle in most states. Minors also can be treated as adults for the purpose of waiving \textit{Miranda} rights. \textit{See} Fare v. Michael C., 442 U.S. 707, 725 (1979) (finding no persuasive reasons to adopt different approaches for adults and juveniles when evaluating waiver of \textit{Miranda} rights); \textit{see also} Thomas Grisso, Juveniles' Waiver of Rights: Legal and Psychological Competence 209 (1981) ("The majority's decision [in Fare] is a warning that the Supreme Court . . . will not look favorably on proposals for special due process protections in the interrogation of juveniles."). In addition, minors can be subject to adult criminal prosecution. \textit{See} Franklin E. Zimring, The Treatment of Hard Cases in American Juvenile Justice: In Defense of Discretionary Waiver, 5 Notre Dame J.L. Ethics & Pub. Pol'y 267, 268 (1991) (advocating maintenance of status quo for determining when juveniles should be tried as adults).

\textsuperscript{12} \textit{See}, e.g., 23 U.S.C. § 158 (1988) (mandating that states prohibit drinking until age 21 or lose federal highway funds). This federal statute was upheld by the Supreme Court against a challenge based on the Twenty-first Amendment. South Dakota v. Dole, 483 U.S. 203 (1987); \textit{see also} Childers v. Childers, 575 P.2d 201 (Wash. 1978) (en banc) (authorizing child support to assist with financing college education though child is no longer minor).

\textsuperscript{13} In most states, upon reaching the age of majority, an individual can vote, serve on a jury, execute a binding contract, consent to medical treatment and serve in the armed forces without parental consent. Alan N. Sussman, The Rights of Young People: The Basic ACLU Guide to a Young Person's Rights 24-25, 48-49, 188-89 (1977). In general, parental custody ends at the age of majority, as does the duty of parental support. \textit{Id.} at 45, 155-56.

\textsuperscript{14} For a thoughtful, comprehensive treatment of this issue, see Franklin E. Zimring, The Changing Legal World of Adolescence (1982). \textit{See also} Willard Gaylin, The "Competence" of Children: No Longer All or None, 21 J. Am. Acad. Child Psychiatry 153 (1982) (challenging fixed age of majority and arguing for
Yet, resistance to reformulating the premises of legal policy toward children is formidable.

The paternalistic goal of protecting minors and society from the costs of immature judgment is an even more powerful constraint on initiatives to extend adolescent self-determination than is usually acknowledged. In this Part, I will demonstrate that policies that appear to signal an erosion of the paternalistic legal framework in fact fit quite comfortably within it. Moreover, even advocates of expanded rights for adolescents are generally instrumentalist in their approach to autonomy and are ultimately driven by paternalistic goals. At the heart of this paternalism is a commonly shared intuition that minors have poorer judgment than adults and that they are more likely than adults to make choices that are threatening to their health and well-being.

A. The Decline of Paternalism: Revolution or Illusion

1. Signs of Change

Although the legal control that adults have over children’s lives is pervasive, some evidence suggests that courts and legislatures are rethinking the law’s protectionist stance. At a constitutional level, the United States Supreme Court in recent years has reexamined old premises that fixed the positions of the state and parents as powerful protectors of dependent children. Heralding this change was the 1967 opinion, In re Gault,\(^1\) in which the Court dealt an almost fatal blow to the paternalistic juvenile court system by according to juveniles many of the rights of adult criminal defendants.\(^2\) Two years later, in Tinker v. Des Moines Independent Community School District,\(^3\) the Court announced that children are persons under the Constitution and that their interest in expressing opposition to the Vietnam War was protected under the First Amendment.\(^4\) Presaging the approach of later children’s rights

\(^{15}\) 387 U.S. 1 (1967).

\(^{16}\) See id. (giving juveniles many of same procedural protections—notice of charges, right to counsel, privilege against self-incrimination and right to cross-examination—as adult criminal defendants because consequences are similar). Another opinion, Goss v. Lopez, weakened the authority of school authorities somewhat by affording due process protections to students facing school disciplinary proceedings. See Goss v. Lopez, 419 U.S. 565, 581 (1975) (holding that student must be given notice of charges, explanation of evidence authorities possess and opportunity to present his side of story).

\(^{17}\) 393 U.S. 503 (1969).

\(^{18}\) Id. at 514 (upholding students’ rights to wear black armbands to protest Vietnam War).
adolescents, Justice Douglas, in his famous dissent in *Wisconsin v. Yoder*, cited psychologists Jean Piaget and Lawrence Kohlberg as authority for the proposition that fourteen-year-old Amish students should have a voice in resolving the dispute between their parents and the state about whether they should remain in school.\(^{19}\)

On issues of medical consent, courts and legislatures have also reexamined traditional approaches. Several states have endorsed significant restrictions on parents’ authority to admit their children to psychiatric facilities.\(^{20}\) Arguments favoring such restrictions emphasize adolescents’ important liberty interest in avoiding involuntary hospitalization. In many states, medical consent statutes give minors authority to consent independently to treatment for substance abuse, venereal disease, contraception and psychotherapy.\(^{21}\) Moreover, in a few states, mature minor


20. Some states go far beyond the limited constitutional restriction of parental authority announced by the Supreme Court in *Parham v. J.R.*, 442 U.S. 584 (1979). Under *Parham*, a parental initiative to admit a child to a psychiatric hospital must be subjected to inquiry by a “neutral factfinder” to determine whether statutory requirements for admission are met. *Id.* at 606. However, no formal proceeding is necessary and a physician can direct the inquiry. *Id.* at 607. Some states require a formal judicial proceeding to evaluate the appropriateness of involuntary admission. See, e.g., *Va. Code Ann.* §§ 16.1-335 to -348 (Michie Supp. 1992) (requiring judicial proceeding for involuntary commitment of minors age 14 and older).

legislation extends general medical consent authority to older minors. These legislative responses indicate a readiness to extend legal autonomy to minors for some purposes and suggest a willingness to rethink old categories.

This trend might seem to indicate the beginning of a fundamental shift in legal policy toward recognition of adolescents' interest in and claim to more autonomy. In part, support for such a shift by advocates for children's rights reflects a growing skepticism, expressed in Justice Douglas' dissent in Yoder, about the accuracy of the premise that minors, or at least adolescents, are significantly less capable than adults at making important choices. To the extent that this premise falters, the case for treating childhood as a separate category is weakened. Following Justice Douglas' example, supporters of expanding adolescent legal rights have drawn on developmental theory and research to challenge the premise of incompetence.

A broader trend in family law has also contributed to a changing perspective on children and families. Influenced by liberal ideology, the law's conception of the family has been trans-
formed from a tightly organized hierarchical feudal community to a loosely knit association of autonomous, rights-bearing persons. Some observers would argue that the last stage in this process, which is now unfolding, involves extending legal personhood to minors. This account of recent legal reform would suggest that, at least as applied to adolescents, the paternalistic norm is gradually becoming obsolete.

2. Reinterpreting the Change

The recent developments clearly indicate that the legal demarcation separating childhood and adulthood has become blurred and the categories more complex. Adolescents have at least become "semi-persons." However, an account of these events that ends with a prediction of the disintegration of the paternalistic framework seems to seriously miscalculate the extent to which a goal of promoting adolescent autonomy has driven recent legal developments. In fact, many of the reforms that expand adolescent self-determination are wholly consistent with traditional goals of promoting children's welfare, furthering social welfare and preserving parental authority.

A reexamination of the Supreme Court's espousal of children's rights in this light is exemplary. *Tinker v. Des Moines School District* and *In re Gault*, the Supreme Court's two landmark opinions that appear to proclaim a departure from traditional conceptions of childhood, on reflection seem to have a more orthodox cast. *Tinker*, on its face, describes expansive First Amendment protection of the right of students to political expression in schools. Subsequent opinions, however, have shown the Court to


27. For a radical expression of this position, see Farson, *supra* note 2 (proposing elimination of societal discrimination against children to accord children's rights equivalent to adults' rights when making decisions affecting children's lives).


be reluctant to restrict school authority,\(^3\) reinforcing the view of many observers that *Tinker* has as much to do with the interest of parents (in inculcating their political values) as with children's rights.\(^2\)

*Gault* provides another example. To be sure, this opinion has resulted in a sea of change in the procedures applied to juveniles accused of crimes. Indeed, the most important and extensive reforms in legal policy toward children are in the realm of juvenile justice procedure, and it is here that legal treatment of minors and adults nearly converges.\(^3\) Yet, a close reading of *Gault* reveals that juvenile justice reform was not motivated primarily by an urge to recognize minors' autonomy interests. Rather, the Court rejected the paternalistic approach of the traditional juvenile court, at least in part, because of its dismal failure to deliver on its promise of protecting the welfare of children accused of crimes.\(^4\) The *Gault* Court implicitly recognized that the paternal-


32. See, e.g., Bruce C. Hafen, Children's Liberation and the New Egalitarianism: Some Reservations About Abandoning Youth to Their "Rights," 1976 B.Y.U. L. Rev. 605, 646. Hafen has commented: "*Tinker* is not an obstacle to the assertion that none of the Supreme Court's children's rights cases provide authority for upholding the exercise of minors' choice rights—particularly against contrary parental claims." *Id.* John Garvey described *Tinker* as being about "family rights." John H. Garvey, Child, Parent, State and the Due Process Clause: An Essay on the Supreme Court's Recent Work, 51 S. Cal. L. Rev. 769, 785 (1978); see also Robert A. Burt, Developing Constitutional Rights of, in, and for Children, Law & Contemp. Probs., Summer 1975, at 118, 122-24 (noting "false psychology" of acknowledging dispute between children and state without recognizing role of parents in dispute).

33. For example, minors, like adults, have the right to notice of the charges against them, the right to counsel, the right to cross-examination and the privilege against self-incrimination. *Gault*, 387 U.S. at 33, 41, 55, 57.

34. *Id.* at 28-29. Justice Fortas noted the procedural differences between juvenile and adult courts and described the delinquency adjudication as analogous to a Star Chamber proceeding. *Id.* at 18. Had Gerald Gault been an adult, he would have been entitled to substantial protection under the United States and Arizona constitutions and would have been subject at most to a minimal fine or two months imprisonment for his offense. *Id.* at 29. As a juvenile, he was committed to a correctional facility for an indefinite term of up to six years. *Id.* As the Court noted: "There is evidence . . . that . . . the child receives the worst of both worlds: that he gets neither the protections accorded to adults nor the solicitous care and regenerative treatment postulated for children." *Id.* at 18 n.23 (citing *Kent* v. United States, 383 U.S. 541, 556 (1966) (citing Joel F. Handler, The Juvenile Court and the Adversary System: Problems of Function and Form, 1965 Wis. L. Rev. 7)). Justice Fortas summarized his point in the now-famous charac-
ism of the traditional juvenile court was disingenuous in that it masked the extent to which the social (and judicial) response to juvenile crime is punitive in nature. In fact, young defendants' welfare is better protected if they are accorded basic procedural rights. Moreover, the Court in *Gault* assumed that juveniles facing criminal charges make decisions with their parents, and thus saw no disruption of parental authority in the reform.

The policies dealing with medical decisionmaking also fit within a paternalistic framework. For example, the medical consent statutes described above give minors the authority to consent independently to treatment in specific contexts in which encouraging treatment will benefit the minor (or society) and in which a requirement of parental consent will likely deter needed treatment. This is surely the case with psychotherapy, and with treatment for venereal disease and substance abuse. Moreover, although the "right" of adolescents to obtain contraceptives has been linked to notions of reproductive autonomy, access is also justified as a means to prevent teenage pregnancy with its onerous personal and social costs. There is little evidence that policymakers are moved by concern for minors' autonomy interest in making decisions about sexual activity. Even access to abortion, surely the most complex of the medical consent issues, is supported on paternalistic and general utilitarian grounds as

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35. The fiction that rehabilitation was the only purpose of the delinquency intervention was particularly dangerous given the vast discretion of juvenile court judges. Judges were free to act punitively in the name of rehabilitation.

36. For example, the Court held that due process of law required notice to the child's parents or guardian, as well as notice to the child himself. *Gault*, 387 U.S. at 33-34. Notice of the child's right to counsel also must be given to both child and parents. *Id.* at 41.

37. For a discussion of medical consent statutes, see *supra* note 21 and statutes cited therein.


39. Indeed, the Supreme Court, in striking down a New York statute that prohibited the distribution of contraceptives to minors, recognized that states might have a legitimate interest in regulating adolescent sexual behavior. *See* Carey v. Population Servs. Int'l, 431 U.S. 678, 694 (1977). In no sense do adolescents have a "right" to engage in sexual activity. In fact, some observers have described adolescent reproductive rights as the right not to reproduce. *See* Bruce C. Hafen, The Constitutional Status of Marriage, Kinship and Sexual Privacy—Balancing the Individual and Social Interests, 81 MICH. L. REV. 463, 530-31 (1983) (explaining distinction between decision to engage in sexual activity and to use contraception).
much as on the basis of reproductive autonomy.\textsuperscript{40} No theory of autonomy, standing alone, explains why some treatments require parental consent and others do not.

Upon examination, this trend supports my assertion that the law cares about the quality of adolescent judgment and that policies extending the freedom to make choices are limited by paternalistic goals. In general, medical consent statutes give minors the freedom to make "good" choices by some societal measure—to seek beneficial treatment which might not be obtained if traditional parental authority were respected.\textsuperscript{41} Few argue for extending to adolescents the right to make treatment decisions that they may later regret, such as choices about cosmetic surgery and sterilization.\textsuperscript{42} Moreover, the statutes seldom accord minors a right to refuse treatment that their parents or the state decide is needed. Only in contexts (such as psychiatric hospitalization) in which the benefit of treatment is ambiguous and the interest of traditional decisionmakers may conflict with that of the child does the issue of treatment refusal arise.\textsuperscript{43} In short, the medical consent statutes, while they appear to endorse greater adolescent autonomy, are equally consistent with a response directed toward

\textsuperscript{40} Arguments favoring independent access to abortions for adolescents emphasize the burden of teenage pregnancy and the costs associated with a legal requirement of parental involvement. \textit{See APA Hodgson} brief, supra note 3, at 29. Abortion presents another situation in which the traditional premise that parents will act in the child's interest is uncertain.

\textsuperscript{41} Those who oppose adolescent access to abortion would not think, of course, that abortion is a "good" choice. Those who favor adolescent access to abortion likely do believe abortion is often a "good" choice, given the alternatives.

\textsuperscript{42} Indeed, opposition to abortion is based, in part, on exactly this type of argument—that young women who have abortions may later regret having had them and that adolescents are not mature enough to anticipate this reaction. Such an argument also provides a rationale for age requirements under sterilization statutes.

\textsuperscript{43} Statutory restrictions on parental authority to admit their children to psychiatric hospitals are based, at least in part, on the perceptions that parents may have a conflict of interest in this setting (in desiring to rid the family of a difficult member) and that institutional treatment may not promote the child's welfare. \textit{See Carol Warren & Patricia Guttridge, Adolescent Psychiatric Hospitalization and Social Control, in Mental Health and Criminal Justice} 119, 120-21 (Linda Teplin ed., 1984) (describing adolescent hospitalization as means of social control); Lois A. Weithorn, \textit{Mental Hospitalization of Troublesome Youth: An Analysis of Skyrocketing Admission Rates}, 40 \textit{Stan. L. Rev.} 773, 789 (1988) (describing high percentage of adolescents in psychiatric hospitals presenting primarily conduct problems). Another situation in which a minor's refusal of treatment is legally recognized is where a minor refuses to consent to abortion. This "treatment" is uniquely complex and cannot be categorized in the same way as other treatments. The fetal life issue alone gives involuntary abortion different stakes from other medical decisions.
promoting adolescent welfare and reducing social cost.\textsuperscript{44}

B. Autonomy and Children's Welfare

It is not surprising that legal policies that seem directed toward adolescent self-determination also reflect more traditional paternalistic purposes. The desire to facilitate children's healthy, happy development by providing them with necessary resources, and by protecting them from others and from their own costly choices is deeply rooted in our culture and pervasively influences the law. What is less obvious is the extent to which proponents of adolescent autonomy are also driven by the goal of promoting the welfare of children.

Supporters of adolescent autonomy argue that self-determination is good for teenagers. The argument has several dimensions. First, social scientists have argued that allowing adolescents to participate in important decisions affecting their lives will enhance their self-esteem, positively affect their identity formation and increase their sense of personal causation and control.\textsuperscript{45} All these effects are associated with healthy psychological development.\textsuperscript{46} Greater personal autonomy will also benefit adolescents because they need experience in decisionmaking before they enter adulthood. It makes little sense to assume that minors restricted to a dependent status will cross the threshold to adulthood and magically be capable of mature functioning. Franklin Zimring has described adolescence as a period of "semi-autonomy," in which youths should be given the freedom to make

\textsuperscript{44} My colleague, Bill Stuntz, provides another point that suggests that medical consent statutes have a paternalistic cast. The treatments that are the subject of these statutes are relatively low cost interventions. Thus, physicians may have little incentive to urge unwanted or unwise interventions, reducing the prospect of a conflict of interest between physicians and youthful patients that might be present generally in the medical treatment context.

