

Psychology and the Legislative Future of In Vitro Fertilization

Kerry Lynn Macintosh*

In *LePage v. Center for Reproductive Medicine, P.C.*,¹ three couples that had undergone in vitro fertilization (*hereinafter* IVF) sued a fertility clinic and hospital after their stored embryos were lost in an accident.² The plaintiffs included claims under Alabama's Wrongful Death of a Minor Act (*hereinafter Act*), which imposes liability for a wrongful act, omission, or negligence that causes the death of a "minor child."³ The trial court dismissed the wrongful death claims, holding that the embryos were not children.⁴ The Alabama Supreme Court, however, reversed the dismissal, reasoning that the lost embryos qualified as unborn children within the Act.⁵

* Inez Mabie Distinguished Professor of Law, Santa Clara University School of Law. I am grateful to Professors Gary Spitko and June Carbone for their helpful comments on my draft. I also thank Thomas Deguzman, Research Librarian, Wendie Beddingfield, J.D. 2023, and Connor Haney and Nicholas Voytilla, J.D. 2025, of Santa Clara University School of Law for their capable research assistance. Finally, I thank the Journal of Health and Biomedical Law staff and editors, who made many valuable contributions to this Article.

¹ See No. SC-2022-0515, SC-2022-0579, 2024 Ala. LEXIS 60, at *1 (Ala. 2024).

² See *id.* at *3. In 2020, a hospital patient at the Mobile Infirmary Medical Center wandered into The Center for Reproductive Medicine through an unsecured door and entered a room of storage tanks containing IVF embryos. *Id.* When she grabbed receptacles containing embryos, extreme cold seared her hand, and she dropped the receptacles, thereby destroying the embryos. *Id.*

³ See ALA. CODE § 6-5-391 (1975).

⁴ See *LePage*, 2024 Ala. LEXIS 60, at *4-5 (outlining finding of trial court on wrongful death claims). The trial court further determined that Alabama's restriction on recovery for compensatory damages for loss of human life precludes plaintiffs' negligence and wantonness claims. *Id.* at *5.

⁵ *Id.* at *9, *20. As the Court explained, although the Act did not define the terms "child" or "minor child," case precedent held it applied to unborn children. *Id.* at *9-10. Thus, the Court framed the issue as "whether the Act contains an unwritten exception to that rule for extrauterine children – that is, unborn children." *Id.* at *1. Further, the Alabama State Constitution "acknowledges, declares, and affirms that it is the public policy of this state to ensure the protection of the rights of the unborn child in all manners and measures lawful and appropriate." ALA. CONST. art. I, § 36.06(b) (2022). The Court reasoned that this constitutional provision functioned as a canon of construction; thus, it must construe the Act in a manner that protected the rights of born and unborn children equally. *LePage*, 2024 Ala. LEXIS 60, at *12. The Act did not contain an exception for extrauterine children, and the Court declined to infer one based on policy concerns; if its decision made IVF more expensive or cryopreservation more complicated, that was for the Legislature to resolve. *Id.* at *17-18.

Following this unprecedented decision, several Alabama fertility clinics paused their IVF services.⁶ Clinics and doctors feared incurring civil liability if embryos died during the IVF process.⁷ They also dreaded criminal prosecution, because the Alabama Supreme Court expressly declined to decide whether individuals who caused the death of extrauterine embryos could be convicted of homicide.⁸ Faced with a reproductive health care crisis, the Alabama State Legislature swiftly enacted a law that protected IVF providers and patients against civil and criminal liability for damage to or death of an embryo.⁹ The law also protected manufacturers of goods used during the IVF process or transport of stored embryos: it shielded them against criminal prosecution and capped their civil liability at the price paid for an affected IVF cycle.¹⁰ Although the new law did not address whether an extrauterine embryo qualified as a legal child or person, it encouraged some fertility clinics to resume their IVF services.¹¹

The Alabama State Legislature's effort to protect access to IVF contrasts with its prohibition of most abortions. In 2022, the United States Supreme Court ruled that the Due Process Clause of the Fourteenth Amendment does not secure a right to abortion.¹² This ruling allows Alabama to enforce a state law that prohibits abortion

⁶ See Lauren Mascarenhas & Isabel Rosales, *Alabama Clinics Resume Treatment Under New IVF Law, But Experts Say It Will Take More Work to Protect Fertility Services*, CNN (Mar. 7, 2024), <https://www.cnn.com/2024/03/06/us/alabama-ivf-fertility-protection/index.html> [<https://perma.cc/AF2E-8WKJ>].

⁷ See Nadine El-Bawab et al., *Physicians Share Concerns Over IVF Treatments Pausing After Alabama Court Ruling*, ABC NEWS (Feb. 24, 2024), <https://abcnews.go.com/US/physicians-share-concerns-ivf-treatments-pausing-after-alabama/story?id=107516220> [<https://perma.cc/ECD9-U5AF>] (reporting concerns that unintentional mishandling or routine discard of surplus embryos could lead to lawsuits).

⁸ See Samantha Latson, *Two Clinics Resume IVF Treatment in Alabama*, POLITICO (Mar. 7, 2024), <https://www.politico.com/news/2024/03/07/alabama-ivf-ruling-bill-00145628> (last visited Oct. 23, 2024) (stating that clinics paused IVF due to fear of criminal prosecution); see also *LePage*, 2024 Ala. LEXIS 60, at *16-17 (stating no occasion to reach that issue occurred).

⁹ See ALA. CODE § 6-5-810 (2024); see also Adam Edelman, *Alabama Governor Signs Bill to Protect IVF Treatments into Law*, NBC NEWS (Mar. 6, 2024), <https://www.nbcnews.com/politics/alabama-lawmakers-ivf-protection-bill-vote-rcna141710> [<https://perma.cc/Y33A-6YTB>] (reporting Governor's signature of hastily passed bill).

¹⁰ See ALA. CODE § 6-5-811 (2024) (shielding IVF manufacturers from criminal prosecution and limiting civil liability to cost of IVF cycle).

¹¹ See Kim Chandler, *Alabama Governor Signs Legislation Protecting IVF Providers from Prosecution and Lawsuits*, PBS NEWS HOUR (Mar. 7, 2024), <https://www.pbs.org/newshour/politics/alabama-governor-signs-legislation-protecting-ivf-providers-from-prosecution-and-lawsuits> [<https://perma.cc/2ZGK-369F>] (noting Alabama's new legislation did not resolve legal status of extrauterine embryos); Mascarenhas & Rosales, *supra* note 6 (naming clinics that resumed services after law was enacted). But see Brammhi Balarajan, *Alabama Hospital to End IVF Treatments at the End of the Year, Citing Litigation Concerns*, CNN (Apr. 3, 2024), <https://www.cnn.com/2024/04/03/us/alabama-mobile-infirmiry-hospital-end-ivf/index.html> [<https://perma.cc/ZTH8-MMS9>] (reporting Alabama hospital that lost *LePage* embryos will end IVF due to potential legal liabilities).

¹² *Dobbs v. Jackson Women's Health*, 597 U.S. 215, 231 (2022). The Supreme Court overruled nearly fifty years of precedent with this decision. *Id.* The Court explained that the Constitution did not expressly mention abortion, and while the Fourteenth Amendment Due Process Clause implicitly guaranteed some rights, the right to abortion was not among them. *Id.* The Court stated that the Due Process Clause only protects rights "deeply rooted in this Nation's history and tradition" and "implicit in the concept of ordered liberty." *Id.*

with narrow exceptions for serious health risks to the mother or lethal anomaly in the unborn child.¹³ Under this law, an “unborn child” is a “human being, specifically including an unborn child *in utero* at any stage of development, regardless of viability.”¹⁴ Thus, according to the Alabama State Legislature, acts that cause extrauterine IVF embryos to be lost are *not* classified as abortions, an omission that the Alabama State Legislature intended.¹⁵

The question arises as to how Alabama legislators can justify outlawing abortion while supporting IVF, a process that creates more human embryos than needed for immediate transfer, leaving patients to cryopreserve, store, or discard the rest.¹⁶ Critics have asserted that the legislators are hypocrites who care only about their own political futures.¹⁷ However, the Alabama State Legislature’s preference for IVF over abortion is generally consistent with public opinion.¹⁸ A CBS News poll conducted in 2024 found that eighty-six percent of United States adults believe IVF should be legal.¹⁹ A Pew Research Center poll conducted in the same year found that sixty-three percent of United States adults believed abortion should be legal in all or most cases.²⁰ The abortion polling results were divided by party: eighty-five percent of Democrats and Democrat-leaning independents endorsed access to abortion, while fifty-seven percent

¹³ See ALA. CODE §§ 26-23H-3(1), (3), 26-23H-4 (2023) (prohibiting abortion and creating exceptions for serious health risk to mother or lethal anomalies); see also Kerry Lynn Macintosh, *Dobbs, Abortion Laws, and In Vitro Fertilization*, 26 J. HEALTH CARE L. & POL’Y 1, 10-11 (2023) (analyzing implications of abortion laws on IVF practices, embryo protection and legislative challenges).

¹⁴ ALA. CODE § 26-23H-3(7) (2023); see Macintosh, *supra* note 13, at 11 (explaining that Alabama’s definition of abortion terminating pregnancy in utero excludes destruction of IVF embryos).

¹⁵ See Macintosh, *supra* note 13, at 11 (clarifying destruction of extrauterine embryo not abortion in Alabama); Jerry Lambe, *Alabama Abortion Law Says Terminating a Fertilized Egg Is Legal in a Lab Setting*, L. AND CRIME (May 29, 2019), <https://lawandcrime.com/high-profile/alabama-abortion-law-says-terminating-a-fertilized-egg-is-legal-in-a-lab-setting/> [<https://perma.cc/AQN4-WG8T>] (reporting Alabama law allows terminating fertilized egg in IVF labs, distinguishing this from abortion restrictions). Alabama also has an older statute that prohibits giving a pregnant woman an abortion through drugs or other means but excepts abortions necessary to preserve her life or health. See ALA. CODE § 13A-13-7 (2023) (penalizing inducing, attempting abortion, miscarriage, or premature delivery without medical necessity, with fines and imprisonment). However, this law applies only to pregnant women and not to IVF embryos outside the uterus. Macintosh, *supra* note 13, at 13.

¹⁶ See *id.* at 5-6 (describing patients abandoning stored embryos, doctors hesitating to discard them, and risks of storage failures).

¹⁷ See Lambe, *supra* note 15 (reporting fury of pro-choice advocates at exemption of IVF from abortion law). Critics argue that Alabama’s abortion law is not truly about protecting embryos, as it does not apply to fertilized eggs created in labs for IVF, which these labs often discard. *Id.* Barbara Ann Luttrell of Planned Parenthood Southeast highlighted what she views as the law’s hypocrisy, stating, “[i]t’s not about the embryo,” while pointing out the law’s exclusion of IVF embryos as evidence of its focus on controlling women’s reproductive choices. *Id.*

¹⁸ Kelly Garrity, *Americans Overwhelmingly Support Keeping IVF Legal for Women, Poll Finds*, POLITICO (Mar. 3, 2024), <https://www.politico.com/news/2024/03/03/americans-overwhelmingly-support-ivf-legal-women-poll-00144588> (last visited Nov. 25, 2024) (reporting vast majority of U.S. respondents support legal IVF).

