Adaptive Choice:

Psychological Perspectives on Abortion and Reproductive Freedom

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Abstract

We explore abortion access, abortion experiences, and abortion stigma. We emphasize global perspectives on abortion diversity and the relationship between pregnancy norms and expectations, abortion stigma, and practical constraints on reproductive freedom. Evolutionary psychological, clinical psychological, and social psychological perspectives illuminate how abortion decisions are shaped by strategies to optimize survival and success, support services that emphasize the costs and risks of pregnancy termination, and pronatalist norms and punishment of departures from those expectations. We call for future abortion research that integrates multiple subfields in psychology and is rooted in an intention to affect public policy and social change that promotes reproductive autonomy.

Keywords: abortion, stigma, reproductive justice, the motherhood mandate, pronatalism

"When you gone to get married? You need to have some babies. It'll settle you."

"I don't want to make somebody else, I want to make myself" (Morrison, 1973, p. 92)

In many ways, contemporary political legislation, social expectations and norms, and family planning research reflect and perpetuate stereotypes of femininity and womanhood: the beliefs that women are instinctively nurturing, that motherhood is natural and therefore the decision to terminate a pregnancy (or to forego childbearing) is unnatural, and that motherhood is an essential criterion that a 'legitimate woman' must meet (Gotlib, 2016). Pronatalism broadly refers to the ways that many sources of social influence (e.g., norms and beliefs, government policies) present motherhood as natural, obligatory, and essential to womanhood (Turnbull, Graham, & Taket, 2017). As such, pronatalism not only encourages reproduction but also naturalizes and normalizes motherhood; consequently, women who do not meet these pronatalist expectations are marginalized and targeted by negative stereotypes (Graham, Turnbull, McKenzie & Taket, 2018). These pronatalist stereotypes lead to social sanctions and stigma as a function of abortion experience. In this article we address the normalization of motherhood and the consequential characterization of abortion as abnormal and unnatural. Three psychological perspectives are employed to position abortion decisions as *adaptive choices*, that can increase women's success and achievement in specific social, developmental, and environmental niches. We carefully consider how these adaptive choices can be shaped and constrained by social expectations and stigma, as well as practical and legislative barriers.

Reproductive decisions are not made in a bubble, but are shaped by broader social and cultural forces. For example, pronatalist stereotypes are transmitted through government action, such as policies to increase fertility or policies that make abortion access difficult. These policies

vary and include those that facilitate increased fertility (e.g., French policies designed to make balancing work and family responsibilities easier), those that incentivize the decision to have a child (e.g., Russian and Ukrainian policies that provide financial incentives for childbearing), and those that coerce certain reproductive choices (e.g., American and Romanian policies designed to limit or eliminate access to abortion and contraceptive services; Botev, 2015). The role of broader social expectations in perpetuating these stereotypes is perhaps best demonstrated in the lived experiences of stigma described by women who abort or forego childbearing; they have reported being perceived as less-feminine, more selfish, less fulfilled, less mature, and as immoral or 'evil' by individuals in their communities (Shaw, 2011; Tsui et al., 2011). As stigmatization refers to any process that targets individuals perceived as possessing some characteristic that violates the standards of what their given society terms "normal" (Goffman, 1963), in this work we will conceptualize abortion stigma as a consequence of a perceived violation of parenting norms and expectations.

Representations of abortion and reproductive decision making to both lay and academic audiences reinforce pronatalist stereotypes in various ways; for example, media outlets (Purcell, Hilton, & McDaid, 2014) and peer-reviewed research (Reardon, 2018) have been found to emphasize the negative or harmful outcomes associated with elective pregnancy termination. *The Daily Mirror* (Careless, 2010, as cited by Purcell, Hilton, & McDaid, 2014, p. 1146) asserted that "There are two common reactions to abortions - either to have an abortion, deeply regret it and vow never to have another, or to have an abortion and feel numbed from emotion." Reinforcement of the 'feminine ideal' of motherhood is exemplified in an article published by *The Daily Mail* (Caldwell, 2010, as cited by Purcell et al., 2014, p. 1147), which juxtaposed the positive health outcomes associated with pregnancy and the purported health risks of abortion:

A team of scientists made the claim while carrying out research into how breast-feeding

> can protect women from developing the killer diseases [cancer]. While concluding that breast-feeding offered significant protection from cancer, they also noted that the highest reported risk factor in developing the disease was abortion.

While both claims regarding regret about abortion and the health risks of abortion have been largely debunked by literature (see Cameron, 2000 and Dadlez & Andrews, 2010, respectively), these stereotypes are reinforced in reproductive decision-making research as well. Existing work on abortion narratives tends to emphasize negative experiences and outcomes and neglect a broader view of individuals' experiences (Astbury-Ward, Parry, & Carnwell, 2012; see Purcell, 2015 for a review). While some work investigating abortion narratives has highlighted positive consequences and outcomes (e.g., abortion facilitating growth in self-esteem and maturity; Andrews & Boyle, 2004; Halldén, Christensson, & Olsson, 2005; Simonds, Ellertson, Springer, & Winikoff, 1998), much of this work continues to contextualize abortion experiences and outcomes as negative (e.g., experiences of guilt, anxiety, grief and loss; Fielding, Edmunds, & Schaff, 2002; Lafaurie, Grossman, Troncoso, Billings, & Chaveze, 2005; McIntyre, Anderson, & McDonald, 2001). Indeed, Casey (2010) noted that considerable published work has been devoted to understanding women's risk of psychological harm, psychiatric disorder, and sexual dysfunction following an abortion, yet surprisingly little has been devoted to understanding the benefits associated with abortion. This is in contrast to feminist psychologists work in the 1990's which conceptualized abortion experiences as a potential for personal growth, with post-abortive feelings such as increased self-esteem, control, and fulfilment (e.g., Adler et al., 1990; Major et al., 1990). However, there is a particular lack of published research on potential benefits over the past 20 years. Rather, some work finds that this emphasis on negative outcomes of abortion is reflected in the beliefs of women receiving post-abortion care, who tended to overestimate the risk of depression and negative health consequences (Littman et al., 2020).

Government policy, interpersonal expectations, media outlets, and academic research can serve as sources of social transmission of the normative expectations of motherhood -- and the systematic marginalization and stigmatization of departures from this norm. In this article, we use various psychological perspectives to emphasize the relationship between abortion decisions and our evolved psychologies (i.e., psychological mechanisms present in humans as a result of the process of evolution) to contextualize abortion as *adaptive*. In addition, we outline three potential integrations of the psychological concepts presented. Our ultimate goals are to encourage more collaborative research across the subfields of psychology and outreach on the topic of abortion decision-making and stigma; to deepen understanding of how and why abortion stigma varies between cultures; and to foster greater social support for women[1] who make the *adaptive choice* to abort.

