



“I’m trying to create, not destroy”: Gendered Moralities and the Fate of IVF Embryos in Evangelical Women’s Narratives

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Abstract

Although conservative evangelical Protestants advocate for protecting the embryo in their opposition to abortion and embryonic stem-cell research, they generally support the use of in vitro fertilization (IVF), a procedure that routinely results in embryo loss. This study draws on 42 interviews with Protestant women experiencing infertility—the majority of whom are evangelicals who ascribe personhood to embryos—to examine how these women navigate issues of fertility, religion, and reproductive technologies. In their pursuit of parenthood, these women drew on cultural ideals of femininity, such as nurturance and protection, in forming attachments to embryos. These ideals of femininity were also invoked in the women’s moral reasoning surrounding embryo loss, where women emphasized their procreative intention as the creation, not the destruction, of embryos. In doing so, the women described themselves as embracing motherhood. Embryo loss was often understood as a means to create the family formations that God intended. I develop the concept of *gendered moralities* to show how evangelical women mobilize and enact culturally valued forms of femininity in their reasoning about embryo loss. These findings shed light on larger debates about when and why embryo loss becomes a moral issue. I argue that because embryo loss in the fertility clinic occurs in a space where women are striving to become mothers, the clinic and its largely white, middle-class clientele are shielded from moral condemnation that occurs in other settings. This suggests that the fertility clinic, along with its patients and practitioners, occupies a privileged space within the moral hierarchies of reproduction.

Keywords Reproduction · Religion · Gender · Morality · IVF · Assisted reproductive technologies (ART)

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Introduction

Conservative Christian groups in the United States have advocated for “personhood” legislation at the state and federal level that aims to protect human life from the moment of fertilization. While the primary objective of such legislation is the criminalization of abortion, critics have also voiced concern over the implications for assisted reproduction involving embryos. In vitro fertilization (IVF) technology combines sperm and ova to create embryos for transfer to the uterus with the goal of achieving pregnancy. Clinicians grade embryos and transfer those they deem as likely to achieve pregnancy, discarding what are considered to be low-grade or non-viable embryos. Most embryos in fertility clinics are not transferred and do not result in pregnancy. The high financial, emotional, and physical costs and low success rate of IVF can result in trying to create many embryos per treatment cycle, both to increase the number of viable embryos, which can be frozen for future use, and to limit the number of treatment cycles. Despite “pro-life” Christian opposition to stem cell research and abortion, only the Catholic Church has taken an official stance against IVF. IVF technology has been far less embroiled in “embryonic politics” than abortion or embryonic stem cell research (ESC) and is widely accepted as a means to achieve biological parenthood. A recent study assessing public opinion among Americans about abortion, embryonic stem cell research, and IVF found that a majority did not view IVF as a moral issue or found it to be morally acceptable (Mohamed 2018). Among white evangelical Protestants, 75% viewed abortion as morally wrong, 38% viewed ESC as morally wrong, and 14% viewed IVF as morally wrong (Pew Research Center 2013). Yet this uneven response to what is currently one of the most morally contentious entities—the human embryo—is still not well understood.

According to a 2017 report by the U.S. Department of Health and Human Services (DHHS), there are estimated to be over 600,000 frozen human embryos resulting from fertility treatments in storage facilities across the United States (U.S. Department of Health and Human Services 2017). Embryos for stem cell research are procured with a patient’s consent from fertility clinics (Franklin 2006a).¹ In 2001, George W. Bush, an evangelical Christian, limited federally funded embryo research to existing stem cell lines on the grounds that research creating new stem cell lines destroys what he and some other evangelical Christians consider to be human life. In a 2007 press conference, Bush showcased children who originated as frozen embryos in fertility clinics, referring to them as “snowflakes” to underscore claims of the uniqueness and sanctity of frozen embryos as people (Stolberg 2006). Christian organizations concerned about the freezing and potential destruction of embryos promote instead their “adoption,” a process by which leftover embryos are given to other couples (Cromer 2018; Nightlight Christian Adoptions n.d.). Since 2002, the DHHS has provided funding to embryo adoption organizations (Cromer

¹ Patients can consent to have their leftover IVF embryos donated to research. Other options include discarding the embryos, donating them to other patients, and freezing them for future use or indefinitely.

2018; Lester 2019). To emphasize the embryo's personhood status, Christian organizations often refer to this process as "adoption"² rather than "donation." These programs state their mission in "pro-life" terms, with some limiting adoption to married, heterosexual couples (National Embryo Donation Center n.d.; Nightlight Christian Adoptions n.d.). These programs do not take an official position against IVF. This general support of IVF on the part of evangelical groups who oppose abortion, stem cell research, and some forms of contraception on the grounds that personhood begins at fertilization calls for further examination. Under what conditions is the embryo imbued with moral status in need of protection? When is embryo loss an issue of moral concern, and what can this tell us about reproductive politics in the United States?

This study asks how evangelical Protestant women who ascribe personhood to the embryo navigate infertility, religion, and reproductive technologies that often result in embryo loss. I develop the concept of *gendered moralities* to capture how evangelical women mobilize culturally valued forms of femininity in their reasoning about embryo loss. I find that women often described their decisions about pursuing assisted reproductive technologies (ARTs) as informed by God. In their pursuit of these technologies, religion and cultural ideals of femininity helped women form attachments to embryos and make sense of embryo loss. Women emphasized their intention as the creation, not the destruction, of embryos when using IVF technology, thus embracing rather than rejecting motherhood. Many considered embryo loss to be undesirable but inevitable in their pursuit of motherhood. Infertility and embryo loss were often understood as part of a divine plan to build families that might not otherwise have formed. These insights into why there is less moral outrage about embryo loss in fertility clinics than in abortion clinics or stem cell research speak to larger questions about the "politics of reproduction" in the United States, and the conditions under which the embryo is considered to be a life in need of protection (Ginsburg and Rapp 1991; Kaufman and Morgan 2005).

Protestant Perspectives on Assisted Reproductive Technologies

Protestantism encompasses numerous denominations, ranging from theologically and socially conservative to liberal, and includes an increasing number of those who identify as "nondenominational." Unlike the Catholic Church, for which the Vatican dictates the official position on ARTs, there is no uniform or official Protestant position on these technologies. Having developed historically out of protest to Catholic hierarchical authority, Protestantism does not have a centralized authority (Cohen 2002; Schenker 2000). Instead, it generally privileges the authority of the Bible and an individual's personal relationship with God. Broadly, Protestant groups range from separatist and theologically conservative Fundamentalists, to mainline Protestants, who tend to be more theologically and socially liberal, though there is diversity even within these Protestant traditions

² I use the term "adoption" because it was the language used by the respondents.

(Evans 2010; Fitzgerald 2017; Gallagher 2003). Evangelical Protestants fall somewhere between these two traditions and include individuals with a variety of theological and political positions, though white evangelical Protestants tend to be socially conservative (Evans 2010). Common to evangelicals is a belief in the centrality of the Bible, a personal God and salvation through Jesus, and a focus on evangelizing their faith (Ammerman 1982; Chan and Ecklund 2016; Woodberry and Smith 1998). Though Protestants value children and family, childbearing is generally not mandated (Connor et al. 2012; Traina et al. 2008), though some conservative Protestant groups are strongly pronatalist. In short, Protestantism is a theologically and politically diverse Christian tradition with varying impacts on whether and how its adherents take a position on ARTs.

As such, Protestant positions on ARTs vary (Cohen 2002; Sallam and Sallam 2016; Schenker 2000); indeed, most Protestant traditions have not taken an official position on the issue. Those that have generally take a less prohibitive stance towards IVF than the Catholic Church (Office of Technology Assessment 1988; Sallam and Sallam 2016). A “Protestant ethos” that privileges individual choice means that even if a clerical position is offered, decisions about ARTs may ultimately be left to individual conscience and interpretation of the scripture (Carr 2015; Cohen 2002; Iltis and Cherry 2015). For instance, the Lutheran Council in the U.S. issued a report on IVF stating that couples considering the procedure are in “good conscience,” but the council also acknowledged differing views about IVF and declined to take a uniform stance because “hard and fast rules” governing human behavior are not in line with their religious tradition (Lutheran Council in the U.S.A n.d.). Similarly, the General Council of the Assemblies of God expressed concern about IVF but ultimately advised couples to seek religious counsel, pursue medical professionals who share similar values, and discouraged those pursuing fertility treatments from discarding embryos (Assemblies of God 2010).

