ABSTRACT

The Experience of Female Infertility: Who Do Women Talk To When They Cannot Conceive?

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The psychological effects of infertility on women are documented well in the research literature. However, a pervasive notion still exists that women do not want to speak about their experiences with infertility. Challenging this, women, in recent years, have been using social media to share their stories about infertility, but the stories often seen are from women with 'happy endings.' Where are the stories from women who never have a child, from the women who cannot adopt? To understand this issue, a survey was developed, focused on understanding the relationships between a woman's sense of self and motherhood, how she experienced infertility, and who she chooses to communicate with about her experiences. The survey did not yield any data; thus, the objective of this project became a review of existing literature, assessing gaps in the literature, and proposing methods for filling those gaps. The conclusion: women who do not communicate about their experiences with infertility experience a changed sense of self which affects their views on being a woman, motherhood, and whether they will share their stories with others, either verbally or on social media.

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THE EXPERIENCE OF FEMALE INFERTILITY

WHO DO WOMEN TALK TO WHEN THEY CANNOT CONCEIVE?

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By

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DEDICATION

This Thesis Project is dedicated to every woman who has or will, experience infertility. May you always know that your stories have power and deserve to be told.

CHAPTER ONE

Introduction

Objective of the Paper

In searching for a thesis topic, I encountered several women, older than I, on social media who were posting lengthy updates or blogposts about their experiences with infertility. Many of these women were posting because they had experienced infertility but had since either given birth to or adopted a child. Much of what they wrote was meant for other women experiencing infertility: they wrote about the anguish, the way it challenged their identities, and the feelings of hopelessness. Most interesting, however, was what these women said about why they never told anyone (at least friends and family) what they were experiencing, while they were dealing with it. Moreover, while none of them named this hesitation to speak about their experiences, something was happening. Many of these women were longtime family friends, members of our church, mothers of my school friends, and learning that women, (whom I consider family), were struggling for years without telling anyone was incredibly disheartening.

In earnest, I asked myself "Why are these women not communicating about their experiences, until after the fact?" Which led me to question then, if these were the stories I heard about, the ones with happy endings, how many more women are still suffering and how many of them never realize their happy ending? Recognizing that the aim of this project was not to undertake a complete understanding of infertility, I approached this topic hesitantly: what could I understand and thus write about. Regardless, asking women

about their experiences with infertility is important. This paper adds to an ongoing conversation about the health and well-being of our mothers, sisters, daughters, and friends.

Hypothesis, Research Questions, and Predictions

Although it is not within the scope of this paper to empirically answer the question, "Why do women not talk about their experiences with infertility?" a plausible answer can be theorized. As fundamentally social creatures, human beings tend to aggregate into social groups. These groups provide us with a framework for understanding the world, making decisions, and accessing support and resources. Why then do women who experience infertility not share their experiences with their social groups, thus removing themselves from understanding and support? A better question, and one that might be answered more easily, what is keeping women from sharing their experiences with infertility?

Within social groups, there are those with power and those without. This 'power' enables (or disables) members to find and access resources as well as define their position within the group.[1] Women who experience infertility find themselves in an odd position: they feel 'other,'[2] finding themselves cut off from resources and support because they feel their narrative has no place in the group. This notion, although harmful, is maintained by what Barbara Ehrenreich calls the 'Bright-sided hypothesis.'[3] Essentially, women believe their stories are not worth telling because experiencing infertility

[1] Foucault, *The History of Sexuality*.
[2] Whiteford and Gonzalez, "Stigma."
[3] Ehrenreich, "Bright-Sided."

challenges their identity, labels them as 'other,' and forces them to suffer outside their social group, only returning when their happy ending is achieved.

In reviewing the Facebook posts I saw that prompted my original interest in this subject, all the women who were posting had a positive story to tell-they had achieved their happy ending. Openly posting on Facebook for all to see is not where one is likely to find women who are still struggling, but might these women who have not achieved (or will never achieve) their happy ending be flocking to private groups? Do the walls of 'privacy' offer women who are suffering infertility a place to share, or are they still shamed into silence by group mentality that promotes positivity over everything else?

Hypothesis

I recognize that answering the question, "Why do women not talk about their experiences with infertility, specifically when they are going through it?" would be difficult, if not near impossible, to accomplish. More reasonably, I hypothesize that a) women who have experienced infertility would exhibit significant changes in their self-perception, b) that seeking treatment would positively affect a woman's experience with infertility and c) that women would feel more comfortable speaking about their experiences after, not during, the process. This paper cannot answer the overarching question, but some useful research questions can be extracted for analysis. From this hypothesis, five research questions were identified and used as the basis for constructing a survey, as well as the subsequent research for this paper.

Research Questions:

1) Is there an association between being a woman and becoming a mother, and if so, how does this association affect women who are experiencing infertility?
2) Does the physical, emotional, and psychological stress of infertility affect a woman's self-perception?
3) Is the desire to have children influenced by or linked to a woman's relationship with her partner?
4) Does seeking treatment positively influence or affect a woman's experience with infertility?
5) Who do women feel more comfortable talking to about the experience of infertility?

From these questions, several predictions were formulated. Testing these predictions was the objective of the study; however, since no one completed the survey, analyses of existing literature was used. The predictions are as follows.

Predictions

Question 1: Is there an association between being a woman and becoming a mother, and if so, how does this association affect women who experience infertility?

Prediction 1A: Many women will exhibit a strong association between their perception of womanhood and motherhood, so much so that the "success" or "failure" in becoming a mother will reflect similarly in their perception of being a woman

Prediction 1B: This connection between being a woman and becoming a mother will cause stress, especially when becoming a mother is not achievable due to infertility.

Prediction 1C: Women who consider themselves religious will exhibit a higher degree of connection between womanhood and motherhood due to cultural expectations.

It must be noted that being a mother is not the sole marker of being a woman. Understanding what constitutes being a woman is fluid and beyond the scope of this essay. However, examining the connection between motherhood and womanhood is important for understanding how women who have experienced infertility change based on their experiences. Endeavoring to understand these changes may also illuminate more on why women tend to not talk about their experiences, or why women prefer a person/group of people to communicate.

Question 2: Does the physical, emotional, and psychological stress of infertility affect a woman's self-perception?

Prediction 2A: Women who experience infertility will exhibit and recognize a changed self-perception. This change is not inherently negative; however, it may begin that way.

Prediction 2B: In reflecting on what defines them as successful, women who experience infertility will tend to focus on aspects of their life in which they have more direct control such as, personal relationships, education, job performance, etc. Because being a woman and motherhood are inextricably connected, experiencing infertility will challenge a woman's sense of identity and purpose. This challenge is stressful and can be compounded if a woman feels that other areas of her life suffer as a result. However, the stress of this challenge to identity and purpose can be remediated.

Question 3: Is the desire to have children influenced by, or linked to, a woman's relationship with her partner?

Prediction 3A: Women who are in committed, long-term relationships will self-report that they are emotionally and financially capable of raising children and that they strongly desire to have children.

Prediction 3B: The level of partner support will influence how a woman processes dealing with infertility.

Here it is important to remember the partner's role in conception and pregnancy, as well as parenting. Concerning infertility, addressing the experience of partners, whether that be men or women, is beyond the scope of this paper. However, the presence or absence of a partner and degree of support that partner offers can drastically influence a woman's experience with infertility.

Question 4: Does seeking treatment positively influence or affect a woman's experience with infertility?

Prediction 4A: In general, women who are insured and financially stable or well off will have better access to medical treatments and counseling.

Prediction 4B: Women who consider themselves religious will be less likely to seek out invasive medical interventions such as IVF and will be more likely to adopt children or seek out counseling due to beliefs about God's will and interfering with a natural process.

Question 5: Who do women feel more comfortable talking to about their experience with infertility?

Prediction 5A: Women will feel more comfortable speaking with their medical provider than with close family or even friends.

Prediction 5B: Women who share their stories on social media (Facebook, Instagram, blogs, etc.) will be more likely to speak about their experiences openly.

Prediction 5C: Women who post their stories on social media will be more likely to have resolved their issue with infertility than to be actively struggling with it.

Prediction 5D: Women who share their stories on social media are more likely to consider themselves religious.

Background Information

Every organism on the planet engages in some form of reproduction, from asexual bacteria to sexually reproducing, placental mammals, such as humans. The biology of reproduction differs from species to species, and different reproductive strategies can be found in different environments. Human beings are classified as placental mammals; our young develop in the female's uterus for approximately 40 weeks before birth. The physical relationship between mother and fetus is mediated by the placenta, a specialized organ grown from maternal and fetal tissue only during gestation. Along with the growth of the fetus and placenta, a woman's body undergoes many changes brought on by cascades of hormones and other biological components. Many of these can be identified as hallmark signs of "pregnancy," a rounded, growing belly, enlarged breasts, swollen ankles, food cravings or aversions, and the list continues.