Abortion Access: A Global Perspective

Access to abortion services can constrain or support women's ability to make the *adaptive choice* to abort. Abortion services offered by medical practitioners fall into two primary categories: "medical abortion" (i.e., the use of mifepristone-misoprostol, administered orally or vaginally) and "surgical abortion" (i.e., the use of dilation and curettage and/or vacuum aspiration to remove tissue from inside the uterus). Although "spontaneous abortion" is the medical term for miscarriage, most people recognize that abortion refers to the active decision to end a pregnancy.

Access to these medically administered abortion services varies widely both intra- and

[1]When we cite research, we use the original terms used by the researchers; at points when we discuss theory and/or future research, we use the more inclusive phrase "pregnant people" or a variation thereof.

internationally, with medical abortion upon request (i.e., with no justification required) only available in 50 countries with available data (i.e., from the Global Abortion Policies Database; Lavelanet, Schlitt, Johnson, & Ganatra, 2018). Although abortion access varies significantly from country to country (see Table 1), abortion rates do not differ regardless of the level of restriction to legal abortion services. Specifically, while rates of unintended pregnancies are lower in countries that provide less (versus more) restricted access to medical abortion, the proportion of unintended pregnancies ending in abortion is similar in countries where abortion access is more restricted (i.e., approx. 36% in places where abortion is permitted to save a woman's life or preserve her health) and less restricted (i.e., approx. 40% in places where abortion is permitted upon request with no justification; Bearak et al., 2020). This likely reflects the greater unmet reproductive health and contraceptive needs of individuals in countries with severely limited legal abortion services. Notably, even in countries where abortion is legal nationally such as the United States, regional laws restrict abortion access in myriad ways (e.g., gestational limits, mandatory counseling and/or waiting periods, laws imposing additional and unnecessary requirements on abortion providers; Beckman, 2017).

Globally 3.5% of individuals 15-44 years old obtain induced abortions (electively terminated pregnancies, including those medically administered and those administered without medical staff; Sedgh et al., 2016); if we account for both individuals who obtain single abortions and those who obtain multiple abortions, an estimated 25% of all pregnancies end in induced abortion (World Health Organization, 2019). Abortion rates have demonstrated a general decline in the 21st century in industrialized nations, whereas they have largely remained stable in non-industrialized nations (Sedgh et al., 2016). Abortion is a relatively common reproductive health option for individuals around the world, yet it remains a highly debated, politicized, and stigmatized choice. Pronatalist stereotypes and anti-abortion stigma might limit women's ability

to exercise their *adaptive choice* to abort.

Three Psychological Perspectives on Abortion

We believe that the future of abortion, abortion stigma, and reproductive freedom research can be strengthened through an approach integrating multiple subfields in psychology. If insights, theories, methods, and assumptions from multiple subfields within psychology and from related fields are integrated, new research questions can be generated and new knowledge created. For example, by utilizing evolutionary psychological perspectives, researchers and practitioners could arrive at insights regarding the function and benefits of specific reproductive strategies (e.g., Why might this behavior have evolved in humans? How might this behavior have increased the survival and success of our ancestors?), including the use of abortion as a strategy to promote survival and success. Clinical psychological perspectives can provide insights regarding phenomenological histories and experiences of abortion (e.g., How does an individual's personal history -- including pre-existing mental and physical conditions, immediate environment, goals, and needs -- affect abortion decision making?). Social psychological perspectives could provide insights into proximate factors (e.g., How do identities, roles, cultural practices and expectations, social and political power structures, and interpersonal relationships work together to shape abortion decisions?) that shape abortion experiences, stigma, and outcomes. The following sections will highlight pertinent research in the said subfields, naming key ideas that could be utilized to provide a more complete picture of abortion.

Evolutionary Psychological Perspectives on Abortion

Evolutionary psychological perspectives can provide unique insight into reproductive decision-making practices, particularly decisions about whether - and how much - to invest in parenting. As Hrdy (1992) explained, humans have a "highly facultative maternal response system that varies in line with life-history stage and socioenvironmental conditions" (p. 428).

Humans who might or do experience pregnancy possess an adaptable set of behaviors and cognitions that favor investment or elimination of offspring, depending on that person's needs, demands, and opportunities. These behaviors and cognitions are considered adaptations as they increased the survival and success of our ancestors (Buss, Haselton, Shackelford, Belske, & Wakefield, 1998). As such, abortion is a *natural and adaptive choice*, given that abortive practices are present in all studied human societies, throughout recorded human history, and can increase women's survival and success in a given environmental niche (Nurge, 2011). As Himes (1963) explained, "The desire for control [over reproduction] is neither time nor space bound. It is a universal characteristic of social life" (p. 54).

Through the lens of life history theory, we can understand how abortion is an adaptive choice. According to this theory, humans have a limited pool of energetic resources (e.g., time, health, food, money) from which to draw and many resource-draining tasks and goals to pursue over the life course (Trivers, 1972). As such, individuals must make tradeoffs between investing in some tasks and goals, to the detriment of others, at any given point in their lifetime. Some tradeoffs are more advantageous, and better promote survival and reproduction, in a given ecology or at a given developmental stage. For example, individuals can invest time and energetic resources into their own physical, social, and economic development (e.g., embodied capital) or into their mating and reproductive efforts (e.g., searching for, attracting, and retaining a mate; parenting). Early in life, prior to sexual maturity, it is optimal to invest all available resources in an individual's own physical and cognitive development and not invest at all in other resource-spending tasks (e.g., obtaining social status, mating, reproduction). Later in the life course, optimal strategies involve the prioritization of resource-acquisition tasks, such as mating and acquiring physical and social resources. Environmental risk, including mortality, morbidity, and resource instability, also shapes which patterns of investment are optimal for an

individual (Schaffer, 1983). In high-risk environments, favoring mating and reproduction at the expense of investment in an unstable and uncertain future is more advantageous (i.e., “fast” life history strategy), whereas in low-risk environments, favoring investment in embodied capital and skill acquisition at the expense of investment in early mating and reproduction is more advantageous (i.e., “slow” life history strategy; Chua, Lukaszewski, Grant, & Sng, 2017).

Life history theory can provide a foundation for understanding the adaptive, natural process of regulating one’s parenting effort by delaying childbearing or avoiding childbearing altogether. This theoretical perspective suggests that pregnant people should facultatively adjust their willingness to invest in potential offspring as a function of what is optimal in their given environment, at their developmental stage, and with their current resources and opportunities. A critical feature of this theory is that an individual’s reproductive strategies are only adaptive to the extent that they are responsive to changing environmental factors (Low, 2007). Traditional evolutionary investigations of the role of environment on fertility in many species have been limited to parental neglect, abandonment, and infanticide as tools for shaping an individual’s reproductive strategy. Indeed, these have been the tools available to non-human animals, ancestral humans, and contemporary humans with limited access to advanced contraceptive and abortive technologies. Ethnographic studies of nonindustrial and/or tribal societies suggest that ancestral humans may have favored infanticide and abandonment over abortion due to the extreme risk and discomfort of available abortive techniques (e.g., pouring hot water on the abdomen, hard manual labor, fasting and starvation, attempts to penetrate the cervix with physical objects; Nurge, 2011).