¹⁹ See *id.*

²⁰ See *Public Opinion on Abortion*, PEW RSCH. CTR. (May 13, 2024), <https://www.pewresearch.org/religion/fact-sheet/public-opinion-on-abortion/> [<https://perma.cc/DH5B-FGER>] (providing data regarding public opinion on abortion).

of Republicans and Republican-leaning independents opposed access to abortion.²¹ Republicans make up the majority of the Alabama State Legislature; therefore, it is unsurprising that legislation prohibits abortion in Alabama.²²

The above poll results beg another question: *why* should the public or legislators favor availability of IVF more than access to abortion? This Article answers that question by identifying and analyzing psychological factors that may drive both public opinion and legislative action.²³ Part I begins by describing psychological essentialism, a heuristic that enables human beings to assess natural kinds and their traits.²⁴ It applies the heuristic to explain how members of the public and legislators can experience intuitions that lead them to oppose abortion while tolerating IVF.²⁵ Part II describes status quo bias, a heuristic that predisposes human beings to prefer existing and enduring things.²⁶ The legal status quo of abortion has yielded a patchwork of state laws, and political status quo makes it difficult for Democrats and Republicans to change their positions on abortion.²⁷ By contrast, IVF enjoys a legal status quo that supports its continued availability, and a political status quo in its favor may be emerging.²⁸

This Article concludes that IVF is likely to remain legal nationwide for three reasons.²⁹ First, legislators who attempt to ban a reproductive technology that enjoys overwhelming public approval will lose support from their constituents.³⁰ Second, legislators can oppose abortion but support IVF because essentialism provides them with an intuitive basis for distinguishing the two.³¹ Third, legislators can oppose abortion but support IVF because status quo bias makes it feel natural to maintain existing political positions and legal regimes.³² However, despite these psychological advantages, IVF may face proposals to prohibit or limit the production,

²¹ See *id.* (documenting association of political party affiliation with opinion on abortion).

²² See *Alabama State Legislature*, BALLOTEDIA, https://ballotpedia.org/Alabama_State_Legislature [https://perma.cc/EJ44-RFLN] (outlining Alabama's legislative political affiliation). In July 2024, of the one hundred and five Alabama House of Representatives members, seventy-six were Republicans, twenty-eight were Democrats, and one seat was vacant. *Id.* Twenty-seven of thirty-five Alabama State Senators were Republicans, and eight were Democrats. *Id.*

²³ See *infra* Parts I, II (explaining psychological essentialism and status quo bias).

²⁴ See *infra* Part I.A (explaining basic principles of psychological essentialism); see also Michael McDonough, *Heuristic*, BRITANNICA (Sept. 18, 2024), <https://www.britannica.com/topic/heuristic-reasoning> [https://perma.cc/7XF3-YRYL] (explaining heuristic is “mental shortcut” used to make “good enough” decisions, solutions, inferences, and predictions).

²⁵ See *infra* Parts I.B.2, I.C.2 (explaining gestating fetuses may appear to possess human essence while IVF lab embryos may not).

²⁶ See *infra* Part II.A (explaining human preference to maintain status quo).

²⁷ See *infra* Part II.B (describing effects of status quo bias on abortion law and politics).

²⁸ See *infra* Part II.C (detailing legal and political status quos of IVF).

²⁹ See *infra* Part III (reaching conclusions about legislative future of IVF).

³⁰ See Garrity, *supra* note 18 (reporting poll indicating 86% of U.S. adults believe IVF should be legal).

³¹ See *infra* Parts I.B.2, I.C.2 (applying essentialist principles to analyze abortion and IVF, respectively).

³² See *infra* Parts II.B, II.C (explaining how status quo bias affects political and legal responses to abortion and IVF, respectively).

cryopreservation, and disposal of embryos.³³ To prevent such proposals from becoming law, the fertility industry must persuade legislatures that the standard IVF protocol is necessary to achieve reasonable pregnancy and birth rates.³⁴

I. Psychological Essentialism

A. Basic Principles

Psychologists Douglas Medin and Andrew Ortony published their seminal work on psychological essentialism in 1989.³⁵ According to their theory, people act as though they believe things have a hidden essence that causes superficial characteristics.³⁶ Medin and Ortony reason that essentialism has utility because it allows people to observe superficial characteristics and link them to deeper ones, especially for natural kinds.³⁷ “Natural kinds” refers to living kinds such as animal and plant species (*e.g.*, tigers,

³³ See *Ethical and Theological Considerations on IVF from the Southern Baptist Convention*, THE ETHICS & RELIGIOUS LIBERTY COMM’N OF THE S. BAPTIST CONVENTION, <https://erlc.com/wp-content/uploads/2024/03/Ethical-and-Theological-Considerations-on-IVF.pdf> [<https://perma.cc/3C2D-9JU2>] [hereinafter *Ethical and Theological Considerations on IVF*] (suggesting federal law to deter fertilization of multiple eggs and prohibit destruction of IVF embryos); Macintosh, *supra* note 13, at 19 (discussing reasons for legislators to regulate IVF embryo processes).

³⁴ See Madeline Holcombe, *About 2% of babies born in the United States are from IVF. Here’s what you need to know about it*, CNN (Feb. 21, 2024), <https://www.cnn.com/2024/02/21/health/ivf-egg-freezing-explainer-wellness> [<https://perma.cc/H2EX-DHUC>] (explaining IVF success depends on fertilization of multiple eggs); Alexander M. Quaas et al., *The role of state-of-the-art IVF care as a marker of societal development*, 40 HUMAN REPRODUCTION 9, 12 (2025) (stating IVF experts must educate public and legislators); see also J. Benjamin Younger Office of Public Affairs, AM. SOC’Y FOR REPROD. MED., <https://www.asrm.org/advocacy-and-policy/media-and-public-affairs/asrm-office-of-public-affairswho-and-what-we-are/> [<https://perma.cc/YP7T-WV56>] (explaining ASRM provides advice on legislative and regulatory issues involving reproductive medicine).

³⁵ See DOUGLAS MEDIN & ANDREW ORTONY, SIMILARITY AND ANALOGICAL REASONING 179, 180 (Stella Vosniadou & Andrew Ortony eds., 1989) (coining theory of “psychological essentialism”). Medin and Ortony distinguish their theory from metaphysical essentialism, a philosophical theory in which hidden essence makes an object what it truly is. *Id.* at 183. They note that metaphysical essentialism fails because the essence varies according to how one describes the object. *Id.* By contrast, their psychological essentialism theory acknowledges that *things* do not have essences but claims that people’s *representations* of things indicate such a belief. *Id.*

³⁶ See *id.* at 183-84, 186. Medin and Ortony recount experiments described by psychologist Lance Rips in which transformations of superficial properties of objects rendered the objects more like objects of a different category, but the subjects remained unwilling to change their classification. *Id.* at 184. The subjects behaved as though such category membership depended on the object’s specific “hidden” properties. *Id.* These properties then cause the more superficial properties that drive perceptions about similarity. *Id.* at 186. Essentially, their argument is that “twins are not twins because they are similar; they *are* similar because they are twins.” *Id.*

³⁷ See *id.* at 186 (explaining causal link between deeper and superficial properties). For example, Medin and Ortony point out that whales are mammals that look more like fish. *Id.* A person would not likely classify a whale as a mammal based on its superficial characteristics. *Id.* at 179. If, however, people think about whales as mammals, they probably would conclude that whales must share deeper properties with other mammals. *Id.* Therefore, “psychological similarity is tuned to those superficial properties that are likely to be causally linked to a deeper level. This is particularly likely to be true with respect to natural kinds.” *Id.* at 186.

grasshoppers, and aspen trees) and inanimate substances found in nature (*e.g.*, silver or water).³⁸

For example, a person who sees a tiger may assume it contains a “tiger essence” that causes its superficial traits (orange fur, black stripes) and predicts deeper ones (ferocity).³⁹ Moreover, the heuristic can work its magic even if there is no such thing as actual essence.⁴⁰ Essence is a placeholder that the mind can fill with anything, such as a theory of the soul, the concept of DNA, or nothing at all.⁴¹

Psychologist Susan Gelman’s 2003 book yields a wealth of evidence that supports the theory of psychological essentialism.⁴² For example, adults act as if they detect kind essence even in atypical members of the kind.⁴³ In identifying kind members, children and adults rely on what is inside the body—a possible repository of essence—rather than outer appearances.⁴⁴ Children expect animal and human offspring to resemble birth parents; they seem to intuit that parents transmit essence to offspring.⁴⁵ Even very young children know animals can grow and change, but expect them to retain kind membership, as if essence anchors them there.⁴⁶

³⁸ See SUSAN A. GELMAN, *THE ESSENTIAL CHILD: ORIGINS OF ESSENTIALISM IN EVERYDAY THOUGHT* 6, 30 tbl. 2.1 (2003) (defining natural kinds to include animal and plant species and nonliving, natural substances).

³⁹ See KERRY LYNN MACINTOSH, *HUMAN CLONING: FOUR FALLACIES AND THEIR LEGAL CONSEQUENCES* 65 (2013) (explaining psychological essentialism heuristic and distinction from philosophical essentialism with tiger example). To be sure, there is no true essence of a tiger that resides within a single animal; species are classified based on the characteristics of the entire population. *Id.* However, if a pedestrian sees “a large creature with an orange and black-striped coat, claws, and long tail slinking through a stand of trees,” her brain’s intuition that the creature carries tiger essence protects her from harm, regardless of whether the essence exists. *Id.*

⁴⁰ See MEDIN & ORTONY, *supra* note 35, at 184 (explaining essence need not actually exist). “We do not claim that objects have essences or that people necessarily believe that they know what these essences are....we are claiming only that people find it natural to assume, or act as though, concepts have essences.” *Id.*; see also MACINTOSH, *supra* note 39 (explaining that even though true tiger essence does not exist, heuristic still signals danger).

⁴¹ See MEDIN & ORTONY, *supra* note 35, at 184-85 (discussing possibilities for essence placeholder, like beliefs about necessary/sufficient properties, or complex or inchoate theory).

⁴² See generally GELMAN, *supra* note 38 (discussing psychology experiments author and others conducted with child and adult subjects).

⁴³ See *id.* at 69-70 (explaining that kind membership does not have to reflect typicality). For example, Gelman points out that penguins are routinely accepted as birds, even though they are atypical members (presumably because they are flightless). *Id.*

⁴⁴ See *id.* at 75-83 (discussing privileging of “insides” over “outsides” when determining kind membership). For example, in one experiment, four- and five-year-old child subjects were asked whether removing certain parts of a dog would affect its identity and function as a dog. *Id.* at 79-80. The subjects said that removing a dog’s blood and bones would change its identity and function, but removing its fur would not. *Id.* at 80.

⁴⁵ See *id.* at 92-95 (addressing experiments wherein young children expect offspring to resemble birth parents in biological traits). “Children in these studies treat a range of categories—including animal species, gender, race, and at times psychological traits—as possessing inborn features, inherent in the animal or person, and passed down from parent to child.” *Id.* at 105.

⁴⁶ See GELMAN, *supra* note 38, at 63-67 (noting children expect identity to persist despite changes in appearance). For example, in one experiment, five-year-old child subjects understood that a caterpillar could change into a butterfly but retain its identity. *Id.* at 64-65.

In 2015, researchers at the University of Colorado Boulder conducted experiments to see if subjects would essentialize women who were biological mothers.⁴⁷ Subjects who were exposed to images of imaginary creatures were more likely to essentialize those that physically transformed during procreation.⁴⁸ Researchers concluded that the physical changes women experience during pregnancy increase essentialist perceptions of mothers compared with fathers, and biological mothers compared to adoptive ones.⁴⁹ More generally, they reasoned that physical change may signal that a biological or genetic basis underlies group membership.⁵⁰

B. Abortion and Psychological Essentialism

a. Abortion

Encyclopedia Britannica describes abortion as the expulsion of a fetus from the uterus prior to viability.⁵¹ A spontaneous abortion is a miscarriage, but abortion can also be induced; thus, the remainder of this Article uses the word “abortion” to refer to induced abortion.⁵² Abortion can be accomplished through medication through ten weeks of gestation.⁵³ Surgical methods include suction, dilatation and evacuation, and saline solution injection.⁵⁴

The Centers for Disease Control and Prevention (CDC) reported that 625,978 abortions were performed in forty-six states and the District of Columbia in

⁴⁷ See Bernadette Park et al., *Psychological Essentialism, Gender, and Parenthood: Physical Transformation Leads to Heightened Essentialist Conceptions*, 109 J. PERSONALITY & SOC. PSYCH. 949, 951-62 (2015) (reporting results of five studies aimed at discerning essentialist views of mothers).