Pregnancy is a uniquely female phenomenon. Some might view this as a defining characteristic of being a woman; however, it is important to note that "being female" is more than just the ability to bear children.[4] Addressing gender fluidity is beyond the

[4] Layne, "Unhappy Endings."

scope of this study; however, exploring the relationship between being female and motherhood is addressed in the survey on which this paper is based.

Bearing children is not the only component of being a woman, but it is an important factor. What happens then when a woman, who wants to have children, cannot? First, this could be happening for a variety of reasons. Some women might be unmarried, and while they do want children, feel that being married or at least being in a committed long-term relationship is a precursor to having children. A far more prevalent reason a woman might not be able to have children is that the woman and her partner are experiencing infecundability, colloquially referred to as infertility. Infecundability is defined as the inability to support conception. This can occur for numerous reasons; issues with the female's reproductive system, with the male's reproductive system, with both partners' systems, or for unknown reasons. Factors that affect one's ability to conceive are variable and complex; what affects one individual may not affect another in the same way.[5] In the survey, infertility was used instead of infecundability; the same will be done in this essay.

Public perception is that infertility is heavily influenced by age, specifically the age of the woman. A study conducted in Denmark in 2013 reveals that while age is a significant factor, especially for women, it is not the only factor contributing to infertility. Other factors include environmental stressors and genetics. In this study researchers also found that the peak of fertility appears to be around the age of 30 for both men and women. Researchers found that the decline in fertility occurs more rapidly in women than

[5] Rothman et al., "Volitional Determinants and Age-Related Decline in Fecundability."

in men.[6] However, this is variable by population; one study reveals that body fat percentage at birth affects long-term ovarian function in women.[7]

The incidence of infertility is increasing for several reasons. First, the medicalization of reproduction has increased the number of women being diagnosed with infertility.[8] At the same time, new diagnostic methods can also account for an increase in the incidence of infertility. Second, men and women are getting married later in life. Especially for women, this is mostly due to the increase in education and desire to pursue a career before marrying and subsequently having children.[9] And third, many women take some form of prescribed birth control, which variably affects a woman's ability to conceive. For example, some women who take a combination estrogen and progesterone report the return to normal ovulation and menstruation 6-12 months after they stop taking the pill.[10] This can be misleading since not all women who utilize birth control experience infertility. Rather this information serves two points: reproduction is a complex series of processes, and individuals' bodies respond variably to stimulus and suppression of the reproductive system.

Introduction to Research Methods

In order to collect data to analyze the predictions listed above, a survey was constructed, which would be administered to women who had experienced or were experiencing infertility. The survey, which consisted of about 29 questions, mostly rated,

[6] Rothman et al.
[7] Jasienska, Thune, and Ellison, "Fatness at Birth Predicts Adult Susceptibility to Ovarian Suppression."
[8] Jensen, "Improving Upon Nature."
[9] Kravdal and Rindfuss, "Changing Relationships between Education and Fertility."
[10] Hyde and DeLamater, "Contraception and Abortion."

Likert-style questions with several free responses, was submitted to Baylor's Institutional Review Board (IRB) council. Since the survey did not collect any identifying information, this study was exempted from IRB approval.

After exemption, the survey was emailed along with a marketing page to over 114 IVF clinics, Obstetricians and Gynecologists (OBGYNs), and reproductive specialists across the state of Texas. We asked these medical professionals to print the marketing page that contained a QR code link to the online survey and place it on the front desk for clients and patients to see. This type of marketing is a limitation and will be discussed in detail later. The email sent to the clinics and the advertisement to be printed can be found in Appendices A and B, respectively (pgs. 49, 51).

The survey was emailed to the clinics on October 23, 2018, and accepted responses until February 1, 2019. Clinics were re-emailed once every two weeks until the end of January; despite this, very few clinics even replied to the surveyors. Of those that did reply, it can only be speculated how many of them followed through with printing and placing the survey advertisement and directing their patients' attention to it. That is not to say that the lack of data collected by the survey is the fault of the professionals working in the clinic, but rather that the recruitment method for this survey was not effective. Unfortunately, no data were collected by the survey. Reasons for this are discussed below, with suggestions for improvements regarding future research discussed in Chapter 3.

Structure of Questions

The first screen consisted of a consent form with explanations of survey purpose, and the rights as a participant, assuring them that the information they provide will be kept confidential and is non-identifying. Contact information was provided should if participants felt the need to contact surveyors. The consent form can be found in Appendix C (pg. 52).

The initial questions were aimed at gathering non-identifying, demographic information. This information will be useful in assessing who is taking the survey and therefore offer a glimpse into who is experiencing infertility and what their experience entails. Questions 1-9 requested demographic information such as age, ethnicity, occupation, insurance status, and highest degree of education. Of note, question 3 is open-ended and asks the participant about religiosity. This is asked to identify any correlation between religiosity and usage of medical interventions.

Questions 10-13 ask participants to think about how they define themselves, do they feel they are confident or successful, and what success means to them. Questions 14 and 15 explore the association between being a woman and becoming a mother by asking participants to define what these terms mean.

Questions 16-22 ask about partner relationship and their desire to have children. Women who take the survey will undoubtedly express a desire to have children, and it is also expected that women who express the desire to bear children will also self-report being in a long-term and committed relationship.

The fourth section asks participants to provide details about their experience with infertility, such as: how long they have been dealing with infertility, how many times

they have experienced a miscarriage, how many times they have been pregnant, and what types of infertility treatments they have sought. (e.g., professional counseling, in vitro fertilization (IVF), fertility specialists, Obstetrician/Gynecologist, etc.)

Question 28 is broken down in several components (listed as ‘a’ through ‘r’) using a Likert-type scale of 1-5 (1=completely disagree, 5=completely agree). The data from the questions will provide a means for quantifying the participants’ experience with infertility by looking at their changed perceptions, whether negative or positive, how they are coping with their experience, and whether or not they feel hopeful about their situation. The survey and the list of clinics emailed can be found in Appendices D and E, respectively (pgs. 54, 57).

Participant Selection and Means of Delivery

Participant recruitment was attempted at fertility clinic offices across the state of Texas. 114 clinics were emailed the information concerning the survey; this included a personalized email stating the objective of the study and how participating works, the survey flyer which included a link to the survey, and a list of the survey questions. We asked the clinics to print and place the flyer at the front desks of their clinics for patients and clients to see.

The survey, which encompasses a total of 29 questions, takes up to 10 minutes to complete. Ideally, participants would take the survey in between checking in for their appointment and seeing a physician, although this is not necessary for a participant to provide representative answers.

Why this Method Was Not Effective

This section will discuss the survey constructed, why this research method did not work and posit suggestions for further improvement. Mainly, the survey itself did not appear to be a problem, but rather the method of advertising to potential participants was ineffective. While this method of collection was less time intensive and inexpensive, it proved unproductive at collecting data. Several reasons for this are discussed below; none are confirmed but taking these into account will be beneficial for the construction of future studies.

The decision to construct the survey and distribute it via email to the selected clinics (asking them to print the flyer and direct their patients' attention to it) was made in order to save time and money. This method required no research expenditures and decreased the amount of time needed to collect the data. However, this method also had several flaws, which in hindsight may have contributed to the survey not collecting any data. Moving forward these flaws can be taken into account when designing future research projects.

Foremost, staff members at clinics are busy. Checking patients in and out, filing insurance claims, answering questions, fielding phone calls, etc. Of the 114 clinics emailed, only 15 responded that they would be printing and placing the advertisement where patients could see it. Of these 15, it is speculated that not all did so, again not because they do not care but because they are busy with their routine tasks. Furthermore, even if all 15 clinics printed and placed the advertisements, patients may not have noticed/had it brought to their attention and therefore would not have taken the survey.

Furthermore, participation may have been limited because of the sensitive nature of the questions asked. It was clear from the beginning that no questions were required for participation just by the description of the study. In addition, women at these clinics may already feel burdened with paperwork and may have no interest in filling out even more information.

CHAPTER TWO

Research

Introduction

While data collection intended for this study did not yield any data for analysis, there was an opportunity to apply existing knowledge to the research questions and predictions. Another benefit is that now we can discuss cross-cultural data, while the intended study would have looked at women who are most likely insured, living in large cities throughout the north, south, and centrl regions of Texas.

The information reviewed below focuses mostly on women in developed nations, with some variation. Clearly, these articles were not asking the exact same research questions initially posited above. Regardless, the information provided by these studies will be useful for three main reasons: 1) evaluate some of our predictions made based on the research questions of this study 2) to understand better where gaps in the existing research are and 3) to help posit methods of gathering future data.