\textsuperscript{45} Gary B. Melton, Decision Making by Children: Psychological Risks and Benefits in Children's Competence to Consent 21, 30-31 (Gary B. Melton et al. eds., 1983) (discussing possibility that "increased autonomy would increase children's performance in those spheres in which they had the opportunity to make choices"); Charles R. Tremper & Morgan P. Kelly, The Mental Health Rationale for Policies Fostering Minors' Autonomy, 10 INT'L J. L. & PSYCHIATRY 111, 112-13 (1987) (maintaining that strong linkages have been shown between autonomy and positive personal identity, self-actualization, internal locus of control and principled moral reasoning).

\textsuperscript{46} Tremper & Kelly, supra note 45, at 112-13. David Wexler has made the same argument about the benefits of participation in treatment decisions by mentally disabled adults. See David B. Wexler, An Introduction to Therapeutic Jurisprudence, in Therapeutic Jurisprudence: The Law as a Therapeutic Agent 3, 8-16 (David B. Wexler ed., 1990).
choices and take responsibility in a setting that protects them from the long-term costs of their mistakes.\textsuperscript{47} Such a "learner's permit" will better prepare adolescents for full participation in society.\textsuperscript{48}

Zimring is typical in his instrumentalist approach to autonomy in this context.\textsuperscript{49} Even advocates who endorse adolescent self-determination far more strongly than does Zimring generally do not support children's autonomy as an end in itself. Few argue that minors should be offered the self-determination accorded to adults to make "bad" choices\textsuperscript{50} even when evidence supports that children can make adult-like decisions.

Two examples will clarify this point. The first example is Justice Douglas' dissent in \textit{Yoder}, which argued for a decisionmaking role for Amish students regarding their future educational status, largely on grounds that young adolescents have adult-like competence.\textsuperscript{51} On reflection, Douglas' position also seems to be a response to the uncertainty concerning which outcome will promote the welfare of these children, given the unique circumstances in which they live. It seems unlikely that Douglas would favor giving all Wisconsin fourteen year olds the choice of whether to continue their education on the ground that adolescents are competent decisionmakers. When the superior outcome is clear, arguments for expanded adolescent autonomy are seldom heard.

The second example involves the waiver of \textit{Miranda} rights by juveniles.\textsuperscript{52} Thomas Grisso compared minors' and adults' capac-

\textsuperscript{47} ZIMRING, \textit{supra} note 14, at 90-91, 100.

\textsuperscript{48} \textit{Id.} at 89-98. Zimring asserts that maturity, like many other skills and activities in life, takes practice—a fact that justifies extending privileges to the immature. \textit{Id.} at 89.

\textsuperscript{49} Instrumentalist arguments can also be raised, of course, to support the autonomy interests of adults. The difference is in the extent to which these arguments seem important, and in the extent to which the asserted instrumental benefit is linked to developmental characteristics. The autonomy interest of adults is more likely to be asserted as an end in itself.

\textsuperscript{50} This is not to say that adults are not restricted in their authority to make bad choices, even when only their own welfare appears to be at stake. In many spheres, adults are subject to paternalist policies to protect them from the impact of bad judgment. Examples can be found in landlord-tenant law, workplace safety regulation and consumer protection law. The difference in policies toward children is that paternalism is pervasive. In the regulation of adult behavior (particularly when self-regarding acts are involved), paternalist policies are more sparingly adopted.


\textsuperscript{52} Few states provide minors with special protection against "incompetent" waiver of their \textit{Miranda} rights. This stance is driven by the state's interest
ity to understand *Miranda* warnings and found that minors aged fifteen and older were able to understand the warnings as well as adults.\(^5\) He did not suggest, however, that the validity of waivers by older minors should be subject to the same standards as adults. Instead, Grisso argues for a per se rule under which minors' confessions are excluded unless made in the presence of an interested adult.\(^5\) This response seems to reveal a desire to protect juveniles, who tend to waive their *Miranda* rights at a significantly higher rate than adults,\(^5\) from waiving these rights. Most would find the decision to waive *Miranda* rights unwise, even if the decision is "competent."\(^5\)

It seems likely that this protective stance would be endorsed by many proponents who, in other contexts, argue that adult-like competence in adolescents demands a legal response of adult-like liberty. The lesson here seems to be that the inclination to recognize minors' autonomy interest is result-oriented. When the welfare of minors seems threatened by self-determination, then special treatment is endorsed and the paternalistic dimension of the reform initiative becomes apparent. As the *Miranda* waiver example suggests, this threat to a minor's welfare derives from the conviction (which in the *Miranda* rights case is supported empirically) that, in some contexts, adolescents will exercise poorer judgment than adults. In these contexts, minors may require protection from their inclination to make poor choices, even if they are, in some narrow sense, competent to make the decisions.

(often obscured in the juvenile justice system) in punishing youthful offenders and protecting society against juvenile crime. Some states require that minors be interrogated in the presence of their parents. See, e.g., OKLA. ST. ANN. tit. 10, § 1109(A) (West 1992). This response may offer little protection in practice, because parents seldom counsel against waiver. See generally Grisso, supra note 11, at 161-90.


\(^{54}\) Id. at 1140-43, 1160-66.

\(^{55}\) Id. at 1134. The United States Supreme Court has rejected the argument that a per se test is constitutionally required in cases of juvenile waiver. See *Fare v. Michael C.*, 442 U.S. 707, 725 (1979) (upholding constitutionality of totality of circumstances standard).

\(^{56}\) The decision to waive *Miranda* rights is of course not "bad" in any objective sense. Indeed, it offers substantial societal benefits. In terms of the narrow self-interest of the waiving juvenile, however, the modern view is that a waiver is unwise.
II. COMPARING ADULTS AND MINORS UNDER AN INFORMED CONSENT FRAMEWORK: THE RESEARCH AND ITS LIMITATIONS

The paternalist response does not mean that competence or incompetence of minors is irrelevant in shaping policy to regulate their lives. At some level, it clearly does matter whether, and to what extent, minors of different ages are similar to adults in the way in which they make decisions and perform functions that fall within the scope of legal regulation. Ultimately, indeed, the viability of the paternalistic framework depends on the empirical difference between the functioning of adults and minors.57

Critics of the paternalistic norm that defines legal policy toward children have drawn on developmental theory and social science research to challenge the premise that minors are incompetent and thus appropriately subject to adult decisionmaking authority. In part because consent to medical treatment has been a key focus of interest for advocates of adolescent rights, the framework used to evaluate competence to make health care decisions has been highly influential in shaping the inquiry generally. Under this approach, the legal competence of minors is evaluated through a comparison of their performance with that of adults on legally constructed competence tests derived from informed consent doctrine. In this part, I argue that this informed consent framework is both scientifically and conceptually inadequate. Research has not yet provided sufficient empirical evidence to support claims that no differences distinguish the cognitive operations applied to decisionmaking by adolescents and those applied by adults.58 Moreover, the framework is too narrow in scope. Whether policies restricting minors' choices are warranted depends as much on how adolescent judgment compares with adult judgment as it does on how their more narrowly defined cognitive operations compare.

57. In other words, if conclusive evidence were available that minors over the age of 15 years, for example, were indistinguishable from adults in their cognitive, intellectual and emotional functioning (as some have argued), then policymakers would be hard pressed to ignore this information. For a discussion of this point, see infra note 198 and accompanying text.

58. One important limitation of the research is due to the impossibility of “proving the null hypothesis”—that no differences exist—and the burdensome nature of merely establishing the probability that no differences exist. See Claire Sellitz et al., Research Methods in Social Relations (3d ed. 1976), reprinted in John Monahan & Laurens Walker, Social Science in Law: Cases and Materials 76, 76-79 (1990). For further discussion of the difficulties posed in proving the null hypothesis, see infra notes 103-04 and accompanying text.
A. Competence under an Informed Consent Model

1. The Legal Framework

Much of the analysis of adolescent competence has focused on medical decisionmaking. Even under the traditional legal framework, medical decisions involving adolescents often have been treated as a special category, and policymakers have struggled with appropriate legal responses. The issue of whether minors should have independent authority in this realm has been linked inevitably to the question of their decisionmaking competence. This is because informed consent doctrine requires that medical treatment must be based on the patient’s knowing, voluntary and intelligent consent.59 If minors are to make independent treatment decisions, it is assumed that they must be capable of meeting the threshold legal requirement of competence. It is not surprising, therefore, that much of the research on adolescent legal competence has involved medical decisionmaking in either laboratory or natural settings and has been structured to evaluate competence under informed consent tests.60 In turn, this research has reinforced the importance of the informed consent framework in defining adolescent competence.

59. See Canterbury v. Spence, 464 F.2d 772, 780 (D.C. Cir.), cert. denied, 409 U.S. 1064 (1972). The requirement that the consent be knowing creates a duty of disclosure for the physician, who, under the modern approach, must disclose to the patient all information about the treatment that a reasonable person would find material in making a decision. Id. at 786-87. This includes the nature of the procedure, risks, benefits and alternatives. Id. at 787-88. Some states adhere to a standard of disclosure based on professional practice. See PAUL S. APPELBAUM ET AL., INFORMED CONSENT: LEGAL THEORY AND CLINICAL PRACTICE 41-43 (1987). The decision also must be voluntary, in the sense that it is not coerced by the healthcare provider. Id. at 60-62. The relevance of coercion from other sources is unclear. Id. at 61-62. Finally, the requirement that the consent be intelligent focuses on the ability to make the decision under applicable competence tests using the disclosed information. For a discussion of tests of competence under informed consent doctrine, see infra notes 60-62 and accompanying text.

Because adults are presumed competent to consent, the legal prescriptions tend to focus on the disclosure requirement. See JUDITH AREEN ET AL., LAW, SCIENCE AND MEDICINE 406-09 (1984) (reprinting informed consent statutes).

60. See, e.g., Bruce Ambuel & Julian Rappaport, Developmental Trends in Adolescents’ Psychological & Legal Competence to Consent to Abortion, 16 LAW & HUM. BEHAV. 129 (1992) (comparing competency to consent to abortion of three age groups of women—15 or younger, 16-17 and 18-21); Catherine C. Lewis, A Comparison of Minors’ and Adults’ Pregnancy Decisions, 50 AM. J. ORTHOPSYCHIATRY 446 (1980) (examining differences between minors and adults in pregnancy decisionmaking); Lois A. Weithorn & Susan B. Campbell, The Competency of Children and Adolescents to Make Informed Treatment Decisions, 53 CHILD DEV. 1589 (1982) (studying decisionmaking by subjects nine to twenty-one years old in response to medical and psychological treatment vignettes).
Tests of competence under informed consent doctrine are designed to evaluate the process of decisionmaking using a rational decisionmaking model. Although the emphasis varies depending on the test, modern competence constructs focus on the following decisionmaking elements: an understanding of relevant disclosed information about the treatment (including consequences, risks, benefits and alternatives); an ability to appreciate the relevance of the information to one's situation; and an ability to use the information to weigh the risks and benefits of different options and to compare alternatives while making a choice.61 Tests under modern informed consent doctrine focus on the process of decisionmaking. Although some traditional competence tests evaluate the reasonableness of the choice, explicit emphasis on outcome is excluded under contemporary constructs.62 Thus,

61. Paul S. Appelbaum & Thomas Grisso, Assessing Patients' Capacities to Consent to Treatment, 319 NEW ENG. J. MED. 1635, 1635-36 (1988). Appelbaum and Grisso note that the majority of commentators identify four categories of legal standards used to determine competence: (1) communicating choices; (2) understanding relevant information; (3) appreciating the situation and its consequences; and (4) manipulating information rationally. Id. at 1635-36. The first test only requires that a patient maintain and communicate a constant choice long enough for a health care provider to implement the choice. Id. at 1635. To meet the "understanding relevant information" standard, a patient must have the capacity to remember information, to comprehend the importance of the information for treatment, and to understand her role in the decisionmaking process. Id. at 1636. To assess a patient under this standard, a doctor may ask him or her to paraphrase and interpret the disclosed information. Id. Under the appreciation standard, a patient must apply the relevant information to his or her specific illness or assign a personal value to the information. Id. In assigning a personal value, the patient must include the "existence of illness, the probable consequences of a treatment or its refusal, and the likelihood of each of a number of consequences." Id. The inquiry focuses on the patient's understanding of his or her illness, the need for treatment, the probable outcomes as a result of treatment, and the motives of those involved. Id. Under the rational manipulation test, a patient must be capable of weighing information by comparing benefits and risks to reach a decision. Id. This standard focuses upon the decisionmaking process—on the patient's ability to identify the major factors of the illness and treatment and their importance, and to weigh those factors in the decision. Id.

62. See Loren H. Roth et al., Tests of Competency to Consent to Treatment, 134 AM. J. PSYCHIATRY 279, 280-81 (1977); cf. Appelbaum et al., supra note 59, at 87 (noting that standard that focuses on nature of decision undermines autonomy, and, in effect, endorses physician judgment). The President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research specifically rejects a competence standard that focuses on outcome. PRESIDENT'S COMMISSION FOR THE STUDY OF ETHICAL PROBLEMS IN MEDICINE AND BIO MEDICAL AND BEHAVIORAL RESEARCH, MAKING HEALTH CARE DECISIONS: A REPORT ON THE ETHICAL AND LEGAL IMPLICATIONS OF INFORMED CONSENT IN THE PATIENT-PRACTITIONER RELATIONSHIP 61 (1982). Such a standard, the Commission points out in its criticism, would find a patient incompetent "who makes a health care decision that reflects values not widely held or that rejects conventional wisdom about proper health care." Id. at 170. Despite the exclusion of
under modern informed consent law, good judgment is not required.

This focus on the process of decisionmaking and exclusion of outcome evaluation is grounded largely in the overriding purpose of protecting the autonomy interest of individuals making decisions about medical interventions. A strong norm supports the position that choices about treatment should reflect the subjective values and preferences of decisionmakers, and that an objective (or external) standard is not appropriate. Monitoring patients' choices is deemed unduly intrusive given the private and self-regarding character of medical decisions. The requirements of understanding and rationality for decisional competence also serve the goal of promoting autonomy because a choice that is irrational or that miscomprehends the options is not autonomous.

The use of the framework derived from informed consent doctrine to evaluate adolescent competence to make medical decisions is relatively straightforward. Competence is assessed by examining the individual's capacity to understand and appreciate disclosed information and to engage in a rational decisionmaking process. Advocates of this approach argue that if adults who are legally competent to make treatment decisions under the applicable test have authority to do so, then minors who are similarly competent should have the same privilege. Under this approach, the policy issue can be resolved by comparing the decisionmaking performance of adolescents and adults to determine whether they differ in legally relevant ways.

Applying this framework, proponents of adolescent self-termination have argued that no significant differences separate adults and adolescents in their capacity to make informed medical decisions. Social science evidence of adolescent decisionmaking competence has been offered in particular contexts, such as

outcome in competence tests, "unreasonable" choices (such as the choice to forego treatment) often will influence the assessment of competence. See Roth et al., supra, at 280-81 (noting that "reasonable outcome" test is probably used more often than physicians and courts might admit). In the same vein, the competence of the patient who agrees with the physician's judgment will seldom be questioned. Id. at 281.

63. A stance of excluding evaluation of outcome reasonableness can also be defended on efficiency grounds, given enforcement and error costs of monitoring.

64. See, e.g., APA Hodgson brief, supra note 3, at 21 (asserting that assumption that adolescents are less capable than adults of understanding, reasoning and making decisions is not supported by psychological research).
abortion decisionmaking,65 and in support of generally lowering the age of medical consent.66 This evidence has also been used in support of broader claims for increased adolescent self-determination.67 It is perhaps not surprising that adolescent competence in general has been analyzed within this framework. In effect, competence to make medical decisions—a relatively straightforward construct defined by a legal test—has been used as a proxy in other legal contexts in which competence is harder to measure or is more vaguely defined.68 For example, the law does not tell us with any clarity what makes a teenager competent to decide about his or her own custody when his or her parents divorce,69 or why a fifteen year old, but not a five year old, has a meaningful

65. For a discussion of the social science advocacy efforts with regard to adolescent abortion, see infra notes 91-95 and accompanying text.

66. See Patricia A. King, Treatment and Minors: Issues Not Involving Lifesaving Treatment, 23 J. Fam. L. 241, 252-53 (1984-1985) (asserting that minors 15 years old and older should have right to self-determination regarding medical treatment and that youths 11 to 14 can possess decisionmaking abilities that might provide some claim to self-determination).


68. On a few issues, such as competence to testify and to stand trial, specific competence tests define the inquiry. See Lois A. Weithorn, Children's Capacities in Legal Contexts, in CHILDREN, MENTAL HEALTH AND THE LAW, supra note 38, at 25-50 (discussing legal standards for various competencies and relevant psychological theories and research). On these issues, however, and particularly competence to testify, the focus is not on self-determination in decisionmaking. The requirement of competence to testify is directed to safeguarding the quality of evidence offered in judicial proceedings. See SAMUEL J. BRAKEL ET AL., THE MENTALLY DISABLED AND THE LAW 447 (3d ed. 1985). The requirement of competence to stand trial protects the fairness and integrity of criminal proceedings. Id. at 694.