Overall, Protestantism has been supportive of ARTs in the context of heterosexual marriage when using spousal gametes (Office of Technology Assessment 1988; Traina et al. 2008). There is greater opposition towards the use of donor gametes and surrogacy (Office of Technology Assessment 1988; Sallam and Sallam 2016; Schenker 2000). Protestant traditions that view the embryo as a person may discourage selective reduction and the disposal or genetic testing of embryos (Evans and Hudson 2007; Sallam and Sallam 2016; Schenker 2000). Yet there is a lack of consensus among Protestants groups and few take a definitive stance against ARTs given that these technologies facilitate traditional family building (Davis 2005). For example, evangelical theologian Wayne Grudem argues that IVF “pleases God” because, “it violates no scriptural guidelines, achieves the moral good of overcoming infertility, and brings the blessing of children [to heterosexual couples]...” (Grudem 2019, para. 24). In contrast, others have raised concerns about ethical and moral issues surrounding IVF and their religion’s “silence” about them (Anderson and Walker 2019).

Reproductive Politics and Gendered Moralities

The Politics of Reproduction

The “politics of reproduction” refers to the ways that reproduction—often considered to be one of the most private and intimate aspects of our lives—is entangled with broader political, economic, and cultural institutions and ideologies (Ginsburg and Rapp 1991). More specifically, it encompasses the “power of states, markets, medicine, social movements, religions, cultural norms, and social inequalities in shaping individual bodily experiences” (Almeling 2015, 425). Social scientists have been at the forefront of examining the politics of reproduction in research on abortion, contraception, sterilization, pregnancy and birth, and ARTs (e.g., Almeling 2015; Briggs 2017; Ginsburg and Rapp 1991; Solinger 2005). Legislation regarding reproduction, such as the restriction of abortion, is an explicit example of how institutions shape reproductive lives. Cultural ideologies that make motherhood an imperative are a less explicit but no less powerful influence on women’s reproductive trajectories and lives (Hays 1998; Russo 1976). This is evident in women’s use of reproductive technologies, with women who have access to them often having difficulty ending their quest for biological parenthood (Sandelowski 1991), though the cultural meanings assigned to these technologies varies by social group and cultural setting (Inhorn and Birenbaum-Carmeli 2008).

Cultural ideals of motherhood and womanhood are historically and culturally specific and are shaped by systems of inequality. White middle-class femininity emerged as a cultural ideal by positioning itself in opposition to cultural “others” ascribed less status (Skeggs 2002). Who has access to technologies that facilitate reproduction is shaped by, and often reproduces, social inequalities. For those suffering from infertility, access to fertility treatments is not solely a result of necessity, but of whom society considers deserving enough to use them (Becker 2000). In the U.S., such distinctions of deservingness regarding ARTs are rooted in inequalities of class, race, and sexuality (Becker 2000; Bell 2014; Jain 2006; Mamo 2007; Roberts 1997). Despite Black women having higher rates of infertility, the fertility market primarily serves white, affluent women, thereby facilitating the reproduction of white babies (Inhorn et al. 2012; Roberts 1997). The devaluing of non-white motherhood spans all areas of reproduction (e.g., Bridges 2011; Davis 2019; Roberts 1997). For example, in her ethnography of birth, Bridges found that racist tropes shaped the treatment of women who were viewed as “bearers of despised fertility” (Bridges 2011, 249). Class-based distinctions of deservingness are also evident. King and Meyer (1997) found that although state-mandated insurance for fertility treatments covered working and middle-class women, it was not extended to women on Medicaid. Their study reveals a “de facto fertility policy” in the U.S. that values the reproduction of only certain groups (King and Meyer 1997).

Religious institutions are central to reproductive politics around the globe, but how religion shapes the experience of reproduction varies considerably. Religious

institutions can severely limit reproductive options but can also serve as a source of meaning and provide cultural resources to make sense of reproduction (Singer 2017). In the context of social scientific research on infertility and ARTs, the role of religion is notably different in Western and non-Western contexts. These studies unintentionally associate secular accounts of technology and infertility with the West, and religious experiences of infertility and technology with the non-Western world (Franklin 2006b). Anthropological studies in non-Western contexts foreground the relationship between religion and science, examining how nature, culture, and technology are constitutive of each other in contingent relationships that emerge within particular political and economic contexts (Bharadwaj 2006a, b; Birenbaum-Carmeli 2004; Handwerker 2002; Inhorn 2003, 2006; Inhorn and Birenbaum-Carmeli 2008; Kahn 2000; Paxson 2004; Roberts 2012; Thompson 2006). Thompson (2006) importantly notes that religion and science should not be assumed to be oppositional in the West, and that religion is also present in fertility clinics in the U.S. Yet research in Western contexts has largely focused on the medicalized experience of infertility, where a condition of human life becomes defined as a medical problem (Conrad 1992). Within this framework, alternative explanatory frameworks, such as religion, are removed from definitions, explanations, and treatments of medical conditions.

Though a few U.S.-based qualitative studies have referenced religion when examining the uncertainties of infertility (Greil 1991; Greil et al. 1989, 2020; Sandelowski 1993), the rare refusal of treatment (Thompson 2005), and the financial inaccessibility of infertility treatments (Bell 2014), religion itself was not the primary focus of these studies. Greil et al.'s (2010) quantitative analysis of religion and medical help-seeking for infertility shows that religion plays a complex role: higher levels of religiosity are associated with greater importance placed on motherhood and thus help-seeking, but religiosity is also associated with greater ethical concerns that have the opposite effect on help-seeking. The limited qualitative research on religious women's experiences with infertility in the United States reflects religion's complex role, with one study highlighting the role of religion in support groups for women using ARTs (Jennings 2010), and the other examining how women who oppose ARTs reckon with the double bind of religious restrictions against ARTs, while at the same time valorizing motherhood (Czarnecki 2015).

While research on the politics of reproduction has been an exceptionally rich site for the interdisciplinary study of reproduction, Almeling (2015) notes that there are distinct literatures for different reproductive events. For example, research on abortion and infertility treatments—both procedures resulting in embryo disposal—remain largely distinct scholarly domains. These two reproductive settings are also on opposite ends of the spectrum in terms of cultural meanings assigned to their respective clientele and clinicians. Abortion clinics, patients, and providers are highly stigmatized, with patients viewed as violating cultural ideals of womanhood for “eschewing rather than embracing” motherhood (Harris et al. 2011, 1062). Abortion providers are marginalized from health care institutions, physically and socially, due to abortion care's stigmatized status as “dirty work” (2011). In contrast, fertility clinics are viewed as sites of family-making, with compassion and sympathy extended more readily to those struggling from infertility than to those ending

a pregnancy. The siloing of research on reproduction precludes a more expansive understanding of reproductive politics. The present study seeks to contribute by examining why embryo disposal is generally accepted in the fertility clinic, despite embryo loss being condemned in other settings.

Cultural Meanings of the Embryo

The moral status of the human embryo has been a contested subject of contemporary abortion debates in the U.S. Social science research in cross-cultural contexts provide a vantage point for understanding the cultural meanings of embryos and what we understand to be the beginnings and ends of life (Kaufman and Morgan 2005). In the United States, imaging technology has not immediately led to the personification of embryos, nor have embryos always been embroiled in abortion politics (Morgan 2003, 2009). Morgan (2003) argues that rather than embryos having inherent qualities that evoke and provoke questions of "life," social contexts provide "the interpretive lenses through which embryos are imbued with meaning" (cf. Addeison 1999; Morgan 2003, 262). Indeed, research in Ecuador, for example, shows that despite the Catholic Church's unequivocal position on the embryo as human life in need of protection (Roberts 2007, 2012), concerns about the embryo are not always framed in terms of questions of life (Roberts 2011). Contingent definitions of life are also evident in the United States, where infertility patients' decisions about embryo disposition do not always stem from right-to-life beliefs but are sometimes linked to anxieties about the embryo being in another woman's body or a part of another family (Lyerly et al. 2006). Others show that various cultural constructions of the embryo may influence IVF patients' disposal decisions (Goedeke et al. 2017). Research on the "IVF-stem cell interface" finds that embryos procured from fertility clinics for stem-cell research have a "dual reproductive identity" (Franklin 2006a), where the embryo's reproductive value is defined differently as it moves from the fertility clinic to stem-cell laboratory (Franklin 2006a; Parry 2006; Svendsen and Koch 2008; Thompson 2005, 2013). The practices of stem-cell biobanks and Christian embryo adoption programs, for example, aim to transform leftover IVF embryos from "trash to treasure" (Cromer 2018, 373). These studies suggest that ideas about embryos as sacred or banal entities are contextually contingent.