Important Definitions

Sex vs. Gender

The relationship between sex and gender is complicated, firstly because they are often used synonymously. According to research, however, it is best to treat sex and gender as separate components of an individual. ‘Sex’ is a broad term referring to anatomical sex, genetic sex, phenotypic sex, and hormonal sex. Sex typically refers to the

biological based components of an individual's identity: anatomical parts, genetic factors, the expression of those factors (phenotypic), and hormonal. All four of these may be in concordance with one another, or some may differ.

Gender, a social construct is fluid, the origins of which can be traced back to the Kinsey scale, originally published in 1948.[11,12] Alfred Kinsey's research revealed how sexuality is best expressed by a fluid continuum. This fluidity means that through an individual's life, their sexuality can, and probably will, change. The data utilized in Kinsey's first report was collected over 15 years, including thousands of participant interviews. Contrary to popular belief, there is no 'quiz' or 'test' that will assign an individual a number on the Kinsey scale, rather Kinsey and team assigned individuals a number based on their sexual history[13].

Based on the work conducted by Kinsey and others, it is concluded that sexuality is fluid. Following this train of thought then, gender is also fluid.

"Gender identity relies on a person's sense of self as male or female or feeling between sexes. The concept of gender identity can be better understood keeping distinguished the notions of "sex," "sexuality" and "gender." Even if gender seems to flow naturally from biological sex, gender and sex are not interchangeable terms" - Gender Fluidity Across the World (pg. 2554).[14]

This quote summarizes well the definition of gender: a social construct, independent but often related to sex and sexuality, that heavily influences a person's

[11] Kinsey, Martin, and Pomeroy, *Sexual Behavior in the Human Male*.
[12] Institute for Sex Research. and Kinsey, *Sexual Behavior in the Human Female*.
[13] "The Kinsey Institute at Indiana University."
[14] Fontanella, Maretti, and Sarra, "Gender Fluidity across the World."

world view and experiences. From this same article, the authors add that gender then encompasses biological aspects but also, "the behavioral, psychological and social characteristics of men and women." (pg. 2554).

Fontanella et al. is not the only study with these results, in fact, it of one of many articles published in recent years examining the concept of gender fluidity. Understanding every nuance of sex, sexuality, and gender is not the aim of this study, however understanding basic definitions, and how the three interact will help examine the association between being a woman and becoming a mother. Looking back, Kinsey's research on the fluidity of sexuality paved the way for a better understanding of the fluidity of gender.

Womanhood

Women have traditionally been associated with home life, as they typically cared for children and the home. Before World War II, women in the United States rarely worked outside the home, and if they did, it was because they were unmarried and/or did not have children. There was a set of cultural norms that dictated when and in what order a woman completed significant milestones in her life: work, marriage, and children. More recently, women are increasingly entering the workforce, and while challenges like paid maternity leave, discrimination based on gender, and gender pay-gap do exist, the general trend is upward: more women are being employed. Increasing rates of employment coupled with increased levels of education have resulted in women (and men) marrying and having children later in life than previously.[15]

[15] Kravdal and Rindfuss, "Changing Relationships between Education and Fertility."

These changes, in combination with gender fluidity, make defining 'womanhood' difficult. Instead of focusing strictly on biology or what roles a woman does and does not fulfill, a better definition of womanhood would consider the cultural and historical contexts of 'being a woman,' how a woman chooses to make her place in her society and how that affects her self-perception.

Motherhood

Being able to carry a fetus and birth a baby is a unique, physical phenomenon attributed only to females. However, the qualities that make one a mother are not wholly dependent on biology, genetic relatedness, and gender. Adopting children is widely practiced in America and is documented in other cultures. Mothers whose children are adopted might not bear any genetic similarities (although sometimes they can be) to the child they are rearing, but this in no way makes them any less of a mother.

In some societies, maternal duties are shared among several women in the family. For example, in Peter Ellison's book, *On Fertile Ground*, he describes this phenomenon in hunter-gatherer groups. In these smaller communities, mothers, aunts, sisters, and even grandmothers engage in maternal duties.[16] This method ensures that no woman goes through childbirth, breastfeeding, and motherhood alone; providing a sense of security and continuous access to social support.

Expanding on this, motherhood then is not wholly based on genetic relatedness, but more on the act of mothering. This can include duties like gestation, parturition (giving birth), lactation and breastfeeding, and other physical or physiological aspects of

[16] Ellison, *On Fertile Ground*.

motherhood. At its core being a parent includes responsibilities for biological and emotional care.[17] The biology of motherhood is unique and extraordinary, but altogether secondary compared with the emotional component of motherhood.

The Association between Motherhood and Womanhood

Cultural, Historical, and Spiritual

The association between motherhood and being a woman is influenced by multiple factors and is vital regarding the discussion of infertility. Being a woman and being a mother have been associated with one another for centuries, and rightly so: several major religions, including Christianity, feature a creation story in which a woman is either bestowed with the gift of child-bearing or already possess it. Culturally, the association between womanhood and motherhood became solidified based on religious influences and out of necessity.

As previously discussed, women were primarily caregivers and homemakers before the 20th century. This stems from the division of labor seen in the hunter-gatherer societies studied by Peter Ellison. In these groups, the duties of life and survival are gendered. This is not because one sex is considered superior to the other, but because logically it makes sense to divide the tasks this way.[18] In this way, womanhood and motherhood became strongly associated.

Over time this association has evolved into a benchmark for gauging the success of a woman based on her ability to become a mother. While the original association of

[17] Scott, Cayleff, and Lara, "Stories of Idenity and Community."
[18] Ellison, *On Fertile Ground*.

womanhood and motherhood was benign, utilizing motherhood as a critical benchmark for being considered a woman is *inaccurate and harmful*.

How a society views infertility has a lasting impact on how a woman perceives and copes with her infertility experience. This is because a woman's understanding of infertility is shaped by cultural beliefs before she ever experiences it herself.

In some countries, the family unit is of the highest importance, the needs of the group being met by individuals working together. Often the duty to have children is commensurate with continuing the bloodline. There are some differences from group to group, mostly based on religious and political factors, but overall people in many of these cultures tend to view having children as a familial duty. For example, a study conducted in Pakistan by Naz and Batool concluded that both men and women reported feeling immense familial pressure to have children. Also, the women experiencing infertility reported feelings of an inability to cope with their diagnosis and subsequently discuss their experience with their family.[19]

Women from various backgrounds express their sense of purpose and identity differently. For some women, having children is a part of their identity and purpose because it is important to their family, while others feel that having children will result in ultimate, personal happiness. Regardless of the reason, women of various cultural backgrounds incorporate motherhood into the fabric of their identities. A study conducted in 2015 in the United States obtained information from women diagnosed with primary and secondary infertility. The data revealed that women, especially those diagnosed with

[19] Naz and Batool, "Infertility Related Issues and Challenges: Perspectives of Patients, Spouses, and Infertility Experts."

primary infertility, overall experienced a loss of self-compassion.[20] Mainly, the inability to conceive challenges a woman's sense of identity.

There is an overlap between an individual's sense of purpose and identity; they inform one another and can be re-evaluated and changed. Infertility challenges a woman's perception of purpose in collectivist societies; her contribution to the future of her family is being hindered. In individualistic societies, infertility challenges a woman's identity, how she individually defines herself. While infertility challenges women differentially across cultures, it produces similar feelings of loss, grief, and hopelessness.[21]

These feelings of grief and hopelessness are in part due to the association between motherhood and womanhood. Balen and Bos, who conducted a study in 2004 regarding the worldwide perspective on infertility and cultural perceptions, suggest that thinking motherhood and womanhood are synonymous is hurtful and does not allow for healing in the face of infertility.

Further, they suggest a "Life Story" approach to addressing the effects infertility has on women. In this model, womanhood and motherhood are viewed as components of a fluid and dynamic "Life Story" narrative. Perceived failure in one area of an individual's "Life Story" is just that, a perceived failure in one area.[22] It follows then that women who are experiencing infertility are not failures as women or as mothers. The physical, mental, and emotional pain associated with infertility are still very real and

[20] Raque-Bogdan and Hoffman, "The Relationship Among Infertility, Self-Compassion, and Well-Being for Women With Primary or Secondary Infertility."
[21] Daniluk and Tench, "Long-Term Adjustment of Infertile Couples Following Unsuccessful Medical Intervention."
[22] Balen and Bos, "Infertility, Culture, and Psychology in Worldwide Perspective."

should be addressed with sensitivity and seriousness, considering each woman's unique "Life Story."

Addressing Research Questions and Predictions

Question 1: Is there an association between Womanhood and Motherhood?

The tendency to associate being a woman and becoming a mother is not illogical, simply because anatomically only women can bear children. Furthermore, it makes sense that women were historically charged with taking care of the children, as a division of labor between men and women allowed for the duties to be managed more efficiently. [23] However, in the modern era, things have changed as women are more present in the workforce and even delaying the onset of marriage and having children. Arguably then, a new approach to associating womanhood and motherhood should be considered. This new way of thinking should reflect how women can find identity in being a mother but also in other areas of their lives.