69. See Weithorn, supra note 68, at 45. Lois Weithorn suggests that an evaluation of capacity in this context focuses on understanding the nature of the question and on the ability to contemplate and compare the alternatives of living with each parent in the future. Id. at 43. This approach is derived from informed consent requirements. Weithorn, however, is not wholly comfortable with this approach or implicitly with how well the informed consent framework "fits" custody decisions. Id. at 45. She suggests that informed consent requirements may restrict the child's self-determination excessively. See id. at 42-45.

Ellen Garrison has adapted Weithorn's approach in studying competence of children to participate in custody decisions. See Ellen G. Garrison, Children's Competence to Participate in Divorce Custody Decisionmaking, 20 J. Clinical Child Psychol. 79 (1991). Garrison tested subjects under two competence standards, the traditional "reasonableness of preference" test and the "rationality of reasons" test. Id. at 79. She argued that the reasonableness of preference standard is inadequate as a measure of competence because the custody decision is value-laden and subjective. Id. at 84.
interest in political expression. Claims about competence grounded in the informed consent framework presume that competence findings in one sphere are applicable in others.

2. The Scientific Evidence for Adolescent Competence

The theoretical foundation for the assertion that adolescents and adults are similar in their decisionmaking capability is psychologist Jean Piaget's stage theory of cognitive development. Piaget posited that between the ages of eleven and fourteen, children reach the stage of formal operations, the highest stage of cognitive development. In this stage, the individual can think about a problem hypothetically and consider alternative solutions, anticipating, weighing and comparing consequences. Because the process of making competent medical decisions requires the use of these cognitive abilities, Piaget's theory indicates that adolescents who have reached this stage possess the cognitive capacity to make decisions in an adult-like manner.

A small body of empirical research lends support to this claim about adolescent decisionmaking competence. A few studies have compared the approaches of minors and adults making health care decisions and found few differences. Lois Weithorn and Susan Campbell compared youths and adults making decisions about different types of medical and psychological treatment by responding to different scenarios in a laboratory.

70. Tinker recognized that minors as young as 13 have a meaningful interest in political expression. Tinker v. Des Moines Indep. Community Sch. Dist., 393 U.S. 503, 504, 511-14 (1969). An eight year old Tinker child, however, who also participated in the protest, was not a party to the suit. Id. at 516 (Black, dissenting).

71. Melton, supra note 3, at 99-100.


73. SIEGLER, supra note 72, at 20-21.

74. Id. at 37-38.

75. See APA Zbaraz brief, supra note 3, at 13-15; Weithorn & Campbell, supra note 60, at 1590-91. Thomas Grisso and Linda Vierling were the first to suggest that the application of cognitive development theory to informed consent doctrine supports the position that by mid-adolescence minors are legally competent to make medical decisions. Grisso & Vierling, supra note 5, at 423. The authors argue that adolescents age 15 and older are able to provide knowing, intelligent and voluntary consent while youths ages 11 to 14 generally are unable to intelligently and voluntarily render consent. Id.
They found that fourteen year olds were similar to adults in their reasoning processes and in their factual and inferential understanding of information about medical conditions and treatment options. Catherine Lewis studied a small group of adult and adolescent women awaiting results of pregnancy tests who were, thus, potentially confronted with a medical decision. She found few age-related differences between minors and adults in knowledge of the applicable law, persons consulted or reasoning process. Bruce Ambuel and Julian Rappaport studied a larger sample of minors and adults contemplating a decision about an unplanned pregnancy. Their evaluation of different aspects of decisionmaking—consideration of consequences, number of reasons given (richness of reasoning), volition (freedom from undue influence) and quality of reasoning—indicated no differences between adolescents and adults considering abortion. These studies focused primarily on the subjects' understanding of information and capacity to make decisions through a rational process.

76. Weithorn & Campbell, supra note 60.
77. See id. at 1595-96. The 14 year olds were found to demonstrate adult-like competence under four different standards: evidence of choice, reasonable outcome, rational reasons and understanding. Id. at 1595.
78. Lewis, supra note 60, at 446.
79. Id. at 447-51.
80. Ambuel & Rappaport, supra note 60. The minors were 13-15 and 16-17 years old. Id. at 134, 140.
81. Id. at 140-42.
82. See, e.g., Weithorn & Campbell, supra note 60, at 1590-91. The Weithorn and Campbell study evaluated the responses under the traditional (and now disfavored) standard that looks at the reasonableness of the choice, as well as under other tests of competence. Id. at 1591-93. The performance of 14 year olds generally equalled that of the adults, but "numerically small but statistically significant differences" were found between 14 year olds and adults in one treatment choice for the epilepsy dilemma. Id. at 1596. The recommended medication rejected by 12.5% of the 14 year olds was reported as having potential side effects: periodontal problems and hirsutism (excess growth of body hair). Id. The researchers suggested that these findings may be explained by early adolescent concerns about body image and physical attractiveness. Id. The findings also led Weithorn and Campbell to hypothesize that competence may be somewhat dependent upon the specific decisionmaking context. Id. The adolescents, however, were no different from the adults in their capacity to "understand," which is the most recognized informed consent standard. Id.

Garrison, in a rare study of decisionmaking outside of the health care context, evaluated competency to participate in divorce custody decisions under an informed consent framework. See Garrison, supra note 69. In part, her study involved judicial assessment of the reasonableness of the preferences of subjects ages 9 to 18. Id. at 80. She also examined the rationality of the decisionmaking process. Id. at 79. The only differences she found, based on judges' ratings, were between 10 year olds and older subjects. Id. at 84.
Another study examined an aspect of decisionmaking that is relevant to the legal requirement of voluntariness under informed consent doctrine. Using vignettes, David Scherer examined the extent to which minors and young adults making health care decisions might be subject to the coercive influence of their parents. He found no clear developmental patterns across different kinds of treatments. Scherer’s findings did suggest that, for more serious treatment decisions, confidence in the face of parental opposition increases with age.

Several researchers have studied minors’ capacity for understanding in different contexts, without directly looking at decisionmaking. Ronald Belter and Thomas Grisso compared the ability of minors (ages nine and fifteen) and adults (age twenty-one) to understand and assert rights in psychotherapy. They found that adolescents and adults showed similar capabilities, while younger children were less able to discern violations of their rights. Nancy Kaser-Boyd and her colleagues examined the ability of children and adults to identify the risks and benefits.

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83. Voluntariness is not a dimension of legal competence per se. It is an additional requirement of informed consent. It is relevant to the discussion, however, because developmentally based susceptibility to influence might affect the ability to make autonomous decisions.


85. Scherer, supra note 84, at 442. In two of the three vignettes (hypotheticals) posed, treatment decisions made by children were not significantly different from those made by young adults. Id.

86. Id. at 442-43. Thus, older subjects were less susceptible to information of parental disagreement with decisions about kidney donation than were younger decisionmakers, although older subjects were more responsive to parental wishes regarding minor treatments than were younger subjects. Id.

87. Ronald W. Belter & Thomas Grisso, *Children’s Recognition of Rights Violations in Counseling*, 15 Prof. Psychol. 899 (1984). Belter and Grisso evaluated a sample of 60 males at ages 9, 15 and 21 in which the subjects were given information about their “rights” in counseling (right to refuse treatment, to know the reason for referral, to withhold information from the counselor, etc.) and about protection of their rights. Id. at 902. At age 9, providing information about rights had minimal effect; at ages 15 and 21, the authors observed higher scores for rights recognition. Id. at 907-09. This study suggests no difference between the 15 year olds’ and 21 year olds’ ability to understand rights violations. See id. at 907.

88. Id. at 907-08.
of psychotherapy; they found little to support the belief that children were less able to do so than adults.89 Finally, Grisso's comprehensive study comparing minors' and adults' capacities to understand their *Miranda* rights revealed that by age fifteen adolescents of average intelligence demonstrated an ability that was similar to adults, while younger minors performed significantly less well.90

**B. A Critique of the Informed Consent Model**

Law-psychology advocates have argued that this theoretical and empirical research demonstrates that by mid-adolescence minors are indistinguishable from adults in their decisionmaking capacity, and that legal restrictions inconsistent with this evidence are inappropriate. The unequivocal character of this claim and the adherence to the informed consent framework can be linked to the central importance of adolescent abortion as an advocacy issue.91 It is in this context that the informed consent framework has been refined and most extensively employed. In my view, it is unfortunate that psychology's effort to contribute to legal understanding of adolescent decisionmaking capability has focused so extensively on the issue of abortion. Because of its intensely polarized and politicized character, abortion discourse tends to be dominated by advocacy norms; this is not the best environment for science to function according to its own values.92

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89. Nancy Kaser-Boyd et al., *Children's Understanding of Risks and Benefits of Psychotherapy*, 15 J. CLINICAL CHILD PSYCHOL. 165, 168-71 (1986) (studying subjects ages 10 to 19 and finding no significant differences between age groups in ability to process information about risks and benefits of psychological treatment); Nancy Kaser-Boyd et al., *Minors' Ability to Identify Risks and Benefits of Therapy*, 16 PROF. PSYCHOL. 411, 416 (1985) (studying subjects ages 10 to 20 and finding that younger minors were not significantly different from older minors in identifying risks and benefits of psychotherapy).

90. Grisso, *supra* note 53, at 1152, 1154-60. In several studies using different methodologies, Grisso probed the capacity of minors and adults to understand the vocabulary, meaning and function of *Miranda* warnings. See id.

91. Organized psychology has been very involved in the effort to fight restrictions on adolescent access to abortion. As described earlier, the American Psychological Association has submitted amicus briefs to the Supreme Court in several cases, arguing that adolescents are competent to make abortion decisions, based on the psychological research. For a discussion of these briefs, see *supra* note 3. Moreover, an interdivisional task force of the APA has issued a policy statement supportive of adolescent abortion rights. See *Interdivisional Committee on Adolescent Abortion, Adolescent Abortion: Psychological and Legal Issues*, 42 AM. PSYCHOLOGIST 73 (1987). The statement asserts that adolescents are as capable of conceptualizing and reasoning about treatment alternatives as adults, and that perceived differences have to do with differences in social situation rather than psychological maturity. *Id.* at 73.

92. For a thoughtful analysis of the perils associated with the involvement
those who oppose restrictions on adolescent abortion may be reluctant to challenge either the conclusions or approach of law-psychology advocates, because questioning the informed consent framework or the empirical conclusions could undermine political goals.

In some sense, psychologists who have argued on competence grounds that minors seeking abortion should be subject only to restrictions applied to adults have become committed both to the informed consent framework and to the position that adolescent and adult decisionmaking are not significantly different. This perspective presumes that the framework poses the right questions and that the answers are settled. These presumptions are erroneous. In this political climate, the goal of influencing policy threatens to eclipse that of learning about how adolescents compare to adults in their decisionmaking.

1. The Scientific Limits of the Competence Model

The scientific theory and data that are the basis for the argument favoring adolescent rights cast doubt on the traditional legal presumption that minors are less competent decisionmakers than adults. As William Gardner and others have demonstrated, however, the evidence does not establish the contrary proposition—that no differences in decisionmaking separate minors and adults. Those who argue that evidence derived from the in...
formed consent framework demonstrates that adolescents have adult-like decisionmaking competence have overstepped the limits of science. First, the strict stage theory of cognitive development on which they rely is no longer widely accepted among cognitive psychologists. Second, only sparse empirical data support the proposition that the reasoning process, understanding and voluntariness of adolescent decisionmakers approximates that of adults, and the data is of limited generalizability. Even if the informed consent framework incorporated all relevant dimensions of decisionmaking, scientific authority for the claim of adolescent legal competence would be very tentative.

Piaget's stage theory of cognitive development has come under fire in recent years. Today, few cognitive psychologists accept that cognitive development is strictly stage-like—that is, that children in a given stage engage in a characteristic reasoning process across many tasks, and that this process differs from reasoning at other stages. Rather, recent research has revealed that similar skills develop at different rates in different task domains. This conception undermines the informed consent framework because it does not support the notion of a cognitive ability (i.e., to engage in formal operations) that is linked to a general decision-making capability. A finding of competence to make one kind of

have provided a thoughtful and persuasive critique of the decisionmaking competence framework as it has been used to support adolescent abortion rights. My observations draw heavily on their analysis, which convincingly points out both the theoretical and empirical weakness of the scientific claims that have been advanced about adolescent competence. See id.; William Gardner, A Life-Span Theory of Risk-taking, in ADOLESCENT & ADULT RISK-TAKING: THE EIGHTH TEXAS TECH SYMPOSIUM ON INTERFACES IN PSYCHOLOGY (N. Bell ed., forthcoming); William Gardner & Janna Herman, Developmental Change in Decision-Making: Use of Multiplicative Strategies & Sensitivity to Losses (April 19, 1991) (unpublished manuscript, on file with the Villanova Law Review); William Gardner et al., Developmental Change in Decision-Making (November 4, 1991 draft) (unpublished manuscript, on file with the Villanova Law Review); Maya Tester et al., Experimental Studies of the Development of Decision-Making Competence, presented at the symposium CHILDREN, RISKS & DECISIONS: PSYCHOLOGICAL & LEGAL IMPLICATIONS at American Psychological Ass'n Convention (August, 1987).

96. Siegler, supra note 72, at 49-57.

97. See id., at 57. In part, the challenge to Piaget's theory is based on research indicating that cognitive development is more continuous and gradual than stage theory suggests. Id. at 51. Moreover, children appear to master similar cognitive tasks in a given stage at different ages. Id. For example, children master the concrete operations concept of solid mass conservation (recognizing that a given amount of sand poured into a tall beaker and then into a fat beaker is the same) before that of weight conservation (recognizing that weight stays the same when a clay ball is remolded into sausage). Id.; see also Flavell, supra note 72, at 114 (discussing growing doubt that cognitive systems develop in stage-like manner).
decision cannot be generalized to other decisions in other settings.

Even if it were grounded on a more solid theoretical foundation, the existing body of empirical research is inadequate to support the assertion that minors are similar to adults in their decisionmaking competence. To date, only a handful of studies have compared decisionmaking by adults to that of adolescents, and most have examined only a small number of subjects. The two abortion studies have focused on only one type of decision—about a treatment that has unique properties. A few other studies have compared the comprehension of minors and adults in legal settings, but do not focus on decisionmaking. Finally, a handful of studies have examined adolescents' understanding of issues involved in treatment, but have not compared adolescents with adults or focused on decisionmaking.

Although these studies, taken together, challenge traditional notions about minors' capabilities, they are too few in number to establish the "no difference" proposition. Moreover, this deficiency is exaggerated by the fact that the asserted claim involves the confirmation of a null hypothesis—that no differences exist. A positive claim of this kind requires a great deal of empirical substantiation, using convergent methodologies. The fact that

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98. The deficiencies in the research raise questions primarily about the external validity of the findings. The external validity of research is measured by the extent to which the findings are generalizable across persons, settings or time. MONAHAN & WALKER, supra note 58, at 50. Internal validity refers to the accuracy of the inferences drawn as applied to the circumstances of the study itself. Id.

99. See Ambuel & Rappaport, supra note 60, at 134-35 (study had 75 subjects ranging from 13 to 21 years old); Lewis, supra note 60, at 446 (ages ranged from 15 years-one month to 25 years-six months; of 42 interviewees, 16 were minors); Weithorn & Campbell, supra note 60, at 1591 (study had 96 subjects ranging from 9 to 21 years old). Weithorn cautioned that her subjects were "normal," white, healthy individuals of high intelligence and middle class backgrounds who considered "hypothetical" cases, and that these factors might affect the study's external validity or generalizability. Weithorn & Campbell, supra note 60, at 1596.

100. See Ambuel & Rappaport, supra note 60; Lewis, supra note 60.

101. Grisso, supra note 53 (comparing capacity of minors to that of adults in understanding Miranda warnings); Belter & Grisso, supra note 87 (comparing capacity of minors to that of adults in understanding and asserting rights in psychotherapy).

102. Kaser-Boyd et al., Minors' Ability to Identify Risks and Benefits of Therapy, supra note 89 (examining adolescents' ability to identify risks and benefits of psychotherapy); Kaser-Boyd et al., Children's Understanding of Risks and Benefits of Therapy, supra note 89 (examining adolescents' understanding of risks and benefits of psychotherapy).

103. See SELLTIZ, supra note 58.
no differences have yet been observed does not mean that none exist. It may mean only that differences have not been uncovered because researchers have failed to ask the right questions.\textsuperscript{104}

In addition to the fact that there is simply too little research to make strong claims, other limitations of the existing studies restrict the inferences that can be drawn. First, most of the studies were conducted in a laboratory setting in which the subjects were provided with the relevant information for making hypothetical treatment decisions.\textsuperscript{105} Although this kind of research provides much useful data about decisionmaking, some questions about external validity arise.\textsuperscript{106} Having nothing at stake, subjects may give what they view as appropriate responses; such responses may not reveal emotional, social or cognitive factors that could influence their choices in making real treatment decisions. Findings of studies using the informed consent format are limited in another way. Because subjects are provided with all relevant information and then asked to make a decision, comparisons are only applicable to similar structured contexts. We know little about the sources, range or use of information when adolescents

\textsuperscript{104} See Gardner et. al., \textit{supra} note 6, at 897-99. For example, Gardner contends that researchers have failed to inquire about possible key differences between adolescent and adult decisionmaking, such as effects of emotional arousal on decisionmaking, or the degree to which adolescents can sift through an overabundance of information to find relevant facts the way adults do. \textit{Id.} at 898. This article argues that aspects of decisionmaking relevant to judgment have not been tested.