Theorizing Gendered Moralities

Social scientific approaches to the study of morality shift the focus from universal, abstract principles rooted in philosophical moral theory to the realities of daily life (e.g., Czarnecki et al. 2019; Hitlin and Vaisey 2013; Kleinman 1999; Rapp 2004). This tradition considers how people's negotiation of values in everyday practice shapes moral life (Kleinman 1999; Rapp 2004). For example, Kleinman's concept of "local moral worlds" views individuals as "stakeholders" in their pursuit of what matters most to them, grounding moral life and experience in local meanings and values (Kleinman 1999, 71). He distinguishes between two meanings of moral: the first being the values that matter most to someone—with the understanding that

moral does not necessarily mean “good” since these values can result in untold harm (Kleinman 2007); the second refers to an inner “sense of right and wrong” (2007, 2). Cross-cultural research similarly finds that moral categories and meanings are context-specific (e.g., Birenbaum-Carmeli and Inhorn 2009; Inhorn 2003, 2015; Inhorn and Birenbaum-Carmeli 2008; Kaufman and Morgan 2005; Roberts 2007, 2011).

In research on motherhood and reproduction, gendered dimensions of moral worlds are evident, spanning topics such as parenting styles, managing risk, and reproductive decision-making. Hays’ (1998) concept of “intensive mothering” describes the contemporary Western model of motherhood that expects women to invest immense time, energy, and resources towards raising children. The concept’s broad use in studies such as vaccine refusal (Reich 2014), elective egg freezing (Myers 2017), and mothers’ feeding practices (Elliott and Bowen 2018), points to both its utility and the pervasiveness of this cultural ideology. Rapp’s similarly influential conceptualization of “moral pioneers” (1988, 2004), which characterized women’s experiences with amniocentesis, is widely used to convey the morally fraught decisions women face in their reproductive lives. Others have shown how women exert agency in their reproductive decisions in contexts of precarity. For example, Singer’s (2017) ethnography of abortion in Mexico details Catholic women’s “moral agency” in ending their pregnancy in order to preserve their existing family. Others focus on the moral worlds of religious people’s experiences with reproductive technologies (Inhorn et al. 2020). For example, devout Catholic women’s refusal of ARTs and formation of alternative maternal identities not tied to biological motherhood resulted in a form of “moral femininity” (Czarnecki 2015). Gendered moral frames also figure in institutional contexts. Almeling’s (2011) study of the market for sperm and egg donation shows how agencies draw on middle-class cultural norms of motherhood and fatherhood to market and assign value to bodily materials, more often attributing egg donation to altruism. Similarly, in her work on the Mexican surrogacy industry, Hovav (2019) shows that agencies frame surrogacy in altruistic terms to legitimize their practices, thereby “producing moral palatability” in order to secure profitability (Hovav 2019, 274).

Building on this work, I develop the concept of *gendered moralities* to capture the ways in which morality is informed by and expressed through culturally valued enactments of femininity and masculinity. As previously described, these cultural values are shaped by social institutions and hierarchies marked by race, class, and gender inequalities. For instance, dominant cultural definitions of what constitutes “good” womanhood or manhood are typically defined according to white, middle-class standards. As intersectional theory shows, the gender system is inseparable from other social systems, such as race, class, and sexuality (Collins and Bilge 2020). Religious institutions also inform gendered moralities. Religious groups, such as conservative Protestantism, that only support ARTs for heterosexual, married couples define moral standards according to privileged social categories and identities. Collins (1998) notes that traditional family ideals serve as “exemplars of intersectionality” in the U.S., shaping social organization, ideological frameworks, and “notions of belonging” (Collins 1998, 71).

Taken together, these studies provide a basis for the study of religion and ARTs among one of the largest religious groups in the United States—evangelical

Protestants, many of whom advocate for the protection of the embryo even as they support technologies that result in embryo loss. I examine how evangelical Protestant women reason through IVF-related embryo loss, and explore the raced, classed, and gendered moral hierarchies at work. More specifically, I show how evangelical women mobilize gendered cultural ideologies that are informed by social hierarchies of moral worth and deservingness.

Methods

Recruitment and Sample

The data from this study is part of a larger qualitative study examining Christian women's experiences with infertility and ARTs in the United States. Despite Protestantism being one of the largest religious groups in the United States, there is little known about Protestant women's experiences with infertility and ARTs. Unlike the Catholic Church, which opposes almost all ARTs, there is no clear position on the use of these technologies among Protestant denominations (Sallam and Sallam 2016). Therefore, one aim of the study was to understand how Protestant women who assign personhood to the embryo think about fertility treatments that routinely result in embryo loss; this is the focus of my analysis here. Though beliefs about the moral status of the embryo were not part of the selection criteria, the Protestant sample overwhelmingly ascribed personhood to the embryo.³

To better understand how religion shapes Protestant women's experiences, I conducted 42 in-depth, semi-structured interviews with Protestant women who experienced infertility. Participants were recruited online via Facebook groups, a university research recruitment website, infertility blogs and forums, and through local fertility clinics. Recruitment was limited to women aged 18–50 who identified as Christian and had considered infertility treatments. The study was approved by the University of Michigan's Institutional Review Board.

Participants were primarily from the Midwestern and Southern regions of the United States. The median age was 32. Thirty women were employed, eight were stay-at-home parents, one was a student, and four provided no response to their occupational status. The sample is predominantly middle to upper-middle-class, white, college-educated women (Table 1).

Interviews

All interviews were conducted by telephone and lasted one to two hours. Interviews were audio recorded and transcribed verbatim. I asked participants about their

³ Though I asked respondents about their views on the moral status of the embryo, I did not ask about their position on abortion. Nonetheless, respondents' opposition to abortion often surfaced in our conversations. To the extent that the legality of abortion was discussed, few, if any, stated that their beliefs about abortion should be imposed on others.

Table 1 Sample characteristics

	<i>Evangelical</i> n = 36	<i>Mainline</i> n = 3	<i>Other</i> n = 3
Education			
<i>Less than 4-year degree</i>	10	1	0
<i>4-year degree</i>	16	0	2
<i>Graduate degree</i>	9	2	1
<i>No Response</i>	1	0	0
Household Income, \$			
<i>20,000–39,999</i>	3	0	0
<i>40,000–74,999</i>	21	1	2
<i>75,000–100,000+</i>	11	2	1
<i>No Response</i>	1	0	0
Church Attendance			
<i>At least once a week</i>	29	1	2
<i>2–3 times a month</i>	3	2	0
<i>Once a month</i>	2	0	1
<i>Less than once a month</i>	1	0	0
<i>No Response</i>	1	0	0
Religiosity¹			
<i>Very religious</i>	20	0	1
<i>Religious</i>	12	3	2
<i>Somewhat religious</i>	4	0	0
<i>Not very religious</i>	0	0	0
<i>Not religious</i>	0	0	0
U.S. Region²			
<i>Northeast</i>	2	1	0
<i>South</i>	11	0	0
<i>Midwest</i>	22	2	3
<i>West</i>	0	0	0
<i>Other</i>	1	0	0
Marital Status			
<i>Single</i>	0	0	0
<i>Married</i>	35	3	3
<i>Divorced</i>	1	0	0
Infertility			
<i>Primary</i>	34	3	3
<i>Secondary³</i>	2	0	0
Use of ARTs, NaPro⁴, Adoption			
<i>Medication (e.g., Clomid)</i>	34	2	3
<i>Intrauterine (IUI)/Artificial Insemination (AI)</i>	13	1	1
<i>IVF</i>	11	1	1
<i>NaPro</i>	0	0	1
<i>Embryo Adoption⁵</i>	7	0	0
<i>Donor Egg</i>	1	0	0

Table 1 (continued)

	<i>Evangelical</i> n = 36	<i>Mainline</i> n = 3	<i>Other</i> n = 3
<i>Donor Sperm</i>	0	0	0
<i>Adoption</i>	13	0	3
Median Length of Time Trying to Conceive (years)	6	2	4

¹ Due to the varied meanings respondents assigned to the word “religiosity,” I rely primarily on their responses during the interview to a question about the importance of religion and God in their life as a more accurate measure of their religious devotion

² One respondent was from the United Kingdom

³ Secondary infertility refers to infertility experienced following a successful pregnancy conceived without the assistance of reproductive technologies

⁴ NaPro refers to “Natural Procreative Technology,” a fertility treatment developed by a self-described pro-life Catholic doctor as an alternative to mainstream treatments. The method primarily relies on biomarkers, charting, and exploratory surgery. NaPro’s use is not limited to Catholic patients

⁵ Since the women interviewed primarily use the term “embryo adoption” rather than “embryo donation,” I use the former

family backgrounds and the importance of religion in their lives; their relationship with God; their experience with infertility; their interactions with doctors; their position on the moral status of the embryo; and their thoughts on ARTs. After each interview, I asked participants to complete a short demographic questionnaire.