Most of the literature agrees that associating womanhood and motherhood is not inherently wrong. However, this same literature also believes that advocating for women to base all or even most of their identity on becoming a mother is harmful. Jessica Brody and Lisa Frey argue in an article about how childless women view motherhood, that placing importance on becoming a mother detrimentally affects the health of women, especially those who cannot conceive.[24] In reviewing Prediction 1A, the association between womanhood and motherhood is so strong that when women cannot achieve

[23] Ellison, *On Fertile Ground*.
[24] Brody and Frey, "Mis(Sed) Conceptions."

motherhood, it challenges their sense of identity. Thus, failure as a mother is translated to mean failure as a woman.

This line of thinking is damming, particularly because infertility is often regarded as a 'silent handicap,' meaning that while it irreparably changes a woman's life, the changes are not always evident from an outside perspective. Infertility is regarded as a deviation from normal, which is reinforced by societal norms. In *Stigma: The Hidden Burden of Infertility*, authors argue that two main societal norms contribute to infertility being regarded as a 'silent handicap': 1) the purpose of marriage is procreation and 2) all married couples should want to procreate.[25]

Body and Frey posit a better way of thinking, "Placing women's reproductive struggles in a sociocultural context may help to increase women's sense of agency and authenticity in negotiating their perceptions of motherhood as they make reproductive decisions." (pg. 1) While the connection between womanhood and motherhood is not problematic, the extent to which women base their identity on it causes significant stress (Prediction 1B).

Research varies on the topic of psychological stress caused by infertility. Studies conducted in the 1990s, such as Griel et al. found no psychopathological difference between women who experienced infertility and those who did not.[26] However, more recent studies such as, Verhaak et al. and Chen et al. report increasing incidence of psychological disorders in women who experience infertility[27].

[25] Whiteford and Gonzalez, "Stigma."
[26] Greil, "Infertility and Psychological Distress."
[27] Verhaak et al., "Women's Emotional Adjustment to IVF"; Chen et al., "Prevalence of Depressive and Anxiety Disorders in an Assisted Reproductive Technique Clinic."

This high correlation of psychological symptoms and disorder among women experiencing infertility is further corroborated by a study that found infertile women scored higher for significant predictive measures of depression and anxiety. These significant factors being self-judgment, external, and internal shame. “Shame has been referred to as an important emotion in the experience of infertility, related to a sense of loss of control over the body, feelings of personal exposure, of being a sexual failure or defective in some way.” (pg. 2409)[28]

Other authors conceptualize the stress of infertility as a woman feeling as though she is ‘other.’ This ‘otherness’ forces infertile women to suffer in silence and isolation, further exacerbating any psychological symptoms they may be experiencing. “The sense that their identities have been 'spoiled,' their dignity and privacy destroyed by infertility, keeps women struggling to overcome the condition, suffering their losses in silence, and hoping that their hidden burden will stay hidden.” (pg. 30)[29]

Evidence that psychological distress is a commonality of women experiencing infertility is mounting and serves to support Prediction 1A and 1B further. Because the association between womanhood and motherhood is utilized by many women in constructing their identity, an inability to become a mother challenges her identity and causes psychological stress.

Regarding Prediction 1C, that women who consider themselves religious will exhibit a higher degree of connection between womanhood and motherhood, there is no

[28] Galhardo et al., “The Impact of Shame and Self-Judgment on Psychopathology in Infertile Patients.”
[29] Whiteford and Gonzalez, “Stigma.”

direct evidence to validate this claim. However, there exists some indirect relationship between a woman's religious views and practices and her experience with infertility.

Women in cultural or religious groups that tend to believe infertility is related to one's spiritual life or journey, also tend to seek treatment options in the spiritual community.

A small study conducted in China revealed that the women interviewed cited religion as their primary source of coping. "They rather firmly believed that their devout prayers, especially their firm faith in God, would ultimately give them the strength to overcome the crisis or enable them to conceive. 'Everything we encountered has causes and effects, and God arranged all the events for us. I hold this belief. I endured the pressure and pain for six to seven years before accepting the fact that I am infertile. (Inf-8)'" (pg. 5)[30]

When infertility challenges the identity of the women in this study, they found comfort in their religious beliefs. Moreover, while not all women are religious, many religious women, regardless of denomination or practice, find solace in their religious beliefs. More research is needed to gain a better understanding of how religion influences a woman's perspectives on being a woman, motherhood, and infertility.

Question 2: Does the physical, emotional and psychological stress of infertility affect a woman's self-perception?

Infertility, for some women, might be the most stressful challenge they will endure in their lifetime. The effects of infertility are emotional as well as physical,

[30] Tiu et al., "Lived Experience of Infertility among Hong Kong Chinese Women."

especially if a woman chooses to undergo medical interventions, and psychological. As discussed earlier, the psychological effects of experiencing infertility are widely recognized and cited in the literature. In general, women who experience infertility are more likely to exhibit psychological symptoms that are predictive of disorders such as depression and anxiety, than are their counterparts who do not experience infertility. According to Prediction 2A, women who experience infertility will exhibit a changed self-perception. This changed perception is not inherently harmful, although it may have begun that way. Daniluk and Tench contend that when important events in an individual's life do not occur, it challenges their assumptions about life. These challenges then necessitate a change. "Being unable to produce a child despite one's best effort certainly constitutes such a non-event transition." (pg. 89)[31]

It follows that since womanhood and motherhood are so strongly associated, that an inability to become a mother would cause a woman to question her identity. This process is distressing, and while it may have begun negatively, the end result does not have to be. Women who experience infertility report a wide variety of emotions as they begin the journey of deciding how to proceed and cope: "Feelings of shame, guilt, inadequacy, failure, negative qualities, being de-valued, abnormal, incomplete and not whole. Attribution of a stigmatizing characteristic de-values the individual's sense of

[31] Daniluk and Tench, "Long-Term Adjustment of Infertile Couples Following Unsuccessful Medical Intervention."

self" (pg. 30)[32], "grief, depression, isolation, lowered self-esteem, relationship distress, and sexual dissatisfaction." (pg. 91)[33]

Despite these initial feelings, the research suggests that long-term changes, with the help of intervention, are overall either positive or benign. "It is important to note the continued increase in self-esteem over time for participants in this study, supporting Schlossberg et al.'s (1995) assertion about the importance of time in healing the pain of such a difficult nonevent life transition" (pg. 90)[34] Counseling is advocated as one of the best possible tools for women and partners to utilize long-term in re-shaping their relationships and identities.

From *Infertility and Life Satisfaction Among Women,* McQuillan et al. state:

"The authors find no direct effects of lifetime infertility, regardless of the perception of a problem, on life satisfaction; however, there are several conditional effects. Among women who have ever met the criteria for infertility and perceive a fertility problem, life satisfaction is significantly lower for nonmothers and those with higher internal medical locus of control, and the association is weaker for employed women. For women with infertility who do not perceive a problem, motherhood is associated with higher life satisfaction compared to women with no history of infertility." (pg. 955)[35]

[32] Whiteford and Gonzalez, "Stigma"; Peterson, "The Experience and Influence of Infertility: Consideration for Couple Counselors."
[33] Daniluk and Tench, "Long-Term Adjustment of Infertile Couples Following Unsuccessful Medical Intervention."
[34] Schlossberg, *Counseling Adults in Transition*; Daniluk and Tench, "Long-Term Adjustment of Infertile Couples Following Unsuccessful Medical Intervention."
[35] McQuillan, Torres Stone, and Greil, "Infertility and Life Satisfaction Among Women."

Over time, the effects of infertility do cause changes in a woman's self-perception, but with proper resources, she (and her partner) can redefine what constitutes a positive satisfaction with their life, albeit different than it was before.

McQuillan et al. also write about how if motherhood were to not occupy such a central place in the development of identity, women could achieve and maintain higher levels of life satisfaction despite experiencing infertility. Overall, this is important because approximately 10% of infertility cases cannot be explained.[36] In conjunction with counseling, transitioning the focus away from motherhood during identity development could prove beneficial for women long-term.

Prediction 2B posits that women who experience infertility will focus on defining their success through their jobs, education, and personal relationships. While there is a plethora of research regarding how women cope with infertility, challenging their sense of identity and success, there is not as much research exploring specifically where women find their new identities. In broad terms, the identification and pursuit of alternate life paths or roles are important for women adjusting to a life of potential childlessness.[37] McQuillan et al. suggest that there could be evidence that women who experience infertility find a renewed sense of identity and success in their education, "Women who meet the criteria for infertility and perceive infertility as a problem have higher life satisfaction if they are employed." (pg. 975)[38]

[36] Masoumi et al., "An Epidemiologic Survey on the Causes of Infertility in Patients Referred to Infertility Center in Fatemieh Hospital in Hamadan."
[37] Daniluk and Tench, "Long-Term Adjustment of Infertile Couples Following Unsuccessful Medical Intervention."
[38] McQuillan, Torres Stone, and Greil, "Infertility and Life Satisfaction Among Women."