\textsuperscript{105} See Belter & Grisso, \textit{supra} note 87, at 901-03 (documenting that in first session, therapy "rights" were explained; in second session, subjects viewed videotaped counseling session and were asked to identify rights violations); Kaser-Boyd et al., \textit{Minors' Ability to Identify Risks and Benefits of Therapy, supra} note 89, at 419 (dividing subjects into groups of those who were therapy-inexperienced, those previously in therapy, and those currently in therapy; subjects were asked to list risks and benefits of therapy); Kaser-Boyd et al., \textit{Children's Understanding of Risks and Benefits of Psychotherapy, supra} note 89, at 167-68 (asking participants with varying degrees of therapy experience/inexperience to categorize statements as risks of therapy, benefits of therapy or irrelevant to therapy and then to determine from hypotheticals whether child considering therapy would or would not enter therapy and to explain their reasons); Scherer, \textit{supra} note 84, at 436 (asking subjects to make treatment decision based on hypothetical); Scherer & Reppucci, \textit{supra} note 84, at 129 (asking subjects to make treatment decision based on hypothetical); Weithorn & Campbell, \textit{supra} note 60, at 1591-93 (documenting that participants listened to audiotape of treatment dilemma and then were interviewed). The abortion decision studies were conducted in a natural setting. See Ambuel & Rappaport, \textit{supra} note 60, at 134-37 (interviews conducted at women's health center after participants underwent pregnancy test); Lewis, \textit{supra} note 60, at 446-47 (interviews conducted in small private rooms at pregnancy clinics while subjects awaited pregnancy test results).

\textsuperscript{106} For a discussion of external validity, see \textit{supra} note 98.
are making choices in more informal settings.107 Finally, as Gardner and his colleagues have pointed out, much of the information about the subjects' cognitive decisionmaking processes consists of retrospective self-reports, a poor substitute for contemporaneous observation.108

Another deficiency weakens the usefulness of the research as a base for evaluating adolescent decisionmaking capability. Findings about the influence of others on adolescent decisionmaking are not only meager, they are inconclusive in their implications for the important issue of voluntariness under informed consent doctrine.109 David Scherer observed some differences between adults and adolescents in response to parental influence. Although he found no systematic developmental pattern, Scherer's study suggests that adults may be less susceptible to influence than younger subjects when considering more important medical decisions.110 Given the widely shared intuition that minors are susceptible to influence not only from parents but from peers,111 the question of whether differences relevant to voluntariness exist is unresolved.

Taken together, the existing research represents an initial step toward understanding how adolescent decisionmaking compares to that of adults. It certainly casts doubt on the presumption that adolescent reasoning and understanding are inferior. Our current state of knowledge is far too inconclusive, however, to support a positive claim that no differences distinguish adoles-

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107. For a more thorough discussion of the unknowns associated with decisionmaking in formal settings, see infra notes 168-73 and accompanying text.

108. See Gardner et al., supra note 6, at 898. Cognitive scientists are not certain that a subject can accurately report the influences on his or her thinking. Id.

109. The legal requirement of voluntariness has vague contours. The kind and extent of coercion necessary to render a decision involuntary is unclear. It is unlikely that influence, per se, is sufficiently coercive. Moreover, coercion from parents or peers is less relevant than coercion by health care providers. However, the voluntariness requirement is based on a policy of ensuring autonomous independent medical decisions, a goal that is undermined if decisions reflect the values and preferences of someone other than the decisionmaker. See Appelbaum et al., supra note 59, at 60-62. The only studies that have focused on the influence of others on minors' decisions made in a legal context are by David Scherer and N. Dickon Reppucci. See Scherer & Reppucci, supra note 84. For a discussion of how other research has examined peer influence on decisions in non-legal contexts, but the relevance of these studies has been obscured here-tofore, see infra notes 127-90 and accompanying text.

110. Scherer, supra note 84, at 443.

111. For a discussion of the research evidence supporting this intuition, see infra notes 127-32 and accompanying text.
cent and adult decisionmaking, and that the research findings in themselves dictate a direction for legal policy.

2. Competence and Judgment

Even if further research confirms that adults and adolescents have similar capacities to understand information and make decisions through a rational process, this conclusion will not fully resolve the issue of whether and when adolescents should be subject to the same legal treatment as adults. To be sure, the legal presumption that minors are incompetent rests, in part, on the belief that minors’ capacities for understanding and for making choices through a rational process are less developed than are those of adults. Protective policies are also based on a presumption, however, that minors and adults differ in their decisions and behavior in ways that go beyond the requirements for competence under informed consent doctrine. The paternalistic norm is supported by a presumption that, in general, the judgment of adolescents is less mature than that of adults, and that the outcomes adolescents choose reflects this immaturity.112 In essence, the societal intuition is that adolescents make poorer choices than adults, due to a variety of social, emotional and cognitive influences that are developmental in nature. As the analysis in Part I suggests, protecting minors (and others) from the costs of their own poor choices is a core rationale of paternalistic policies. Thus, evaluating competence in an informed consent framework provides an incomplete account of how minors’ decisionmaking compares with that of adults.

As I have suggested, it is for good reason that legal competence constructs under modern informed consent doctrine exclude evaluation of outcomes and thus of individual judgment.

112. The Supreme Court has endorsed this presumption in several opinions, including those dealing with adolescent abortion. See, e.g., Bellotti v. Baird, 443 U.S. 622, 635 (1979) ("[D]uring the formative years of childhood and adolescence, minors often lack the experience, perspective, and judgment to recognize and avoid choices that could be detrimental to them."). One of the clearest statements of this presumption was in a case involving psychiatric hospitalization decisions. See Parham v. J.R., 442 U.S. 584 (1979). In Parham, the Supreme Court stated:

The law’s concept of the family rests on a presumption that parents possess what a child lacks in maturity, experience, and capacity for judgment required for making life’s difficult decisions. . . . Most children, even in adolescence, simply are not able to make sound judgments concerning many decisions, including their need for medical care or treatment.

Id. at 602-03.
The doctrine, and therefore the tests, are directed toward the goal of promoting individual autonomy by maximizing patient control over the bodily intrusion of medical intervention.\textsuperscript{113} If the patient understands the relevant information and makes a choice through a rational process, then no one should have authority to monitor the “quality” of the outcome. The decision should reflect the subjective values of the decisionmaker, even if those values lead to idiosyncratic outcomes which most others would reject. Thus, in theory at least, under informed consent doctrine, adults are free to make poor decisions (from the perspective of others) as long as their understanding and reasoning are not greatly impaired.\textsuperscript{114} The legal test for competence is conceived as a checkpoint and not as a roadblock to individual choice.\textsuperscript{115}

Should policymakers care whether or not adolescents systematically differ from adults in the substantive choices they make or in the factors that shape their decisions? Although few who have argued for expanded adolescent rights using the informed consent framework have given much attention to this question, it can be inferred that the answer for some is clearly “no.”\textsuperscript{116} In part,

\textsuperscript{113} See Jay Katz \& Alexander M. Capron, Catastrophic Diseases: Who Decides What? 82 (1975). Katz and Capron describe the promotion of individual autonomy as a primary function of informed consent. \textit{Id.} For a discussion of the central importance of autonomy to informed consent doctrine, see Appelbaum et al., supra note 59, at 17-32. For a discussion clarifying that competing values are at stake in medical decisionmaking, see Alan Meisel, The “Exceptions” to the Informed Consent Doctrine: Striking a Balance Between Competing Values in Medical Decisionmaking, 1979 Wis. L. Rev. 413.

\textsuperscript{114} Competence tests that focus on the quality of the outcome have been subject to intense criticism and are generally disfavored. See Roth et al., supra note 62, at 281. Appelbaum and colleagues analyze the tension between the value of health care and the value of autonomy. Appelbaum et al., supra note 59, at 28-31. They point out that courts, although they try to accommodate the two values, are reluctant to compromise autonomy and that courts therefore place decisional authority with the patient. \textit{Id.} at 30-31. Appelbaum and colleagues criticize any test of competence that focuses on outcome on the grounds that it undermines autonomy and is “paternalistic to an extreme.” \textit{Id.} at 87; see also Meisel, supra note 113, at 451 (describing danger that finding of incompetence will be based on patient’s making decision not approved by physician).

\textsuperscript{115} Another aspect of legal competence requirements that also reflects autonomy goals is that adults making medical decisions are presumed to be competent, a presumption that is not routinely challenged. See Appelbaum et al., supra note 59, at 92 (describing legal presumption of competence); Appelbaum \& Grisso, supra note 61, at 1635 (noting that presumption of patients’ competence recognized by both physicians and law).

\textsuperscript{116} Certainly the premise of the advocacy literature, although sometimes unstated, is often that competence under the applicable legal test should be dispositive of legal authority. Thus, arguments for greater legal authority for adolescents are based on research evidence that adolescents are competent under
this presumably negative response reflects an ideological stance that simply favors policies promoting personal autonomy. Apart from a preference for autonomy, however, this position can be derived from the doctrinal premises of the informed consent framework itself. If the legal competence of adults does not involve considerations of judgment, according to this argument, the same principle should hold for minors who fulfill competence requirements.

At one level, the response to this argument is simple. The analysis is incomplete because it examines tests for decisionmaking competence in a vacuum, discounting policy contexts that differ for adults and minors. It is precisely the belief that differences between adolescent and adult judgment exist that drives the traditional paternalistic policies toward youth. Thus, the fact that tests that are applied to adults generally exclude any inquiry into substantive outcomes or judgment simply means that such tests do not evaluate dimensions of decisionmaking that are relevant in formulating policy regulating minors. In some contexts, age restrictions based on an intuition that younger minors have poorer judgment are uncontroversial. For example, few would argue, on "competence" grounds, that twelve year olds who can pass the legally required written and performance tests should be awarded a license to drive a motor vehicle.

The case that judgment is appropriately considered in evaluating adolescent legal capacity rests in part on a straightforward claim that the social cost of a different response would be excessive. Informed consent policy reflects a conclusion that the importance of respecting adults' autonomy in the context of health informed consent tests. See APA Hodgson brief, supra note 3 (arguing that adolescents should have legal authority to make abortion decisions based on research showing competence under legal tests); Gittler et al., supra note 5, at 24-29, 49-50, 54 (arguing that adolescents should have legal authority if they are minimally competent under tests, even if adolescents, on average, are less competent); King, supra note 66, at 252-53 (arguing that research demonstrates that adolescents can meet legal tests and thus should have authority). The general view is that if adolescents are able to "conceptualize and reason" about medical decisions, then no justification exists for "age-graded policies." Interdivisional Committee on Adolescent Abortion, supra note 91, at 73, 75. I have not found any discussion of the issue presented in the literature, possibly because the relevance of judgment to adolescent "competence" has not been recognized.

Certainly the scholarship and other pronouncements of leading advocates such as Gary Melton, Lois Weithorn and Donald Bersoff (chief author of the APA adolescent abortion briefs, supra note 3) reveal this preference and the view that self-determination and personhood are linked. See Melton, supra note 25, at 482; Melton, supra note 3, at 101-02; Weithorn, supra note 23, at 85; Bersoff, supra note 93, at 1569.
care decisions outweighs the social cost of poor decisions by "outliers," particularly given the substantial costs of any other policy.\textsuperscript{118} It is plausible to assume that most people are motivated to make health-promoting medical decisions, i.e., to use good judgment, and thus that the social cost of respecting autonomy is tolerable.\textsuperscript{119} This conclusion does not mean that if, in another context, the social cost of poor judgment is more substantial, autonomy concerns will nonetheless triumph. As social costs increase, legal intervention becomes more acceptable. This is obvious when poor judgment results in harm to others.\textsuperscript{120} However, even self-regarding actions can have unacceptable social consequences. For example, seat belt and motorcycle helmet laws restrict freedom to make poor decisions in situations in which the social cost, although largely internalized, is significant.

If adolescents generally have poorer judgment than adults, then the social cost of according them freedom will be significant in some contexts. Legal restriction is not punitive, but a response based on a frequently employed policy calculus. In many, and perhaps even most, legal contexts, the value of personal freedom is balanced implicitly against the anticipated social cost of poor judgment. If these costs fall primarily on juvenile decisionmakers themselves, then the case for restriction may be enhanced because the societal interest in preventing harm to this group is particularly acute. Protecting minors from the harm that can result from their own poor judgment seems important in order to preserve the options of youthful decisionmakers for a future when, it is presumed, they will make sounder choices.

The legitimacy of a paternalistic response seems to hinge on

\begin{itemize}
  \item \textsuperscript{118} The costs of a policy of placing decisionmaking about medical treatment in the hands of physicians are obvious, given the potential for a conflict of interest. Administrative or judicial review of physician decisions would add to the cost.
  
  For a discussion of the tension between a policy of promoting autonomy and of promoting health care, and of the ways in which the law seeks to accommodate these two interests, see Appelbaum et al., supra note 59, at 28-31.
  
  \item \textsuperscript{119} In the area of preventive health care, much evidence suggests that many people do not make health promoting decisions. For example, the social costs of alcohol and tobacco consumption are high, and yet autonomy is not restricted. This is because enforcement costs of restriction or prohibition are also high, as our experience with the prohibition of alcohol under the Eighteenth Amendment demonstrated.
  
  \item \textsuperscript{120} Libertarians recognize that autonomy is limited to acts that do not harm others. See John Stuart Mill, On Liberty 13 (Cambridge University Press 1989) (1859) ("[T]he only purpose for which power can be rightfully exercised over any member of a civilized community, against his will, is to prevent harm to others.").
\end{itemize}
the premise that many of the factors that differentiate adolescent decisionmaking are developmental in nature and transient in duration.\textsuperscript{121} The autonomy interest protected under informed consent doctrine is the interest of individual decisionmakers in making choices that reflect their subjective values. Paternalistic policy does not presume that adolescents' costly choices reflect idiosyncratic personal values or traits, but rather the influence of common age-linked characteristics which predictably will change. If this is so, then the autonomy claim seems less compelling for adolescents than for adults. For example, an adult who makes choices that reflect a preference for immediate gratification is revealing subjective personal preferences. If adolescents, in general, are more inclined than are adults to make choices that emphasize short-term over long-term effects, something other than idiosyncratic personal preference is at work.\textsuperscript{122} Moreover, if the adolescent predictably will become an adult with different values and preferences from his or her youthful self, then that adult arguably should not be burdened by the detrimental effects of his or her earlier immature judgment.\textsuperscript{123}

\textsuperscript{121} For a discussion of weak paternalism in this context, see infra notes 122-23 and accompanying text.

\textsuperscript{122} It is possible to characterize the factors that influence adolescent decisionmaking as analogous to preferences that are associated with other groups, a characterization that challenges the conclusion that autonomy interests are not implicated. For example, elderly people (or Italians) may categorically have different tastes in some matters than the norm. Restrictions based on such differences would not be acceptable, even if the preferences resulted in health threatening choices. To the extent that adolescent differences can be linked to developmental change toward maturity, they can be distinguished from many preferences of this type. To be sure, the line may be fine. For example, it might be questioned whether the distaste of elderly people for loud music is not in some sense "developmental." Nonetheless, the importance of peer approval in adolescence seems to influence decisionmaking in a way that is linked to social development and that predictably will decrease. We may be more comfortable responding to such influences in evaluating competence if we can predict that most adolescent decisionmakers will weigh a given factor differently in the future.

\textsuperscript{123} Moral philosophers have struggled with the impact on personal responsibility and commitment of the fact that personal identity can change over time. Although the focus of philosophical debate on this issue has been on change over the course of a lifetime, the evolution of personal identity in adolescence presents the issue more clearly. Derek Parfit has posited that under a "complex view" of personal identity, the substantial change in an individual's values, preferences and goals over time could support an argument that the person's identity has changed to the extent that he or she has become a different self, who should not be bound by the decisions, commitments and acts of his or her earlier self. Derek Parfit, \textit{Later Selves and Moral Principles}, in \textit{Philosophy and Personal Relations} 137, 138-42 (Alan Montefiore ed., 1973). For an application of this idea to decisionmaking about marriage, see Elizabeth S. Scott, \textit{Rational Decisionmaking About Marriage and Divorce}, 76 Va. L. Rev. 9, 58-62 (1990).
The case for categorical exclusion of judgment factors from a model of adolescent decisionmaking capability rests on other objections, however. First, the task of constructing measures of decisionmaking that incorporate judgment is formidable. It is surely easier to work within the informed consent framework with its established and, by comparison, simpler structure. Moreover, the inherently value-laden character of imposing an external norm of good and poor judgment is troublesome in itself, particularly when it serves as the basis for legal restriction of self-regarding actions. Existing legal doctrine that attempts to evaluate judgment reveals the susceptibility of this inquiry to interpreter bias. For example, judges called upon to apply the mature minor requirement under abortion statutes have often done so in ways that reveal more about their attitude toward abortion, teenage sex or the burdens of teen pregnancy than any thoughtful effort to analyze maturity of judgment. A conclusion that a particular outcome represents bad judgment in essence substitutes the values of another decisionmaker or of society for the values of the person most affected by the decision.