⁴⁸ See *id.* at 955-59 (subjects essentialized “Nesters” that underwent physical transformation during reproduction more than “Dusters” that did not).

⁴⁹ See *id.* at 964 (discussing significance of physical transformation of biological mothers).

⁵⁰ See *id.* (arguing that any physical change is marker for group membership). “Our key contribution is to note just how powerful observing physical transformations can be to psychological reasoning about the underlying essence of a group.” *Id.*

⁵¹ See *Abortion*, BRITANNICA (Oct. 20, 2024), <https://www.britannica.com/science/abortion-pregnancy> [<https://perma.cc/8B8G-YN6Z>] (providing medical definition of abortion).

Abortion can happen either intentionally or unintentionally, altering the terminology slightly. *Id.*

⁵² See *id.* Reasons for unintentional, spontaneous abortion include genetic defects, disease, trauma, or mother-fetus biochemical incompatibility. *Id.*

⁵³ See *id.* (discussing how mifepristone and misoprostol work together to effect abortion). The combination of mifepristone and misoprostol is known as a “medical abortion,” and by 2020, more than half of the abortions in the United States were medical abortions. *Id.*; see also *Questions and Answers on Mifepristone for Medical Termination of Pregnancy Through Ten Weeks Gestation*, U.S.

FOOD AND DRUG ADMIN. (Sept. 1, 2023), <https://www.fda.gov/drugs/postmarket-drug-safety-information-patients-and-providers/questions-and-answers-mifepristone-medical-termination-pregnancy-through-ten-weeks-gestation> (last visited Oct. 1, 2024) (providing information about mifepristone and FDA regulation of medical abortion). The U.S. Supreme Court recently ruled that prolife medical associations and doctors lacked standing to challenge the FDA’s approval and Risk Evaluation and Mitigation Strategy (REMS) program for medication abortion. *FDA v. Alliance for Hippocratic Medicine*, 602 U.S. 367, 392-93(2024).

⁵⁴ See *Abortion*, BRITANNICA, *supra* note 51. The method to perform abortions during the first twelve weeks following conception is suction, dilatation, and evacuation until the sixteenth week and saline solution from the twelfth to the nineteenth week. *Id.* The farther along the pregnancy is, the greater the risk that the patient will die or suffer severe complications from the abortion. *Id.*

2021, the calendar year before the U.S. Supreme Court held that the Due Process Clause of the Fourteenth Amendment does not secure a right to abortion.⁵⁵ Fifty-six percent of abortions in 2021 were medication abortions and ninety-three percent occurred during the first trimester of pregnancy.⁵⁶ In 2023, the first year after the 2022 Supreme Court ruling, the Guttmacher Institute estimated clinicians provided 1,037,200 abortions in states without total bans; sixty-three percent of those were medication abortions.⁵⁷

b. Abortion and Essentialism

The Roman Catholic Church plays an important role in abortion politics, so let us review its doctrine for consistency with essentialism.⁵⁸ Early Catholic theologians and thinkers were split, with some insisting that all abortions were wrong and others tolerating abortions performed before the mother could feel the fetus move.⁵⁹ However, in 1869, Pope Pius IX declared that abortion at any stage of pregnancy was grounds for excommunication.⁶⁰ In 1965, the Second Vatican Council decreed that life must be protected from the moment of conception and labeled abortion as an unspeakable crime.⁶¹ In 1974, the Congregation for the Doctrine of the Faith released its *Declaration on Procured Abortion*, repeating that human life must be respected from the time of conception.⁶² The Church reiterated its opposition to abortion in 2024.⁶³

⁵⁵ See *Dobbs*, 597 U.S. at 215; Jeff Diamant et al., *What the Data Says About Abortion in the U.S.*, PEW RSCH. CTR. (Mar. 25, 2024), <https://www.pewresearch.org/short-reads/2024/03/25/what-the-data-says-about-abortion-in-the-us/> [<https://perma.cc/6R5Y-Z2QE>]. Data for the remaining four states was not available. *Id.*

⁵⁶ See Diamant, *supra* note 55 (reporting CDC data on common abortion types and times).

⁵⁷ See *Monthly Abortion Provision Study*, GUTTMACHER, <https://www.guttmacher.org/monthly-abortion-provision-study> [<https://perma.cc/4J66-K48U>]. Research indicated that there was an eleven-point-one percent increase in clinician-provided abortions in states without a total ban since 2020. *Id.*

⁵⁸ See *infra* Part II.B.2 (explaining Republican Party used abortion to recruit Catholic voters).

⁵⁹ See Bradley Onishi, *Why Christians – And Republicans – Should Reconsider the Premise that ‘Life Begins at Conception’*, POLITICO (Mar. 21, 2024), <https://www.politico.com/news/magazine/2024/03/21/life-conception-christian-theology-00147804> (last visited Oct. 1, 2024) (discussing history of Catholic doctrine on abortion).

⁶⁰ See Patsy McGarry, *Catholic Church Teaching on Abortion Dates from 1869*, THE IRISH TIMES (July 1, 2013), <https://www.irishtimes.com/news/social-affairs/religion-and-beliefs/catholic-church-teaching-on-abortion-dates-from-1869-1.1449517> [<https://perma.cc/QF6D-X4K7>]. Before this declaration, Catholic teaching held that abortion was not homicide if performed before the fetus received a soul, an event thought to occur when the mother felt the fetus move, signaling the presence of a separate consciousness. *Id.*

⁶¹ See Pastoral Constitution on the Church in the Modern World, *Gaudium et Spes*, ¶ 51 (1965), https://www.vatican.va/archive/hist_councils/ii_vatican_council/documents/vat-ii_const_19651207_gaudium-et-spes_en.html [<https://perma.cc/576J-BN3L>].

⁶² See Franciscus Card. SEPER, Sacred Congregation for the Doctrine of the Faith, *Declaration on Procured Abortion*, THE HOLY SEE (Nov. 18, 1974), https://www.vatican.va/roman_curia/congregations/cfaith/documents/rc_con_cfaith_doc_19741118_declaration-abortion_en.html [<https://perma.cc/3FBA-7GPK>] (asserting right to life from time egg is fertilized); see also Macintosh, *supra* note 13, at 7 (explaining Church tasked Congregation for Doctrine of Faith with protecting faith and morals doctrine).

⁶³ See Víctor Manuel Card. Fernández & Msgr. Armando Matteo, *Declaration of the Dicastery for the Doctrine of the Faith “Dignitas Infinita” on Human Dignity*, 08.04.2024, HOLY SEE PRESS OFFICE (Aug. 4, 2024),

Human beings occur in nature; we constitute a natural kind.⁶⁴ Thus, an essentialist would infer that human beings possess a human essence that causes human traits.⁶⁵ Now, imagine a woman who is pregnant.⁶⁶ As a parent, she can transmit human essence to her baby.⁶⁷ Members maintain their kind as they develop and grow.⁶⁸ Therefore, an essentialist may intuit that the woman's fetus must *already* possess human essence; otherwise, it could not develop into a baby who belongs to the human kind.⁶⁹ The *Declaration on Procured Abortion* appears to employ similar reasoning when it states: "From the time that the ovum is fertilized, a life is begun which is neither that of the father nor of the mother, it is rather the life of a new human being with his own growth. It would never be made human if it were not human already."⁷⁰

To be sure, a fetus lives inside a woman and does not yet have an independent existence.⁷¹ But the essentialist does not care because atypical members can belong to a kind.⁷² Therefore, if the essentialist believes, as the Church does, that human beings have a right to life, he can easily agree with the Church that the fetus he observes within the woman must not be aborted.⁷³ Indeed, he can even agree with the Church that a

<https://press.vatican.va/content/salastampa/en/bollettino/pubblico/2024/04/08/240408c.html> [https://perma.cc/6L36-DFES] (describing procured abortion). "The deliberate and direct killing, by whatever means it is carried out, of a human being in the initial phase of his or her existence, extending from conception to birth." *Id.*

⁶⁴ See Myron Rothbart & Marjorie Taylor, *Category Labels and Social Reality: Do We View Social Categories as Natural Kinds?*, in LANGUAGE, INTERACTION AND SOCIAL COGNITION 21 (Gunther R. Semin & Klaus Fiedler eds., 1992) (expressing view that humans natural kind for purposes of essentialist reasoning).

⁶⁵ See MEDIN & ORTONY, *supra* note 35, at 183-84, 186 (noting people act if natural kinds have essences that cause traits to make predictions); see also Rothbart & Taylor, *supra* note 64 (explaining observer can draw inferences about traits of individual from its kind membership).

⁶⁶ See *Changes During Pregnancy*, AM. COLL. OBSTETRICIANS AND GYNECOLOGISTS (Nov. 2023), <https://www.acog.org/womens-health/infographics/changes-during-pregnancy> [https://perma.cc/GM6Z-N3CY] (describing pregnancy stages and situating fetus inside uterus of woman).

⁶⁷ See GELMAN, *supra* note 38, at 89-90 (claiming children believe in parent-child transmission of inborn traits).

⁶⁸ See *id.* at 63-67 (providing evidence that children expect identity to persist during development).

⁶⁹ See Lincoln Frias & Noel Struchiner, *The Cognitive Psych. of the Potentiality Argument*, 13 AM. J. BIOETHICS 36, 37 (2013) (claiming arguments based on developmental potential derive from intuition human essence is present in embryo).

⁷⁰ See Franciscus Card. SEPER, Sacred Congregation for the Doctrine of the Faith, *supra* note 62; see also Frias & Struchiner, *supra* note 69, at 37 (characterizing similar arguments as essentialist).

⁷¹ See *Changes During Pregnancy*, *supra* note 66 (describing development of fetus within body of woman). But see Franciscus Card. SEPER, Sacred Congregation for the Doctrine of the Faith, *supra* note 62 (describing human essence starts at contraception). "The one who will be a man is already one." *Id.*

⁷² See GELMAN, *supra* note 38, at 69-70 (asserting that natural kinds allow for atypical members).

⁷³ See Franciscus Card. SEPER, Sacred Congregation for the Doctrine of the Faith, *supra* note 62 (stating unequivocal condemnation of abortion).

fertilized egg must not be killed, for it too has human essence and can develop into a baby.⁷⁴

C. IVF and Psychological Essentialism

a. IVF

IVF is a reproductive technology that accounts for around two percent of all births in the United States.⁷⁵ A patient takes fertility drugs to cause multiple eggs to mature within her ovaries.⁷⁶ The eggs are removed and combined with sperm to fertilize them.⁷⁷ If embryos result, one or more will be transferred to the patient's uterus, and others can be cryopreserved and stored for possible future use.⁷⁸ The first transfer may not yield a pregnancy; most patients require two or three transfers before getting pregnant and delivering a child.⁷⁹

This standard protocol is efficient because it harvests “an entire year’s worth of eggs in one retrieval.”⁸⁰ All eggs are then fertilized because doctors do not know which ones will lead to pregnancy.⁸¹ Patients are encouraged to freeze between two to four embryos for each child they would like to have.⁸² Surplus embryos may be stored or discarded.⁸³ It is estimated that 600,000 to one million embryos are in storage tanks in the United States.⁸⁴ Some have been abandoned by the patients who created them.⁸⁵ And when storage tanks fail, embryos die.⁸⁶

⁷⁴ See *id.* (emphasizing that even fertilized egg new human being); Frias & Struchiner, *supra* note 69, at 37 (stating arguments that embryos require protection on account of their developmental potential derive from essentialism); see also GELMAN, *supra* note 38, at 105 (noting that children treat categories having inborn qualities passed from parent to child).

⁷⁵ See Holcombe, *supra* note 34 (stating over eight million babies born through IVF).

⁷⁶ See *id.* (describing hormonal injections that cause multiple eggs to mature).

⁷⁷ See *id.* (discussing egg retrieval and combination with sperm).

⁷⁸ See *id.* (mentioning fertilizing eggs prior to transfer or cryopreservation).

⁷⁹ See Holcombe, *supra* note 34 (discussing need for repeated embryo transfers).

⁸⁰ See *id.* (quoting fertility doctor on retrieval of multiple eggs).