While there is no direct evidence, the validity of Prediction 2B can be speculated as the research suggests that women who experience infertility but seek alternative meaning for their life still exhibit high life satisfaction. This alternative meaning could include education, job status, and personal relationships. Gaining a better understanding of this topic will require further research.

Question 3: Is the desire to have children linked to a woman's relationship with her partner?

A woman's desire to have children is influenced by multiple factors and is unique to each woman and her experiences and goals. Prediction 3A suggests that woman who are in long-term, committed relationships, will self-report that they are emotionally and financially capable of raising children and that they strongly desire to have children. This is not to say that all women in committed relationships will desire to have children, but that being in a long-term relationship can be correlated with a woman's desire to have children.

McQuillan et al. recognize marriage as a kind of committed relationship, and a significant factor concerning a woman's life satisfaction.[39] Marriage and motherhood are closely correlated, like how being a woman and becoming a mother are related. Therefore, it follows that women who are married are likely to exhibit a strong desire to have children. However, marriage is not the only type of committed relationship; more research is needed to determine the extent to which a woman's relationship with her partner affects her desire to have children.

[39] McQuillan, Torres Stone, and Greil.

In reviewing the literature, it is evident that a woman's level of education also affects her desire to have children, and when she has them. This was not originally a prediction but should have been: a woman who possesses higher levels of education will exhibit a decreased desire to have children than women who do not achieve higher levels of education, although this difference might be small. Authors of *The Importance of Motherhood* found no correlation between a woman's education level and her desire to have children but did find a correlation between education and delayed onset of having children. The authors believe this to be a reflection of multiple factors, but namely, non-family friendly workplaces rather than educated women not valuing or desiring children.[40]

Prediction 3B posits that the partner's support, or lack thereof, will be influential in how a woman processes dealing with infertility. A partner's experience with infertility, albeit different than the woman's, is still difficult. Daniluk and Tench cite that a woman's relationship with her partner may be compromised or changed while dealing with infertility, "The findings from the current study suggest that the harm caused is further exacerbated by the considerable challenges of making the transition to biological childlessness after failed fertility treatments." (pg. 97)[41]

Changes experienced by couples dealing with infertility include, but are not limited to isolation, grief, lowered self-esteem, and some studies even cite decreased sexual functioning and satisfaction. [42] The impact of infertility on self-esteem and

[40] Mcquillan et al., "The Importance of Motherhood Among Women in the Contemporary United States."
[41] Daniluk and Tench, "Long-Term Adjustment of Infertile Couples Following Unsuccessful Medical Intervention."
[42] Daniluk and Tench.

identity are well documented; however, the impact on sexual function and satisfaction requires further research. One study did not find any correlation between infertility and decline of sexual function and desire.[43]

A study assessing perceptions of infertility found that partners and spouses were ranked among the most helpful sources of support, followed by online support groups, friends, websites, family, and then finally infertility specialists.[44] Therefore, including partners in the healing process, through counseling or even medical procedures, may prove helpful to women experiencing infertility.

Question 4: Does treatment positively affect a woman's experience with infertility?

After a diagnosis of infertility, women and their partners have several options for treatment. Commonly, many people think of IVF as a treatment for infertility; however, there are many more options including counseling, surrogacy, adoption, and more. It is predicted that women who are insured and financially stable or well off will have more access to medical treatment, counseling, and other resources.

In support of this Daniluk and Tench write about their study participants:

"Those who elected to participate in and complete the study were primarily White, well-educated, middle-class and upper-middle-class individuals whose relationships had survived the turmoil and formidable stresses of infertility. Although this demographic

[43] Eugster and Vingerhoets, "Psychological Aspects of in Vitro Fertilization."
[44] Kahlor and Mackert, "Perceptions of Infertility Information and Support Sources among Female Patients Who Access the Internet."

profile is quite characteristic of the demographic profiles of many couples who pursue medical solutions to their infertility." (pg. 96)[45]

Many studies also list socioeconomic and racial homogeny of their sampling population as a significant limitation of their studies. Women at fertility clinics are the most readily accessible population of women experiencing infertility, but they are in no way representative of all women who experience infertility.

In some countries, only the wealthy can afford fertility services because this type of medical care is not readily available or is classified as non-essential. For example, the women interviewed for the *Lived Experience* study in China either had the option of paying full price for fertility services (because the services are 'non-core') or seeking treatment elsewhere. One woman interviewed made the decision to spend a month in Taiwan to undergo IVF; however, she indicated that this was a harsh experience as she traveled alone and underwent treatment without any support system. In countries where clinics and hospitals are far away, understaffed, and not well supplied, fertility services are even less likely to be offered, much less used.

Prediction 4B states that women who consider themselves religious will be less likely to seek out medical interventions such as IVF and will be more likely to adopt or seek out counseling. This prediction is based on how major religious groups approach the use of birth control and their views on reproductive rights, technologies, and research.

There does not appear to be evidence directly addressing this topic, but several research studies do offer pieces of useful information. Firstly, Vingerhoets and Eugster

[45] Daniluk and Tench, "Long-Term Adjustment of Infertile Couples Following Unsuccessful Medical Intervention."

explore the physical and psychological toll IVF takes on a woman's body and mind. Also, the authors extend this taxation to partners, claiming that they also feel the psychological and physical effects.[46] The conclusion is that couples who choose invasive medical procedures, such as IVF, suffer more than couples who choose adoption or counseling.

One article addresses three major religious groups' views on fertility treatments. Hinduism, a polytheistic religion, is more accepting of a variety of fertility treatments. The justification is that the influence of multiple deities can either be praised or blamed for fertility, or lack thereof and that the complicated nature of the reason(s) for infertility permit intervention. In contrast, Islam and Christianity's are monotheistic and follow decrees, ordinances, and proclamations made by central authority figures. "There appears to be a large difference between Islam and Christianity concerning the extent to which these edicts are obeyed and the weight they carry among the faithful: they seem to have a much stronger influence among Muslims than among Christians." (pg. 247)[47]

There is no direct data to indicate whether women who consider themselves religious are more likely to adopt or participate in counseling. However, adopting could prove a viable option for couples experiencing infertility, whose preference would be to remain sensitive to their religious beliefs. Regardless of religious commitment, studies have shown the couples who adopt show, "significantly better adjustment … versus those who had not made this role transition by the conclusion of the study." (pg. 97)[48] Adoption

[46] Eugster and Vingerhoets, "Psychological Aspects of in Vitro Fertilization."
[47] Balen and Bos, "Infertility, Culture, and Psychology in Worldwide Perspective."
[48] Daniluk and Tench, "Long-Term Adjustment of Infertile Couples Following Unsuccessful Medical Intervention."

is believed to a practical choice for infertile couples, especially those who may be concerned about their religious beliefs conflicting with other infertility treatments.

In addition to the avoidance of conflicting with religious convictions, adopting is a good option for infertile couples because adoptive parents exhibit fewer depressive symptoms than couples pursuing medical interventions.[49] This is in part due to the physical and psychological taxation treatments like IVF extoll on a couple. The same studies, however, also state that symptoms of anxiety are higher for adoptive parents than couples pursuing medical based fertility treatments.

Question 5: Who do women feel most comfortable speaking to about their experience?

It was predicted that women would feel more comfortable speaking about infertility with medical providers rather than friends or close family. Testing this prediction necessitates acknowledging that many women do not reach out to medical providers, because they choose not to or because they do not have access to providers.[50] Therefore we must ask that, of the women who reach out to medical providers, who do these they more comfortable speaking with about their experience with infertility?

Research suggests that women do not find comfort in speaking with anyone, regardless of their profession or proximity, about their experiences with infertility. Women who reach out the medical providers have been documented to feel that the medical providers rarely offer sympathy, and in some cases ridicule them.[51] The women

[49] Cunha, Galhardo, and Pinto-Gouveia, "Experiential Avoidance, Self-Compassion, Self-Judgment and Coping Styles in Infertility"; Galhardo et al., "The Impact of Shame and Self-Judgment on Psychopathology in Infertile Patients."
[50] Balen and Bos, "Infertility, Culture, and Psychology in Worldwide Perspective."
[51] Whiteford and Gonzalez, "Stigma."

interviewed for the *Lived Experience* study in China, in general, were displeased with the overall quality of medical care they received, and with how the medical providers interacted with them throughout their treatment. These women felt that the clinicians tended to be unsympathetic and "not-client oriented" to the challenges they were experiencing.[52] A longitudinal study conducted in the United States found that woman who did not seek medical treatment for infertility reported lower distress levels than women who did seek medical treatment.[53] This could be attributed to the physical and psychological effects that medical treatments extoll on a woman and her partner, but could also be related to how a woman perceives her experience with clinics and medical providers.