Despite these objections, exploring aspects of adolescent decisionmaking...

124. See, e.g., H. B. v. Wilkinson, 639 F. Supp. 952, 955, 957-58 (D. Utah 1986) (finding 17-year-old minor to be immature because she demonstrated unrealistic judgment and perspective in relying upon advice of teenagers, expecting to conceal from her parents any medical complications arising from abortion, dismissing possibility of post-abortion depression, failing to use contraceptives and exhibiting "cavalier attitude" toward ease of abortion; finding of immaturity made despite minor's advanced age, high scholastic average in high school, college plans and family's opposition to abortion); Matter of T.H., 484 N.E.2d 568, 570-71 (Ind. 1985) (refusing to allow 14-year-old to terminate her pregnancy, although she testified as to her reasons for wanting abortion and her foster mother and social worker testified that they thought she was mature enough to make her own decision); In re T.P., 475 N.E.2d 312, 315 (Ind. 1985) (refusing to allow 16-year-old minor to terminate pregnancy; requested abortion would have been second abortion within seven months); In re Jane Doe 1, 566 N.E.2d 1181, 1182, 1184-86 (Ohio 1990) (divided appellate court upholding trial court's finding that 17-year-old minor was not sufficiently mature to consent to abortion, despite expert testimony supporting her competence and dissent's call for objective test based on specific factors, in part because requested abortion would have been her second within one year and pregnancies were result of intercourse with two different men); see also Robert H. Mnookin, Bellotti v. Baird: A Hard Case, in IN THE INTEREST OF CHILDREN: ADVOCACY, LAW REFORM & PUBLIC POLICY 149, 239-40 (Robert H. Mnookin ed., 1985). Mnookin and Virginia Cartoof's studies revealed that every pregnant minor who sought judicial authorization for an abortion between April 1981 and February 1983 in Massachusetts obtained judicial authorization. Id. at 239. Mnookin asserts that judges granted approval because "the superior court judges realize that it would be impossible as a legal proposition to justify a finding that a pregnant minor was too immature to decide whether to have an abortion for herself, but that it was in her best interests to bear the child." Id. at 240.
decisionmaking related to judgment and considering their relevance to legal policy is a worthwhile undertaking. This response is largely pragmatic. The empirical assumption that minors' judgment is poorer than adults' is the core of the paternalistic framework that continues to define legal policy toward minors. This assumption is often explicitly invoked when courts uphold legislative restrictions on such issues as adolescent abortion. For the most part this assumption is currently grounded in intuition, which may be crude, but is nonetheless quite persistent. Arguing that judgment should not count seems unlikely to alter the intuition. The important and difficult question is not whether judgment should be excluded in principle from an analysis of adolescent competence. Rather, we should analyze the components of judgment that are relevant in different decision contexts, chart the similarities and differences between adolescents and adults and analyze the relevance to legal policy. A more precise and empirically based understanding of the amorphous concept of judgment may either reinforce or undermine the premises of the paternalistic framework, depending on the context. In any event, a more empirical and less intuitive foundation for legal policy would be an advance.

III. JUDGMENT AND ADOLESCENT DECISIONMAKING

In this Part, I explore how the framework for comparing adolescent and adult decisionmaking could be expanded beyond the constrictions imposed by informed consent doctrine, so as to incorporate and permit the evaluation of judgment. First, I sketch several characteristics associated with adolescence that, in some contexts, might be relevant to assessing judgment as a dimension of decisionmaking. Using a standard model of rational decisionmaking, I then demonstrate, as precisely as possible, how adolescents potentially could be capable of understanding relevant information and making decisions through a rational process, and yet systematically differ from adults in important ways that

125. The United States Supreme Court has often described the immaturity of youthful judgment as the justification for parental authority and paternalistic oversight. For a discussion of this issue, see supra note 112 and accompanying text.

126. For example, it is commonly believed that adolescents differ from adults in breadth of experience, in attitude toward risk, in impulsiveness, in the weight attached to short-term versus long-term consequences and in the importance attached to personal appearance and to peer influence. For a discussion of these issues, see infra notes 127-42 and accompanying text.
would not be captured by an analysis in the informed consent framework.

A. Adolescent Development and Decisionmaking

In general, adolescents are presumed to be less independent in their decisionmaking than adults, and to be subject to the influence of both parents and peers. Although, compared to younger children, adolescents have achieved greater autonomy in relation to their parents, tentative evidence suggests that they are more subject to parental influence than are young adults. A more pressing concern for paternalists is that adolescents have a greater inclination to respond to peer influence than do adults. This tendency reflects the importance of horizontal peer relationships during adolescence to the formation of personal identity, and, as such, is a part of emotional and social development. Peer influence operates through two processes: social comparison and conformity. Through social comparison, adolescents use others' behavior as a measure of their own. Social conformity leads adolescents to adapt their behavior and attitudes to those of their peers. The importance of peer influence to adolescent

127. Scherer, supra note 84, at 442-46. Scherer's research suggests that adolescents are more responsive than young adults to parental influence in making some important medical decisions, although no clear pattern of influence was revealed, and on more trivial decisions (removal of a wart) young adults were more responsive to parental opinion. Id. at 442-43.

The influence of others on decisionmaking implicates the psychological constructs of conformity, compliance and reactance. Scherer & Reppucci, supra note 84, at 125-27. Conformity involves acceptance of and effort to mirror social norms, a response that is most pronounced in early adolescence. Id. at 125. Compliance relates to obedience and acquiescence to others. Id. Reactance is, in essence, "anti-conformity," behavior that is oppositional to attempted social influence. Id. at 125-26. There is little concrete evidence that adolescents are inclined to resist parental influence. Scherer, supra note 84, at 444 (citing Grisso & Vierling, supra note 5).

128. See ERIK H. ERIKSON, IDENTITY: YOUTH AND CRISIS 45-53 (1968). Erikson described the importance of peer group relations in the formation of personal identity. Id. Peer influence can be either informational or normative. Adolescents learn attitudes, behaviors and values from peers. They also feel pressure to behave as others do. See NORMAN SPRINHTALL & W. ANDREW COLLINS, ADOLESCENT PSYCHOLOGY 286-95 (2d ed. 1988).

129. See SPRINHTALL & COLLINS, supra note 128, at 286-95.

130. Id. at 287. Adults and younger children engage in social comparison as well, but the process is more important in adolescence. Id.

131. Id. at 288. Studies of social conformity provide dramatic evidence of the extent to which adolescents are influenced by peer opinion. Philip Costanzo asked 490 subjects to describe which of three straight lines was the same as a comparison line. Phillip R. Costanzo, Conformity Developments as a Function of Self Blame, 14 J. PERSONALITY & SOC. PSYCHOL. 366, 369-72 (1970). Tested in groups of four, but seated in individual booths, subjects were told that indicator lights
decisionmaking could be relevant in two ways. In some contexts, adolescents might be more vulnerable to direct peer pressure in making choices. More indirectly, adolescent desire for peer approval may affect decisionmaking without any coercion.\textsuperscript{132} For example, an adolescent might reject a particular outcome because he or she believes that his or her peers will disapprove.

Adolescents in general also demonstrate a heightened concern for personal appearance, a trait that is linked to the dramatic physical changes that occur during this developmental stage.\textsuperscript{133} This concern is interwoven with the focus on peer approval and is an important dimension of social and emotional development. The importance of body image might affect the value attached to different consequences in making decisions. For example, adolescents are less willing than adults to accept treatment with disfiguring side effects.\textsuperscript{134}

\textsuperscript{132} The Costanzo study reveals how powerful this indirect influence can be. \textit{See} Costanzo, \textit{supra} note 131.

\textsuperscript{133} Child development experts agree that physical change during adolescence has an important effect on psychological development. Self-image and self-esteem are linked to the individual adolescent's subjective reaction to the change and the reaction of others. \textit{See} Guy J. Manaster, \textit{Adolescent Development: A Psychological Interpretation} 16, 26-29 (1989) (discussing psychosocial effects of early and late maturation); Sprothall & Collins, \textit{supra} note 128, at 56-57 (discussing effect of pubertal changes on self-concept). Adolescents share "an intense psychological need for physical sameness with their peers." B. Geraldine Lambert \textit{et al.}, \textit{Adolescence: Transition from Childhood to Maturity} 107-09 (1972); \textit{see also} A. Peterson & B. Taylor, \textit{The Biological Approach to Adolescence}, in \textit{Handbook of Adolescent Psychology} 147 (J. Adelson ed., 1980).

\textsuperscript{134} For an example of when adolescents are less willing to undergo disfiguring treatment, \textit{see supra} note 82. \textit{See also} Barbara A. Cromer & Kenneth J. Tarnowski, \textit{Noncompliance in Adolescence: A Review}, 10 J. Dev. & Behav. Pediatrics 207, 211-12 (1989) (finding in study that poor body image was related to non-compliance with back exercises and with wearing braces for scoliotic condition). One study of renal transplant patients found several adolescent girls who reported "that their appearance was so repugnant to them and caused such problems in their social relationships that 'it was not worth it'" to adhere to a regimen of immunosuppressive medication, despite the fact that non-compliance was life threatening. Barbara M. Korsch \textit{et al.}, \textit{Noncompliance in Children with Renal Transplants}, 61 Pediatrics 872, 874 (1978). Another study found small but statistically significant differences between 14 year olds and adults in choosing treatment options for epilepsy; the authors related these findings "to the concerns of early adolescents about body image and physical attractiveness" because the rejected medication was described as sometimes leading to periodontal problems and excess growth of body hair. Weithorn & Campbell, \textit{supra} note 60, at 1596.
Youthful decisionmakers are also presumed to be more impulsive in their behavior than adults. This tendency, if established, might affect decisionmaking competence, if impulsiveness disables the young individual from considering alternatives or weighing and comparing consequences according to his or her subjective utility. More likely, impulsiveness might simply affect the care with which actual decisions are made, even though it might not impair theoretical competence to follow a rational process.

Adolescents seem to differ from adults in their perception of and attitude toward risk and in their perspective on time. Different attitudes toward risk might result from dissimilar risk preferences. Adolescents are believed to be less risk averse than

135. Norman A. Sprinthall & R. L. Mosher, *Studies of Adolescents in the Secondary Schools* (1969), cited in SPRINTHALL & COLLINS, supra note 128, at 464-65. These authors conducted research in secondary schools to assess the decision-making process of high school juniors with respect to career objectives. Id. They found that almost two-thirds of teenagers failed to use rational planning and instead chose blindly and impulsively, left the decision to fate or sought advice from others. Id.

136. William Gardner and colleagues have conducted several studies and written thoughtfully on adolescent attitudes toward risk. See Gardner, supra note 95; Gardner et al., Developmental Change in Decision-Making, supra note 95; William Gardner & Janna Herman, *Adolescents' AIDS Risk Taking: A Rational Choice Perspective, in 50 New Directions for Child Dev. 17* (1990); Tester et al., supra note 95. It is well established that adolescents engage in "risky" behavior—behavior which from an adult perspective presents greater risk of loss than possibility of gain. See Gardner & Herman, supra, at 17; cf. Lita Furby & Ruth Beyth-Marom, *Risk Taking in Adolescence: A Decision-Making Perspective* 28 (Carnegie Council on Adolescent Development Working Papers, 1990) (analyzing risk taking behavior as rational decisionmaking). Furby and Beyth-Marom offer a comprehensive description of the relevant research literature. Id. at 19-25.

Risk taking behavior is closely linked to perspective on time. Many researchers have studied the changes in temporal perspective that occur during adolescence. A. L. Greene, in an article that provides a comprehensive description of existing studies, has described three differences between younger children and adolescents. Adolescents demonstrate greater depth and extension of temporal perspective, have a more complex set of behavioral expectations, and show more planning, organization and realism in describing future aspirations. A.L. Greene, *Future-Time Perspective in Adolescence: The Present of Things Future Revisited*, 15 J. Youth & Adolescence 99, 100 (1986). Changes in temporal perspective continue to occur through late adolescence. See F. Monks, *Future Time Perspective in Adolescence*, 11 Hum. Dev. 107, 111 (1968) (studying essays written by 14 to 21 year olds showed close relationship between age and personal attitude toward future); see also Thomas Cottle et al., *Adolescent Perceptions of Time: The Effect of Age, Sex, and Social Class*, 37 Personality 636 (1969) (noting that young adolescents are preoccupied with present; sense of extended future not yet formed). Furby and Beyth-Marom express skepticism about whether research has demonstrated that adolescents possess stronger positive time preferences than do adults. Furby & Beyth-Marom, supra, at 32.
adults. Compared to adults, adolescents appear to focus less on protection against losses than on opportunities for gains in making choices. Differences in risk perception also have been observed. Perhaps because they have less experience than adults, adolescents may sometimes be unaware of risks that adults perceive, or they may calculate the probability or magnitude of a given risk differently.

Attitude toward risk also has a temporal component. In general, adolescents seem to discount the future more than adults and to weigh more heavily the short-term consequences of decisions—both risks and benefits. This tendency contributes to risky behavior in some settings. William Gardner and Janna Herman hypothesize that this tendency may be linked to the greater uncertainty that young people may feel about their own futures, an uncertainty that might make short-term consequences seem

137. See Gardner & Herman, supra note 136, at 23-28.

138. Differences in risk preference are reflected in the extent to which avoiding loss (or exploiting the potential for gain) is important in reaching decision outcomes. Lola Lopes, Between Hope and Fear: The Psychology of Risk, 20 ADV. IN EXPERIMENTAL SOC. PSYCHOL. 255, 275 (1987); see also Furby & Beyth-Marom, supra note 136, at 56-59 (presenting hypotheses as to how differences in risk preference described by Lopes, supra, may lead to differences in risk taking); Gardner & Herman, supra note 136 (finding in study that older children and girls favor choices that reduce exposure to large losses).

139. The belief that adolescents sometimes do not perceive risks or calculate them accurately is linked to a view that youth is associated with a sense of invulnerability (unrealistic confidence in personal safety). See Furby & Beyth-Marom, supra note 136, at 33. Furby and Beyth-Marom speculate that adolescents’ more limited experience leads to the tendency to disregard the possibility of negative outcomes. Id. This speculation is supported by some research findings. See Catherine C. Lewis, How Adolescents Approach Decisions: Changes over Grades Seven to Twelve and Policy Implications, 52 CHILD DEV. 538, 541 (1981) (concluding that compared to younger subjects, 18 year olds more likely to spontaneously mention risks of cosmetic surgery); Charles E. Phelps, Risk and Perceived Risk of Drunk Driving Among Young Drivers, 6 J. POL’Y ANALYSIS & MGMT. 708, 710-11 (1987) (finding that young drivers greatly underestimate risk of accident associated with drinking six alcoholic drinks).

Interestingly, mid-adolescents seem to have poorer perception of the risks of cigarette smoking than either younger children or older teens. See Kathryn Urberg & Rochelle Robbins, Perceived Vulnerability in Adolescents to the Health Consequences of Cigarette Smoking, 13 PREVENTIVE MED. 367, 373-74 (1984) (finding in cross-sectional study that perception of risks of smoking dropped to low point at age fourteen and then rose slowly during high school).

140. See Gardner & Herman, supra note 136, at 25-26. As Gardner and Herman point out, strong positive time preferences (focus on immediate consequences) can increase risk taking behavior because only immediate negative consequences will be taken into account and future harmful consequences will be discounted. Id. Adolescent propensity to engage in risky sexual behavior, discounting the risk of AIDS (or pregnancy), can be explained in these terms. Id.
more salient in an evaluation of different options. This tendency also may reflect the reality that adolescents have had less experience. An adolescent may find it more difficult than an adult to contemplate the meaning of a consequence that will be realized five to ten years in the future, because such a time span is not easily made relevant to adolescent experience.

B. Judgment in a Rational Decisionmaking Model

In order to examine how adolescent and adult decisionmaking might be compared in ways that have been ignored or obscured under the formal informed consent framework, I develop a step-by-step analysis using a standard "model" of rational decisionmaking. Lita Furby and Ruth Beyth-Marom describe such a decisionmaking model that would include the following steps: (1) identifying the possible alternative outcomes; (2) identifying the consequences that may follow from each outcome; (3) assessing the desirability and the probability of each consequence; and (4) using this information to make a decision that maximizes one's utility. The requirements for competent decisionmaking under an informed consent framework conform to this prescription. Examination of the process of making decisions under this model also permits a more expansive inquiry into dimensions of decisionmaking relevant to the comparison of adult and adolescent judgment.

1. Differences in Use of Information

The first stages of decisionmaking involve the gathering and organization of information. Dissimilarity in the use of information

141. See id. at 23-27.

142. In general, the fact that adolescents have less experience than adults can influence decisionmaking in tangible and intangible ways. Although the relative inexperience of adolescents is not contested as a general proposition, the relevance of this fact to decisionmaking and to judgment has not been rigorously analyzed. Thus, traditionalists frequently make rhetorical claims about the detrimental impact of adolescents' more limited experience on their decisionmaking in support of restrictive policies while advocates routinely dismiss these claims.