⁸¹ See *id.* (reporting that thirty to fifty percent of eggs retrieved will not develop into pregnancy).

⁸² See *id.* (describing advice provided to IVF patients).

⁸³ See Rachael Robertson, *Why Discarding Embryos Is Inherent to the IVF Process*, MEDPAGE TODAY (Feb. 28, 2024), <https://www.medpagetoday.com/obgyn/infertility/108932> [<https://perma.cc/UTE9-MEUC>] (noting IVF creates more embryos than needed for immediate transfer, leading to cryopreservation or discard).

⁸⁴ See Trevor Hughes, *Alabama court rules frozen embryos are children, chilling IVF advocates*, USA TODAY (Feb. 20, 2024), <https://www.usatoday.com/story/news/nation/2024/02/20/alabama-supreme-court-frozen-embryos-ruling-ivf/72662533007/> [<https://perma.cc/HYK4-DFX6>] (reporting concerns about medical effects of LePage decision).

⁸⁵ See Mary Pflum, *Nation’s fertility clinics struggle with a growing number of abandoned embryos*, NBC NEWS (Aug. 12, 2019), <https://www.nbcnews.com/health/features/nation-s-fertility-clinics-struggle-growing-number-abandoned-embryos-n1040806> [<https://perma.cc/6875-UPNB>] (describing problem of abandoned embryos).

⁸⁶ See Nicholas Iovino, *Jury Finds Tank Maker Responsible for Lost Eggs and Embryos, Awards \$15 Million*, COURTHOUSE NEWS SERV. (June 10, 2021), <https://www.courthousenews.com/jury-finds-tank-maker-responsible-for-lost-eggs-and-embryos-awards-15-million/> [<https://perma.cc/6MEG-VLVH>] (reporting litigation on storage tank failure). For example, in 2018, a cryogenic storage tank failed at the Pacific Fertility Center in San Francisco, leading to the

b. IVF and Essentialism

This Section applies principles of psychological essentialism to explain alternative conclusions regarding the moral worth of IVF embryos.

i. IVF embryos have a right to life

The Roman Catholic Church strongly opposes abortion from the moment of conception.⁸⁷ Its *Declaration on Procured Abortion* states that the life of a new human being begins when sperm fertilizes an egg.⁸⁸ Unsurprisingly, the Church also holds that the deliberate destruction of IVF embryos contradicts its doctrine on abortion.⁸⁹

In 2024, the Southern Baptist Convention adopted a resolution to reaffirm the human right to life from the moment of fertilization.⁹⁰ The resolution objects to IVF because it leads to “freezing, stockpiling, and ultimate destruction of human embryos.”⁹¹ It calls upon Southern Baptists to use only reproductive technologies that respect the right to life, especially in the number of embryos created, and urges the government to “restrain” actions inconsistent with the human dignity and value of cryopreserved embryos.⁹²

Arguably, such religious opposition is consistent with psychological essentialism: if a kind member possesses kind essence throughout its development, an essentialist can intuit that a human being possesses human essence from the moment of conception.⁹³ This human essence enables the inference that the embryo has human

loss of some 3,500 eggs and embryos and 140 federal lawsuits against the manufacturer of the tank. *Id.* In just one of these suits, a jury awarded fifteen million dollars to five couples who lost eggs and embryos in the incident. *Id.* The jury assigned ninety percent of the liability to the manufacturer, which ended up responsible for paying thirteen and one-half million dollars. *Id.*
⁸⁷ See Franciscus Card. SEPER, Sacred Congregation for the Doctrine of the Faith, *supra* note 62 (discussing right to life fundamental and abortion violation of that right).

⁸⁸ See *id.* (declaring right to life begins at fertilization).

⁸⁹ See Joseph Card. Ratzinger, *Instruction on Respect for Human Life in its Origin and on the Dignity of Procreation Replies to Certain Questions of the Day*, THE HOLY SEE (Feb. 22, 1987), https://www.vatican.va/roman_curia/congregations/cfaith/documents/rc_con_cfaith_doc_19870222_respect-for-human-life_en.html [<https://perma.cc/6F3V-ZCCF>] (declaring that deliberate destruction of IVF embryos violates abortion doctrine).

⁹⁰ See *On the Ethical Realities of Reproductive Technologies and the Dignity of the Human Embryo*, S. BAPTIST CONVENTION (June 12, 2024), <https://www.sbc.net/resource-library/resolutions/on-the-ethical-realities-of-reproductive-technologies-and-the-dignity-of-the-human-embryo/> [<https://perma.cc/4D8C-F478>] (resolving questions regarding IVF for Southern Baptists).

⁹¹ See *id.* (declaring right to life begins at fertilization).

⁹² See *id.* (calling upon members to carry out this vision and advocate for legal restrictions upon IVF); see also Ruth Graham, *Southern Baptists Vote to Oppose Use of I.V.F.*, THE NEW YORK TIMES (June 12, 2024), <https://www.nytimes.com/2024/06/12/us/ivf-vote-southern-baptists.html> (last visited Sept. 29, 2024) (describing annual meeting where resolution passed).

⁹³ See GELMAN, *supra* note 38, at 63-67 (discussing children’s intuition that identity persists despite physical transformation); Kerry Lynn Macintosh, *Psychological Essentialism and Opposition to Human Embryonic Stem Cell Research*, 18 J. TECH. L. & POL’Y 229, 257 (2013) (explaining that embryo’s development into child demonstrates its human essence and moral worth).

traits, including moral worth.⁹⁴ While an embryo is tiny and does not resemble a human baby, the essentialist believes that identity persists throughout transformation and accepts atypical kind members.⁹⁵

In *LePage*, the plaintiffs treated their lost embryos like children by suing under Alabama's Wrongful Death of a Minor Act and the fertility clinic's storage room was referred to as a "cryogenic nursery."⁹⁶ Even politicians can experience essentialist instincts: although former South Carolina Governor Nikki Haley disagreed with the *LePage* decision and said Alabama should review its laws, she admitted that she views IVF embryos as children.⁹⁷

ii. IVF embryos do not have a right to life

IVF, however, contrasts with traditional human procreation, in which one man and one woman engage in sexual intercourse.⁹⁸ If the woman is ovulating, an egg will be available in her Fallopian tubes for fertilization by sperm in the man's ejaculate.⁹⁹ The fertilized egg subdivides into an embryo as it travels to the uterus, where it implants and develops through fetal stages until it emerges as a baby after nine months of gestation.¹⁰⁰ According to psychological essentialism, parents transmit the essence of their kind to offspring; thus, the sustained presence of the fertilized egg, embryo, and fetus within a human body ensures a continual link to human essence until a baby emerges into the world.¹⁰¹

Moreover, in traditional procreation, the female body changes over time as the fetus matures; a pregnant woman may experience nausea or food cravings, appear tired, and develop larger breasts and abdomen.¹⁰² As discussed previously, researchers at the University of Colorado believe physical changes encourage observers to essentialize biological mothers.¹⁰³ Further, they suggest that *any* physical change that indicates group membership may increase essentialism by reminding people of underlying genetic or

⁹⁴ See MEDIN & ORTONY, *supra* note 35, at 184, 186 (discussing inference of traits from essence); Macintosh, *supra* note 93, at 257 (explaining presence of human essence allows inference that embryo has moral worth).

⁹⁵ See GELMAN, *supra* note 38, at 64-66 (discussing perception that identity persists despite change during growth) and 69-70 (explaining that atypical members judged to belong to natural kinds).

⁹⁶ See *LePage v. Ctr. For Reprod. Med., P.C.*, No. SC-2022-0515, SC-2022-0579, 2024 Ala. LEXIS 60, at *2-4 (Ala. 2024). Plaintiffs sued under Alabama's Wrongful Death of a Minor Act § 6-5-391. *Id.* at *4.

⁹⁷ See Gregory Krieg & Kit Maher, *Nikki Haley Says She Believes Embryos Are Children but Disagrees with Alabama Supreme Court Ruling*, CNN (Feb. 22, 2024), <https://www.cnn.com/2024/02/22/politics/nikki-haley-alabama-ivf-ruling/index.html> [<https://perma.cc/5HJS-MQGM>].

⁹⁸ See *Human Reproduction*, ENCYCLOPEDIA.COM, <https://www.encyclopedia.com/social-sciences/applied-and-social-sciences-magazines/human-reproduction> [<https://perma.cc/HKQ8-4DSG>] (describing process of human reproduction).

⁹⁹ See *id.* (describing first step of fertilization).

¹⁰⁰ See *id.* (discussing reproductive process after fertilization occurs).

¹⁰¹ See Macintosh, *supra* note 93, at 234 (noting belief that living creatures transmit category membership and associated traits to offspring).

¹⁰² See *Changes During Pregnancy*, *supra* note 66 (describing symptoms women experience during pregnancy).

¹⁰³ See Park, *supra* note 47, at 964 (discussing results of experiments and reaching this conclusion).

biological factors.¹⁰⁴ If they are correct, then the “baby bump” that signals pregnancy and impending motherhood may encourage observers to essentialize the growing fetus, which is also visibly changing.¹⁰⁵

The Roman Catholic Church deems IVF “morally illicit” because it separates procreation from the conjugal union of husband and wife and treats children as technological products.¹⁰⁶ The Ethics and Religious Liberty Commission of the Southern Baptist Convention echoes this reasoning, claiming Christians should oppose IVF on principle because it separates procreation from sex and treats children as products.¹⁰⁷ This insistence that embryos be conceived inside a body through sex suggests a deep unease with the way in which IVF disrupts the paradigmatic transmission of essence from parent to child.¹⁰⁸

Unlike abortion, which terminates a fetus that is conceived inside a person, the IVF process removes eggs and sperm from human bodies and uses them to conceive embryos in a lab.¹⁰⁹ By separating conception from gestation, IVF may appear to postpone transmission of human essence from parent to child, thereby creating a window during which embryos may be freely produced, cryopreserved, and/or stored without moral objection.¹¹⁰ Transferring an embryo to a woman restores the transmission of essence paradigm and leads to the conclusion that the offspring is indeed human.¹¹¹

When essentialism is applied in this way, it explains the politics of former U.S. Senator Orrin Hatch, a prolife Republican who opposed abortion but supported

¹⁰⁴ See *id.* at 965 (*emphasis added*). “[A]ny physical change that denotes group membership may signal or remind people of underlying genetic or biological mechanisms, giving rise to enhanced essentialism.” *Id.*

¹⁰⁵ Cf. *id.* (reasoning that any observable physical change can trigger essentialism).

¹⁰⁶ See Joseph Card. Ratzinger, *supra* note 89 (explaining reasons to oppose IVF even if embryos are not lost); see also William Card. Levada, *Instruction Dignitas Personae on Certain Bioethical Questions and the Dignity of the Person*, THE HOLY SEE (Sept. 8, 2008), https://www.vatican.va/roman_curia/congregations/cfaith/documents/rc_con_cfaith_doc_20081208_dignitas-personae_en.html [<https://perma.cc/G6AU-TEDQ>] (reiterating that it is unacceptable to separate procreation from conjugal act); James McTavish, *Why the Church Says “Yes” to Life and “No” to IVF*, 89 CATH. MED. ASS’N 450, 452 (2022) (detailing Roman Catholic Church’s objections to IVF). The Catholic Church also denounces the use of IVF because of the “massive destruction of human life.” McTavish, *supra*. The Church argues that for every child conceived through IVF, many embryos are destroyed or lost. *Id.*

¹⁰⁷ See *Ethical and Theological Considerations on IVF*, *supra* note 33 (explaining reasons to oppose IVF).

¹⁰⁸ See GELMAN, *supra* note 38, at 105 (describing intuition that parents transmit inborn traits to children).

¹⁰⁹ See Holcombe, *supra* note 34 (detailing elements of IVF process).

¹¹⁰ See *id.* (noting some IVF embryos transferred for gestation while others frozen and stored); Macintosh, *supra* note 93, at 234 (discussing belief in parent-child transmission of identity and traits).