Analysis involved reading the transcripts and identifying major themes. I used Dedoose, a web-based data analysis program, to perform open and focused thematic coding (Emerson et al. 2011). The coding process was iterative. I used the data to develop initial ideas; these ideas were written and developed in memos; and the coding scheme was further refined.

During the interviews, I was struck by women who voiced their opposition to abortion and ascribed personhood to the embryo while at the same time accepting embryo loss under certain circumstances when using ARTs. Their commitment to the protection of the embryo was apparent in certain circumstances, such as abortion and stem-cell research. In the context of the fertility clinic, however, there was more flexibility in justifying embryo loss. It was through asking additional questions during these moments of the interview that I was provided with some of the most important insights about the circumstances under which the embryo is imbued with moral significance, and how gendered ideals were central to the women’s reasoning. How the women in this study navigate these tensions became the center of my analysis in order to understand their moral worlds and why many did *not* regard their views on the embryo as inconsistent.

Importantly, my objective here is not to single these women out as having inconsistencies in their narratives. Secular and religious individuals alike are entangled in contradictions between their beliefs, values, and practices that they make sense of

in their everyday lives. At the same time, it is also true that some of the beliefs and values expressed by my interviewees are espoused by evangelicals who do actively seek to limit reproductive rights. Though I came across no evidence that the women in my study sought to do so, that others with similar beliefs do underscores the importance of understanding these women's moral worlds.

Measuring Religiosity and Classifying Religious Identity

Sociologists of religion agree that religiosity is multidimensional and complex. Protestantism is especially complex and difficult to classify in terms of religious and political orientation (Laumann 1994). This study incorporates multiple measures of religiosity, including a religiosity scale, an open-ended interview question about the importance of God and religion in their lives, and frequency of church attendance and Bible reading.

Given that some were reluctant to describe the strength of their faith under the label of "religiosity" due to its association with institutional and doctrinal rituals, I relied primarily on women's responses during the interview to a question about the importance of religion and God in their life to determine their level of religiosity. Women often described their relationship with God as the most important aspect of their lives, even before their spouses and children. Using this measure, the vast majority of the sample described their relationship with God as central to their lives.

The most commonly used measures for distinguishing Protestants are self-identification, beliefs, and denominational affiliation (Smith 2000; Steensland et al. 2000). Following these measures, I grouped respondents into three broader categories based on their self-identification and denominational affiliation: mainline, evangelical, and other Protestant. If a respondent self-identified as evangelical, I categorized them as such. For the rest, I distinguished between mainline and evangelical respondents by using Steensland et al.'s (2000) religious classification scheme, a standard for classifying religious groups in the U.S. (Woodberry et al. 2012). This scheme relies on denominational affiliation and is informed by American religious traditions' origins, practices, and worldviews, such as differences between mainline and evangelical traditions (2000). The scheme classifies Protestantism as mainline (e.g., American Lutheran, Presbyterian), evangelical (e.g., Assembly of God, Pentecostal) and black Protestantism (e.g., Southern Baptist Convention). Since my sample is overwhelmingly white, I categorized respondents who identified with a denomination as mainline or evangelical. For example, a respondent who identified as Protestant and indicated an affiliation as Southern Baptist would be categorized as evangelical according to Steensland's categorization. In addition, those who attended church at least once a month and identified as "nondenominational," "Christian," or "Protestant" but indicated no denominational affiliation were classified as evangelical (Steensland et al. 2000). Respondents who could not be categorized according to these measures were classified as "Protestant-other." After applying these measures of self-identification and affiliation, the sample was composed of 36 "evangelical," three "mainline," and three "Protestant-other" women.

Findings

“The Bible really doesn’t cover that”: Seeking Guidance about ARTs

In order to understand how evangelical women reason through embryo loss, it is important to understand the role of their relationship with God in their decisions about using ARTs. As discussed previously, most Protestant denominations have no official position on ARTs. Instead, reading the Bible, prayer, communication with God, and conversations with spouses were the most commonly cited influences in women’s decision-making. Yet deciphering how God was “speaking to them” and what course of action to take required interpretive work. Women also indicated other sources that impacted their decisions, such as Christian radio programs, online support groups, and their pastors.

Though few respondents could recall their church having a position on ARTs, many were aware of their religion’s position on abortion and the moral status of the embryo. Some inferred from the latter that efforts should be made to avoid intentionally destroying embryos in the fertility clinic. For instance, some sought out health care providers with “pro-life” beliefs to perform fertility treatments in a manner that would decrease embryo wastage, such as creating fewer embryos to avoid leftover embryos. For example, Anna tried to conceive for three years but did not pursue IVF due to its cost and concerns about the grading and selecting of embryos. She found out about embryo adoption while visiting a Christian adoption website and noticed a link for embryo adoption. She decided to do embryo adoption and blogged about her experience, finding support in a community of Christian women bloggers. Anna adopted seven embryos and underwent two embryo transfers, paying approximately seven-thousand dollars each time. The first time the doctor transferred three embryos, and the remaining four during the second. The doctor finished each transfer by telling Anna that the outcome was in “God’s hands.” She recalled that although not all of her embryos were developing well, the doctor still transferred them to avoid discarding them. Anna found her doctor’s “pro-life” stance appealing, “[her doctors] want to give each one a chance at life. So, even if they don’t believe that it’s going to make it, they’ll still transfer it just to give it a chance.” For Anna, her decision to adopt embryos offered each a chance to become a child. Neither procedure resulted in a pregnancy, and Anna eventually adopted a child through traditional adoption. Other respondents assumed that since their religion valued family, religious leaders would view fertility treatments favorably. As one respondent explained, “I think the position is just to be for life, and so whatever is going to help creating life is fine... There’s not like some person that says this is what I should believe and shouldn’t believe so much. I know that God likes life and babies, so [...]” Without official religious guidelines about ARTs, Anna and others drew on their existing beliefs in a variety of ways to come to a decision about what they perceived as God’s plan for them.

Respondents described infertility as a “taboo” topic at church, something rarely discussed openly. Some did consult privately with their pastors, but in

many such cases, found the latter to be unfamiliar with infertility and ARTs. Respondents were typically directed to look to God and the scripture for guidance, as one woman recounted, “He told me, ‘whatever God wants you to do, you’ll feel compelled to do. God decides what will happen.’” Another respondent, Gabrielle, sought counsel from her pastor and his wife, who supported the couple’s decision to use IVF and directed them to turn to God for guidance:

“They said whatever you have to do to have kids is what you have to do, so it’s your own decision. They’ve always been supportive. Our senior pastor and his wife have prayed with us and prayed for IVF to work [...] I’ve never heard anybody speak out against that [IVF]. Our church has talked about abortion, but nothing along the lines of IVF or medical procedures to help infertility [...] I don’t think anywhere in our doctrine does it say don’t do this, that, or the other with infertility [...].”

Even with the pastor’s blessing, Gabrielle struggled with what to do after her IVF treatment resulted in only one viable embryo that ended in a miscarriage. She was uncertain whether to try IVF again or pursue embryo adoption. She wished the Bible provided more clarity, asking, “God, why could you not have put in scripture, ‘this is what you do if this doesn’t work, and then move on to this plan,’ because there’s so much room for interpretation.” Gabrielle, like others, engaged in interpretive work to determine the path she believed God intended for her.

Respondents also discussed how they sensed God providing guidance about ARTs during mundane moments of their everyday lives, such as while driving or doing laundry. Women searched for signs regarding how and whether to proceed with treatments or adoption. Rachel, a woman from the South, described feeling “called” to be a mother. She suffered from secondary infertility and was reluctant to pursue fertility treatments due to cost and the potential negative effects of hormonal medications. She explained, however, that God eventually provided an answer in the form of an unexpected car payment from family friends:

“I pray all the time and prayers are answered in the craziest of ways. When I started exploring fertility medications, I found out from my gynecologist that it would cost one hundred dollars per month for three months. Well, I just happened to get a letter in the mail saying, we’re taking care of your car payment this month, and my car note is three hundred dollars a month. So, when I’m praying for some sort of answer, and then I get that kind of letter in the mail, that’s an answered prayer.”

For Rachel and others who interpreted aspects of their daily lives as divine messages, their decision to undergo fertility treatments was often understood as a fulfillment of God’s will.