While it is as-yet insufficiently addressed in the extant literature, evolutionary psychology can also offer insight into stigmatization and discrimination on the basis of abortion experience. Broadly, stigma involves perceiving a violation of a social expectation and as a result

endorsing negative attitudes or beliefs about the individual that violates that expectation. This stigma can be transmitted via felt stigma (i.e., perceived or anticipated stigma from others - including acquaintances, friends and family, as well as broader social structures like religious institutions, government and media messaging), internalized stigma (i.e., internalized negative attributions), or enacted stigma (i.e., negative attitudes inferred from the overt behaviors of others; Cowan, 2017). From an evolutionary perspective, perceiving those that violate cultural norms more negatively, and socially sanctioning them for this violation, have been advantageous to human survival. Social norms act to promote cohesion, coordinated social action, and the achievement of complex shared goals in a given society (Roos et al., 2015). For example, the establishment of norms (e.g., regulating food preparation, personal hygiene, violence) through imitation, learning, and the punishment of violations can protect humans from various survival threats (e.g., disease, infection, assault; Curtis, de Barra, & Aunger, 2011). Importantly, while social norms are a human universal - present in all studied cultures and societies - specific norms and willingness to punish deviant behavior varies considerably from culture to culture (Ensminger & Henrich, 2014). This sets a precedent to study and eventually understand both how and why behavioral norms and stigma that regulate, restrict, and constrain abortion experiences vary across cultures. What ecological or sociological factors in a society shape their unique pregnancy and abortion norms? More research is needed to address this question.

Evolutionary psychological analyses of abortion experiences and abortion stigma are limited, but not entirely absent. By and large, evolutionary psychological and anthropological approaches to abortion have been limited to large-scale, demographic analysis rather than idiographic focus on individual, lived experiences. Virgo and Sear (2016) have focused on environmental risk and harshness as predictors of demographic patterns of the proportion of total pregnancies aborted. They found, in a U.K. sample, that increased mortality and morbidity in

each community predicts a lower proportion of abortions in young adults (<25 years). The authors proposed that the suppression of abortion, in high-risk ecologies, is consistent with life history theory: in these environments, postponing reproduction may result in missed opportunities. They further posited that the specificity of this effect in young adults is because women's fertility is limited by age, thus the costs of abortion are lower for younger individuals (e.g., they can postpone without foregoing reproduction altogether). Other evolutionary psychologists and ecologists have highlighted the role of age and reproductive potential, again by relying on demographic reports of the proportion of pregnancies that end in abortion (Hill & Low, 1992; Lycett & Dunbar, 1999; Tullberg & Lummaa, 2001).

Tullberg and Lummaa (2001) found that abortion likelihood is inversely related to reproductive potential; younger women in a Swedish sample, who ostensibly have more opportunities to reproduce in the future, were more likely to abort. That study highlighted an increase in abortion rates among women approaching menopause, which the authors posited may be due to an increased investment in other dependents, including grandchildren. Hill and Low (1992) examined U.S. census data and found that younger women, women with other dependents, and women without paternal investment are more likely to abort. A similar pattern of results emerged in a demographic analysis of abortion rates in England and Wales: higher abortion rates in young women, women approaching menopause, and single women (Lycett & Dunbar, 1999). The authors proposed that abortion probability is shaped by an individual's likelihood of securing future mating and reproductive opportunities (i.e., abortion is favored as a strategy that will reserve resources for future offspring and/or increase an individual's desirability as a future mate). An empirical investigation of hypothetical abortion decisions presented complimentary findings (Anglin, Amaral, & Edlund, 2010) reporting that a higher perceived likelihood of future mating opportunities (e.g., self-perceived mate value) was

associated with greater intentions to abort a hypothetical pregnancy. Overall, it appears that demographic patterns of abortion reflect a life history account of human reproductive decision-making in that pregnant people adjust their abortion intentions and outcomes in ways that optimize their survival and success in each environment, developmental stage, and personal circumstance.

Clinical Psychological Perspectives on Abortion

Clinical psychological perspectives can examine the relationship between abortion stigma, barriers to abortion access, and individual abortion experiences and outcomes. Abortion stigma is conceptualized as a dynamic process, both a cause and a consequence of restrictive abortion policy and legislation (Kumar, 2013). Since the Roe v. Wade (1973) decision by the U.S. Supreme Court, there have been multiple attempts to ban abortion, often with a focus on the supposed development of post-abortion syndrome (PAS; Speckhard & Rue, 1992) and politicized through the requirement of pre-abortion counseling and legislation that restricts access to abortion services. We propose that policies and procedures that impose barriers to receiving abortion services are caused by, and themselves promote, anti-abortion attitudes and beliefs.

Clinical psychology has a history of being used to deter people from the decision to have an abortion even as there is little to no credible evidence which supports its weaponization (e.g. C. Everett Koop, Ronald Reagan's Surgeon General, found no evidence for emotional or physiological distress post-abortion (Koop, 1989). Implications from abortion research, clinical practice, and anti-abortion legislation that abortion causes a "constellation of dysfunctional behaviors and emotional reactions," dubbed PAS have been used to strengthen and justify restrictive abortion practices and policies (Speckhard & Rue, 1992, p. 96), most notably through funding and legitimizing Crisis Pregnancy Centers (CPC).

CPCs are a grassroots movement whose aim is to prevent abortion by persuading people to pursue adoption or parenting. There are more CPCs in the United States than are abortion clinics (2,500 CPCs vs. 808 abortion clinics; Jones, Witwer, & Jerman, 2019), providing abortion counseling that emphasizes PAS and other medical falsities (e.g., abortion causes breast cancer) and often refuse to provide referrals to abortion clinics (Bryant & Swartz, 2018). CPCs frequently perpetuate PAS, an abortion-specific psychopathology that has been used to help overturn abortion legislation (Kelly, 2014). PAS emphasizes the narrative that abortion is traumatic and results in PTSD like symptoms (Speckhard & Rue, 1993). Despite the political promotion of PAS, there is no scientific evidence that poor mental health outcomes are correlated with an elective abortion (Biggs et al., 2017; Boonstra et al., 2006; Koop, 1989; Major et al., 2009), and it is not recognized by any professional association as a medical or psychiatric condition. Rather, the political promotion of PAS attempts to remove the bodily autonomy and decisional certainty that people feel pre and post abortion.