¹¹¹ See Joseph Card. Ratzinger, *supra* note 89 (acknowledging humanity of child conceived through IVF). “Although the manner in which human conception is achieved with IVF and ET cannot be approved, every child which comes into the world must in any case be accepted as a living gift of the divine Goodness and must be brought up with love.” *Id.*

embryonic stem cell research on surplus IVF embryos.¹¹² As he stated, “I believe that a human’s life begins in the womb, not in a petri dish or refrigerator.”¹¹³ Senator Hatch also testified in support of the Stem Cell Research Enhancement Act of 2005, which would have provided federal funds to support embryonic stem cell research had it not been vetoed.¹¹⁴

Applying essentialism this way also explains why eighty-six percent of Americans embrace legal IVF but only sixty-three percent support legal abortion.¹¹⁵ It clarifies why IVF is legal nationwide while many states outlaw abortion, and why some prolife legislators fight to protect IVF even though embryos are lost in that process.¹¹⁶

However, as discussed above, the Roman Catholic Church and Southern Baptist Convention have embraced a stricter essentialism in which every IVF embryo has moral worth regardless of location.¹¹⁷ The Ethics and Religious Liberty Commission of the Southern Baptist Convention suggested that federal legislation is needed to discourage fertilization of multiple eggs and prohibit destruction of IVF embryos.¹¹⁸ Popular support for IVF could make it hard to achieve the national consensus required to enact such federal restrictions.¹¹⁹ However, prolife legislators in conservative states may introduce bills to limit the number of embryos created, mandate their transfer to the patient, and/or prohibit cryopreservation or discard.¹²⁰ Such bills could lower success rates, increase multiple pregnancies, and elevate expense and risk.¹²¹ To defeat them, the fertility industry must convince state legislators that creating

¹¹² See Bernard Lo & Lindsay Parham, *Ethical Issues in Stem Cell Research*, 30 ENDOCRINE REV. 204, 205 (2009) (discussing Senator Hatch’s positions on abortion and embryonic stem cell research). See generally *Stem Cells: What they are and what they do*, MAYO CLINIC (Mar. 23, 2024), <https://www.mayoclinic.org/tests-procedures/bone-marrow-transplant/in-depth/stem-cells/art-20048117> [<https://perma.cc/AJ97-DHYP>] (discussing possible stem cell therapies).

¹¹³ See Statement of Hon. Orrin G. Hatch, U.S. Senator from Utah, in Hearings Before a Subcommittee of the Committee on Appropriations, U.S. Senate, S. Hrg. No. 107-499, at 11 (July 18, 2001), <https://www.govinfo.gov/content/pkg/CHRG-107shrg77047/html/CHRG-107shrg77047.htm> [<https://perma.cc/J838-XRVI>] (documenting Senator Hatch’s arguments for stem research at hearing).

¹¹⁴ See *Stem Cell Bills Approved by Congress; President Issues Veto*, WOMEN’S CONG. POL’Y INST., <https://www.wcpinst.org/source/stem-cell-bills-approved-by-congress-president-issues-veto/> [<https://perma.cc/UGQ6-4EF3>] (detailing history of Stem Cell Research Enhancement Act of 2005); see also Stem Cell Research Enactment Act of 2005, H.R. 810, 109th Cong. (2006) (providing federal funding for embryonic stem cell research).

¹¹⁵ See Garrity, *supra* note 18 (describing poll in which U.S. adults favor legal IVF); PEW RSCH CTR., *supra* note 20 (reporting nationwide polling on abortion issue).

¹¹⁶ Cf. Lo & Parham, *supra* note 112, at 205 (describing prolife support for research that destroys embryos). Compare Macintosh, *supra* note 13, at 8 (stating that “IVF is legal in the United States”) with *infra* text accompanying notes 135-37 (describing patchwork of state abortion laws).

¹¹⁷ See *supra* Part I.C.2(a) (explaining Roman Catholic Church and Southern Baptist’s views on IVF embryos).

¹¹⁸ See *Ethical and Theological Considerations on IVF*, *supra* note 33 (asserting federal law should prohibit destruction of non-implanted embryos and use in scientific research).

¹¹⁹ See Garrity, *supra* note 18 (reporting recent poll in which 86% of U.S. adults support legal IVF).

¹²⁰ See Macintosh, *supra* note 13, at 19 (describing these potential legal limitations).

¹²¹ See *id.* (noting disadvantages of imposing such legislative limitations); see also Quaas, *supra* note 34, at 10 (explaining how German law lowers pregnancy rates by limiting number of embryos created).

multiple embryos and freezing some for later cycles is essential if patients are to achieve viable pregnancies.¹²² The American Society for Reproductive Medicine (ASRM) is well-situated to take on that challenge: it has an Office for Public Affairs that engages in public relations and lobbies Congress and state legislatures on policy matters affecting the fertility industry and patients.¹²³

II. Status Quo Bias

A. Basic Principles

Human beings generally prefer to maintain the status quo—that is, they resist change.¹²⁴ Psychologists Scott Eidelman and Christian S. Crandall assert that two other biases underlie status quo bias: existence bias, which leads people to believe existing states are good, and longevity bias, which causes people to favor things that have lasted a long time.¹²⁵ Existence and longevity biases are heuristics that enable swift and subconscious decision-making.¹²⁶

B. The Status Quo of Abortion Law and Politics

a. Abortion Law

When the U.S. Supreme Court decided *Dobbs*, it overruled *Roe v. Wade* and *Planned Parenthood of Southeastern Pennsylvania v. Casey*, two cases that held the Due Process Clause of the Fourteenth Amendment established a right to abortion prior to fetal viability.¹²⁷ *Dobbs* recounted the legal history of abortion in England and the United States: common law treated abortion after quickening as a crime; in 1868, when the Fourteenth Amendment was adopted, three-quarters of American states had laws that criminalized all abortions; and by the nineteen-fifties, forty-six states barred abortion except to save the life of the mother.¹²⁸ When *Roe* was decided in 1973, thirty states still

¹²² See Holcombe, *supra* note 34 (noting most patients must create multiple embryos and undergo two-three transfers before becoming pregnant); Quaas, *supra* note 34, at 12 (urging fertility experts to educate policymakers about IVF).

¹²³ See J. Benjamin Younger Office of Public Affairs, *supra* note 34 (discussing role of ASRM in lobbying government on legislative and regulatory issues).

¹²⁴ See Scott Eidelman & Christian S. Crandall, *Bias in Favor of the Status Quo*, 6 SOC. PERSONAL PSYCH. COMPASS 270, 271 (2012) (stating costs of change carry more weight than benefits, incentivizing maintenance of status quo); RONALD M. GREEN, BABIES BY DESIGN: THE ETHICS OF GENETIC CHOICE 8-9 (2007) (revealing people overestimate advantages of the familiar and disadvantages of innovation).

¹²⁵ See Eidelman & Crandall, *supra* note 124, at 271-74 (noting tendency to treat existence and longevity indicators of goodness).

¹²⁶ See *id.* at 274 (arguing biases exhibit hallmarks of heuristic thinking: over-application, efficiency, and lack of awareness).

¹²⁷ See *Dobbs*, 597 U.S. at 231, 292 (2022) (overruling *Roe* and *Casey*); see also *Roe v. Wade*, 410 U.S. 113, 170 (1973) (holding abortion within scope of personal liberty granted by Due Process Clause of Fourteenth Amendment); *Planned Parenthood v. Casey*, 505 U.S. 833, 871 (1992) (reaffirming right to abortion before fetal viability).

¹²⁸ See *Dobbs*, 597 U.S. at 242-48 (tracing England and United States' history and finding no history/tradition of right to abortion). The *Dobbs* decision described quickening as "the first felt movement of the fetus in the womb, which usually occurs between the 16th and 18th weeks of pregnancy." *Id.* at 242.

prohibited abortion while other states with liberalized laws regulated and even criminalized some abortions.¹²⁹ The Court concluded that the abortion right was not deeply rooted in American history and tradition; instead, there was a tradition of criminalizing abortion.¹³⁰ The Court's reasoning, with its emphasis on the existence and longevity of anti-abortion laws, suggests a status quo bias in favor of such laws.¹³¹

On the other hand, *Dobbs* could not erase the years from 1973, when *Roe* held that abortion was a constitutional right, through 1992, when *Casey* reaffirmed that right, to 2022, when those decisions were finally overruled.¹³² Because a right to abortion existed and endured for nearly half a century, some Americans may experience a status quo bias in favor of continuing that right.¹³³

After *Dobbs* was decided, states became free to outlaw abortion once again.¹³⁴ Today, some states have full bans.¹³⁵ Others permit abortion until the fetus has gestated for a specified number of weeks or become viable, while still others tolerate abortion throughout pregnancy.¹³⁶ States with restrictive laws may allow termination of pregnancies that threaten the life or health of the mother, stem from rape or incest, or involve lethal fetal anomalies.¹³⁷ This patchwork of laws may exist in part because

¹²⁹ See *id.* at 249-50 (noting that nineteen-seventies trend toward liberalization of abortion law had its limits).

¹³⁰ See *id.* at 250 (rejecting claim that abortion right was rooted in history and tradition).

¹³¹ See Eidelman & Crandall, *supra* note 124, at 272-74 (discussing existence and longevity biases that undergird status quo bias).

¹³² See *Roe*, 410 U.S. at 164-65 (basing right to abortion on trimester system, with state's ability to regulate increasing pregnancy progresses); *Casey*, 505 U.S. at 878-79 (reaffirming right to abortion while establishing undue burden standard for evaluating regulations short of prohibition); *Dobbs*, 597 U.S. at 292 (overruling *Roe* and *Casey*).

¹³³ See Eidelman & Crandall, *supra* note 124, at 272-74 (tracing status quo bias to underlying existence and longevity biases).

¹³⁴ See *Dobbs*, 597 U.S. at 292 (returning authority to regulate abortion to voters and their representatives).

¹³⁵ See *Abortion*, BRITANNICA, *supra* note 51 (offering interactive map outlining rights to abortion in each state). Alabama, Arkansas, Idaho, Indiana, Kentucky, Louisiana, North Dakota, Mississippi, Oklahoma, South Dakota, Tennessee, Texas, and West Virginia ban abortion. *Id.*

¹³⁶ See *id.* (providing interactive map specifying rights to abortion in each state). States that bar abortion after a set number of weeks of gestation include Florida, Georgia, and South Carolina (six weeks); North Carolina (twelve weeks); Utah (eighteen weeks); Iowa and Wisconsin (twenty-two weeks); and Massachusetts, Montana, Nevada, New Hampshire, and Pennsylvania (twenty-four weeks). *Id.* The states that prohibit abortion once the fetus attains viability are California, Connecticut, Delaware, Hawaii, Illinois, Kansas, Maine, Maryland, Michigan, New York, Ohio, Rhode Island, Virginia, Washington, and Wyoming. *Id.* Alaska, Colorado, Minnesota, New Mexico, New Jersey, Oregon, and Vermont fall into the most permissive category, allowing abortion throughout pregnancy. *Id.* However, these categories are subject to change: in 2024, Missouri and Arizona voters amended their state constitutions to permit abortion up to fetal viability, while Nebraska added its twelve-week ban to its state constitution. See Geoff Mulvihill & Christine Fernando, *Abortion rights advocates win in 7 states and clear way to overturn Missouri ban but lose in 3*, AP NEWS (Nov. 6, 2024), <https://apnews.com/article/abortion-ballot-measures-harris-trump-florida-missouri-49c9073cbb6056b66a8a7d0d099795d1> (reporting outcome of ballot measures in seven states).