Women also find difficulty in speaking with their family members. One woman interviewed for the *Stigma* study cited that her experience with infertility caused tension in her relationship with her husband's family, specifically her mother-in-law.[54]

Infertility also affects a woman's relationship with her friends, especially her female friends, who are or become mothers. Referring again to the women interviewed for the *Lived Experience* study, two women summarize this well, "I withdrew from all my relationships with those colleagues who have children and kept away from those women who had just given birth to babies (Inf-5). Another informant even indicated that: I would not surf any Facebook postings if my friend has given birth to a baby. I hate seeing those baby photos. (Inf-4)" (pg. 4)[55]

[52] Tiu et al., "Lived Experience of Infertility among Hong Kong Chinese Women."
[53] Greil et al., "Infertility Treatment and Fertility-Specific Distress."
[54] Whiteford and Gonzalez, "Stigma."
[55] Tiu et al., "Lived Experience of Infertility among Hong Kong Chinese Women."

It would be incorrect to write that infertility causes women to hate other women, children, or her friends and family. Instead, infertility can genuinely challenge a woman's identity and desires, which many women are not comfortable talking about with friends, family, and even medical professionals. Opting to not talk about their experience, women dealing with infertility begin to feel isolated from those around them. This isolation, in turn, increases stress, which manifests in different ways depending on a woman's access to support systems, medical care, and counseling.

Regarding Predictions 5B-D, about the use of social media, no data were available. This literature did reveal something interesting: women are increasingly consulting the internet for information about infertility and support throughout their journey. A cross-sectional study administered to 567 females through an infertility information website found that on average participants spent 2 hours a day searching the internet specifically for infertility resources. These resources included: discussion boards and chat rooms, websites, books, magazines, and local support groups.

This study also found that not only are women increasingly utilizing online resources for support and information, but that because of this women were decreasingly relying on physicians and fertility specialists for the same information and support. "Sense of being informed was related to patient history, comfort level with doctor, doctor's encouragement of Internet use, and reliance on infertility specialists, but not related to Internet use. Perceived helpfulness of online information was negatively related to reliance on infertility specialists for information and support." (pg. 83)[56]

[56] Kahlor and Mackert, "Perceptions of Infertility Information and Support Sources among Female Patients Who Access the Internet."

It was concluded that physicians and fertility specialists should incorporate online resources into their care plan for women experiencing infertility. In doing so, physicians would maintain and even grow relationships with their patients.

While there is no specific research to assess whether or not women are turning to the online resources for information and support it is probable that women utilize social media sites as platforms for telling the world about their experiences with infertility. Moreover, women could turn to social media in the future for information as well as utilizing websites as a mechanism for coping. For that to happen though, all women, those who have experienced infertility, those who have not, and those still fighting their battle, would have to feel comfortable enough in their identities and confident enough in support of others to share their stories.

In researching for this project, I specifically came across online support groups located on Facebook and large blogging platforms. The Facebook groups range in size, as well as demographic they are catered towards. Some groups are only for women of a certain ethnicity[57] or religion (usually Christian),[58] while others are only for women from a certain area.[59] The content on these pages is geared toward providing women with a safe and secure place to share their stories and exchange information.[60] Many of the groups are private, so analyzing the content, beyond what is given in the biography portion, is not possible.

[57] "Fertility for Colored Girls - Home."
[58] "Waiting in Hope Infertility Ministry - Home."
[59] "Dallas/ Fort Worth Area IVF IUI TTC ICSI FET Infertility Support."
[60] "Infertility Support Group."

Unlike the Facebook posts, however, blogposts are public, so anyone is able to view them. One blogger I came across began her journey in 2010, after being diagnosed with early onset ovarian failure. Prior to this, Keiko Zoll blogged anonymously but felt that her journey with infertility could benefit other women experiencing the same thing. And since Keiko publicly began documenting her journey, before any resolution was reached (although she did eventually become pregnant after several rounds of IVF), her story gives hope to women experiencing the similar situations. Just because a woman is unsure of what her outcome will be, does not mean that her story cannot be told. Women like Keiko Zoll are bravely utilizing their online presence to make space for all women to share their stories, regardless of where they are in their journeys.[61]

[61] "The Infertility Voice™."

CHAPTER THREE

Analysis and Suggestions

The analysis in this paper will consist of examining whether existing literature supports or refutes the predictions listed above. Further, this section will posit areas in need of more research and proposes several methods for doing so. In brief, most of the predictions are well supported, with the exception of Predictions 5B-D about social media as a platform where women who have experienced infertility share their stories. Future areas of research could focus on how social media influences a woman's experience with infertility, the impact of religion on infertility, (especially treatment options), and the inclusion of minority groups in sampling.

Supported Predictions

Despite the survey not collecting any data, several of the predictions were well supported by existing literature. There is an evident association between womanhood and motherhood, and this association causes stress especially when biologically having a child is not an option.[62] Success or failure as a mother is translated as success or failure as a woman. The literature argues that this connection, while logical in origin[63] is harmful in

[62] Whiteford and Gonzalez, "Stigma."
[63] Ellison, *On Fertile Ground*.

the modern era. Instead of placing such importance on motherhood in the development of identity, women should be encouraged to construct their sense of self on other pillars.[64]

Women who experience infertility will exhibit a changed self-perception and will tend to focus on defining themselves as success via other areas of their lives. Women who experience infertility report feeling as though they are 'other' causing them to question their identities. [65] These changes are not inherently negative but may have begun that way. Counseling and proper support can help women who experience infertility to redefine their identities. [66] Factors such as employment status, education, and relationships often provide women who experience infertility with new ways to achieve personal success.[67]

Women who seek out medical treatments for infertility are usually financially stable and insured. Many articles cite this as a limitation of their study, as the participants are only women who are insured, they are typically White, and financially secure. However, this in no way constitutes a representative sample of the women who experience infertility.[68] There are two main causes for this. First, in countries where clinics and hospitals are poorly staffed and supplied and are not conveniently located, women cannot access infertility treatments. Second, even in countries where infertility treatments are available, the services are often expensive and might not be covered by insurance.[69]

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[64] Brody and Frey, "Mis(Sed) Conceptions."
[65] Whiteford and Gonzalez, "Stigma."
[66] McQuillan, Torres Stone, and Greil, "Infertility and Life Satisfaction Among Women."
[67] Daniluk and Tench, "Long-Term Adjustment of Infertile Couples Following Unsuccessful Medical Intervention."
[68] Daniluk and Tench.
[69] Tiu et al., "Lived Experience of Infertility among Hong Kong Chinese Women."

The psychological effects of infertility on a woman are well documented in the literature. How a woman copes with infertility is unique to an individual's experience; however, the most commonly cited method of coping is partner support. Specifically, being married to a partner not only influences a woman's desire to have children[70] but is also an important factor in a woman's overall life satisfaction.[71] A partner's experience with infertility is different, but despite the differences, one study found that partners and spouses are cited as the most helpful source of support when coping with infertility.[72]

Lastly, the literature indicates that women do not feel comfortable talking to family, friends, and even medical providers about their experience with infertility. Women interviewed in one study found that infertility strained their relationship with family[73], while women in another study felt that their friendships suffered. Interactions with physicians were described as "not-client oriented," which disappointed some women[74]. Also, a longitudinal study found that women who sought medical treatment exhibited higher levels of distress than women who did not seek out medical interventions[75]. Based on the information from these studies, it becomes clearer why women do not feel they can speak about their struggles with infertility: it challenges their culturally constructed identity, creates tension in their relationships, and forces them to suffer silently. These struggles are not remediated by seeking out medical treatment, and

[70] Mcquillan et al., "The Importance of Motherhood Among Women in the Contemporary United States."
[71] McQuillan, Torres Stone, and Greil, "Infertility and Life Satisfaction Among Women."
[72] Kahlor and Mackert, "Perceptions of Infertility Information and Support Sources among Female Patients Who Access the Internet."
[73] Whiteford and Gonzalez, "Stigma."
[74] Tiu et al., "Lived Experience of Infertility among Hong Kong Chinese Women."
[75] Greil et al., "Infertility Treatment and Fertility-Specific Distress."

thus women do not feel comfortable reaching out to family and friends as well as medical professionals.

Areas for Improvement

Based on the literature and predictions, there are several areas for improvement that could be fulfilled by future research. These areas include the role of social media in a woman's experience with infertility, the impact of religion (especially on how a woman makes decisions about treatment options), and increasing the inclusion of minority groups in sampling.

Role of Social Media

A primary purpose of the present study was to assess why women tend to not talk about their experiences with infertility. What brought this topic to my attention was seeing posts on social media from women who had experienced infertility but had since resolved their issue, either through conceiving a child or adopting. The role of social media in a woman's journey with infertility appears to be unresearched in the current literature. This makes sense, as social media sites only became widely used within the past 10-15 years.