143. Furby & Beyth-Marom, supra note 136, at 4-5. The structure of Furby and Beyth-Marom's analysis of decisionmaking has influenced my approach to this section significantly, although I draw different inferences from the analysis.

144. The competent patient is capable of understanding the options for treatment (including no treatment) and the consequences of each option. The patient should be able to evaluate the magnitude and probability of the risks and benefits of each option and then to make a choice by using this information in a rational manner.
tion between adolescents and adults would exist if minors considered a different range of options in thinking about their available choices, or if they identified different consequences in evaluating and comparing alternatives. Individuals may vary in at least two ways in the use of information. First, they may vary in the extent to which they have relevant knowledge on which to draw in making a decision, and second, they may differ in the amount or type of information that they actually use.

The use of information by adult decisionmakers has been the focus of a great deal of research in cognitive psychology. Adults are not by any means optimal rational decisionmakers. Through the use of various strategies or heuristics, decisionmakers organize large amounts of information in order to focus on salient data. These strategies, although usually helpful, can distort the type of information that is considered and thus can bias decisionmaking. What is of interest, therefore, is not whether minors fail to consider important information, but how they compare to adults in this regard. Ultimately, the evaluation of whether disparities in the use of information signify differences in the quality of decisionmaking requires an assessment about the importance of the information which is ignored or treated differently in a given context.

The research comparing adolescents and adults in their use of information has produced ambiguous results. Adolescents are similar to adults in their cognitive capacity for information processing, and, in some contexts, are also similar to adults in the use of information that is provided to them. Research findings do indicate, however, that in some contexts, adolescent decisionmakers are aware of and use less information than adults.

145. See Furby & Beyth-Marom, supra note 136, at 9-10. For example, fewer teenagers than adults whose families seek psychiatric hospitalization might be aware of the alternative of refusing hospitalization.

146. For a sampling of research and positive theory, see JUDGMENT UNDER UNCERTAINTY: HEURISTICS & BIASES (Daniel Kahneman et al. eds., 1982).


148. Kahnemann & Tversky, supra note 147, at 350.

149. See Gardner et al., supra note 6 at 897-98 (citing studies suggesting that adolescents' cognitive capacity for information processing is similar to that of adults).

150. Weithorn and Campbell's research indicates that adolescents who were provided with information about treatment alternatives used the information similar in a manner to that of adults. Weithorn & Campbell, supra note 60, at 1596. But see id. (noting that despite "generally equivalent" performance, small but statistically significant differences were found).
For example, some studies of adolescent use of contraceptives suggest that ignorance about the risk of pregnancy is more widespread among teens than adults.\textsuperscript{151} Maya Tester and her colleagues, in a study that tested the use of information about loss, gain and probability in making choices, found that adults used more information than children or adolescents.\textsuperscript{152} In particular, this and other studies have found that older decisionmakers pay more attention to loss in making decisions than do children and adolescents.\textsuperscript{153} Catherine Lewis found that, compared to fifteen year olds, eighteen year olds spontaneously mentioned a broader array of risks of cosmetic surgery.\textsuperscript{154} Valerie Reyna and colleagues found that adolescents were more influenced by single case histories in estimating probabilities than were adults.\textsuperscript{155}

Taken together, these studies indicate that, in some contexts, adolescents differ from adults in the way they use information in making choices.\textsuperscript{156} However, few generalizations seem to hold and the sources of difference are quite complex; differences in experience, knowledge, and attitude toward and perception of risk may all be interwoven.

\textsuperscript{151} See Diane M. Morrison, \textit{Adolescent Contraceptive Behavior: A Review}, 98 PSYCHOL. BULL. 588, 539-41 (1985) ("Studies of high school-age adolescents suggest . . . that many have only limited, and often faulty, information.").

\textsuperscript{152} Tester et al., \textit{supra} note 95 at 4-5, 7-9. The study tested the use of information by subjects directed to make choices in a computer gambling game. Subjects included children (ages 7-9), adolescents (ages 11-13) and adults (ages 19 and over). \textit{Id.} at 3.

\textsuperscript{153} \textit{Id.} at 5. Gardner and his colleagues found that children and adolescents tended to pay more attention to potential gains than losses, while adults gave equal weight to both dimensions. Gardner et al., \textit{Developmental Change in Decisionmaking}, \textit{supra} note 95, at 9-10.

\textsuperscript{154} Lewis, \textit{supra} note 139, at 541. Because risks were not revealed to the subjects, the differences between adolescents and adults in mentioning risks may be attributable to the different information bases each group had available in making choices.

\textsuperscript{155} See Furby & Beyth-Marom, \textit{supra} note 136, at 18 (citing Valerie F. Reyna et al., \textit{Attitude Change in Adults and Adolescents: Moderation Versus Polarization, Statistics Versus Case Histories} (1987) (unpublished manuscript)).

\textsuperscript{156} In a review of the research, commentator Harmoni and colleagues reported that older adolescents are better able to think of options, identify risks and benefits and assess the credibility of information than are younger adolescents (ages 12-14). R. Harmoni et al., \textit{Adolescent Decisionmaking: The Development of Competence} (1987) (unpublished manuscript, on file with Flinders University of South Australia), \textit{cited in} Furby & Beyth-Marom, \textit{supra} note 136, at 17-18. \textit{But see} John A. Ross, \textit{The Measurement of Student Progress in a Decisionmaking Approach to Values Education}, 27 ALBERTA J. EDUC. RES. 1 (1981), \textit{cited in} Furby & Beyth-Marom, \textit{supra} note 136, at 17-18 (finding few differences among seventh to tenth graders in identifying alternatives and summarizing information about criteria and suggesting that decisionmaking growth takes place only in early elementary and late secondary grades).
2. Value Differences

A different type of variation could emerge in the next stage of decisionmaking, in which the individual attaches subjective value to the perceived consequences of each alternative. In undertaking a cost-benefit calculus, minors, subject to developmental influences, might weigh a particular cost or benefit differently than adults (or view as a benefit what adults would count as a cost). For example, because adolescents are relatively more concerned about personal appearance than are adults, the fact that a medication involves a twenty percent risk of causing unsightly hair growth might be weighed more heavily as a cost of that option by teenagers than by adults.\textsuperscript{157} Similarly, it might be a more important benefit to adolescents than to adults that one choice is likely to result in greater peer approval than another.\textsuperscript{158} Finally, the fact that adolescents tend to discount the future more than adults could influence the way some costs and benefits are weighed.\textsuperscript{159} Thus, an adolescent with scoliosis who is deciding whether to consent to wearing a brace to correct her spinal curvature might weigh the anticipated short-term embarrassment more heavily than an adult and the prospect of a straight spine in the distant future less heavily.

Adolescents and adults might also calculate the probability of a given consequence differently. Adolescents are more likely than adults to engage in risky behavior\textsuperscript{160} perhaps, in part, because it seems less risky to them than it would to to adults. Although this could be due to differences in accessible information,\textsuperscript{161} dissimi-

\textsuperscript{157} Lois Weithorn found that adolescents were less likely than adults to choose one alternative treatment for epilepsy that occasionally could cause periodontal problems or excess growth of body hair. Weithorn & Campbell, supra note 60, at 1596. Research on adolescent patients with kidney transplants revealed that repulsion at the side effects of immunosuppressive medication (hirsutism and facial disfigurement) was associated with noncompliance, despite an intellectual understanding of the life-threatening potential of this choice. Korsch et al., supra note 134, at 874, cited in Cromer & Tarnowski, supra note 134, at 209 n.73.

\textsuperscript{158} See Lambert et al., supra note 134, at 107-09.

\textsuperscript{159} Gardner, A Life-Span Theory of Risk-taking, supra note 95, at 9-11.

\textsuperscript{160} “Risky behavior,” of course, is defined objectively by adult standards, and includes behavior that puts health, welfare and life at risk. Substance abuse, auto accidents and unprotected sexual activity are more commonly associated with youth. See Furby & Beyth-Marom, supra note 136, at 19 (citing studies concerning risky behavior by youths); see also Risking the Future: Adolescent Sexuality, Pregnancy, and Childbearing 101 (Cheryl D. Hayes ed., 1987) (same); Gardner, A Life Span Theory of Risk Taking, supra note 95 (same).

\textsuperscript{161} See Lewis, supra note 139, at 541 (finding that 42% of twelfth graders spontaneously mention future consequences of cosmetic surgery and experi-
lar attitudes toward risk itself and temporal discount rates can also play a part. For example, adolescents and adults might both think drug experimentation carries a risk of addiction, and sexual experimentation poses a risk of pregnancy and AIDS. The two groups may assess differently, however, the probability that the negative consequences will occur. Alternatively, minors and adults might concur that a given option carries a certain percentage of risk of a particular bad consequence, but due to dissimilar risk preferences, differ on whether that risk is prohibitive or acceptable.162

Substantial evidence supports the claim that youthful decisionmakers sometimes subjectively value consequences in ways that distinguish them from adults.163 These differences reflect the influence on the risk-benefit calculus (and thus on the outcomes reached) of developmental factors such as susceptibility to peer influence,164 concern about personal appearance,165 attitude toward risk and perspective on time.166 The substantial body of research on treatment compliance in patients with chronic illness

mental acne treatment, while only 25% of tenth graders and 11% of seventh and eighth graders mention these consequences); Phelps, supra note 139, at 710-11 (noting that adolescents underestimate risk of accident associated with drinking).

162. One whose predisposition is to avoid large losses is likely to weigh a given risk more heavily than is one who is inclined to exploit the potential for gain. For a further discussion on differing attitudes toward risk, see supra notes 136-39 and accompanying text. This is not the same issue as is presented by the hair loss example above. For example, presumably, most people would agree that contracting AIDS is very undesirable. However, decisionmakers might vary in their response to the information that a contemplated choice holds a one percent risk of contracting AIDS. An alternative (not inconsistent) explanation is based on differences in time preference. A decisionmaker willing to risk AIDS may be discounting the future harm represented by the risk in favor of immediate benefit. Gardner & Herman, supra note 136, at 25-26. This response is directly linked to time preferences. Id. at 25; see also Furby & Beyth-Marom, supra note 136, at 31-33 (discussing empirical studies on developmental differences in temporal perspective).

163. Again, it should be emphasized that no evidence suggests that adults perform optimally in their perception or assessment of risks. For a discussion emphasizing this point, see supra notes 147-48 and accompanying text.

164. See Costanzo, supra note 131, at 372 (demonstrating through study that "suggestibility [sic] of child to peer influence increases with age into pubescence," and then declines with increasing age).

165. For a discussion of the impact that concerns about personal appearance may have on the risk-benefit calculus, see supra notes 133-34 and accompanying text.

166. See Furby & Beyth-Marom, supra note 136, at 33 ("[I]t may be that adolescents judge some negative consequences in the distant future to be of lower probability than do adults or to be of less importance than adults do."); Gardner et al., A Life Span-Theory of Risk-taking, supra note 95, at 9-11; see also Gardner & Herman, supra note 136, at 25 ("[A] thirty-five-year-old can predict
suggests that these developmental factors in combination may contribute to greater non-compliance among adolescents than adults. In general, when adolescents choose different outcomes than adults, it may reflect a risk-benefit calculus informed by different values and preferences.

C. The Implications of Informational and Value Differences

As discussed in the previous subsection, the potential differences that might lead youths and adults to make dissimilar choices appear to fall into two categories: differences in the range and type of information possessed or used and differences in subjective value attached to various risks and benefits.

1. Informational Differences

If adolescents depart from adult norms in the character or circumstances of his or her life at age forty-five far better than a fifteen-year-old can predict his or her future at age twenty-five.

167. Barbara Cromer and Kenneth Tarnowski reviewed several developmental issues that relate to adolescents' "willingness and ability to comply with medical advice": cognitive ability, effective individuation and separation from the family, and consolidation of body image. See Cromer & Tarnowski, supra note 134, at 207, 211-12. Robert Blum noted: "Among clinicians, adolescents have an image of being chronic noncompliers with therapeutic regimens. Often factors such as emerging independence from family, rebelliousness, and peer pressure are blamed." Robert W. Blum, Compliance with Therapeutic Regimens Among Children & Youth, in CHRONIC ILLNESS & DISABILITIES IN CHILDHOOD & ADOLESCENCE 143, 143 (Robert W. Blum ed., 1984).

Adolescents tend to engage in "risky" sexual activity more than adults, despite similar information about risks. S. M. Kegeles et al., Adolescents & Condoms: Associations of Beliefs with Intentions to Use (August 1988) (unpublished paper presented at annual convention of American Psychological Association, Atlanta, GA), cited in Furby & Beyth-Marom, supra note 136, at 11-12 (finding that "14-19 year olds' intention to use condoms was not related to their beliefs about degree to which condoms prevent venereal disease or pregnancy"); see also MELVIN ZELNICK ET AL., SEX & PREGNANCY IN ADOLESCENCE 115 (1981) (noting that nearly one-third of sexually active 15- to 19-year-old women never used contraceptives); Karl E. Bauman & J. Richard Udry, Subjective Expected Utility and Adolescent Sexual Behavior, 16 ADOLESCENCE 527, 527-31 (1981) (finding in study of 307 junior high school students that adolescents with higher subjective expected utility for intimate behavior, i.e., those believing positive consequences outweighed negative, had sexual intercourse); Marcia A. Gilbert et al., A Panel Study of Subjective Expected Utility for Adolescent Sexual Behavior, 16 J. APPLIED SOC. PSYCHOL. 745, 745-46 (1986) (studying role of consequence evaluation in decisions regarding sexual intercourse). This seems to reflect differences in risk preference and also in the weight attached to long-term and short-term consequences. See Furby & Beyth-Marom, supra note 136, at 32-33 (discussing adolescents' tendency to discount negative consequences in distant future); Gardner & Herman, supra note 136, at 25 (describing how strong positive time preference can "desensitize people to the costs of risk taking" concerning sexual activity).
amount of information upon which they base decisions, the discrepancy could reflect either differences in awareness of relevant facts or in the use of information. Differences of this kind might not be revealed when competence is formally evaluated under an informed consent framework because the doctrine (and thus the research) directs disclosure of all relevant information. Thus, a person might perform competently when formally evaluated for informed consent purposes, and yet lack information necessary to make informed choices in less structured settings. Informational deficiencies will reflect upon competence under the formal informed consent framework if the decisionmaker disregards relevant information that is provided, but not if, absent disclosure, he or she simply lacks the range of information necessary to make the decision or fails to draw on relevant knowledge.

Even in informal settings, of course, adequate decisions can be based on incomplete or inaccurate data. In some circumstances, however, we are likely to conclude that the decisionmaker who considers a narrower range of options and consequences than the norm, although capable of understanding and of engaging in a rational process, is revealing inferior judgment. For example, consider the individual who, having driven to a party, decides whether to drink or not by weighing the good time tonight against the headache tomorrow. The process by which the person makes a decision might well follow the steps of a rational decisionmaking model. Nonetheless, if the person fails to consider the effect of drinking on his driving (although the person may be capable of understanding that effect), we would consider that omission to reveal deficiencies in judgment. The consequence which has not occurred to the person is an important one, and thus his or her cost-benefit calculus, although rational, is not

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168. These differences, I have argued, could affect the range of options and consequences considered or the level of risk perceived.

169. Further, the extent to which decisionmakers use information that is provided might vary in laboratory and natural settings; to date, most comparative data comes from laboratory research, and involves reconstructive reports by subjects. At this point, we have little data about the extent to which information is actually used by adults and minors outside the laboratory.

170. I would argue that the failure to use information formally presented in the decision context is different from the failure to recognize the relevance of information acquired sometime in the past for this decision. For an example of the latter, see the example in text accompanying notes 171-72 infra.

171. That is to say, the decisionmaker may go through a rational process of identifying options and consequences and may weigh costs and benefits in reaching a decision, while using limited, but the most salient, information.
very satisfactory.\textsuperscript{172}

If, in some contexts, adolescent decisionmaking reveals more limited use of important information (or more extensive use of inaccurate information) than does adult decisionmaking, then our assessment of comparative decisionmaking capability could be affected.\textsuperscript{179} A disparity between adults and minors is of more than theoretical interest when it translates into decisions by minors that threaten significant harm to the youthful decisionmaker or to others. For policy purposes, it seems important to know a great deal more than we do about how adolescents compare with adults in their use of information in contexts in which they must draw on their own experience. Certainly, any broad assault on traditional paternalistic premises is weakened by the current gaps in our knowledge.

2. \textit{Value Differences and the Cost-Benefit Calculus}

It would be irrelevant in assessing competence under an informed consent framework (or any standard rational decision-making model) that adults and minors attach different values to particular consequences. The cost-benefit calculus under an informed consent framework explicitly measures \textit{subjective} utility, the value to the decisionmaker of the potential consequences of each option. A rational decisionmaker makes the choice that best promotes his or her personal values.\textsuperscript{174} The calculus is not measured against any external standard of reasonableness; what might seem like an onerous cost of a particular option to one person could appear trivial to another.