¹³⁷ See, e.g., IDAHO CODE § 18-622 (2023) (classifying abortion felony but creating exceptions for rape, incest, or risk to mother's life); see also IND. CODE § 16-34-2-1 (2024). Indiana allows

abortion's complicated history has generated legal status quos that conflict with each other.¹³⁸

b. Abortion Politics

Turning to abortion politics, a 1972 Gallup poll found that sixty-four percent of Americans believed a woman and her physician should make an abortion decision.¹³⁹ In 2024, a Pew Research Center poll yielded similar results: sixty-three percent of U.S. adults said abortion should be legal in all or most cases.¹⁴⁰ In 1972, political party affiliation made some difference: sixty-eight percent of Republicans and fifty-nine percent of Democrats believed that abortion should be left to the woman and her doctor.¹⁴¹ By 2024, the political alignment flipped: eighty-five percent of Democrats and Democrat-leaning independents approved of access to abortion, while fifty-seven percent of Republicans and Republican leaners opposed it.¹⁴²

Yale researchers Linda Greenhouse and Reva B. Siegel argue that partisan efforts to achieve political realignment facilitated this shift in attitudes.¹⁴³ During the 1972 presidential campaign, Republican strategists used the abortion issue to gain votes from Roman Catholics and social conservatives who disapproved of feminism.¹⁴⁴ President Richard Nixon began changing his policies: for example, in rescinding a Department of Defense regulation that permitted abortions to be performed in military hospitals, Nixon asserted his opposition to “abortion on demand” and his personal belief in the sanctity of unborn human life.¹⁴⁵ Meanwhile, his campaign worked hard to associate his opponent, George McGovern, with amnesty for draft dodgers, abortion on demand, and illegal drugs.¹⁴⁶ Nixon was reelected in a landslide.¹⁴⁷

abortion up to ten weeks in instances of rape and incest and up to twenty weeks in instances of fatal fetal anomaly or threat to life of mother. *Id.*

¹³⁸ See Eidelman & Crandall, *supra* note 124, at 272-74 (discussing existence and longevity biases roots of status quo bias). Compare *Dobbs*, 597 U.S. at 242-48 (recounting long history of anti-abortion laws in the United States) with *Roe*, 410 U.S. at 164-65 (first recognizing constitutional right to abortion in 1973).

¹³⁹ See Linda Greenhouse & Reva B. Siegel, *Before (and After) Roe v. Wade: New Questions About Backlash*, 120 YALE L.J. 2028, 2031 (2011) (noting opinion of Americans regarding abortion prior to *Roe*).

¹⁴⁰ See PEW RSCH. CTR., *supra* note 20. The Pew Research Center conducted multiple polls to gather U.S. adult's opinions on abortion. *Id.* Along with political ideology, the research also examined the differences of opinion based on religious affiliation, gender, race, ethnicity, age, and educational background. *Id.*

¹⁴¹ See Greenhouse & Siegel, *supra* note 139, at 2031 (describing poll that linked abortion views to party affiliation).

¹⁴² See PEW RSCH. CTR., *supra* note 20 (assessing opinion on abortion by political party).

¹⁴³ See Greenhouse & Siegel, *supra* note 139, at 2068-70 (arguing political party realignment accounts for shift in abortion opinions).

¹⁴⁴ See *id.* at 2052-58 (describing Republican efforts to garner support from different groups before 1972 election).

¹⁴⁵ See *id.* at 2053 (recounting steps President Nixon took to gain political support).

¹⁴⁶ See *id.* at 2047, 2054-57 (explaining Nixon campaign tied unpopular policy stances to opponent ahead of election).

¹⁴⁷ See 50th Anniversary of the Historic Landslide of 1972, RICHARD NIXON FOUND. (Nov. 7, 2022), <https://www.nixonfoundation.org/2022/11/50th-anniversary-historic-landslide-election-1972/> [<https://perma.cc/Z83W-AJYV>] (describing President Nixon's presidential campaign and

After Nixon resigned over Watergate, President Gerald Ford chose not to emphasize the abortion issue during his term.¹⁴⁸ In response to *Roe*, however, the Republican Party's 1976 platform supported a constitutional amendment to restore a right to life for unborn children, while the Democratic Party's 1976 platform opposed such an amendment.¹⁴⁹ Republicans continued to build on their political realignment by recruiting evangelical Protestants, who came to oppose abortion along with women's liberation, gay rights, and secular humanism.¹⁵⁰ By 1980, the Democratic Party's platform openly supported *Roe*, but it was Ronald Reagan, a prolife Republican, who won the Presidency that year.¹⁵¹ During the 1980s, opposition to abortion grew among Republican members of Congress and voters, while support increased among Democratic members of Congress and voters.¹⁵² As studies indicate, public opinion on legal abortion remains split today along party lines, with many Republicans opposed and Democrats in favor.¹⁵³

As this history indicates, the current Republican and Democratic positions on abortion can be traced back to the political events of the 1970s.¹⁵⁴ If Eidelman and

reelection statistics). Nixon obtained reelection in 1972 with the most considerable reelection margin in history with nearly 18 million votes, and he received 520 votes from the electoral college. *Id.*

¹⁴⁸ See Greenhouse & Siegel, *supra* note 139, at 2059 (explaining changes in abortion politics after Nixon resigned and Ford took office).

¹⁴⁹ See *Republican Party Platform of 1976*, AM. PRESIDENCY PROJECT (Aug. 18, 1976), <https://www.presidency.ucsb.edu/documents/republican-party-platform-1976> [<https://perma.cc/2WY2-T7LU>] (protesting Supreme Court decision and supporting constitutional amendment to guarantee right to life); *1976 Democratic Party Platform*, AM. PRESIDENCY PROJECT (July 12, 1976), <https://www.presidency.ucsb.edu/documents/1976-democratic-party-platform> [<https://perma.cc/JHT9-CTVD>] (describing Democratic Party's reluctance to overturn *Roe* via constitutional amendment).

¹⁵⁰ See Greenhouse & Siegel, *supra* note 139, at 2065 (explaining Republican Party realignment with Christian groups in late 1970s).

¹⁵¹ See *1980 Democratic Party Platform*, AM. PRESIDENCY PROJECT (Aug. 11, 1980), <https://www.presidency.ucsb.edu/documents/1980-democratic-party-platform> [<https://perma.cc/S9AV-9AAN>] (supporting Supreme Court's 1973 ruling on abortion rights in Democratic Party platform); *U.S. Presidential Election of 1980*, BRITANNICA (Sept. 27, 2024), <https://www.britannica.com/event/United-States-presidential-election-of-1980> [<https://perma.cc/L2GN-JJ7B>] (describing 1980 election where Reagan won all but six states and over 50% of vote). While Governor of California, Reagan signed into state law a bill that liberalized abortion. *Id.* See Fred Barnes, *American Conservatism: Ronald Reagan, Father of the Pro-Life Movement*, WALL ST. J. (Nov. 6, 2003), <https://www.wsj.com/articles/SB106808204063174300> (last visited Nov. 25, 2024) (describing President Reagan's change in stance on abortion rights). He later decided he had made a mistake and led conservative opposition to abortion. Barnes, *supra*.

¹⁵² See Greenhouse & Siegel, *supra* note 139, at 2069-71 (explaining emergence of partisan split on abortion issues). After 1988, Gallup polling consistently shows more Democrats than Republicans supporting access to abortion. *Id.* at 2069. Additionally, longitudinal polling data from the National Election Study concludes that Democrats have been consistently more pro-choice than Republicans since 1990. *Id.* at 2070-71.

¹⁵³ See PEW RSCH. CTR., *supra* note 20 (providing statistics about public opinion on abortion by political leaning, age, and race).

¹⁵⁴ See generally Greenhouse & Siegel, *supra* note 139, at 2052-71 (recounting evolution of competing political positions on abortion).

Crandall are correct that human beings prefer existing states, the existence of these positions mark them as good, at least, among party members.¹⁵⁵ Furthermore, these positions are even more desirable because they have persisted for over forty years.¹⁵⁶ Thus, existence and longevity establish a status quo bias that the same political positions should continue.¹⁵⁷

A political party may maintain its position while reframing an issue to avoid losing voters.¹⁵⁸ Republican candidates for Congress performed worse than expected in the 2022 midterm elections, in part because many voters considered access to legal abortion to be their most important issue.¹⁵⁹ The Republican Party has begun to reframe the abortion issue: although its 2016 platform called for a constitutional amendment to protect unborn children, its 2024 platform appears to delegate the abortion issue to the states.¹⁶⁰

State legislators who buck the political status quo may pay a price: after three Republican members of the South Carolina Senate helped block a proposed abortion ban in 2023, all three lost their primaries in 2024.¹⁶¹ In 2024, two Republican members of the Arizona State Senate joined Democrats to repeal a nineteenth-century abortion

¹⁵⁵ See Eidelman & Crandall, *supra* note 124, at 272-73 (discussing existence bias).

¹⁵⁶ See *id.* at 273-74 (discussing longevity bias).

¹⁵⁷ See *id.* at 271-74 (detailing existence and longevity biases pillars of status quo bias).

¹⁵⁸ See Alexandra Feddersen, *Changing Positions without Losing Face: How Parties Shift Their Position on Issues*, 29 PARTY POLITICS 513, 513 (2022) (noting parties change positions in accordance with public opinion).

¹⁵⁹ See Harry Enten, *How Joe Biden and the Democratic Party Defied Midterm History*, CNN (Nov. 13, 2022), <https://www.cnn.com/2022/11/13/politics/democrats-biden-midterm-elections-senate-house/index.html> [<https://perma.cc/SC3L-UHSX>] (discussing role of abortion issue in midterms). Generally, midterm elections favor the political party that is out of power; for this reason, the Democrats' electoral success in 2022 was considered surprising. *Id.*

¹⁶⁰ Compare 2016 Republican Party Platform, AM. PRESIDENCY PROJECT (July 18, 2016), <https://www.presidency.ucsb.edu/documents/2016-republican-party-platform#families> [<https://perma.cc/6RZZ-98GT>] (reiterating Republican demand for constitutional amendment to protect unborn life) with 2024 Republican Party Platform, AM. PRESIDENCY PROJECT (July 8, 2024), <https://www.presidency.ucsb.edu/documents/2024-republican-party-platform> [<https://perma.cc/7375-SBLK>] (states can secure right not to be deprived of life or liberty without due process); see also Maggie Haberman et al., *Following Trump's Lead, Republicans Adopt Platform that Softens Stance on Abortion*, N.Y. TIMES (July 8, 2024), <https://www.nytimes.com/2024/07/08/us/politics/trump-abortion-gop.html> [<https://perma.cc/6DXG-39YF>] (detailing Republican stance on abortion for 2024 election).

¹⁶¹ See James Pollard, *South Carolina Again Rejects Near-Total Abortion Ban*, AP NEWS (Apr. 27, 2023), <https://apnews.com/article/south-carolina-abortion-ban-legislature-8a3d4c18db8aabfc869b9466aa4f76aa> [<https://perma.cc/9VN2-MF5W>]; Jeffrey Collins, *Voters Kick All the Republican Women Out of the South Carolina Senate*, ABC NEWS (July 1, 2024), <https://abcnews.go.com/US/wireStory/voters-kick-republican-women-south-carolina-senate-111571176> [<https://perma.cc/B54Q-XJLW>] (reporting fate of aisle-crossing Republicans). The South Carolina State Legislature later banned abortion after cardiac activity can be detected via ultrasound, which generally occurs around six weeks after the mother's last period. Collins, *supra*. See Jeffrey Collins, *Judge Says South Carolina Can Enforce 6-week Abortion Ban Amid Dispute Over When a Heartbeat Begins*, AP NEWS (May 17, 2024), <https://apnews.com/article/abortion-south-carolina-fetal-heartbeat-fa742d40c8e15df41c8545d8a33a1838> [<https://perma.cc/9U8M-RE29>].

law that imposed a near-total ban on abortion.¹⁶² Their Republican colleagues questioned their prolife credentials and called on Arizona voters to take note of their disloyalty.¹⁶³

C. The Status Quo of IVF Law and Politics

a. IVF Law

Elizabeth Carr, the first IVF baby in the United States, was born in 1981.¹⁶⁴ Carr was delivered eight years after *Roe* held that a fetus is not a person entitled to protection under the Fourteenth Amendment and that a woman's right to abortion outweighed the government's legitimate interest in potential human life prior to viability.¹⁶⁵ Eleven years after Carr's birth, *Casey* reaffirmed the constitutional right to an abortion prior to viability.¹⁶⁶ Both the *Roe* and *Casey* decisions emphasized the right to make personal reproductive decisions.¹⁶⁷ Thus, when IVF was new and gaining traction with doctors and patients, these decisions implied that states could not prohibit use of a reproductive technology in which embryos were lost or discarded.¹⁶⁸

¹⁶² See Anita Snow & Morgan Lee, *Arizona's Democratic Governor Signs a Bill to Repeal 1864 Ban on Most Abortions*, AP NEWS (May 2, 2024), <https://apnews.com/article/arizona-governor-abortion-ban-1864-signing-07bba2fa805971be62b800bd89c81a5a> [<https://perma.cc/W63C-BZ6W>] (reporting repeal of Arizona's abortion ban). The legislative action came after the state supreme court ruled to reinstate the restrictive abortion ban. *Id.* The bill to repeal passed through the state senate with a slim two-vote margin. *Id.*

¹⁶³ See Gloria Rebecca Gomez, *The AZ Senate Has Repealed the 1864 Abortion Ban, After Two Republicans Join Dems*, AZ MIRROR (May 1, 2024), <https://azmirror.com/2024/05/01/the-az-senate-has-repealed-the-1864-abortion-ban-after-2-republicans-join-dems> [<https://perma.cc/U74P-32SJ>] (reporting statements comparing vote to repeal to 9/11 and calling it unconscionable).