Women are increasingly using the internet to find sources of information as well as support. The women who participated in one study spent an average of 2 hours a day on the internet specifically searching for information related to infertility.[76] Therefore it makes sense that as women flock to internet resources, they will also increasingly use

[76] Kahlor and Mackert, "Perceptions of Infertility Information and Support Sources among Female Patients Who Access the Internet."

social media to find information and support, but also a platform for telling their own stories.

Impact of Religion

The impact of religiosity on a woman's view of infertility is based on how religion informs a woman's perception of the relationship between motherhood and womanhood.[77] This conclusion is pieced together from information pulled from several studies; however, no single study elucidated the specific details of the relationship between religiosity and a woman's experience with infertility.

One of my predictions was that women who consider themselves religious would be less likely to pursue medical interventions such as IVF and would be more likely to pursue counseling or adoption. The reasoning behind this is summarized by Balen and Bos; they generalize about how Hindu, Islam, and Christianity approach infertility issues and treatment differently. [78] However, these are just generalizations based on how those groups have described their stances on infertility treatments; this says nothing about how women, who consider themselves religious, are making their decisions about treatment options.

A new area of study could explore how women from different religious groups feel that religion impacts their treatment decisions, as well as how many women are willing to disregard their religious beliefs in order to conceive a child. Delving into this

[77] Tiu et al., "Lived Experience of Infertility among Hong Kong Chinese Women"; Whiteford and Gonzalez, "Stigma"; Greil, *Not yet Pregnant*.
[78] Balen and Bos, "Infertility, Culture, and Psychology in Worldwide Perspective."

sector of research could elucidate information that could be useful for incorporation into counseling treatments for women who experience infertility and their partners.

The Inclusion of Minority Groups in Sampling

Several of the studies cited in this paper conclude that their samples were not representative of minority women. The researchers believed this lack of representation is due to minority women not having the same level of access to healthcare and thus fertility services.[79] Women who visit fertility clinics are usually White and insured, they do not represent every woman's experience with infertility.

Especially for women in countries where clinics and hospital are far away, understaffed, and poorly supplied, accessing fertility services is difficult, if not impossible. Even women in the United States experience this inability to access and receive care. Expenses for fertility services might only be partially covered by an employer or not all; some women do not have insurance because they cannot afford it, they are unemployed, or they have pre-existing conditions which prevent them from being insured.

The present study would have also fallen into the category of not including minority groups in sampling. This is because even if data had been obtained, the small sample size would have precluded any of the data from being used to make generalizations about all women who experience infertility. It would, however, have offered a window into the lives of some women who experienced infertility.

[79] Brandi, "The Psychology of Infertility"; Balen and Bos, "Infertility, Culture, and Psychology in Worldwide Perspective"; Greil, "Infertility and Psychological Distress."

Many women might not even realize they are experiencing infertility, and even if they did, what could be done about it unless the women were first, able to be diagnosed, and second, able to receive treatment. Clearly, the data generated from current studies on infertility is useful but is not in any way representative of every woman's experience with infertility, especially women in minority groups.

CHAPTER FOUR

Conclusions

The primary objective of this project was to gather information that could help answer the central hypothesis: women who have experienced infertility will exhibit significant changes concerning their self-perception, that seeking treatment positively affects a woman's experience with infertility, and that women feel more comfortable speaking about their experiences after the fact.

To begin gathering information, five research questions and accompanying predictions were generated. Question 1 asks, is there an association between being a woman and becoming a mother, and if so, how does this association affect women who are experiencing infertility? Question 2 poses, does the physical, emotional, and psychological stress of infertility affect a woman's self-perception? Question 3, is the desire to have children influenced by or linked to a woman's relationship with her partner? Question 4 asks, does seeking treatment positively influence or affect a woman's experience with infertility? Lastly, Question 5, who do women feel more comfortable talking to about the experience with infertility?

The survey constructed aimed to answer these questions by collecting demographic, quantitative, and qualitative data. Even if the survey had collected the intended data, there would still be limitations. The survey would have only been assessing insured, most likely White women who lived in or close to large cities in the

north, south, and central regions of Texas. One of the most significant missing pieces in current literature is the inclusion of women from minority groups in the sample sets. The survey would have only captured a fraction of women who are experiencing or have experienced infertility. Results from several of the survey questions could have yielded new information, especially concerning the role of social media in a woman's experience with infertility.

Clearly, emailing the clinics to solicit participation was unsuccessful. Furthermore, a survey about a topic this sensitive might have been more successful if it was not administered online. Even if the survey advertisement had been placed and patients' attention directed toward it, completing it would mean filling out another form in addition to all the paperwork required by the clinic.

Because the survey did not yield any data, the scope of this project changed to analyzing existing literature, how this information supported or refuted the proposed predictions, and where further research is necessary. Of the predictions listed, several of them were well supported by existing research.

The association between motherhood and womanhood is strong, so tied are the two that in fact, this connection causes stress, especially when becoming a mother is not an option due to infertility. Women who experience infertility exhibit a changed sense of self; this change is not inherently harmful. However, it may have started that way. In re-defining themselves, women will tend to focus on other areas of the life in which they are successful, including their job, education, and relationships. The women who seek treatment for infertility are most often insured, White women who are financially stable, meaning most of the research about infertility does not represent women in minority

groups. A woman's desire to have children is strongly associated with her relationship with her partner, which research roughly equates to marriage since this is a traditional form of a long-term, committed relationship. Lastly, partner support, or lack thereof, if influential in how a woman experiences infertility. Partners, although they suffer too, can offer support in the way many others cannot, for this reason, couples are encouraged to seek counseling together when experiencing infertility.

Several of the predictions were not well supported or refuted by the literature. There is currently not enough research to determine whether or not women who consider themselves religious would be less likely to pursue invasive medical treatments, and more likely to pursue counseling or adoption.

Research does suggest that women report feeling unsupported by their friends, family, and medical providers, claiming that doctors can come off as "not client oriented." This begs the questions if women do not feel comfortable discussing their experiences with their friends, family, and even medical providers, who then can women talk to about infertility?

Social media might be a place where women who have experienced or are experiencing infertility might confide in one another, although there is currently no published research to suggest either way. Understanding social media's roles in a woman's experience with infertility is an exciting area for further research.

Why is further research relevant and essential? First, women are important, and infertility is likely one of the most difficult challenges a woman can face in her life. As such, women have the right to feel that even though they are deeply hurt, challenged, and

upset, their experiences matter and have a place to be told. This goes for women who overcome infertility and achieve that 'happy ending,' and for women who are still silently suffering.

Second, more and more women are experiencing infertility. A recent study indicates that an upwards of 15% of couples are infertile[80]; this is an increase over previous studies that cite infertility at around 10-11%. This could indicate that the incidence of infertile women is increasing; however, a much more likely scenario is that a combination of better diagnostic tools, access to care, and delayed child-bearing are working in tandem to produce this increase. Regardless of the cause, more women will continue to experience infertility during their lifetime. As diagnostic methods and treatment options are improved, so too should our cultural reactions to infertility change.

Experiencing infertility causes a woman to evaluate how she views not only herself, but being a woman, and being a mother. These changes materialize differentially based on a woman's experience, support, and culture. Association of womanhood and motherhood, while not inherently problematic, proves to be so for women experiencing infertility. More than that, women who experience infertility and choose to seek treatment, specifically medical interventions, enter into a potentially dangerous cycle of labeling themselves as "not yet pregnant."[81]

These labels and cycles culminate to convince women that silently bearing the pain of infertility is how it always has been and will continue to be. Despite the well-

[80] Zhang et al., "A Weighted Kernel Machine Regression Approach to Environmental Pollutants and Infertility."
[81] Greil, *Not yet Pregnant*.

documented success of therapeutic approaches, like couples therapy, many women and their partners do not access it. Women have begun to find solace on the internet, via chatrooms, informational websites, and support groups. Some women have likely begun taking to social media sites for more than support; they want to tell their stories. And while it seems that for now the women sharing the stories on public platforms have achieved some form of a happy ending, social media could be a place for all women who have experienced or who are experiencing infertility to find information, support, and an empathetic community with which to share their stories.

Only further research will determine how social media will impact women's experiences with infertility. However, one can hope that these social platforms will aid women in their journey with infertility, while also educating the public so that we no longer ask the question, "Why don't women talk about their experiences with infertility?" but rather ask, "How can we support the women in our lives who are experiencing infertility?"