Consider, for example, a young woman deciding whether or not to consent to a leg amputation for cancer. Assume that her

\textsuperscript{172} As Richard Bonnie pointed out to me, this deficiency in evaluating consequences amounts, in part, to a lack of foresight, and thus is analogous to negligence. Decisionmakers might be described as negligent if they do not foresee consequences that the ordinary decisionmaker would foresee. If this is true of adolescents in some contexts, we would not attach the culpability that negligence connotes, but we might conclude that they are "developmentally negligent."

\textsuperscript{173} Even if this is so, it might be often irrelevant to policy concerns; first, legal decisions \textit{can} be formally structured, and second, information deficiencies may only involve peripheral data or innocuous decisions. However, at some point, the failure to consider important options or consequences and the distortion of risk might reflect deficiency in decisionmaking capability that is relevant to policy concerns.

\textsuperscript{174} Thus, Furby & Beyth-Marom describe risky behavior as action or inaction that entails a risk of loss, which is defined in terms of the actor's values. Furby & Beyth-Marom, \textit{supra} note 136, at 3.
chances for long-term survival are ninety percent if she consents. If she refuses, her condition is terminal; she will live at most three or four years. In this situation, a rational decisionmaker could calculate that the costs associated with the loss of her leg (the long hospitalization, the resulting impairment to her appearance and mobility and the anticipated impairment to her social relationships) outweigh the benefit of long-term survival with one leg. If most people would reach a different outcome, this only reveals that most people subjectively attach a different value than does this decisionmaker to long-term survival, on the one hand, and to hospitalization, personal appearance, mobility and peer relations on the other.\(^{175}\) The point is that, if the individual evaluates options and their consequences, and engages in a cost-benefit calculus of the type described above, the decisionmaking process is rational and, by standard measures, competent, even if the outcome is determined by idiosyncratic values or preferences.

The position that the subjective values of decisionmakers are irrelevant to the competence of the decision is deeply entrenched, not only in the legal framework for defining competence,\(^ {176}\) but also in the perspective of social scientists who study decisionmaking.\(^ {177}\) The study of adolescent risk-taking behavior by Lita Furby and Ruth Beyth-Marom provides a clear illustration.\(^ {178}\) These psychologists consider, from a decisionmaking perspective, risky activities that teens engage in more commonly than adults: sex without contraceptives, reckless driving and health-threatening use of drugs and alcohol. The authors argue persuasively that the adolescent who engages in risk-taking behavior is not necessarily an irrational sensation seeker who miscalculates risk. Instead, the adolescent might well be rationally choosing the option that maximizes his or her subjective utility, and which, therefore, holds less risk of loss and more potential gain than do the alternative choices.\(^ {179}\) Because loss and gain are defined according to the decisionmaker's own values, conduct could well appear acceptably risky to adults but not to adolescents. Thus, a teen deciding

\(^{175}\) Alternatively, the different outcome might be the result of less pessimistic assessments of certain undetermined probabilities, such as the probability that peer relations will be damaged.\(^{176}\) For a discussion of the legal framework defining competence issue, see supra notes 61-63 and accompanying text.

\(^{177}\) See Furby & Beyth-Marom, supra note 136, at 9-15, 28, 30-31 (discussing how differences between adolescent and adult decisionmaking may reflect differences in values but not differences in competence).

\(^{178}\) Id.

\(^{179}\) Id.
whether to accept an invitation to join friends in taking drugs might conclude that the costs of saying "no," in terms of self-image (who wants to be a geek?) and peer rejection, weigh more heavily than the risk of addiction or apprehension, and that the benefit of feeling good and sharing in the group experience is greater than that of being a clear-headed, law-abiding citizen. Saying "yes" under these circumstances is simply the rational cost-avoiding choice and is not risky behavior at all.

This analysis demonstrates the error in considering adolescent legal competence in the constricted framework in which adult decisionmaking is studied and evaluated. Scientists studying decisionmaking are appropriately reluctant to get involved with subjecting the values that shape the decision calculus to an objective normative standard. This neutrality does not (and arguably should not) characterize the response of policymakers and parents to the choices made by minors. We are quite ready to conclude that choices that are health-threatening or life-threatening, or in other ways risk future welfare, are risky choices that reflect poor judgment, even if they rationally promote the decisionmaker's values at the time the decision is made. Moreover, if the values that drive risky choices are associated with youth, and predictably will change with maturity, then our paternalistic inclination is to protect the young decisionmaker—and ourselves—from his or her bad judgment. This impulse is not quelled by the knowledge that, in making the "poor" decision, the youthful decisionmaker has engaged in a rational process.

The case of the young cancer victim deciding about amputation is instructive. This is a hard case, because the young woman is not using poor judgment in the way that a young driver choosing to drive 100 miles per hour clearly is. A mature and thoughtful adult might reach the same conclusion that the personal cost of amputation is too great and that a greatly shortened life is preferable. This decision made by an adult would be respected. Can any different response be justified for minors? If the answer is "yes," then it is because we have reason to believe that, in many cases, the values that inform the adolescent choice will change; that long-term survival will mean more with maturity, and that personal appearance and fear of peer rejection will be less important. If the young person's authority to make this decision is restricted, it is because we are reluctant to allow him or her to foreclose future choices in a situation in which we suspect that
ADOLESCENT DECISIONMAKING development influences, and not simply idiosyncratic personal values, have shaped the decision.

D. Adolescent Judgment: The Implications for Research

Expanding our understanding of children's competence from the restricted framework of the informed consent model to one that encompasses judgment also requires expansion of the scope of empirical investigation of how adolescent decisionmaking compares with that of adults. Because the informed consent model has become the framework for thinking about children's competence, some aspects of decisionmaking have not seemed relevant, and thus, have not received much attention. A richer understanding of the decisionmaking capabilities of children and adolescents relative to adults requires both recognizing the importance of research that has not seemed relevant under the informed consent framework and pursuing a broader program of policy-relevant research. Further investigation can inform what is now a sketchy account of how minors and adults compare in their use of information, and of how subjective values that drive the cost-benefit calculus differ at different stages of life.

In comparing adolescent and adult use of information, we can turn to an impressive body of descriptive theory and laboratory research in cognitive and social psychology. Research studying the processes by which adults make judgments under conditions of uncertainty and comparing human performance with an objective norm have been useful in understanding how individuals process and organize information, make predictions and assess risk. Daniel Kahneman and Amos Tversky, for ex-

180. For example, the finding by Weithorn that adolescents more than adults reject a particular treatment that has a risk of hirsutism is seldom, if ever, mentioned in reports of Weithorn's research. One might speculate that this is because this particular finding, which seems to reflect adolescent concern for personal appearance, is irrelevant under the informed consent framework. Thus, Gittler, Quick and Saks, in their exhaustive account of research on adolescent decisionmaking competence, describe Weithorn's research in detail but do not include this finding. See Gittler et al., supra note 5, at 38-40. The extensive research on treatment noncompliance comparing children, adolescents and adults has also been largely unnoticed in the law-psychology literature. For a discussion of this research, see supra note 169 and accompanying text.

181. Three strands of research in the 1950s and 1960s have been the basis of modern decisionmaking research. One line of experimental research compared human judgment to a statistical norm. See Ward Edwards, Dynamic Decision Theory and Probabilistic Information Processing, 4 HUM. FACTORS 59 (1962). Other early research compared statistical prediction with clinical performance. See PAUL E. MEEHL, CLINICAL VERSUS STATISTICAL PREDICTION: A THEORETICAL ANALYSIS AND A REVIEW OF THE EVIDENCE (1954). The third line studied cogni-
ample, have drawn on a large body of experimental data in arguing that individuals rely on heuristics, or rules of thumb, as mechanisms for organizing information, and that distorting biases can sometimes result. Other research explores how the framing of choices can influence outcomes. Because only a few of these studies have compared adults and children, this research suggests one direction for further inquiry that could enhance our understanding of the extent to which adolescent and adult decisionmaking are similar.

If it is important for policy purposes to understand more about adolescent judgment, then the theoretical and research literature on adolescent cognitive and social development potentially has greater relevance than has previously been acknowl-

e strategies for simplifying complex judgments. See Herbert A. Simon, Models of Man: Social and Rational (1957). Building on this research, modern cognitive psychologists have studied the use of judgmental heuristics in assessing probabilities and processing information, and have explored the resulting cognitive error. See generally Judgment Under Uncertainty: Heuristics and Biases, supra note 146 (discussing experimental research and descriptive theories of cognitive error); Richard Nisbett & Lee Ross, Human Inference: Strategies and Shortcomings of Social Judgment (1980) (discussing defects produced by nature of cognitive structures and processes); Robert P. Abelson & Ariel Levi, Decisionmaking and Decision Theory, in 1 The Handbook of Social Psychology 231 (Gardner Lindzey & Elliot Aronson eds., 1985) (reviewing decision research and theory).

182. See Judgment Under Uncertainty: Heuristics & Biases, supra note 146. For example, the availability heuristic causes decisionmakers to overvalue vivid experiential data and discount more abstract information. Id. at 163-68. Use of the representativeness heuristic causes decisionmakers to focus on case examples and disregard base rates. Id. at 23-31. Because of anchoring, another heuristic, individuals can fail to adequately adjust estimates and predictions to accommodate later-acquired information. Id. at 14-16. The approach of Kahneman has been subject to criticism in recent years. See Gerd Gigerenzer, How to Make Cognitive Illusions Disappear: Beyond "Heuristics & Biases," in 2 European Review of Social Psychology 83 (Wolfgang Stroebe & Miles Hewstone eds., 1991) (arguing that probabilistic reasoning approach of Kahneman ignores richness of natural environments and social context of judgment).

183. For example, a lung cancer patient may evaluate treatment information differently depending on whether the outcome is described in terms of survival or mortality. See Kahneman & Tversky, supra note 147, at 346.

184. See Furby & Beyth-Marom, supra note 136, at 47-51; see also Valerie F. Reyna et al., Attitude Change in Adults and Adolescents: Moderation Versus Polarization, Statistics Versus Case Histories (1987) (unpublished manuscript), cited in Furby & Beyth-Marom, supra note 136, at 18 (discussing study finding greater tendency of adolescents than adults to be influenced by case examples). A recent study compared children and young adults in their use of the representativeness heuristic (a commonly used strategy of relying on specific information and similarities and ignoring base rates) and found that adolescents performed more poorly than younger children. Janis E. Jacobs & Maria Potenza, The Use of Judgment Heuristics to Make Social and Object Decisions: A Developmental Perspective, 62 Child Dev. 166, 175-76 (1991).
edged. Although little empirical research has focused directly on children's decisionmaking from a developmental perspective, much data of inferential value exist. For example, the corpus of research examining age patterns in compliance with medical treatment seems to offer little that is useful to understanding competence under the informed consent construct. Under a more comprehensive framework, however, the findings seem more relevant. The same is true of research examining how the source of information diversely affects the value attached to it by different groups of adolescents. Studies that have documented change in cognitive and social development through the course of childhood can be extended into adulthood, to clarify more precisely the extent and context of developmental change as it affects decisionmaking. Much developmental research compares adolescents with younger children; less frequently is adolescent functioning and decisionmaking compared to that of adults.

This body of knowledge can enhance understanding about how various aspects of cognitive and social development affect judgment, and it can clarify where empirical understanding is deficient. I have described several features of adolescence that are assumed to influence judgment. Although there is quite a lot of indirect and anecdotal evidence, few studies have probed directly the extent to which (or the way in which) body image, peer and parent influence, time discounting and attitude toward risk distinguish adolescent and adult decisionmaking. Each of these features might influence choice in complex ways. For example, the influence of peers, parents and other authority figures could be reflected in a correlation between the weight a decisionmaker attaches to information and the source of the information, or it could be reflected in the subjective value attached to different consequences. In either instance, differences between adults and minors could be important, both in evaluating voluntariness in an informed consent framework and in evaluating judgment. Although our understanding of peer and parental influence can be informed by turning to the social development literature, the

185. See Gardner et al., Developmental Change in Decision-Making, supra note 95, at 1 (quoting J. R. Rest, Moral Cognition, in COGNITIVE DEVELOPMENT 565 (J. Flavell & E. Markman eds., 1983)).
186. For a discussion of studies supporting this point, see supra notes 134 and 159-61.
187. For an example of how treatment compliance literature might become relevant under a more comprehensive framework when discussing the complexities of the policy implications, see infra notes 197-99 and accompanying text.
188. For examples of this type of research, see supra note 157.
empirical picture of how decisionmaking in legal contexts might be influenced is murky.\textsuperscript{189} The challenge is daunting. In order to think more scientifically and less intuitively about this and other developmental influences, we need multiple studies with different populations, in different contexts, making different kinds of decisions. We are a long way from scientific knowledge about issues that common intuition presumes are settled.

The effort to achieve a more comprehensive picture of the way adolescents make choices also can enhance our understanding of adolescent reasoning and capacity for understanding. As William Gardner and his colleagues have demonstrated, knowledge is relatively skeletal in this realm as well.\textsuperscript{190} The decision-making model that I have employed to analyze judgment has been the framework for traditional legal competence research. In its reconceptualized form, this framework can serve to structure research to encompass the varied dimensions of decisionmaking, both those that have been obscured under the old framework and those that were featured. In short, the problem with the informed consent framework in shaping research was not in its use of a rational decisionmaking model to evaluate competence, but in its emphasis on certain decisionmaking operations and exclusion of others. Under the judgment framework, increased understanding of judgment will enhance knowledge about other dimensions of decisionmaking as well.

IV. THE JUDGMENT FRAMEWORK AND LEGAL POLICY

A. The Uses of Empirical Data

What difference will it make if advocates and social scientists approach adolescent legal competence in the way that I have suggested? In one sense, the implications for policy are straightforward. If presumptions about immature judgment, as well as understanding and reasoning, influence the shape of policy that regulates the lives of children, then a more comprehensive empirical account of children's capacities will be both more useful and more used than one which focuses narrowly. If the rationale for

\textsuperscript{189} See, e.g., Costanzo, supra note 131, at 369-72 (finding adolescents to be more likely than younger or older decisionmakers to pick wrong option when they believe peers have chosen that option); see also Scherer, supra note 84, at 434 (discussing systems theory and psychodynamic theory conceptualizations of autonomy, which suggest adolescent responsiveness to peer influence). But see Furby & Beyth-Marom, supra note 136, at 38-40 (describing research challenging view that adolescents are particularly susceptible to peer influence).

\textsuperscript{190} See Gardner et al., supra note 6, at 899-900.
paternalism is weakened by the research, then paternalistic policies should be reconsidered. Although the lines that demarcate legal adulthood are drawn to reflect the accommodation of several interests, the age of majority is set at age eighteen in part because eighteen year olds are presumed to be more mature than sixteen year olds. If there is less difference than we supposed in the broad range of capacities that together define maturity, then the burden to justify restrictive protective policies on sixteen year olds becomes greater. In this state of knowledge, the case might be made for lowering the age of majority. A similar analysis applies to particular policies of restriction that are subject to challenge. If adolescents approach a given decision in a way that approximates the manner that adults would approach the same decision—in the sense that reasoning, understanding and judgment are similar—then the restrictive policy, to be legitimate, requires some justification besides incompetence.

A more comprehensive understanding of adolescent decisionmaking permits a more tailored and precise response to developmental difference. By this I do not mean that individualized assessment is necessarily desirable. Rather, existing broad policies of restriction and protection might become more responsive to the particular exigencies of adolescence that currently are only roughly perceived. For example, if adolescent decisionmaking capability is more dependent than that of adults on having all relevant information presented, then structuring legal decisionmaking contexts to respond to this need might be desirable. In areas in which adolescents demonstrate less able judgment, specific policies of protection might be indicated. Thomas Grisso’s recommendation of a per se exclusionary rule to be applied to all minors in the juvenile waiver context is just such a protective response to empirical evidence that adolescent judgment is wanting.

191. For a discussion of why minors may be less capable of drawing on their experience to independently identify options and consequences, see supra notes 151-58 and accompanying text. Information is provided to them in the context of health care decisions, and this model might be useful in other settings. Less formal counselling is another method that could be used to communicate information. This is standard practice when adolescents contemplate abortion. See Elizabeth S. Scott, Legal and Ethical Issues in Counseling Pregnant Adolescents, in ADOLESCENT ABORTION: PSYCHOLOGICAL AND LEGAL ISSUES 116 (Gary B. Melton ed., 1986). Effective communication of information is, of course, the key, and this may require different procedures when dealing with minors. For example, it has been suggested that Miranda rights should be explained to adolescents in a more elaborate way than is the practice with adults. See Grisso, supra note 53, at 1162 (discussing minors’ comprehension of Miranda warnings).
in this area. The deficiency in adolescent judgment is revealed both in Grisso's research findings that minors under the age of fifteen have poorer comprehension than adults and in the statistical evidence that even older juveniles make the (almost always unwise) decision to waive their right to remain silent more than adults.