The idea that having an abortion causes detrimental effects on mental and emotional health has a history of being used as a reason for the procedure to be made illegal and/or to restrict people's access to abortion services (see Lee, 2003; Siegel, 2007). However, in direct opposition to these assumptions, research has consistently demonstrated that women have strong decisional certainty, including relief and belief that they made the right decision after abortion (Ralph, Foster, Kimport, Turok, & Roberts, 2017; Rocca et al., 2020; Rowland, Rocca, & Ralph, in press). In one study (Ralph et. al, 2017), abortion patients were as, or even more, certain in their decision for abortion than were patients who were considering other medical procedures (e.g., mastectomy, antidepressant use during pregnancy). In a study of 500 women, Roberts et al. (2017) found that much of their sample had no change in certainty following either a waiting period or informational visits; rather there was an increase in certainty. Furthermore, while

varying levels of decision difficulty (i.e., “very difficult”, “somewhat difficult”, and “not difficult) and varying levels of perceived stigma (i.e., “no stigma”, “low stigma”, and “high stigma”) produced differences in reported decision rightness in the short-term, all of these differences decreased by 3-5 years post abortion, with relief being the prevailing emotion by year 5 (Rocca et al., 2020). Specifically, the Turnaway study demonstrated that women who were unable to attain an abortion experienced more negative outcomes compared to women who were able to do so; these negative outcomes included poorer mental health, educational attainment, socioeconomic standing, and physical health (Foster, 2020). Thus, research that is used to bolster anti-abortion political agendas, and perpetuate abortion myths, has been challenged and debunked.

Regardless, this myth about decisional certainty has been perpetuated as a reason to “protect” people from undergoing an abortion through legislation and misinformation, justifying pre-abortion counseling laws, particularly those in the United States (Cohen & Joffe, 2020). This includes laws that require women to be informed of supposed negative psychological effects of abortion, waiting periods after having received pre-abortion counseling, and multiple trips to clinics to access an abortion (Guttmacher Institute, 2019). For example, as of 2020, 26 U.S. states require the use of pre-abortion ultrasound, and three of these states require the abortion provider to show and describe the image to the patient (Guttmacher Institute, 2020). However, an overwhelming amount of evidence, including from cross-cultural samples, suggests that pre-abortion ultrasound does not affect medical or surgical abortion outcomes (Kapp et al., 2013; Raymond & Bracken, 2015), that the majority of women seeking abortion services choose not to view the ultrasound images (Kimport, Upadhyay, Foster, Gatter, & Weitz, 2013), and that over 98% of women who view ultrasound images continue with their plans to abort (Gatter, Kimport, Foster, Weitz, & Upadhyay, 2014). Indeed, recent research suggests that ultrasound viewing

laws may have differential coercive effects based on social group status (i.e., race and income; Kimport et al., 2018) and may therefore limit women's ability to exercise their adaptive choice.

Scholars contend that, rather than safeguarding patients' health, these legislative actions are intended to "control and constrain how [individuals] make personal decisions about their bodies and parenthood" (Kimport, Johns, & Upadhyay, 2018, p. 941) and to promote pronatalist norms. In addition, they reflect the stereotype that women are innately maternal, and imply that women's abortion decisions are fraught with uncertainty and emotional turbulence, which is discordant with the conceptualization of abortion as a human universal and a success-promoting strategy for empowered decision-makers. To illustrate, in a ruling relevant to abortion bans (under the Fourteenth Amendment of the U.S. Constitution) in 2007 the U.S. Supreme Court emphasized the "unexceptionable" experience of regret following abortion and contended that "respect for human life finds an ultimate expression in the bond of love the mother has for her child" (Gonzales v. Carhart, 505 U.S. 159).

Overall, restrictive abortion policies do not change individuals' minds (Roberts, Belusa, Turok, Combellick, & Ralph, 2017; Roberts, Turok, Belusa, Combellick, & Upadhyay, 2016; Sanders, Conway, Jacobson, Torres, & Turok, 2016);rather, they create financial and logistical burdens for people seeking an abortion. Sanders et al. (2016) found that the 72-hour waiting period affected abortion seekers through lost wages for themselves and others, increased transportation costs, and having to disclose their abortion to someone they otherwise would not have told. Some evidence suggests that messaging focused on the detriments of abortion creates a self-fulfilling prophecy: negative psychological effects would not exist had external information (such as that required by law) not conveyed the expectation of negative psychological effects (Major et al., 2009). In these ways, anti-abortion stigma - as it is embodied and transmitted through restrictive abortion legislation - can create practical barriers and even

negative health consequences for people attempting to exercise their adaptive choice.

Kornfield and Geller (2010) argued that many studies that find poor mental health outcomes post-abortion have significant methodological flaws and conflate confounding variables to create the appearance of causation. For example, the authors of one study claimed that 80% of women experienced regret following their abortion procedure, yet the entire sample was recruited from members of a "Women Exploited by Abortion" group (Dadlez & Andrews, 2010). Thus, a homogeneous group of women, who had all previously reported having been harmed by their respective abortion experiences, were used to imply a causal relationship between abortion experiences and psychological distress. It is important to note, though, that some women do report mental health concerns after an abortion, which are generally linked to a history of mental illness (e.g., depression, anxiety), age, number of pregnancies, and/or coercion in the decision-making process (Andrew & Boyle, 2003; see Reardon, 2018 for a review). Yet, in focusing on studies with significant methodological flaws and the false belief in the prevalence of PAS, it becomes difficult to tease apart the true difficulties abortion patients may face.

However, the vast majority of abortion patients report more positive psychological outcomes when they are free to make their own choice regarding the pregnancy – whether to continue or terminate, and when they have support for whichever decision is made (e.g., Andrew & Boyle, 2003; Brandi, Woodhams, White, & Mehta, 2018; Casey, 2010; Rocca et al., 2015). Furthermore, the American Psychological Association's Task Force on Mental Health and Abortion (Major et al., 2008) concluded that, among women who have a single, legal, first-trimester abortion of an unplanned pregnancy for nontherapeutic reasons, the risk of mental health problems is no greater than that among women with unplanned pregnancies who give birth. Overall, clinical psychology perspectives on abortion highlight the persistent relationships between pronatalist norms, abortion stigma, and clinical and legislative practices. Future clinical

psychology informed research and practice should account for diverse abortion outcomes and promote decisional autonomy particularly in marginalized peoples and those vulnerable to coercive pre-abortion services.

Social Psychological Perspectives on Abortion

Social psychological perspectives on can provide unique insights into proximate factors – including roles, identities, and social and political power structures – that facilitate or constrain women's adaptive choice to abort. For example, sociology (Chesney-Lind & Hadi, 2017; Petchesky, 1990) and social psychology theories (Huang, Davies, Sibley, & Osborne, 2016; Kumar, Hessini, & Mitchell, 2009) highlight the power dynamics that frame abortion as a dilemma and describe how these power dynamics are rooted in narrow, gender-specific narratives that encompass the ideological struggles about family, motherhood, and sexuality. Patriarchal power structures rely on strict and narrow conceptualizations of gender and family identity, and these restrictive expectations create identity conflicts and dilemmas when someone is considering the choice to abort or parent. For example, the 'inevitability of motherhood' norm emphasizes that biological females are destined to be mothers and that motherhood will eventually occur regardless of their own desires.