Claire, who described God as the most important thing in her life, also found signs that she should pursue IVF. Ultimately, however, doing so turned out to be the necessary step for her to realize she should *stop* pursuing biological parenthood:

“We felt very adamant that the Lord was telling us to try IVF. I never felt like the door was closed after the two IUIs⁴...And then when I found out the insurance covered IVF, I thought this is why it wasn't closed. I really think that it was the Lord saying, “You're going to try the best thing out there and it's not going to work, so that means the door's going to close.” At the beginning, I thought the door's open because we're going to have a baby. Well, apparently, I needed more closure.”

Claire described how divine intervention was ultimately necessary to end her pursuit of a biological child, underscoring the cultural ideal of biological parenthood. Although a third cycle of IVF was covered by her insurance, the costly medications were not. Claire wanted to try IVF again, but her husband was more reluctant given their previous unsuccessful cycles. The couple decided that if they could raise the thousands of dollars necessary for the medication, it would be a sign from God telling them to undergo the last round of treatments. When they fell slightly short of their goal, they stopped pursuing IVF. Claire described the process as necessary for her to come to terms with not being a biological mother and felt that God diminished that desire.

In summary, in the absence of guidance from religious authorities, many evangelical women sought divine guidance about ARTs through understanding aspects of their everyday lives as messages from God. Hearing a song on the radio, seeing a phrase on a billboard, or speaking with a friend would trigger a feeling or thought that was interpreted as a divine message from God about what course of action to take. Given Protestant tradition, formal religious institutions were less important for decision-making than individual interpretations of the Bible and personal communication with God. While most women did not feel their church mandated childbearing—though family and children were certainly valued—they did feel that divine intention played a role in their desire for motherhood and whether and how they pursued ARTs.

Infertility as God's Plan: Biomedical and Religious Frameworks

In women's narratives, infertility was often understood as God's plan for their lives and a means to form the kinds of families and life paths he intended for them. By incorporating God into their explanatory models, the women's understanding of infertility extended beyond a strictly biomedical model. God's role was perceived as evident not only in the women's decisions about reproductive technologies but also in their outcomes. Some also described infertility as their calling or purpose in life, such as through advocacy work for embryo adoption.

Natasha, who was pregnant when I interviewed her, was initially reluctant to undergo IVF. She was concerned that using the technologies might interfere with

⁴ Intrauterine inseminations (IUIs) are fertility treatments where sperm are collected and transferred to a person's uterus to assist in achieving pregnancy.

God's plan. but she came to realize that having financial access to ARTs might actually be part of that plan:

“I felt that if God really wanted us to have a family, then this would happen, and maybe we wouldn't have to do IVF, and [my cousin] said something that really sprung through to me—and I believe, too—is that sometimes you need help, and maybe God has made this available to me... and put us in a position where we could partake in this. It's still a blessing from God, and so I don't believe that it's playing God at all...I know too many women who have had IVF after IVF after IVF, and still have not been able to get pregnant.”

Natasha drew on IVF's high failure rates as evidence of God's role in creating life in the laboratory. Many of the women expressed the belief that there is something beyond human control—something sacred and miraculous—that occurs at conception and during implantation of the embryo. Similarly, Maria explained that while scientists may coordinate the technology, it is God that provides “the spark of life,” thus challenging arguments that using these technologies constitutes “playing God”:

“At the end of the day, you can put the sperm and the eggs in the Petri dish and nothing will happen unless God gives it the spark of life. And so you're not manipulating God. You can't manipulate God. We prayed about it a lot before we did it, and we asked God to do his perfect will, which at the end of the day meant it didn't work.”

Respondents also described God's role in forming families through adoption, and for providing them with a purpose and mission. Maria struggled with infertility for six years and had pursued IUIs, IVF, as well as both embryo and traditional adoption. She described that she communicates with God daily using a mobile Bible app. She believed God's plan for her started as a child, when she played with dolls and imagined them as orphans. Like many respondents who pursued embryo adoption, Maria heard about it while listening to an episode of “Family Talk,” a conservative Christian radio show run by evangelical leader, James Dobson. Dobson promotes a socially conservative vision of both the family and of society. When Maria heard the radio program on embryo adoption, she became an advocate for it because, as she put it, “these little embryos needed to be born.” She elaborated:

“[God has] really called me to advocate for the least, the lost, in the embryo world [...]we have a responsibility before the Lord to do everything to protect that life while we are stewards of it... I tell my friends, there are several points in IVF as a Christian that you have to be very careful. First, how many embryos are you creating? That is a decision you need to actively, not passively, make...you could go from being childless to having so many that you can't take care of them... Then once they're in the petri dish, protecting them, making sure you have that 24 hour wait to make sure that they're dead, making sure your doctor will respect your wishes on discarding and freezing, and then once they're frozen, making sure that you stay up with the clinic and pay the bills. A lot of people don't pay the bills, and then the embryos get discarded because they're abandoned. You have to be prepared

to pay the bills, and to find a good family to adopt them. So there's a lot more to IVF than I want a baby."

For Maria, God might send a divine message to use ARTs, but this does not mean one can use them just as one pleases.

In her embryo advocacy work, Maria's instructions about doing IVF resonate with white, middle-class ideologies of motherhood, such as intensive parenting (Hays 1998). She emphasizes to patients that care must be taken in creating and handling embryos, to be responsible and active in decision-making and family and financial planning, to avoid having too many children, and to plan for their potential children's futures. Maria's calling of embryo advocacy invokes middle-class maternal ideologies in order to fulfill a religious obligation, an example of how gendered moralities are enacted.

According to Maria, God's plan also included her traditionally adopted child, Laura. Indeed, Maria explained that although Laura was not genetically related to her or her husband, God was nonetheless capable of establishing a biological connection:

"When Laura was being knit together in the womb, God knew who her mom was going to be, and he knew who she was being made for. And so, if he's creating Laura, why couldn't he create her with my likes, my hair color, my eye color, why couldn't he do that? He's God. He gets to pick...She looks just like me. She looks nothing like her birth mother, acts just like us, has character traits of both my husband and myself, and I think that God is the universe that creates us all. He's bigger than the details on a birth certificate...So, to me, the biological connection is there. You know, I really don't think it would be any different if we had a technically biological child, and I believe God doesn't make mistakes, and he is the author of life."

The importance of the cultural valuing of biological parenthood is apparent in Maria's account. For her, God not only created life, he also intervened in a way that challenges scientific understandings of genetics and heredity. Divine intervention in this case was understood as facilitating ties of biological kinship between adoptive parents and children.

Understanding infertility as part of God's plan also likely alleviates the threats to these women's gender identity that infertility poses. As one woman explained, rather than questioning her womanhood or why she was afflicted with infertility, she did not view infertility as an indication of something being wrong with her:

"I know that this [infertility] was meant to be, and I'm not constantly questioning the doctor. I'm not questioning science. I just know this has nothing to do with science, and I know there's really not anything wrong with me. This is what his plan was, so I'm not going to argue."

The pursuit of these technologies was understood as part of a divine family-building process, making infertility less of a threat to their femininity than a fulfillment of it.

For most women in this study, ARTs were understood to be instruments of God, but a minority had strong reservations about using ARTs. For example, one woman felt using intracytoplasmic sperm injection (ICSI) technology required too much human intervention in the reproductive process and chose to adopt instead. Some Protestant denominations have clear prohibitions against the use of sperm and egg donors, and many women stated that using a donor gamete was akin to adultery.

Taken together, these excerpts show how medical and religious frameworks are often intertwined in these women's experiences of infertility. For them, infertility is not necessarily an obstacle to building their families; rather, it can be understood as facilitating the formation of familial ties among God, people, wombs, and embryos that might not otherwise meet and become families.

Making and Losing Embryos: Attachment, Kinship, and Loss

Technological outcomes did not always fit neatly into a narrative of God's divine will. IVF routinely results in embryo loss in the pursuit of family building. Yet the majority of the women in this study thought of the embryo as a person and their child from the moment of conception. Embryo loss was understood at times as a *necessary*, albeit unfortunate, part of their family-building process. In their pursuit of biological parenthood, women invoked cultural ideals of femininity—motherhood, nurturance, protection, and altruism—when they needed to reason through embryo loss. Drawing on these gendered cultural ideals both enabled the kin relations that the women longed for and helped resolve tensions between gendered ideals of motherhood and technological outcomes when the two were seemingly in conflict.