As these examples demonstrate, a more textured understanding of adolescent functioning as it relates to legal contexts is worthwhile, not only because what we learn may reinforce or challenge restrictive policies, but also because it might suggest useful strategies to protect adolescent welfare. In some contexts, evidence that adolescents make poorer choices than adults might indicate paradoxically that greater self-determination is desirable. For example, research data suggests that adolescents with chronic illness are less compliant with medical treatment than adults (or than younger children) with chronic illness. If this response is attributable, as most observers believe, to conflict around the dependency associated with illness, then simply interpreting the evidence as justification for restriction seems unhelpful. The goal in this situation, and perhaps in many treatment contexts, would be to encourage a sense of responsibility through participation. This goal might be furthered by a general requirement that adolescents be informed and consulted on decisions affecting their health.

192. For a discussion of Grisso's research and proposal for a per se rule, see supra notes 53-56 and accompanying text. This characterization of the recommendation is mine and not Grisso's.

193. Grisso, supra note 53, at 1134 n.3, 1160. If this were not so—that is, if by age 15, minors had adult-like comprehension and waived their Miranda rights at about the same rate as adults—then the case for a protective rule for 16 year olds would be weakened. Under my framework, an interesting research inquiry would focus on what influences minors to waive their Miranda rights in great numbers, besides poorer comprehension, which only partly explains the differences.

194. For a discussion of studies performed on this topic, see supra notes 133 & 159-61.

195. The external locus of control associated with chronic illness has many debilitating effects, including low self-esteem. It is assumed that a greater sense of personal control is associated with greater compliance. William Garrison & Susan McQuiston, Chronic Illness During Childhood and Adolescence, 19 Dev. Clinical Psychol. & Psychiatry 62 (1989). See generally Cromer & Tarnowski, supra note 134, at 208-10.

196. Lois Weithorn has argued in favor of this approach, even for younger children who are not "competent." Lois A. Weithorn, Involving Children in Decisions Affecting their Welfare: Guidelines for Professionals, in CHILDREN'S COMPETENCE TO CONSENT, supra note 45, at 235, 257 ("It is suggested that professionals who work with children involve [them]... in decisions regarding their own welfare to the maximum extent possible ....").
It is clear that no simplistic formula defines the relationship between adolescent decisionmaking capabilities and policies of restriction, protection and self-determination. Adolescents may be indistinguishable from adults in approaching a particular choice, and yet extending legal authority may appear to carry too high a cost in family disruption, with too little benefit to the minor. Other considerations could also be important. What is the social cost of self-determination and of restriction? Who bears the cost—the decisionmaker or others? Who is in the best position to make the choice? Does the decisionmaker who has traditionally had authority have a conflict of interest which may threaten the child's welfare? Can the decision be postponed until adulthood? Policy choices will be driven by distinctive algorithms based on contextual variables of which competence is only one factor.

B. Normative Preferences and Empirical Uncertainty

Currently, scientific knowledge about adolescent decision-making is scant and policy must be devised in a context of empirical uncertainty. Under these circumstances, different accounts of adolescence will be offered and underlying normative preferences will continue to drive the debate. Advocates resist common perceptions about adolescent immaturity and dependency. From their perspective, adolescents are legal persons and restrictive legal treatment carries a significant burden of justification, in the absence of strong empirical evidence of adolescent incapacity.


198. Perhaps more accurately, advocates' positions can be put in three categories. Some advocates appear to hold that competence is irrelevant and that minors should be accorded all legal rights of adults. See FARSON, supra note 2, at 27 ("The acceptance of the child's right of self-determination is fundamental to all the rights to which children are entitled."); JOHN HOLT, ESCAPE FROM CHILDHOOD 224 (1974) (arguing that young minors should have right to "full and equal protection of the law" and right to "choose to live as fully legally and financially responsible citizen"). A second group of advocates hold that empirical evidence of competence should be the basis for expanded rights to self-determination. This stance supports the argument that evidence of adolescent competence under informed consent tests should result in legal authority to make medical and other decisions. See APA Hodgson, Zbaraz and Thornburgh briefs, supra note 3 (basing argument for right of adolescents to self-determination in abortion context on results of research); Gittler et al., supra note 5, at 24-29; King, supra note 66 (arguing that age of majority for purpose of making health care decisions should be lowered to age 12 or 13 with competence presumed until challenged and disproved); Gary B. Melton & Anita J. Pliner, Adolescent Abortion: A Psycholegal Analysis, in ADOLESCENT ABORTION: PSYCHOLOGICAL
In contrast, the paternalist version of adolescence emphasizes the immaturity and vulnerability of this developmental stage. The paternalistic perspective stresses the law's role in protecting children and promoting their welfare. From this perspective, caution about expanding adolescent rights is warranted, in part, because freedom appears to carry substantial risks.

Many children's rights advocates support a presumption favoring adolescent self-determination, arguing that the central importance of autonomy and liberty in our legal framework requires that these values not be casually subverted by broad presumptions of incompetence. Paternalism is suspect in our legal culture; we are generally loathe to subject one individual to the decisionmaking authority of another on matters of private and personal importance. Under this view, respect for the personhood of minors mandates that they be accorded authority as legal actors unless they are demonstrably incapacitated. Moreover, further research is unnecessary to establish that adolescents, at least in some respects, are closer in their capabilities to adults than to younger minors, or that individuals within a given age group vary greatly in their maturity and ability to perform different functions. Thus, crude rules that restrict and protect minors categorically and base access to legal privilege on age alone ignore the wide range of capabilities within the category.

This stance can be translated into an argument that the law should treat adolescents in the same way that it deals with adults of uncertain competence. In an era in which the ideology of liberal individualism defines the relationship between the individual and the state, paternalistic legal regulation of adults with disabilities has been attacked with considerable success. Adults are

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199. See Melton, supra note 3. This argument gains force when addressed (as is often the case) to issues involving constitutional protection of autonomy and liberty, such as abortion and psychiatric hospitalization.

200. This is perhaps most evident in changes in civil commitment law: over
presumed to be competent legal actors capable of making their own choices and of managing their lives. When an adult's competence to make a decision or perform a function is questioned, a narrowly focused inquiry and determination assures that freedom is not unduly restricted. A designation of general incompetence is usually disfavored, even for persons with significant disabilities. If adolescents were subject to a similar approach, competence would seldom be challenged, and then only in the context of a specific decision or task. The determination would be based on individualized assessment.

The traditional legal approach to adolescent competence is, of course, quite different. The law generally presumes that minors are incompetent and is only cautiously receptive to contrary evidence. Moreover, even observers who are skeptical about the traditional account of adolescent immaturity may have reservations about dismantling the paternalistic framework. In part, these reservations reflect a concern that advocates have ignored the undesirable trade-offs that may result if adolescents are accorded adult-like legal status and have discounted the costs associated with individualized assessment. Moreover, those who are dubious about the wisdom of treating adolescents like adults argue that certain characteristics of childhood distinguish paternalism directed at minors from paternalism that would have a more onerous character.

In part, paternalists are wary of expanding adolescent rights because such a course threatens to disrupt a policy scheme that by and large is beneficial to minors. The special legal treatment of children involves not only restricted freedom, but also special en-

the last two decades, involuntary commitment has been significantly restricted. See Ralph Reisner & Christopher Slobogin, Law and the Mental Health System: Civil and Criminal Aspects 596-604 (2d ed. 1990). Legal regulation of the guardianship of mentally disabled persons has also been reformed in recent years. Id. at 822-47.

201. See Appelbaum et al., supra note 59, at 88-89 (noting two problems with general incompetency designation: that there is "little correspondence between a determination of general incompetency and a patient's ability to participate in medical decisionmaking" and that test for designation can only be applied "mechanically or subjectively"); Samuel Jan Brakel et al., The Mentally Disabled and the Law 258-59 (3d ed. 1985); Meisel, supra note 113, at 449.
titlements,202 more limited obligations203 and reduced accountability and responsibility.204 Although there is dissent, especially in the realm of criminal responsibility,205 these latter dimensions of policy toward minors are generally approved, even by advocates.206 In a crude way, the different facets of paternalistic policy toward minors are all grounded in a presumption about immaturity and thus are interdependent. Thus, if adolescents are accorded adult-like freedom and privileges, many will question whether special legal protection of children, predicated on immaturity and thus are interdependent. Thus, if adolescents are accorded adult-like freedom and privileges, many will question whether special legal protection of children, predicated on immaturity.

202. For example, minors are entitled to financial support from parents and to publicly funded education. In the event that parents are unable to provide necessary financial support, the government extends Aid to Families with Dependent Children and Medicaid to provide for the child's basic needs. See Sussman, supra note 13, at 24-26.

203. Minors are of course not obligated to fulfill military service obligations. Id. at 49.

204. For example, minors can disaffirm most contracts. Id. at 48. Under standard contract doctrine, only contracts for "necessaries" can be enforced against minors. Walter Wadlington et al., Children in the Legal System 8-9 (1983). In the realm of criminal responsibility, from the beginning of the juvenile court system, minors have received special treatment. The traditional juvenile court was premised on the notions that minors were not criminally responsible and that rehabilitation was the purpose of intervention. Although this premise has eroded in recent years, the policy of more lenient treatment remains strong. See id. at 197-201 (tracing historical development of juvenile courts and discussing legislative reforms of juvenile codes that provide for proportionality in sanctions, determinate sentencing and increased role in decision-making for juveniles); Barbara Danziger Flicker, Standards for Juvenile Justice: A Summary & Analysis, 1982 Inst. of Jud. Admin. 22-27 (setting forth premise that juvenile sanction should be equal to crime but should also be least intrusive disposition available); Gary B. Melton, Taking Gault Seriously: Toward A New Juvenile Court, 68 Neb. L. Rev. 146, 151-53 (1989) (discussing relationship between desirability of juvenile court and criminal responsibility of juvenile offenders).

205. Critics have long challenged the claim that the juvenile justice system benefits youthful offenders. See Barry C. Feld, Juvenile Court Legislative Reform and the Serious Youth Offender: Dismantling the Rehabilitative Ideal, 65 Minn. L. Rev. 167 (1981); Barry C. Feld, The Juvenile Court Meets the Principle of Offense: Punishment, Treatment, and the Difference it Makes, 68 B.U. L. Rev. 821 (1988) (criticizing the quality gap between juvenile and adult courts); Barry C. Feld, The Transformation of the Juvenile Court, 75 Minn. L. Rev. 691 (1991) (arguing for abolition of juvenile courts); Melton, supra note 204 (arguing for new juvenile court based upon more procedural protections and recognition of adolescent responsibility).

206. It is not surprising that advocates accept this type of special treatment toward minors, given that there is, as I have argued, a paternalistic subtext to the advocates' cause. For a discussion of this point, see supra notes 44-54 and accompanying text. It is uncontroversial that some aspects of the paternalistic framework offer tangible benefits to children and also further society's goal of producing educated and productive adults. Under traditional common law, the age of majority was 18 for women and 21 for men. See, e.g., Va. Code Ann. § 1-13.42 (1950). No one believes that this was due to women's superior legal status. Rather, the perceived greater importance of preparing boys for adulthood justified continued dependency and parental responsibility.
Adolescent Decisionmaking

...maturity and vulnerability, is warranted. To be sure, no theoretical incoherence defeats a policy of extending adult-like freedom to adolescents, while at the same time offering them special protection, entitlements and reduced responsibility. At some point, however, such an approach seems dissonant. Expanded liberty may seem to undermine, at least politically, the justification for benefits that children enjoy as a part of their special status.

Legal policy premised on the presumption that adolescent self-determination should be maximized can be costly in another way. The argument favoring bright line rules over individualized assessment of competence is based partly on cost considerations and partly on skepticism about the accuracy of individualized as-

207. In the same spirit, if minors are mature enough to be called upon to fulfill the same responsibilities as adults, the case for adult-like privileges becomes stronger. For example, there is little doubt that discomfort over the disenfranchised status of 18-year-old Viet Nam War draftees was a critical catalyst to the passage of the Twenty-sixth Amendment to the United States Constitution. And yet, fighting and voting are quite unrelated functions.

208. Certainly, advocates have argued that adolescents be accorded self-determination while at the same time retaining privileges and entitlements. See Billick, supra note 67 (arguing that adolescents should be accorded legal rights of adults but that parental responsibility should be retained); Michael Roche, Childhood and its Environment: The Implications for Children's Rights, 34 Loy. L. Rev. 5 (1988) (arguing that age of majority should be 15 for liberty, 21 for entitlement and responsibility).

209. Lawrence Houlgate has described this dissonance in powerful terms. See LAWRENCE HOULGATE, THE CHILD AND THE STATE 3 (1980). In Houlgate's view, advocates argue on the one hand that children should have all legal rights because they are as competent as adults. Id. On the other hand, according to Houlgate, advocates argue for special rights of protection for children on the ground that they are not competent. Id. "One is left wondering how these two positions can be seriously advanced by a single author." Id.

210. The delicate balance can be demonstrated by examining the effect of expanded self-determination rights for adolescents on family stability. A policy according adolescents substantial legal autonomy represents a substantial, if indirect, intrusion into the family, a result that may indirectly damage the interests of minors. Currently, parents' obligation to care for and support children is accompanied by the legal authority to guide their development. If children become autonomous, rights-bearing persons, parental enthusiasm for their duties may be prematurely diluted. In an era when children's dependence on their parents is extended into adulthood, this course seems to pose a risk. There is good reason for such extended dependency, although it is not uncontroversial. Society benefits if children have the training and education to prepare them for our complex technological society. Parental financial support is a critical component in obtaining education for most youths. See Michael S. Wald, Children's Rights: A Framework For Analysis, 12 U.C. Davis L. Rev. 255, 275-277 (1979) (analyzing arguments that expanded children's rights threaten family stability and reduce parents' incentive to fulfill their responsibilities); see also Childers v. Childers, 575 P.2d 201 (Wash. 1978) (en banc) (authorizing child support to pay for college education though child no longer a minor).
essment. The process of determining which minors are capable of making a particular decision and which are not would be substantial and might seem justified only when the deprivation itself is costly.\footnote{211} Moreover, some skeptics worry that assessment of adolescent competence is likely to be distorted by the political and ideological perspective of the decisionmaker. The experience with judicial assessment of maturity in the abortion context suggests the pitfalls, with judges either rubber-stamping the minor's preference\footnote{212} or interjecting their own values and biases.\footnote{213} Thus, although bright line rules concededly will result in error in individual cases, with fully capable minors subject to restriction, it is not clear that individualized inquiries will greatly enhance accuracy.\footnote{214}

Implicit in this analysis is the conclusion that paternalists are willing to tolerate legal restriction of some competent minors through efficiency-based classifications that would be unacceptable if applied to adults. In part, this response reflects the conviction that restrictions on adolescent autonomy are intrinsically less offensive than would be analogous burdens on adult liberty. First, minority is a temporary condition, which results in postponement rather than denial of rights and privileges.\footnote{215} To be sure, on some issues, such as abortion, postponement can impose the same costs as denial. On others, however, such as voting or driving, the costs of postponement to the competent minor are far less serious. A presumption that minors are incompetent might also be less offensive because its effect is more frustrating.

\footnote{211} For example, postponing the right to vote is a minimal deprivation; thus, a costly "competence" assessment procedure does not seem warranted. On the other hand, abortion decisions are critically important and cannot be postponed, and therefore, greater assessment costs might be justified. However, as the text suggests, analyzing abortion in a conventional competence framework is unsatisfactory in many regards. For further discussion on this issue, see \textit{infra} note 214.

\footnote{212} See Mnookin, \textit{supra} note 124, at 240.

\footnote{213} For a discussion of when judges impose their values on minors, see \textit{supra} note 124 and accompanying text.

\footnote{214} If, in a given context, an age-based rule restricting autonomy imposes a significant burden, a response of removing the age barrier may be preferable to individualized determinations of competence. Thus, adolescents who express a preference to obtain an abortion could be presumed competent. If a physician were concerned that a particular patient failed to understand the procedure, then a guardian could be appointed, as would happen with an adult in this situation.

\footnote{215} For a discussion of "weak" (and therefore less offensive) paternalism in the context of regulation of creditor-debtor relations, see Robert E. Scott, \textit{Rethinking the Regulation of Coercive Creditor Remedies}, 89 \textsc{Colum. L. Rev.} 730 (1989).
than stigmatic. An adult who is designated as legally incompetent is singled out as different from and inferior to other adults. An adolescent so described is part of a large cohort of peers whose only disability is youth, a condition from which they will recover.216 Thus, in an important sense, the pervasive paternalism toward youth is a weak form of paternalism that seems to persist without extreme discord within a broader liberal framework.

Although advocates and paternalists seem far apart in their accounts of adolescence and of optimal legal policy, the two perspectives may share more common ground than is apparent. Advocates argue in general that autonomy promotes adolescent welfare;217 they seldom advance particular policies about which that claim cannot be made. Similarly, in contexts in which self-determination appears beneficial to minors, nothing in the paternalistic framework argues against policies based on this premise. What primarily separates advocates and paternalists are different empirical accounts of adolescent capacity. The former account is at least partly grounded in science, but is based on a constricted conception of competence; the latter is shaped by “the pages of human experience”218 and intuition. The challenge is to deepen and broaden empirical understanding and to replace intuition with insight.

216. This also distinguishes restrictions of adolescent liberty from burdens on the autonomy interest of elderly persons.
217. See Tremper & Kelly, supra note 45. For a discussion of how autonomy promotes adolescent welfare, see supra notes 45-50 and accompanying text.