The "motherhood mandate" is a more specific expectation that "requires that one have at least two children (historically as many as possible and preferably sons) and that one raise them 'well'" (Russo, 1976, p. 144). Pronatalist norms, such as the motherhood mandate, facilitate the stigmatization of biological women who forgo childbearing altogether. Dryden and colleagues (2014) evidence the stigmatization of childlessness while researching post-cancer fertility with young women, specifically a consistent theme of the self as "inadequate" because of the inability to have children after their cancer treatment. Notably, there is a hierarchy among those who do not have children as a function of their perceived fault in deviating from expectations. There is

less stigma and social sanctioning for those who are unable to have children, typically because of infertility, yet they are still affected by stereotypes that their non-motherhood is deserving of pity, and they are assumed to be desperate and unfulfilled (Letherby, 2002). Those who choose voluntary childlessness (to live child-free) are typically perceived as selfish, emotionally troubled, less warm, nurturing, and likable as compared to mothers, and unfeminine (see Harrington, 2019 for a review; Koropeckyj-Cox, Copur, Romano, & Cody-Rydzewski, 2018; Park, 2002).

The motherhood mandate likely shapes perceptions of women's decision to abort regardless of their reproductive history (e.g., 59% of individuals in the US that obtain an abortion have children/dependents; Guttmacher Institute, 2021), as this norm is hypothesized to reflect the belief that "nonprocreative" or casual sex is morally reprehensible for women (Kumar et al., 2009; Norris et al., 2011). As an example, qualitative data suggests anticipated stigma among mothers seeking abortion services, who feared even greater social sanctioning if the pregnancy was thought to have resulted from casual, pre- or extramarital sex; "... people didn't realize the stigma that's attached to this baby... this is my second baby-daddy who I had a one-night stand with." (Cockrill & Nack, 2013, p. 980). The relationship between abortion stigma and the moralization of casual sex is further supported by research that finds that women can manage and reduce abortion stigma using narratives that contextualize their sexual behaviors as not deviant (e.g., with a long-term partner, using contraceptive; Hoggart, 2017).

Accessing abortion care directly contradicts the motherhood mandate and pronatalist expectations. Kumar and colleagues (2009) described this as "…women who seek to terminate a pregnancy that marks them… as inferior to ideals of womanhood" (p. 628). Overall, voluntary and deliberate choices - including the adaptive choice to abort - may be perceived as a direct challenge to the motherhood mandate, and as such, met with severe stigma and sanctioning. For

example, Cockrill and colleagues (2013) find that abortion stigma is present in both women who have, and have not, experienced previous births – notably, mothers and childless women report similar levels of post-abortive social isolation, self-judgment, and community condemnation. However, childless women report slightly stronger worries about post-abortive judgment from others (e.g., "people would gossip about me") compared to mothers, so parenthood may offer some protection against abortion stigma and discrimination – more research is needed to better discern the nature of the relationship between parenting history and felt abortion stigma. A woman's worth is linked to both her desire and ability to have children (or *more* children), and, if found lacking, she will be deemed deviant or unfulfilled (Ashburn-Nardo, 2017; Belfrage, Ramirez, & Sorhaindo, 2020; Loftus & Androit, 2012). These pronatalist norms that naturalize motherhood facilitate the marginalization and stigmatization of women who choose to abort a pregnancy.

Another factor relevant to patriarchal power structures and reproductive decision-making that feminist scholars, in particular, have acknowledged is the significant emotional labor involved in parenting and other domestic work, described as "forms of labor that contribute to the mental burden and stress of running the household," which are often unnoticed by other household members (Ciciolla & Luthar, 2019, p. 468). Emotional labor is a differentially heavy burden on women, as research suggests that women are expected to engage in more emotional work for children than men are (Minnotte, Pedersen, & Mannon, 2010). Research also suggests that, in heterosexual couples, if husbands perform emotional labor that begins to approach, or exceeds, that performed by their wives, the husbands' satisfaction with their marriage tends to decline (Minnotte et al., 2010).

Emotional labor arguably begins at conception, as the pregnant person becomes responsible for arranging doctor's appointments and planning for parental leave. However,

pregnant people are often put into a double bind: they are subject to pronatalist expectations, yet there are minimal policies in place that protect them. For example, the U.S. has abysmal family leave policies, which may threaten a person's career. There are no mandated parental leave policies, and stop-gaps, such as the Family Medical Leave Act (FMLA), do not guarantee job security or financial security (Williams & Cooper, 2004). This lack of economic and social support for pregnant people and parents exacerbates existing gender inequalities, as women across cultures typically invest more in childcare than men do (van der Lippe, de Ruijter, de Ruijter, & Raub, 2011). Recent work suggests that these differential childcare burdens, as a function of gender, have widened gender inequalities during the coronavirus pandemic as disruptions to schooling and childcare placed yet more childcare and domestic work demands on women than on men (Kristal & Yaish, 2020).

In addition, there is no universal healthcare in the United States, where the average non-complicated childbirth costs over $10,000 and up to $30,000 if perinatal and postnatal care are included (Hoffower & Borden, 2019), and insurance coverages varies. Policies in the UK differ: there are options for maternity leave and pay, paternity leave and pay, as well as shared policies and specific policies that protect employment as a function of parenting and pregnancy status (gov.uk). The average cost of a birth ranges from $2,000 to $3,500 in the UK, but is fully funded under the National Health Service (Lembo, 2018). The large (and in many cases, gender-discrepant) financial, career-advancement, and emotional burdens associated with childbearing may create conditions where abortion and childlessness better promote survival and success. Some social psychological models of reproduction suggest that anti-natal norms may become more common in cultural settings where social and economic advancement is hindered, rather than helped, by having children (Newson, Postmes, Lea, & Webley, 2005). Future social psychological and clinical psychological work should consider both the differential expectations

and differential burdens placed on individuals as a function of pregnancy and parenting status, with emphasis on how their work might be used to inform legislative changes.

Integrating Psychological Perspectives

In societies that are polarized regarding abortion care (e.g., the UK, Poland, the US, among many more; see Cullen & Korolczuk, 2019; Mouw & Sobel, 2001), shame and stigma have the potential to be widespread. Though decisional certainty is high, abortion seekers may consider themselves anti-abortion or have internalized the toxic messages that persist in society (Perrucci, 2012). Integrating clinical psychological, social psychological, and evolutionary psychological perspectives can provide innovative ways of studying and understanding the intersection of abortion stigma and abortion experiences. Here we explore three ways that these perspectives could be integrated in further research.