Women's desire for motherhood is about more than becoming a mother; it is also about becoming a *good* mother (Bell 2014). Cultural definitions of good motherhood describe mothers who are emotionally attached to their children and invested in their children's well-being (Earle and Letherby 2003; Hanigsberg and Ruddick 1999). As women in this study discussed their emotional attachments to embryos, they enacted these cultural ideals. Sarah, a Midwestern homemaker who had IVF, described how she and her husband had different emotional attachments and experiences of miscarriages:

“[My husband] is like, well, they were never born, so why don't you just forget about it? It's probably easier for a guy to say that, because they didn't actually carry them, but as soon as I would get a positive pregnancy test or [the clinic] would call me to tell me I was pregnant, I just had that immediate attachment to that baby as soon as they told me.”

Rachel, who experienced secondary infertility but did not pursue IVF, explained the difference between an abstract, philosophical understanding of when life begins and her own definition, which hinged on her emotional attachments to her future children. When asked about how she thinks about embryos and whether she considers embryos to be persons, she explained:

“I know that technically, speaking from a philosophy professor's standpoint, they're not considered a life until they're past the point of viability, which is

why abortion laws are as they are, but I would still like to think that before the age of viability, a baby is a baby is a baby, because I got attached to my kids, and attached to the idea that I was a mother...as soon as I saw the two lines on the pregnancy test.”

For Rachel, motherhood began at the positive pregnancy test and the emotional attachment she felt meant that the embryo or fetus was her baby at that point. Her sense of attachment and embrace of motherhood also fulfilled cultural expectations of “good” womanhood.

While almost all of the women in the study defined embryos as persons from the moment of conception, the location of the embryo—whether inside the body or in the laboratory—affected the quality of their attachment to the embryos. Natasha, who first experienced a miscarriage, then had IVF and froze her extra embryos, described the different experiences of attachment with her frozen embryos:

“I do think of [the frozen embryos] as my children when I talk about them. I say we have five kids on ice, but I don’t feel the same affection for them as I do for the one that’s growing in my stomach right now. But I do think of them as our children.... I believe they’re lifeI don’t know how to really explain that...but they’re important to me...But say something happened to them in the lab. I don’t think I’d be as devastated. Even though I feel like those are my kids, I don’t feel an attachment to them. I’m not calling up the clinic to see how they’re doing. I just don’t—I don’t feel an attachment like they’re life. It’s weird.”

Natasha’s description of a lack of attachment as “weird” underscores the expectation that women should feel an instinctive attachment to their children. But attachments to embryonic life are contingent. For someone experiencing infertility and miscarriages, the hope and desire for a biological child can affect the qualitatively different attachments to an embryo in or outside the body, even if they are both described as children. The embryo in Natasha’s womb that successfully implanted was one step closer to the successful pregnancy that she longed for.

Women who adopted embryos also drew on ideals of femininity, such as nurturance and self-sacrifice, in forming attachments to their adopted embryos. Women in this study often framed embryo adoption as rescuing vulnerable children. Katie, a nurse from the Midwest, heard about embryo adoption on “Focus on the Family,” a conservative Christian radio show where they interviewed the first “snowflake baby,” a term used by Christian organizations to underscore their claims about the individual uniqueness of all frozen embryos, among which, like snowflakes, no two are alike:

“It took us a couple of months to know this is the direction God wants us to go. When I heard that radio program, I was so in awe and struck by the fact that we...had frozen kids and they had no chance at life. I think traditional adoption is awesome... But what struck me was that there were thousands and thousands of kids who never had a chance to take a breath because they’re

frozen and they have no voice, and they can't even cry about it! At least when you're in the foster system you can cry about it...for us, we just wanted to give life a chance. Even if we don't know if [the embryos] will take, maybe my body will just reject them. Maybe I'm just a place for these children to go on, to be with the Lord. We thought about that too, but if that's what the Lord wants, then it's okay.'

Katie was motivated to adopt embryos because she wanted to rescue what she considered to be vulnerable children in need. In contrast to her views of a cryo-preservation tank as a place that suspends life, Katie's thought of her body as a site of rescue and nurturance.

While several women adopted embryos, few were willing to donate theirs to other couples. Respondents were especially opposed to donating embryos for research, as Katie explained:

"It appalls me, it makes me want to cry to think that—I mean my son started out [as a frozen embryo], and when you look at him and you think that someone would want to do research on his tiny little cells [sighs]. It makes me mad on his behalf and for all of the children they do this on. It also makes me sad that our generation is so depraved that they don't consider the moral implications of what they're doing."

Katie's emotional attachment to her son and the frozen embryos in storage elicited a strong emotional response to the thought of research on embryos. But she also noted a broader dissatisfaction with a society that she understands as not protecting the sanctity of the embryo (Ginsburg 1998).

Although most women in this study were deeply opposed to donating embryos for research or discarding them, some invoked the language of altruism and sacrifice in support of donating embryos to research. Those willing to donate typically had not done IVF. Diane, who could not afford IVF, explained:

"I probably would say the research is okay, though, if there's no use of them, and they could do some research to be able to help someone like me. You know, come up with a new technology, I think that that would be a pretty decent sacrifice for them, even though it contradicts a little bit of how I think, but [laughs] I don't know."

Diane considered embryos to be people, and she was opposed to discarding embryos and to abortion. But, like others who were willing to donate, her justification for research invoked the language of sacrifice for the greater good in order to help others like her have families.

These excerpts illustrate how emotional attachments facilitate kinship relations between women and embryos. Women expressed their attachments to embryos in the gendered language of care, protection, sacrifice, altruism, and nurturance—all qualities associated with idealized femininity. In doing so, they drew on cultural values of what constitutes "good" motherhood in enacting maternal relationships with embryos and in fulfilling their religious obligations toward the embryo, thus preserving their self-concept as moral women in the face of embryo loss.

Losing Embryos

One reason that respondents did not see a conflict between their belief in embryo personhood and IVF technology was because they viewed their infertility and reproductive technology outcomes as part of a divine plan. That is, the meaning and purpose of IVF technology is to create families, even when embryo loss is a routine part of that process. Women frequently drew on these ideas when explaining why embryo loss in an IVF clinic is fundamentally different from other contexts, and even acceptable under certain conditions. As one woman put it, “I don’t see it as not valuing life to try [IVF], our doctor’s perspective is, ‘you want kids, and children—families—are good things, so let’s try to give you kids.’” Women viewed embryo loss as an undesirable but necessary step in the process of achieving motherhood. Whether motherhood was perceived as being embraced or rejected was a key distinction in determining whether embryo loss in abortion, IVF, or embryo research was morally licit—one of the central ways gendered moralities figured in moral reasoning.

Barbara, who underwent four rounds of IVF and plans to continue treatments as long as she can afford them, explained the difference between embryo loss during IVF and embryo loss at an abortion clinic:

“I am opposed to abortion completely, one hundred percent. Even probably in cases of like rapeLike the way I justify it is that this is—I want this baby. Like I’m not throwing it away. I’m trying to create. I’m not trying to destroy.”

Barbara pointed to her intention to create a family in order to justify embryo loss in the context of IVF and contrast it with embryo loss in other settings, such as in abortion. In distinguishing herself from a woman who “throws away” her (potential) child, Barbara framed her pursuit of infertility treatment as an enactment of “good” womanhood, contrasting herself with women who have abortion. When I asked about insurance coverage for infertility treatments in the United States, many used this same reasoning in their objections to the Affordable Care Act and abortion coverage. As one woman stated, “I have a huge issue with it because if my insurance can cover ending a life, I do not understand why it cannot provide a life.” But when I asked Barbara for her thoughts on preimplantation genetic diagnosis (PGD), she struggled as she considered the possibility of discarding embryos with abnormalities:

“If they’re abnormal, chances are they’re not going to make it. You’re trying to avoid heartache. I’m very conflicted here. I wouldn’t want to throw it away. I just don’t know how I’d feel if the baby wasn’t implanted yet, even though I believe that life begins at conception. [Infertility treatment] does a number on you, what you think or what you think you would do, or what you’re even open to. You don’t know until you’re put in that position ... I hope I never to have to experience [miscarriage] again, and so I can better mentally handle not using an embryo because I’ve already lost eleven [pauses]. It would be easier not to use it in that situation versus using it and then miscarryingI’m trying to be

as honest as I can, even though like I'm saying it out loud and I'm like, oh my God, this sounds horrible. But it's the way I feel."

Barbara's experience of immense loss due to recurrent miscarriages during IVF treatments shifted her thinking about PGD and disposing embryos, but her admission of this surprised even her.