¹⁶⁴ See Doree Lewak, *America's First IVF Baby, Elizabeth Carr, Turns 40*, N.Y. POST. (Dec. 27, 2021), <https://nypost.com/2021/12/27/americas-first-ivf-baby-elizabeth-carr-turns-40/> [<https://perma.cc/WR4Z-L8UN>]; see also Elizabeth Carr, *Elizabeth Carr, Compassionate Speaker and Advocate*, <https://ejordancarr.com> [<https://perma.cc/A2CK-4GE7>] (outlining Elizabeth's current work in reproductive awareness).

¹⁶⁵ See *Roe v. Wade*, 410 U.S. 113, 156-58, 162-64 (1973) (holding fetus is not person and woman has a right to abortion prior to viability).

¹⁶⁶ See *Planned Parenthood v. Casey*, 505 U.S. 833, 878-79 (1992) (reaffirming right to abortion and establishing undue burden standard of review).

¹⁶⁷ See *Roe*, 410 U.S. at 152-53 (stating constitutional right to privacy include activities related to procreation and contraception); *Casey*, 505 U.S. at 851 (noting constitutional protection for personal decisions regarding procreation and contraception). "Our cases recognize 'the right of the individual, married or single, to be free from unwarranted governmental intrusion into matters so fundamentally affecting a person as the decision whether to bear or beget a child.'" *Casey*, 505 U.S. at 857 quoting *Eisenstadt v. Baird*, 405 U.S. 438, 453 (1972). To be sure, *Casey* also relied on a line of cases establishing a right to bodily integrity. *Casey*, 505 U.S. at 857. Professor Glenn Cohen argues that the law can prohibit destruction of IVF embryos that have not been implanted and do not implicate bodily integrity. Glenn Cohen, *Reproductive Technologies and Embryo Destruction After Dobbs*, in *ROE V. DOBBS: THE PAST, PRESENT, AND FUTURE OF A CONSTITUTIONAL RIGHT TO ABORTION* 281, 285-86 (Lee C. Bollinger & Geoffrey Stone eds. 2024) (explaining difficulties in locating constitutional protection for IVF).

¹⁶⁸ See Macintosh, *supra* note 13, at 48 (arguing *Roe* and *Casey* shielded IVF by downgrading interests of embryos and fetuses).

Today, IVF is lawful throughout the United States.¹⁶⁹ Because IVF has never been banned, the U.S. Supreme Court has not had reason to consider the constitutionality of a ban.¹⁷⁰ By overruling *Roe* and *Casey*, *Dobbs* may have opened the door to bans or restrictions, making it necessary to consider whether state legislatures are likely to enact them.¹⁷¹

IVF has its critics, including the Roman Catholic Church, Southern Baptist Convention, and other prolife advocates who object to the destruction of surplus embryos.¹⁷² Such fierce opposition raises the question whether some states might outlaw IVF in the future.¹⁷³ However, IVF currently exists as a lawful medical treatment for infertility, and its existence marks it as good.¹⁷⁴ IVF also continues to demonstrate longevity, having been legal and available for over forty years.¹⁷⁵ Given its long-standing use, IVF may already benefit from a status quo bias in favor of its legality, making it harder to ban now.¹⁷⁶

Moreover, as practiced currently, IVF creates more embryos than a patient can receive at one time, leaving surplus embryos to be cryopreserved for future use and/or discarded.¹⁷⁷ State abortion and personhood laws do not reach extrauterine embryos.¹⁷⁸ Louisiana prohibits intentional destruction of viable IVF embryos but not their creation

¹⁶⁹ See *id.* at 8 (reporting on legality of IVF).

¹⁷⁰ See *id.* at 32 (noting lack of Supreme Court case law on IVF). Two lower federal courts have invalidated state laws that burdened access to an IVF variant and gestational surrogacy. See *Lifchez v. Hartigan*, 735 F. Supp. 1361, 1376-77 (7th Cir. 1990), *aff'd*, 914 F.2d 260 (7th Cir. 1990) (unpublished opinion), *cert. denied sub nom.* *Scholberg v. Lifchez*, 498 U.S. 1069 (1991) (holding Illinois law barring experimentation on fetuses violated constitutional right to privacy); *J.R. v. Utah*, 261 F. Supp.2d 1268, 1293 (D. Utah 2002) (holding presumption that gestational surrogate has legal parentage violates couple's right to have children). The IVF variant in *Lifchez* involved the creation within or transfer of an embryo to the uterus of a surrogate for a brief period before flushing it out and transferring it to the uterus of the intended mother. *Lifchez*, 735 F. Supp. at 1367-68.

¹⁷¹ See Macintosh, *supra* note 13, at 39-47 (questioning constitutionality of bans but recognizing laws to protect embryos/fetuses may survive after *Dobbs*).

¹⁷² See Joseph Card. Ratzinger, *supra* note 89 (stating destruction of IVF embryos violates the Roman Catholic Church's doctrine against abortion); *On the Ethical Realities of Reproductive Technologies and the Dignity of the Human Embryo*, *supra* note 90 (presenting Southern Baptist resolution opposing cryopreservation, storage, and destruction of IVF embryos); Macintosh, *supra* note 13, at 8 (stating prolife advocates may urge prosecutors to use abortion laws against IVF practitioners).

¹⁷³ See Macintosh, *supra* note 13, at 18 (speculating that religious opposition could spur attempts to outlaw IVF).

¹⁷⁴ See Eidelman & Crandall, *supra* note 124, at 272-73 (discussing existence bias).

¹⁷⁵ See *id.* at 273-74 (discussing longevity bias).

¹⁷⁶ See *id.* at 271-74 (examining nonrational routes to status quo bias, including existence and longevity biases).

¹⁷⁷ See Holcombe, *supra* note 34 (describing process of superovulation, embryo production, transfer and cryopreservation); Robertson, *supra* note 83 (explaining that storing and discarding embryos part of IVF practice); see also *LePage v. Ctr. For Reprod. Med., P.C.*, No. SC-2022-0515, SC-2022-0579, 2024 Ala. LEXIS 60, at *17-18 (Ala. 2024) (holding Wrongful Death of Minor act applies to IVF embryos).

¹⁷⁸ See Macintosh, *supra* note 13, at 8-14 (reviewing state personhood and abortion laws and finding they do not reach IVF embryos); see also ALA. Code § 6-5-810 (2024) (exempting IVF providers and patients from liability if extrauterine embryos damaged or killed).

or cryopreservation.¹⁷⁹ Thus, the standard IVF protocol remains legal, and its existence marks it as good.¹⁸⁰ The protocol has been utilized for decades, further affirming its desirability.¹⁸¹ The existence and longevity of the protocol establish status quo bias in its favor.¹⁸²

b. IVF Politics

Despite longstanding opposition from the Roman Catholic Church and some feminists, IVF did not become a major political issue until *Dobbs* overturned *Roe* and *Casey* in 2022.¹⁸³ At the time, some providers and patients voiced concern that politicians might turn against IVF.¹⁸⁴ Instead, after *LePage* was decided, the Republican-dominated Alabama State Legislature enacted legislation that exempted IVF providers and patients from civil and criminal liability to persuade fertility clinics to resume services.¹⁸⁵ In Iowa, where the state legislature is under Republican control, a bill to make causing the death of an unborn child a felony failed in committee due to concerns that it threatened IVF services.¹⁸⁶ In Virginia, Republican Governor Glenn Youngkin released a statement indicating his support for IVF and fertility treatments, even though he recently participated in an anti-abortion march.¹⁸⁷ Democratic-controlled legislatures in California, Illinois, and Massachusetts enacted laws to protect IVF providers.¹⁸⁸

¹⁷⁹ See LA. STAT. ANN. § 9:129 (1986) (providing that in vitro fertilized human ovum cannot be intentionally destroyed); see also LA. STAT. ANN. § 9:121 (1986) (defining embryo in vitro fertilized human ovum).

¹⁸⁰ See Eidelman & Crandall, *supra* note 124, at 272-73 (discussing existence bias).

¹⁸¹ See *id.* at 273-74 (discussing longevity bias).

¹⁸² See *id.* at 271-74 (explaining how existence and longevity biases support status quo bias).

¹⁸³ See Joseph Card. Ratzinger, *supra* note 89 (articulating Catholic opposition to IVF on various grounds); Linda J. Lacey, "O Wind, Remind Him That I Have No Child": *Infertility and Feminist Jurisprudence*, 5 MICH. J. GENDER & L. 163, 164-65 (1998) (attempting to begin dialogue incorporating infertile women's perspective); *Dobbs v. Jackson Women's Health Org.*, 597 U.S. 215, 231, 292 (2022) (overruling *Roe* and *Casey*).

¹⁸⁴ See Jan Hoffman, *Infertility Patients and Doctors Fear Abortion Bans Could Restrict I.V.F.*, N.Y. TIMES (July 5, 2022), <https://www.nytimes.com/2022/07/05/health/ivf-embryos-roe-dobbs.html>; see also Jennifer Gerson, *How Overturning Roe v. Wade Could Affect IVF*, PBS NEWS (June 24, 2022), <https://www.pbs.org/newshour/health/how-overturning-roe-v-wade-could-affect-ivf>, [https://perma.cc/M7Q6-VAQP]. "It is also unclear what moves lawmakers would implement in dealing with existing frozen embryos and whether the creation of future frozen embryos may become banned." Gerson, *supra*.

¹⁸⁵ See Edelman, *supra* note 9 (reporting new law exempting IVF providers and patients from liability); Mascarenhas & Rosales, *supra* note 6 (noting some fertility clinics resumed IVF services after new law enacted).

¹⁸⁶ See Adam Edelman, *Iowa Republicans Block Personhood Bill that Could Have Threatened IVF from Advancing*, NBC NEWS (Mar. 14, 2024), <https://www.nbcnews.com/politics/iowa-republicans-block-personhood-bill-ivf-rcna143465> [https://perma.cc/YUQ8-ZRT6]. "[H]e didn't advance the bill . . . because of concerns over 'unintended consequences' the measure could end up creating for IVF care in the state." *Id.*

¹⁸⁷ See Brad Kutner, *Virginia Elected Officials in Washington and Richmond Push IVF Protections*, WVTF (Feb. 26, 2024), <https://www.wvtf.org/news/2024-02-26/virginia-elected-officials-in-washington-and-richmond-push-ivf-protections> [https://perma.cc/N69T-ML2C] (explaining Virginia politicians' stance on IVF).

¹⁸⁸ See Shia Kapos, *Democratic Governors See IVF Following a Familiar Post-Dobbs Pattern*, POLITICO (Mar. 20, 2024), <https://www.politico.com/news/2024/03/20/democrat-governors-ivf-campaigns-00147900> (explaining Democratic states becoming refuge for IVF after *Dobbs*).