(1) Stigmatization and social sanctioning both arise because all human societies possess social norms. Evolutionary psychology research and theory highlight how norms are established and maintained via the advantages the group enjoys when norms are followed (e.g., cooperation in collecting resources and protecting against survival threats; Roos et al., 2015) and the use of punishments when norms are violated (e.g., social avoidance, stigmatization; Fehr & Fischbacher, 2004). Abortion stigma refers to the negative attributions made about individuals who terminate a pregnancy and therefore violate the normative expectations of 'womanhood' (Kumar et al., 2009). Indeed, abortion decisions violate the social expectation that motherhood is a *sine qua non* of womanhood and femininity. As Gotlib (2016) explained:

> Women... must be implicitly and explicitly led, motivated, or, if necessary, compelled towards the realization of motherhood as not only a social good, but, importantly, as something that is essentially in their own best interests as women.... Such apotheosis of motherhood - and the vilification of its opposite [e.g., abortion] - can border on a

> narrative violence that valorizes a single aspect of a woman's life as entirely constitutive of her personhood itself. (p. 332)

Existing social psychological qualitative investigations, although limited (e.g., a recent meta-analysis identified only 15 published studies that address both "abortion" and "stigma"; Hanschmidt et al., 2016), supply examples of abortion stigma from various social sources. Indeed, it is difficult to overstate the importance of social forces in abortion experiences, a claim bolstered by contemporary models of reproductive decision making. Klann and Wong (2020) developed the pregnancy decision-making model, which proposes that abortion decisions are relational in nature; family, friends, community members, and broader social norms are proposed to shape abortion decision-making processes and outcomes. Consistent with this model, Kenyan women have described felt stigma from their broader community members and explained that "[the woman who aborted] is deemed not to have morals. She is bad company and [the community] will advise [others] not to interact with [her]" (Yegon, Kabanya, Echoka, & Osur, 2016, p. 3). Social contacts closer to home (e.g., intimate partners, parents) have particularly important roles in shaping abortion experiences through patterns of stigmatization and disapproval. Specifically, clinical psychological research shows that stigma and reproductive coercion from one's partner is associated with negative health outcomes both pre- (Steinberg, Tschann, Furgerson, & Harper, 2016) and post-abortion (Major et al., 1997), including stress, depression, and anxiety.

Anticipated abortion stigma from parents is quite common, and, perhaps most important, anticipated stigma and social sanctioning from a parent is associated with secrecy and lack of disclosure of abortion intentions/experiences (Gelman et al., 2017). For example, anticipated parent stigma was common in a Mexican sample in which *none* of the individuals seeking abortion services disclosed their decision to a parent (Sorhaindo et al., 2014). Other lines of

inquiry suggest that abortion secrecy and concealment strongly predict reliance on non-medical and unsafe abortion procedures (Gbogbo, 2020). In the same vein, cross-cultural work shows that abortion secrecy and concealment (as well as the negative outcomes associated with them) are more often accredited to anticipated stigma and punishment from family, rather than concerns about illegality, even in countries with limited or nonexistent options for legal abortion (Tsui et al., 2011). Together, these findings illuminate the relationship between abortion stigma, family dynamics, and abortion experiences. Future researchers who integrate clinical psychological, social psychological, and evolutionary psychological approaches could investigate how pronatalist norms are established and maintained in communities and in families, and how the punishment of norm violators (e.g., abortion stigma, discrimination) might contribute to different abortion outcomes.

(2) Clinical psychological and other applied perspectives (e.g., nursing, public health) highlight the roles that broader social institutions and organizations play in transmitting abortion stigma. In African, North American, Latin American, and Southeast Asian samples, qualitative research (e.g., Seewald et al., 2019) and meta-analyses (e.g., Loi, Gemzell-Danielsson, Faxelid, & Klingberg-Allvin, 2015) have revealed felt stigma from healthcare providers. For example, Cohen and Joffe (2020) reported that some primary care physicians withheld ultrasound results, prayed over patients who were seeking abortion, refused to refer patients for abortion services, or misinformed patients about pregnancy length to make it seem that they were no longer eligible for an abortion. Nurses, midwives, and doctors may serve as a critical source of felt stigma, for people seeking abortion care, by expressing the belief that individuals who seek abortion services are rejecting motherhood and their feminine identity.

Clinical psychological and public health research may also assist in illuminating how religious institutions and communities act as a source of felt, internalized, and enacted abortion

stigma. Individuals' reports of internalized stigma in highly religious countries often contain religious themes (e.g., the fear of punishment and/or judgment from God; Tsui et al., 2011). Little work has been devoted to understanding the relationship between religious communities and abortion stigma, but a recent qualitative investigation (Frohwirth, Coleman, & Moore, 2018) suggests that this may be a key area of investigation for reproductive health researchers, as U.S. women express both felt and internalized abortion stigma as a function of their personal faith and/or their broader religious community. For example, in one highly religious sample participants recognized that the Catholic Church prohibits abortion and acknowledged the promise of divine punishment for women who choose to terminate their pregnancy (Sorhaindo et al., 2014). For those women, anxiety about the potential for divine punishment added further difficulty to their abortion experience. Future researchers who integrate clinical psychological and social psychological approaches could investigate how pronatalist norms are established and maintained in health care and religious institutions and how the punishment of norm violators in these settings might contribute to different abortion outcomes.

(3) Beyond pronatalist norms (e.g., the motherhood mandate) and the consequent abortion stigma, research suggests that people often have specific scripts for when and how a pregnancy should occur. Across cultures, individuals endorse heteronormative expectations that pregnancy should occur within the context of a nuclear family unit (one father, one mother, and their biological children; Kitzinger, 2005). Kitzinger (2005) presented a poignant example of these heteronormative expectations, as lesbian parents reported frequently having been asked: "Which one of you is the mother?" (p. 479). Indeed, queer parents continue to face significant stigmatization and discrimination (at individual and institutional levels; see DiBennardo & Saguy, 2018; Downing, 2013; Kuvalanka, Leslie, & Radina, 2014) across cultures (Takacs, Szalma, & Bartus, 2016). As heteronormativity positions queer relationships as deviant, this may

also contribute to the belief that queer parents have unhealthy relationships and would thus be unable to create and maintain a stable home environment for children (Costa, Pereira, & Leal, 2019). Pregnancies and parenting that violate such expectations are more likely to be perceived as abnormal, unhealthy, and dysfunctional (Hudak & Giammattei, 2014) - specifically men, individuals who are higher on religiosity, those who are more politically conservative, older, and less educated tend to endorse more negative attitudes about queer parents (Costa, Periera, & Leal, 2019). These heteronormative and nuclear-family expectations likely play a role in shaping not only pregnancy, but also abortion experiences and outcomes.