Lisa also invoked intention in order to draw a distinction between embryo loss in IVF, abortion, and embryo research:

"Do I sometimes battle with and feel guilty about it in the sense that...it's essentially all these lives that are created and don't...make it? Yes. But I don't view it...as abortion. I don't view it as destroying an unwanted life, because all of these embryos are wanted very much...You know, we very much want children from this process, and we wouldn't destroy them, because yes, I do kind of view that really badly. Because I don't think they were given a shot, the ones that were destroyed. Yeah, I don't agree with that. I don't know if I'd go so far as to call it abortion. I don't know, essentially that's what it is, and then donating to science, essentially they're terminated after they're all done testing, so I don't agree with that either....My mom is the opposite, she tries to tell me all the time it's just a cluster of cells, but I keep thinking, well, my son was just a "cluster of cells," you know? And here he is. So, that we went through so many embryos bothers me....I really struggle with that, so I have a hard time with my religion and that part of infertility with the embryos."

While Lisa struggled with guilt about creating embryos that did not survive, the important distinction for her was that in the context of IVF, they were wanted embryos and required great financial, emotional, and physical effort to create. Still, she was unable to fully reconcile her beliefs about the embryo and their loss in the context of fertility treatments, particularly because she did have a son through IVF.

A few women echoed these moral struggles and chose to avoid or defer thinking through the challenges of embryo loss. One woman laughed and said, "It's easier not to think about it." Others were relieved not to have any extra embryos and thus have to make difficult decisions. One woman noted, "These are tough questions. Infertility is a huge, huge ethical dilemma. I'm glad we got our kids and we didn't have to make those decisions, because they're so hard when you believe that the baby is a baby when it's fertilized."

Claire, who experienced infertility for over a decade, talked to her pastor, who discouraged her from discarding any embryos. She had limited rounds of insurance coverage for IVF, so she transferred all five embryos to her body at one time. She worried that if she froze them for later use, her insurance coverage would run out. If all five implanted, she would have a quintuplet pregnancy. While none ended up surviving, the thought of being pregnant with five embryos created a dilemma:

"We were so caught up in "Let's just have this work and who cares," because there was so much desperation that we wanted it to work that we'll address [multiples] if it happensI think honestly when someone is going through infertility treatments, they get so caught up in the process and it working that

they don't necessarily fully consider what there could be.... I could not imagine doing selective reduction.⁵ There's no way I could."

For Claire, the goal of having a child was of utmost importance, but she feared the possibility of quintuplets. Despite her opposition to terminations, she visited the selective reduction sections of online forums. When the embryos ultimately did not implant, she felt relief. This example reveals the conflicted position some women find themselves in that leads them to consider interventions, such as selective reduction, that violate some of their deepest held beliefs. It also points to how economic constraints exacerbate reproductive dilemmas.

While they were a minority, those who had ethical and moral issues about IVF prior to undergoing treatments typically cited concerns with discarding embryos, intervening in a "natural" reproductive process, or impinging on God's role in that process.

Naturalizing Loss

Another way that women described embryo loss in the IVF clinic was to equate it with early miscarriage, thereby naturalizing the loss in the clinic as similar to loss for those without fertility issues. My use of the term "naturalize" does not imply that the technologies are "unnatural." Drawing on Thompson's (2005) concept "strategic naturalization," I use the term to illustrate the work women do to make technologically assisted reproduction equivalent to procreation through intercourse. Reproductive technology allows for an awareness of early-stage embryo formation and loss that would otherwise go unnoticed outside of the clinic. Embryo loss was also naturalized through a religious narrative that framed infertility and technological outcomes—including embryo loss—as part of God's divine plan.

Lee searched for a fertility doctor on a website that listed "pro-life" Christian doctors and eventually adopted frozen embryos from another couple. She explained that embryo loss during the thawing process is essentially the same as embryos that do not implant or result in miscarriage during unassisted reproduction:

"I struggle a little bit—because when you do create embryos, they don't all typically survive when you thaw them... I mean, when it comes to like having kids naturally, we don't know how many times a woman gets pregnant, like conceives, but it doesn't attach [to the uterine wall]. That happens naturally all the time, so that we're using embryos and they don't attach—It's sad, because we lose those kids, but at the same time, that happens all the time, so it's not completely going outside of...how...life works normally."

For Lee and many respondents, it is the intended use of the embryos and the context of their loss that determines its moral acceptability. For example, Lee further explained that embryos donated for research are instrumentalized for

⁵ Selective reduction is a procedure for a multifetal pregnancy where the number of fetuses or embryos are reduced through termination (e.g., a triplet to twin pregnancy).

non-procreative purposes, devaluing them as (potential) life so that their loss is no longer understood as natural or morally licit.

A few women naturalized loss by describing a process some doctors offer that is referred to as “compassionate transfer,” whereby an embryo is transferred to a woman’s body when she is not ovulating, making pregnancy extremely unlikely. The phrase “compassionate transfer” itself draws on gendered notions of good womanhood as being compassionate and nurturing. When I asked Laura, who had IVF, what she would do with an embryo that tested positively for genetic abnormalities, she described this process but included God’s role in the outcome:

“I would still have it implanted but just at an inopportune time so that at least it’s inside of me and—even though I know that the chances of it taking are slim to none, at least it’s still inside me. It’s not just throwing it away in the trashcan or a biohazard bag... if it’s a survivor that’s meant to be, then it’s meant to be. If that’s what God wanted me to have, then who am I to say no? Especially if it survives all of that and still makes it, then who am I to make that kind of judgment? So it’s more of God’s will.”

Laura drew on her belief in divine miracles to imagine pregnancy as a possibility. She also invoked the womb as a site associated with feminine ideals of nurturance and protection, in sharp contrast to the impersonal specter of the biohazard bag.

Appealing to God’s will was common in women’s accounts of embryo loss. For example, while Lisa expressed guilt that some of her embryos did not survive the IVF process, she ultimately explained that God determined the embryo’s fate:

“If I don’t put [the embryos] in, these lives don’t have anywhere to go. There’s no choice. If you don’t put them in, they just die. But once it’s put in [the woman], it’s then in God’s hands. I’ve done my part. And my body is doing its part, and it’s God’s choice whether they take or not....So yeah, I’m doing up to my part there, but if you don’t do anything with them, and you destroy them, that—I mean, that’s it. They’d never even be given a chance.”

Lisa explains that she must “do her part” to provide an opportunity for the embryo to live. She did everything possible to become a parent: enduring IVF to create an embryo, emotionally attaching to it, and transferring it to her body to encourage its further growth. But if it failed to survive, it was not because of the IVF. As she understands it, her pursuit of IVF was what provided the embryo a chance to live. The responsibility women felt to make every possible effort is an example of not only fulfilling a perceived religious obligation but also the ideology of intensive parenting in the context of embryo care.

Maria adopted four embryos from another couple. Two fused embryos were frozen for future use, but their vial cracked and they did not survive. Before Maria heard about the cracked vial, she agonized over whether to thaw them. Due to prior pregnancy complications, she could not survive a twin pregnancy. She later adopted embryos from another family. Maria explained that all this was “God’s plan”:

“It can’t be an accident that the vial was cracked. I probably wouldn’t have adopted two embryos, but four sounded like the perfect number. But I have to

believe that God allowed that vial to be cracked, he took those babies to heaven to be with him, because there's...another child out there that he has a purpose for. One that has probably been frozen longer, been around for nine years... this embryo we're about to put in, I think was created in like 2004. So, we've had the birth order all mixed up."

Maria coped with the loss through her belief that God determined their fate so that the family he intended would be created. While initially devastated, she understood the loss as akin to a sacrifice for an embryo that was more in need. Embryo loss was understood as a *necessary* part of family formation.

While it may appear that these women are appealing to God's will in a fatalistic way, where all is divinely predetermined, that explanation does not account for the obligations and responsibilities the women also felt to God and their embryos. In working toward fulfilling those responsibilities, women enacted gendered moralities that drew on secular and religious cultural frameworks. Fulfilling God's plan meant behaving in particular ways. Sarah, who experienced miscarriages and lost embryos in the thawing process, explains her religious obligations are a means to maintain kinship ties in order to be reunited in the afterlife:

"We're thinking that those babies might all be up in heaven, so instead of just the two that I miscarried, I may have a total of thirteen up there. But that'll be something that I won't know until that day comes. But... I'm sure God would have adopted those... There's a peace knowing that one day if I do what he wants me to do, I'll see my babies again... even though they were never born, I know that they're up there, because I read a true story that a little boy [who was resuscitated] saw his sister that he had no idea was even ever there, so that's what I cling tight to, and if I do get discouraged, I just think of that and that I need to be strong, and I need to ask God to help me so that one day I'll be with all my children."