On the national level, the Republican Party's 2024 platform declares support for policies that advance access to birth control and IVF.¹⁸⁹ Several Republican candidates for Senate voiced support for IVF, evidently because the National Republican Senatorial Committee urged them to do so.¹⁹⁰ Likewise, the Democratic Party's 2024 platform claims that Democrats are committed to protecting a woman's right to use IVF.¹⁹¹

In 2024, U.S. Senators Ted Cruz (Texas) and Katie Britt (Alabama), two prolife Republicans, introduced the IVF Protection Act, which would condition state access to federal Medicaid funds on not prohibiting IVF.¹⁹² Democrats Tammy Duckworth (Illinois), Patty Murray (Washington), and Cory Booker (New Jersey) responded with the Right to IVF Act, a complicated bill that would grant patients a federal statutory right to receive fertility treatment from a health care provider and make decisions regarding the donation, use, storage, and disposition of their gametes and embryos.¹⁹³ To date, Democrats blocked the IVF Protection Act and Republicans blocked the Right to IVF Act.¹⁹⁴ Some academics suggest that prolife Republicans are insincere in

¹⁸⁹ See AM. PRESIDENCY PROJECT, *supra* note 160 (stating support for mothers and policies advancing IVF).

¹⁹⁰ See Frank Thorp V & Zoe Richards, *Republican Senate candidates rush to defend IVF after Alabama ruling*, NBC NEWS (Feb. 23, 2024), <https://www.nbcnews.com/politics/congress/republican-senate-candidates-rush-defend-ivf-alabama-ruling-rcna140276>, [https://perma.cc/SPS3-UF73] (explaining memorandum sent to candidates with guidance on IVF messaging).

¹⁹¹ See '24 Democratic Party Platform, DEMOCRATIC NAT'L COMM., https://democrats.org/wp-content/uploads/2024/09/2024_Democratic_Party_Platform_8a2cf8.pdf [https://perma.cc/KZ4V-LLHW] (asserting Democrats will support access to IVF).

¹⁹² See Ted Cruz & Katie Boyd Britt, *We'll Protect Both Life and IVF: A Senate Bill to Clear Up Confusion After an Alabama Supreme Court Ruling*, WALL ST. J. ONLINE (May 19, 2024), <https://www.wsj.com/articles/well-protect-both-life-and-ivf-81e2bf1f> [https://perma.cc/E5NJ-PJYY] (explaining bill); IVF Protection Act, S. 4368, 118th Cong. § 3 (2024) (aiming to protect IVF from state prohibition); see also Ted Cruz, *Sen. Cruz on the Dobbs Decision: 'Nothing Short of a Massive Victory for Life'*, TED CRUZ, U.S. SENATOR FOR TEX. (June 24, 2022), <https://www.cruz.senate.gov/newsroom/press-releases/sen-cruz-on-the-dobbs-decision-nothing-short-of-a-massive-victory-for-life> [https://perma.cc/8GAB-D6VL] (referring to *Dobbs* decision victory for prolife movement); Sarah Whites-Kodischek, *Senate Candidate Katie Britt Defends Pro-Life Stance After Durant Ad Blasts Her About UA Pregnancy Prevention Pills*, ADVANCE LOC. MEDIA LLC (May 17, 2022), <https://www.al.com/news/2022/05/senate-candidate-katie-britt-defends-pro-life-stance-after-durant-ad-blasts-her-about-ua-pregnancy-prevention-pills.html> [https://perma.cc/8VQH-L6J2] (asserting life begins at conception and abortion murders babies).

¹⁹³ See Right to IVF Act, S. 4445, 118th Cong. § 104(a)(1) (2024) (proposing federal protections for IVF). "Fertility treatment" included, but was not limited to, preservation of gametes and embryos, artificial insemination, in vitro fertilization, genetic testing of embryos, fertility medications, and donor gametes. *Id.* § 103(1). The bill also would have granted statutory rights to health care providers, health insurers, and manufacturers of drugs and devices used in fertility treatment. *Id.* § 104(a)(2)-(4).

¹⁹⁴ See Al Weaver, *Republicans Block Senate Democrats' IVF Bill*, THE HILL (Sept. 17, 2024), <https://thehill.com/policy/healthcare/4884563-ivf-bill-republicans-blocked/> [https://perma.cc/G8KY-ZDQA] (reporting failure of Democratic bill); see also Joseph Choi, *Democrats Block Cruz Attempt to Pass GOP IVF Bill*, THE HILL (Sept. 17, 2024), <https://thehill.com/homenews/senate/4884839-democrats-block-ted-cruz-gop-ivf-bill/> [https://perma.cc/2SRS-PWVW] (recounting failure of Republican bill). Republican lawmakers criticized Democratic lawmakers for political grandstanding, while Democratic lawmakers called the Republican bill a "show-bill" without meaningful protection of IVF. Choi, *supra*.

supporting IVF while Democrats champion reproductive health and justice consistently; nevertheless, senators from both political parties support IVF.¹⁹⁵

The existence of political support for IVF marks such political support as good.¹⁹⁶ However, the events described above are recent rather than enduring; thus, it is probably too soon to conclude that status quo bias favors continuation of political support for IVF.¹⁹⁷ The *Dobbs* decision gives prolife forces an opening to lobby and legislate against the standard IVF protocol in which embryos are produced in large numbers, cryopreserved, and discarded.¹⁹⁸

III. Summary

Abortion law has varied from the common law restrictions and bans of the nineteenth century to the liberalization movement and constitutional right of the twentieth century.¹⁹⁹ Bitter divisions over the legality of abortion may be rooted in status quo bias that causes Americans to favor differing laws and rights that flourished for years before being overturned.²⁰⁰ On the political side of the issue, the Republican Party opposes abortion while the Democratic Party embraces legal access.²⁰¹ Status quo bias encourages Republicans and Democrats to cling to these positions that were adopted for partisan advantage over forty years ago.²⁰²

IVF is a newer technology than abortion, delivering the first American baby in 1981.²⁰³ Shielded by *Roe* and *Casey* until recently, IVF remains legal throughout the United States.²⁰⁴ This legal status quo may predispose Americans to maintain legal

¹⁹⁵ See Sonia Suter & Naomi Cahn, *IVF in the USA: A Political Dance*, BIONews (July 1, 2024), <https://www.progress.org.uk/ivf-in-the-usa-a-political-dance/> [<https://perma.cc/LLQ9-6HSM>] (presenting academic interpretation of political events). “Republicans, in contrast, treat abortion as distinct from IVF. As a result, they are engaging in political contortions to appear ‘pro-life’ by opposing abortion, while making half-hearted legislative efforts to support IVF – without dealing with access to the technology or the disposition of excess embryos.” *Id.*

¹⁹⁶ See Eidelman & Crandall, *supra* note 124, at 272-73 (defining existence bias).

¹⁹⁷ See *id.* at 273-74 (discussing longevity bias and its role in supporting status quo bias).

¹⁹⁸ See Macintosh, *supra* note 13, at 19 (citing these possible restrictions on IVF post-*Dobbs*).

¹⁹⁹ See *Dobbs v. Jackson Women’s Health Org.*, 597 U.S. 215, 249-54 (2022) (tracing history of abortion law in England and United States); *Planned Parenthood v. Casey*, 505 U.S. 833, 878-79 (1992) (reaffirming right to abortion while creating undue burden standard to assess regulations); *Roe v. Wade*, 410 U.S. 113, 164-65 (1973) (holding Constitution secures right to abortion prior to fetal viability); Greenhouse & Siegel, *supra* note 139, at 2035-52 (discussing twentieth-century movement to liberalize abortion law).

²⁰⁰ See *supra* Part II.B.1 (arguing that status quo bias may account for conflicting laws on abortion).

²⁰¹ See AM. PRESIDENCY PROJECT, *supra* note 160 (defining Republican Party position prolife); ‘24 *Democratic Party Platform*, *supra* note 191 (describing Democrats’ efforts to protect abortion access in wake of *Dobbs*).

²⁰² See Andy Sullivan, *Explainer: How abortion became a divisive issue in U.S. politics*, REUTERS (October 2, 2024), <https://www.reuters.com/world/us/how-abortion-became-divisive-issue-us-politics-2022-06-24/> (relating history of political realignment on abortion issue); *supra* Part II.B.2 (explaining why this history makes it hard to change or defy party positions on abortion).

²⁰³ See Lewak, *supra* note 164 (recounting birth of Elizabeth Carr).

²⁰⁴ See Macintosh, *supra* note 13, at 8 (noting legality of IVF).

access to IVF.²⁰⁵ However, in the wake of *LePage*, some fear that IVF is at risk.²⁰⁶ Politicians are working to protect IVF, but their efforts are relatively recent and may not establish a firm political status quo.²⁰⁷ Thus, prolife advocates have an opening to persuade legislators that IVF must be regulated to protect embryos.²⁰⁸ If the fertility industry believes that IVF success depends on creating more embryos than needed for transfer and freezing or discarding the spares, it should be prepared to make that case in state legislatures.²⁰⁹

IV. Conclusion

This Article explored differing legislative and political reactions to abortion and IVF. While abortion is illegal in many states and restricted in others, IVF is lawful throughout the United States. While abortion provokes political conflict, IVF inspires legislative support on both sides of the aisle. This Article identified two psychological mechanisms that may be responsible for the dichotomy. Psychological essentialism, a heuristic that produces judgments about natural kinds, may encourage observers to intuit that fetuses inside a human body possess a human essence that provides them with moral worth and makes abortion wrong. Although some religious authorities and observers view IVF embryos in much the same way, the creation of embryos outside the human body weakens the association with human essence and the inference of moral worth, encouraging others to accept actions like embryo production, cryopreservation, and discard.

Status quo bias is another possible source of disparate reactions to abortion and IVF. The law and politics of abortion evolved over time, leading to conflicting legal status quos, party-driven political status quos, and a patchwork of state laws. By contrast, IVF has always been legal, so the status quo supports continuation of its legal status. Although it is too soon to discern a firm political status quo, the recent flurry of pro-IVF bills and laws hint at a near future in which political support for IVF becomes difficult, though not impossible, to overcome.

The foregoing analysis leads this Article to the following predictions. First, with eighty-six percent of the public supporting legal access to IVF, federal and state legislators cannot ban the technology outright without sparking controversy and alienating many voters. Self-interest will motivate legislators to maintain IVF's legal status. Second, psychological essentialism provides an intuitive basis for distinguishing abortion from IVF. Thus, if Republican and conservative legislators prefer to oppose abortion while embracing IVF, their actions will resonate on an intuitive level with many people and seem coherent rather than contradictory. Third, status quo bias will further

²⁰⁵ See *supra* Part II.C.1 (explaining how status quo leads to bias for legal IVF); Garrity, *supra* note 18 (reporting that 86% of U.S. adults support legal IVF).

²⁰⁶ See Mariana Lenharo, *Is IVF at risk in the US? Scientists fear for the fertility treatment's future*, 628 NATURE 241, 242 (2024) (reporting doctors' concerns that lawmakers may regulate how IVF is performed).

²⁰⁷ See *supra* Part II.C.2 (discussing recent efforts to protect IVF).

²⁰⁸ See Lenharo, *supra* note 206, at 242 (citing fears that legislators will impose such limitations).

²⁰⁹ See Holcombe, *supra* note 34 (noting most patients must make multiple embryos and undergo two-three transfers before achieving pregnancy); Macintosh, *supra* note 13, at 48 (arguing that fertility practitioners should lobby against bills to restrict IVF); Quaas, *supra* note 34, at 12 (encouraging fertility experts to educate decision makers).

encourage legislators who oppose abortion to maintain that position while favoring continued legal access to IVF. Prolife forces may advocate for new laws to prohibit or limit the production, cryopreservation, and discard of embryos. Such proposals will fail if the fertility industry can persuade legislators that patients must create multiple embryos to have a decent chance of bringing a baby home.