Evolutionary psychological and anthropological perspectives can be useful in questioning the validity of the 'nuclear as normal' assumption. For example, Hrdy (2007) proposed that ancestral humans did not evolve to favor a 'nuclear family' structure, wherein one biological father and mother provide all necessary care for their offspring. Instead, humans have evolved to favor a cooperative breeding model, wherein offspring are cared for by both biological parents and alloparents (i.e., group members that are not genetic parents). This is primarily because human offspring require so much investment before they become independent, a huge undertaking for one or two biological parents. As Hrdy (2009) explained, "... at some point [in our evolutionary history] human mothers began to bear offspring too costly to rear by themselves. This made a mother's commitment to any given child contingent on her perception of social support" (p. 283). Indeed, low levels of perceived social support are associated with depression in new mothers (Corrigan, Kwasky, & Groh, 2015), pregnant people, and abortion patients (Harris et al., 2014). A lack of social and emotional support was particularly common among women who reported negative emotional experiences or emotional difficulty following an abortion (Kimport, Foster, & Weitz, 2011).

Cross-cultural and social psychological research supports the cooperative childrearing

model: alloparenting from kin and non-kin is associated with advantages for offspring and biological parents (e.g., increased child survivability, Sear & Mace, 2008; improved cognitive ability in children; Shaver et al., 2020). If cooperative childrearing was indeed more common than the nuclear family throughout human evolution, our evolved psychologies are likely highly attuned to social approval - and scorn - relevant to our own reproductive planning. As such, social support may be critical for increasing individuals' reproductive autonomy and improving individuals' abortion experiences. Future researchers who integrate social psychological and evolutionary psychological approaches would be uniquely situated to further illuminate the relationship between nuclear family scripts, cooperation and social support in reproductive planning, and abortion outcomes.

Future Directions and A Call to Action

The works reviewed here question several commonly held assumptions about reproduction, including that abortion outcomes are primarily negative (e.g., Littman et al., 2014), that emotional and practical burdens of childcare have (ancestrally) and should differentially affect women (e.g., Minnotte, Pedersen, & Mannon, 2010), and that motherhood is natural therefore abortion is unnatural (e.g., Belfrage, Ramirez, & Sorhaindo, 2020). It is our hope that this article can serve as a call to action for clinicians and researchers to employ multiple perspectives and subfields in psychology to probe the nature of lived experiences of abortion and abortion stigma and to develop pathways that empower pregnant people to practice reproductive freedom. Abortion practices vary dramatically across cultures, and, in many countries pregnant people have limited access to safe, medical abortion services; even in countries where abortion is legal, abortion stigma and pronatalist norms may create practical barriers to obtaining a safe and legal abortion. Reproductive liberation work should therefore be rooted in an ultimate intention to affect both public policy and normative change in a way that promotes pregnant people's

autonomy, goals, and health.

We call for future research that applies perspectives from multiple disciplines and subfields, such as the evolutionary psychology, clinical psychology, and social psychological perspectives we highlighted. Such research could take advantage of the strengths of each specific domain, including their theories, methodologies, and assumptions. Evolutionary psychological perspectives on abortion can assist in clarifying how our reproductive psychologies interact with our environments, clinical psychological perspectives can provide useful pathways to impact both individuals' experiences and abortion legislation, and social psychological perspectives can provide unique insights regarding intersecting identities and relevant stereotypes in reproductive experiences and decision-making. Future psychological research on reproductive decision-making should be guided by several underdeveloped areas of investigation that we have identified. For example, very little is known about abortion decision-making processes in countries without (or with only lifesaving) legal abortion services. The practical implications of such research could be significant, as unsafe abortion procedures are particularly common in these societies. A better understanding of abortion decision-making processes when people must pursue high-risk abortion options without medical support could provide a foundation for lifesaving interventions.

Evolutionary psychological perspectives, although often used to explain variation in mating and reproductive strategies in human and non-human animals – including the facultative adjustment of parenting effort via infanticide, abandonment, and neglect – can be a useful tool to inform investigations of individuals' experiences of abortion. Although used to analyze demographic, large-scale patterns in abortion (in primarily WEIRD populations: Western, educated, industrialized, rich, and democratic; Henrich, Heine, & Norenzayan, 2010), these theoretical approaches have rarely been applied to an idiographic analysis of abortion. Future

researchers could apply evolutionary theory and methods to explore the nature of individual abortion decision-making and outcomes, with a specific emphasis on the role of environmental harshness, resource stability, and social support (employing life history theory, the cooperative breeding model, etc.). In addition, conceptualizing abortion as natural and adaptive may represent a fruitful avenue for decreasing abortion stigma. This possibility is bolstered by the existing literature on stigma and discrimination, which shows that perceptions of fault strongly determine the extent to which deviant or non-normative behaviors are stigmatized (Easter, 2012).

Clinical psychology has historically been weaponized to bolster practices and policies designed to limit access to abortion and dissuade pregnant people from pursuing abortion as a reproductive option. Early research in this discipline emphasized the negative outcomes associated with abortion experiences, including PAS, and that work has been used to justify potentially coercive pre-abortion counseling and "support" services. Indeed, these potentially coercive pre-abortion services may differentially target, and affect, marginalized people as a function of their ethnicity, race, and income level. Yet a newer and ever-growing body of literature proposes that abortion decisions are unlikely to be characterized by uncertainty or to have detrimental effects on a pregnant person's mental or emotional well-being. Future research that addresses diverse abortion outcomes, particularly positive outcomes and explores techniques and interventions to promote reproductive autonomy (with an emphasis on intersectionality) is needed.

Researchers should also investigate the nature of abortion stigma, including how religious communities might maintain pronatalist norms, transmit abortion stigma, and engage in social sanctioning of deviations from pronatalist or maternal norms. Indeed, relevant literature – albeit limited – suggests that fears of divine punishment and anticipated disapproval from religious family members strongly shape abortion experiences and outcomes. Independent evidence

suggests the presence of pronatalist norms and (thus) abortion stigma in many countries worldwide (e.g., the U.S., Canada, Australia, Mexico, the UK, France, Kenya, South Africa, Israel), yet there is very little cross-cultural work on pronatalist norms and/or abortion stigma. Future research in this area should include cultural diversity in pronatalist expectations and the social sanctioning of abortion, as a lack of literature limits our ability to draw conclusions regarding why and how abortion stigma takes root in specific communities. Overall, there is very little cross-cultural work on abortion stigma, which limits our ability to draw important conclusions regarding 1) communities in need of interventions to address abortion stigma and the health risks associated with reproductive autonomy-suppressing norms, and 2) what factors might make abortion stigma more likely to develop in a given community. Evolutionary psychological and social psychological perspectives on abortion stigma can guide future cross-cultural investigations by including such factors as environmental threat (e.g., mortality, morbidity, resource stability) and social norms (e.g., heteronormativity, nuclear family expectations, the motherhood mandate), as candidate causal factors that might promote abortion stigma in a given community.