Sarah viewed her actions as fulfilling a maternal obligation toward maintaining ties with her kin, whom she views as under the care of God in her absence.

The women in this study often understood ART-related embryo loss not as an abdication of maternal responsibilities but as precisely the opposite. Their desire for motherhood informed their sense of kinship and connection with embryos that they viewed as their children—whether those embryos were in wombs, Petri dishes, cryopreservation tanks, or heaven.

Discussion

This study has shown how evangelical Protestants hold two seemingly competing views: moral opposition to abortion and stem cell research on the grounds that the embryo is human life, and support of IVF, a technology where embryos are routinely discarded. For many of the women I spoke with, these were not necessarily contradictory positions. Women invoked religion as a reason for pursuing these technologies and perceived God's role in its outcomes. Many described God as

guiding them towards their decision, a finding that challenges underlying secular assumptions about infertility and ARTs in the United States. Women mobilized gendered and religious frameworks in reasoning through why embryo loss was compatible rather than in contradiction with some of their most deeply held beliefs about the moral status of the embryo. Women's discussions of embryos in the context of IVF were suffused with gendered enactments of culturally valued forms of femininity. Mobilizing these gendered ideals prepared women to envision themselves as mothers, to achieve longed-for kin, and to resolve tensions surrounding embryo loss resulting from ARTs. Many considered embryo loss to be inevitable, albeit undesirable, in their pursuit of motherhood. Infertility and embryo loss were at times viewed as instrumental, rather than as impediments, in realizing the kinds of families women believed God intended for them. Women frequently emphasized their intention as the creation, not the destruction, of embryos when using IVF technology, thus proving their embrace, rather than rejection, of motherhood. Some women framed embryo donation in altruistic terms, seeing it as helping couples in need or furthering scientific knowledge, while others viewed it as a form of abandonment.

Many of the women I interviewed felt that embryo loss through abortion and through IVF were so categorically different that the comparison itself was perplexing—a position that reflects, in part, their privileged place in the moral hierarchies of reproduction. At the same time, respondents' ability to discuss the topic at length when asked reveals forms of negotiation that are overlooked when we assume that those positioned at the "top" of a stratified system of reproduction are somehow spared from engaging in processes of meaning-making. It is this very process that, in part, shapes such hierarchies. The point of this research is not to point out a contradiction or inconsistency in these women's thinking, nor is it to assess the success or failure of the ways in which they either seek to reconcile that tension or manage not to see one at all. Rather, what I seek to highlight are the cultural narratives and norms around gender, motherhood, and religion that evangelical Protestant women draw upon as they navigate their experiences in order to shed light on broader questions about reproduction, technology, religion, and morality.

I develop the concept of *gendered moralities* to describe how evangelical women drew on gendered and religious cultural frameworks to both guide and interpret their actions as conforming with their understanding of being a "good" woman. Cultural ideals about what constitutes a "good" mother are rooted in classed and raced ideas of white, middle-class womanhood (Bell 2010, 2014; Earle and Letherby 2003; Roberts 1997). I show how evangelical women invoked ideals of femininity alongside religious frameworks, thereby preserving their moral self-concept in the face of embryo loss. Morality is often considered to be a private matter of the psyche or an abstract concept. In contrast, gendered moralities speak to the socially situated nature of morality, both as a process of moral reasoning and as a moral self-concept. Morality is shaped by cultural beliefs and values that are rooted in structures of power. What is deemed good, moral, and righteous often derives from hierarchies of moral worthiness. Normative femininity, masculinity, and sexuality are often central to conservative religions, but they extend beyond religious circles. Power confers some forms of femininity with greater moral worth and value than others (Hamilton et al. 2019). Though the

cultural values that inform gendered moralities are durable, they are also contingent. When cultural values are enacted, the systems of inequality that shape them are reinforced. When morality and moral values are understood as distinct from social relations, the role of inequality in shaping morality is rendered invisible.

This study also adds to our understanding of how people think about the moral status of the embryo. Everyday forms of moral reasoning are often drowned out by the dominance of political debates that are removed from the embodied experiences and social contexts central to people's understandings of what constitutes life and when it is permissible to end it (Rapp 2004). The contingent and contextual meanings of the embryo in evangelical women's accounts depended on factors like intent in using technologies, with a key distinction being whether one is understood as embracing motherhood or not. These factors are connected to the space of the fertility clinic and the kinds of patients inhabiting it. White, wealthier women pursuing motherhood through ARTs are fulfilling gendered ideals. Their varied meanings of embryo loss add to studies showing that the meaning and status of the embryo is contingent and not universally about life or not life, even in contexts where public discourse frames debates as such (Kaufman and Morgan 2005; Morgan 2003, 2009; Roberts 2007, 2012).

As scholars of reproduction have shown, intersecting hierarchies of race, class, and sexuality shape whose reproductive trajectories are condemned and whose are celebrated (Bell 2014; Bridges 2011; Briggs 2017; Davis 2019; Ginsburg and Rapp 1991). This study provides a vantage point from which to understand why the fertility clinic and its clientele are shielded from the moral condemnation that other sites of embryo disposal endure. I argue that because embryo loss is occurring in a space where women are striving to become mothers, those in the fertility clinic are understood as adhering to cultural ideals of womanhood. In contrast, abortion patients are stigmatized for their perceived violation of ideals of femininity (Kumar et al. 2009; Norris et al. 2011). Often ignored in debates about abortion is that over half of abortion patients are mothers (Jerman et al. 2016). For some, abortion can also be understood as an enactment of motherhood, albeit unrecognized as such, as a way to protect one's existing family. Conservative Christian religious groups, including conservative Protestantism, have played a central role in the stigmatization of abortion as immoral. Yet the fertility clinic and its largely white, middle-class clientele are shielded from the moral condemnation that abortion clinics face because the loss of embryos occurs in a space where women are going to great lengths—financial, physical, and emotional—to become mothers. This study suggests that the fertility clinic and its patients and practitioners occupy a privileged space within the moral hierarchies of reproduction.

Conclusion

This study offers a much-needed analysis of the role of religion in people's experiences with reproductive technologies in Western contexts and also speaks more broadly to the relationship between religion, gender, and technology (Cromer 2019;

Czarnecki 2015; Jennings 2010; Thompson 2006). Far from providing a rigid set of guidelines, gendered moralities afford a degree of flexibility to negotiate moral decision-making. The concept is not limited to women or religious groups, nor is there a singular “gendered morality.” In this case, I have focused on the gendered moralities employed by evangelical Protestant women. In other work, I show how devout Catholic women navigate their relationships with religion and reproductive technologies differently by refusing IVF and constructing alternative maternal identities (Czarnecki 2015). In the study of reproduction, the salience of gender is apparent but how it operates and interacts with other institutions and belief systems varies. Future research is needed to identify the various forms gendered moralities take in different contexts and settings within the study of reproduction and beyond.

The concept of gendered moralities expands our thinking about morality in at least three important ways. First, it moves away from thinking about morality as being either completely individual or universal, but rather deeply social. Second, it moves us toward investigating how and when different gendered norms and narratives are called upon as people both make decisions and assign meaning to them. Third, the study calls for greater scholarly conversation and collaboration across the study of reproductive events, such as abortion and ARTs, that are often studied in isolation from one another (Almeling 2015). Gendered moralities offer a framework to facilitate conversation and theory-building between these fields of study.

The concept also has utility beyond the study of reproduction or religion and can be applied at the individual and institutional level. Other studies could examine: how gendered moralities are invoked and developed in how people assign meaning to various technologies, such as whether to refuse or accept vaccines; religious and nonreligious approaches to technology and the role of gender in moral reasoning about them; how cultural ideologies of masculinity inform both moral reasoning and moral self-concept; and how other axes of social identity, such as race, class, and sexuality, intersect with gender in varied ways in processes of moral reasoning across a range of settings. Future work studying institutions and social policy might also examine the role of gendered moralities in how institutions draw from and perpetuate inequalities in the name of what is deemed “good” and “moral.” Some examples of this include the history of welfare policy in the U.S. and reproductive policies such as sterilization and the criminalization of pregnancy, where pathologizing structurally disadvantaged groups as “immoral” is central to policy making (Morgan and Roberts 2012; Roberts 1997). Future research should be attuned to how gendered moralities relate to hierarchies of moral worthiness that are rooted in systems of inequality. As I have shown, gendered moralities encompass more than gender alone. The concept shifts our understanding of morality from being confined to either an inner life or a universal abstract concept, revealing instead the varied ways that morality is informed by social life.

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