Conclusion

Through our application of various psychological perspectives, we conclude that abortion follows evolutionary trends and that these trends counter certain stereotypes and normative expectations about women and femininity. Violations of these norms create stigma and social sanctioning, which can lead to restrictive abortion policies and legislation, barriers to accessing safe abortion services, and psychological and physical harm to individuals who seek and receive abortion services. Abortion stigma is also critical in shaping pre- and post-abortion care and counseling services (e.g., pre-abortion ultrasounds, pre-abortion counseling, PAS policies and practices) that may limit individuals' reproductive autonomy. Humans are social beings and

cooperative breeders. As such, abortion stigma is likely to compromise people's ability to receive social support when it is most needed. If future researchers address existing gaps in this body of literature, we can begin to understand how and why abortion stigma varies between communities, and we can target specific communities for outreach efforts focused on education and counseling that supports the *adaptive choice* to abort. Future abortion research and interventions should be guided by the ultimate intent of fostering greater social support and decisional autonomy for people who make the adaptive choice to abort.

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Table 1

Cross-cultural perspectives on abortion access (as of October, 2020)

Country	Abortion access
Argentina	Abortion is not provided upon request – abortion is only provided if justified. Specifically, abortion is provided given sufficient evidence that A) the pregnancy is the result of rape, B) the pregnant individual's physical health is in danger (including life-threatening conditions), and/or C) the pregnancy will cause severe psychological distress or mental suffering.
Australia	Varies significantly by state or territory, but is typically available upon request (without the need for justification) before 16 (Tasmania) - 24 weeks (Victoria) gestation. Notably, abortion is prohibited in the Northern territory unless there is sufficient evidence that A) severe fetal impairment is present and/or B) the pregnancy will cause harm to the pregnant person's mental and/or physical health
Brazil	Abortion is not provided upon request – abortion is only provided if justified. Specifically, abortion is provided given sufficient evidence that A) the pregnancy is the result of rape or incest and/or B) the pregnant individual's life is in danger.
Cuba	Abortions are provided upon request (without the need for justification) until 12 weeks' gestation. After 12 weeks' gestation, abortion is only provided if justified. Specifically, abortion is provided given sufficient evidence that A) the pregnancy is the result of rape, B) the pregnant individual's physical health is in danger (including life-threatening conditions), and/or C) severe fetal impairment is present.
Egypt	Abortion is not provided upon request – abortion is only provided if justified. Specifically, abortion is provided given sufficient evidence that the pregnant individual's physical health is in danger (including life-threatening conditions).
El Salvador	No options for legal abortion.
Ghana	Abortion is not provided upon request – abortion is only provided if justified. Specifically, abortion is provided given sufficient evidence that A) the pregnancy is the result of rape and/or incest, B) the pregnant individual's physical health is in danger (including life-threatening conditions), C) the pregnancy will cause severe psychological distress or mental suffering, and/or D) severe fetal impairment is present.
Honduras	No options for legal abortion. However, the Code of Medical Ethics of the Honduran Medical Association permits the use of abortion for 'therapeutic

	purposes' including when the pregnant person's life is in danger.
India	Abortion is not provided upon request – abortion is only provided if justified. Specifically, abortion is provided given sufficient evidence that A) the pregnant individual's life is in danger, B) if the pregnancy poses mental health risks to the pregnant person, C) the pregnant person presents a severe intellectual or cognitive disability, and/or D) if there is severe fetal abnormality.
Iraq	Abortion is not provided upon request – abortion is only provided if justified. Specifically, abortion is provided given sufficient evidence that A) the pregnant individual's life is in danger, B) if the pregnancy poses mental health risks to the pregnant person, and/or C) if there is severe fetal abnormality.
Japan	Abortion is not provided upon request – abortion is only provided if justified. Specifically, abortion is provided given sufficient evidence that A) the pregnant person cannot afford to support a child, B) the pregnancy is the result of rape, and/or C) the pregnant individual's physical health is in danger (including life-threatening conditions).
Mexico	Varies from state to state - however, in all states abortion is not provided upon request – abortion is only provided if justified. Specifically, in most states abortion is provided given sufficient evidence that A) the pregnant individual's life is in danger, B) the pregnancy is the result of rape, and/or C) if there is severe fetal abnormality.
Nicaragua	No options for legal abortion.
Nigeria	Varies from province to province – however, in all provinces abortion is not provided upon request – abortion is only provided if justified. Specifically, abortion is provided given sufficient evidence that the pregnant individual's life is in danger.
Peru	Abortion is not provided upon request – abortion is only provided if justified. Specifically, abortion is provided given sufficient evidence that the pregnant individual's physical health is in danger (including life-threatening conditions).
Philippines	No options for legal abortion. While there are no explicit legal exemptions from criminal liability for abortion providers, it is possible that liberal interpretations of the law would protect abortion providers from criminal prosecution if the abortion were demonstrated to have been a life-saving procedure.
Poland	Abortion is not provided upon request – abortion is only provided if justified. Specifically, abortion is provided given sufficient evidence that A) there is severe fetal abnormality, B) the pregnancy is the result of rape and/or incest, and/or C) the pregnant individual's physical health is in danger (including life-threatening conditions).

Russia	Abortions are provided upon request (without the need for justification) until 12 weeks' gestation. After 12 weeks' gestation, abortion is only provided if justified. Specifically, abortion is provided given sufficient evidence that A) the pregnant person cannot afford to support a child, B) the pregnancy is the result of rape, C) the pregnant individual's physical health is in danger (including life-threatening conditions), and/or D) if there is severe fetal abnormality.
United Kingdom	Varies in England, Northern Ireland, Scotland, and Wales – overall, abortions are provided upon request (without the need for justification) until 12 weeks' gestation. After 12 weeks' gestation, abortion is only provided if justified. Specifically, abortion is provided given sufficient evidence that A) the pregnant person cannot afford to support a child, B) the pregnancy is the result of rape and/or incest, C) the pregnant individual's mental and/or physical health is in danger (including life-threatening conditions), and/or D) if there is severe fetal abnormality.
United States	Abortion is legal in the United Sates under Roe v. Wade (1973) and Casey v. Planned Parenthood (1993). However, many individuals have restricted abortion access as a function of jurisdiction. This includes state legislation imposing gestational limits, as well as physical access to clinics. In six states only one clinic that provides abortion services is available. Consequently, many individuals live 100 miles or more away from an abortion provider.
Uruguay	Abortions are provided upon request (without the need for justification) until 12 weeks' gestation. After 12 weeks' gestation, abortion is only provided if justified. Specifically, abortion is provided given sufficient evidence that A) the pregnant person cannot afford to support a child, B) the pregnancy is the result of rape, and/or C) the pregnant individual's mental and/or physical health is in danger (including life-threatening conditions).

Note. A non-exhaustive list to illustrate some of the cross-cultural differences in conditions necessary to receive abortion services. Information synthesized from the World Health Organization's Global Abortion Policies Database (see https://abortion-policies.srhr.org/)