APPENDIX A

Email to Clinics

Email advertisement for Cruthirds Honors Undergraduate Research Thesis (Baylor University)

Email subject line:

Cruthirds Thesis Research-Experience of Female Infertility

Email body:

https://www.surveymonkey.com/r/9YYYXBQ

This Survey has been created and organized by Sarah Cruthirds, an Honors Undergraduate student at Baylor University under the guidance of Dr. Michael Muehlenbein, Chair of the Anthropology Department. This survey is being sent to Reproductive specialists, Fertility Clinics, and OBGYN's across the state of Texas.

The aim of the survey is to understand the experiences of women experiencing or have experienced infertility, and how these experiences reshape their definitions of self, womanhood, and motherhood. The associations between womanhood and motherhood impact a woman's sense of self, and when becoming a mother is improbable or impossible the individual's sense of self is altered. It is important to understand these associations and self-perception in approaching women's reproductive health.

As a medical professional involved in the healthcare industry, specifically women's reproductive health, you are invited to help promote this survey. The potential participants we are trying to reach are your clients/patients. We ask that you or your office display the attached advertisement at your front desk. This way clients/patients coming in and out will see the advertisement and can voluntarily participate.

We will utilize this information to analyze how the participant's experience with infertility has influenced their perceptions and associations of self, womanhood, and motherhood.

The survey is completely ANONYMOUS and is ethically approved by The IRB of Baylor University.

This survey will be active until January 1, 2019.

Thank you for your time! If you have any questions, please feel free to email: Infertility_Survey@baylor.edu.

https://www.surveymonkey.com/r/9YYYXBQ

APPENDIX B

Flyer Advertisement to be Printed by Clinics

APPENDIX C

Consent Form

Baylor University
Department of Anthropology

Consent Form for Research

PROTOCOL TITLE: The Experience of Female Infertility

PRINCIPAL INVESTIGATOR: Sarah Cruthirds

SUPPORTED BY: Baylor University

Purpose of the research: The purpose of this study is to assess women's definitions of self, womanhood, and motherhood based on their experience with infertility.

Study activities: If you choose to be in the study, you will complete an electronic survey (approximately 10 minutes in length).

Risks and Benefits: You may be uncomfortable with some of the questions and topics we will ask about. You do not have to answer any questions that make you feel uncomfortable. Although you will receive no direct benefits, others may benefit in the future from the information that is learned in this study.

Confidentiality: A risk of taking part in this study is the possibility of a loss of confidentiality. Loss of confidentiality includes having your information shared with someone who is not on the study team and was not supposed to see or know about your information. The researcher plans to protect your confidentiality by not collecting any identifiable information from you.

There are times when federal or state law requires the disclosure of your records. Authorized staff of Baylor University may review the study records for purposes such as quality control or safety.

Compensation: You will not be paid for taking part in this study.

Questions or concerns about this research study
You can call us with any concerns or questions about the research. Our telephone numbers are listed below:

Michael Muehlenbein: 812-606-9062

If you want to speak with someone not directly involved in this research study, you may contact the Baylor University IRB through the Office of the Vice Provost for Research at 001-254-710-1438. You can talk to them about:

- Your rights as a research subject
- Your concerns about the research
- A complaint about the research

Taking part in this study is your choice. You are free not to take part or to stop at any time for any reason. No matter what you decide, there will be no penalty or loss of benefit to which you are entitled. If you decide to withdraw from this study, the information that you have already provided will be kept confidential. Information already collected about you cannot be deleted.

By continuing with the research and completing the study activities, you are providing consent.

APPENDIX D

Survey

The Experience of Female Infertility Survey Questions:

1. Ethnicity/race
    a. White
    b. Black or African American
    c. Hispanic, Latino, or Spanish Origin
    d. Asian
    e. Pacific Islander or Native Hawaiian
    f. American Indian or Alaskan Native
    g. Middle Eastern or North African
    h. Other (specify)
2. Age (open)
3. Religion (open)
4. Occupation (open)
5. What was the total income for your household during the last 12 months (open)?
6. Do you have health insurance?
    a. Yes
    b. No
    c. Unsure
7. How are you insured? (choose all that apply)
    a. Employer health insurance
    b. Government program such as Medicare or Medicaid
    c. Private health insurance
8. What is your employment status? (open)
9. Highest level of formal education completed:
    a. GED
    b. High school diploma
    c. College degree
    d. Masters degree
    e. Doctoral degree
    f. Other (specify)
10. What aspects of your life do you feel define who you are as a person? (open)
11. On a scale of 1-5 (1 very unconfident, 5 very confident), rate your level of self-confidence.
12. On a scale of 1-5 (1 uncomfortable, 5 comfortable), rate how comfortable you are with yourself.
13. On a scale of 1-5 (1 not successful, 5 very successful), rate your level of personal success.

14. How do you define being a woman? (open)
15. What does being a mother mean to you? (open)
16. Relationship status:
    a. Single
    b. Partnered
    c. Married
    d. Divorced
    e. Other (specify)
17. If you are in a relationship, how long have you been in this relationship? (open)
18. On a scale of 1-5 (1 very weak, 5 very strong), rate the strength of this relationship.
19. On a scale of 1-5 (1 strongly disagree, 5 strongly agree), rate how strongly you agree with the following statement: "I feel emotionally invested in my partner and plan to be with this person for a long time."
20. On a scale of 1-5 (1 no desire, 5 strong desire), rate your desire to have a child/children.
21. On a scale of 1-5 (1 not prepared, 5 very prepared), rate how prepared you feel to be a mother.
22. Have you experienced infertility? (inability to conceive a child after one year of unprotected sex)
    a. Yes
    b. No
23. How long have you been dealing with infertility? (open)
24. How many times have you been pregnant?
    a. 1
    b. 2
    c. 3
    d. 4
    e. 5 or more
25. Have you lost a pregnancy during the first trimester (first 12 weeks)?
    a. Yes
    b. No
26. If yes, how many times?
    a. 1
    b. 2
    c. 3
    d. 4
    e. 5 or more
27. What kinds of treatment/advice have you sought for dealing with infertility? (select all that apply)
    a. Professional counseling
    b. In vitro fertilization
    c. Fertility specialists
    d. Obstetrician/gynecologist
    e. Nothing
    f. Other (please specify)

28. On a scale of 1-5 (1 completely disagree, 5 completely agree), rate your agreement with the following statements:
    a. “Being a mother is an integral part of being a woman.”
    b. “Dealing with infertility has changed how I view myself.”
    c. “Dealing with infertility has negatively influenced how I view myself.”
    d. “My experience with infertility has changed my view on what it means to be a woman.”
    e. “My experience with infertility has negatively impacted my view on womanhood.”
    f. “My experience with infertility has changed my views on what it means to be a mother.”
    g. “I feel that womanhood and motherhood are strongly linked.”
    h. “My experience with infertility has negatively impacted my view on motherhood.”
    i. “My experience with infertility has changed my views about myself as a woman and mother.”
    j. “My experience with infertility has negatively impacted my views about myself as a woman and mother.”
    k. “One day I believe that I will become a mother.”
    l. “I speak openly with my friends about my experiences with infertility.”
    m. “I speak openly with my family about my experiences with infertility.”
    n. “I am willing to speak openly with strangers who are not medical professionals about my experience with infertility.”
    o. “I am more willing to discuss my experience with infertility in person than online.”
    p. “My partner and I are willing to consider adopting a child/children if we are unable to conceive naturally.”
    q. “My partner and I are willing to consider medical intervention if we are unable to conceive naturally.”
    r. “The thought of never being able to have a child/children makes me unhappy.”
29. Is there anything else you would want surveyors to know about you or your experiences? (open)

In the future, Researchers will add these questions to the survey:

1. How many siblings do you have? (open-ended)
2. At what age did your mother have you? (open-ended)
3. At what age did your mother have your siblings? (if you have any) (open-ended)
4. What is your desired family size? (i.e. how many children would you like to have?) (open-ended)

APPENDIX E

List of Clinics Emailed

** designates clinics that responded to emails*

Name:	Street Address:	City:
Texas Fertility Center Austin	6500 N. Mopac Expressway, Building 1, Suite 1200	Austin, TX 78731
Texas Fertility Center San Antonio	18707 Hardy Oak Blvd. Ste. 505	San Antonio, TX 78258
Texas Fertility Center New Braunfels	705 Generations Dr. Suite 120	New Braunfels, TX 78130
Fertility Specialists of Texas	5757 Warren Pkwy Bldg 2, Suite 100	Frisco, TX 75304
Fertility Specialists of Texas	8230 Walnut Hill Lane Bldg 3, Suite 512	Dallas, TX 75231
Fertility Specialists of Texas	540 East Southlake Blvd. Suite 100	Southlake, TX 76092
Reproductive Medicine Associates (RMA)	911 W. 38th St. Suite 402	Austin, TX 78705
Reproductive Medicine Associates (RMA)	4330 Medical Dr. Suite 200	San Antonio, TX 78229
Reproductive Medicine Associates (RMA)	19296 Stone Oak Parkway	San Antonio (Stone Oak), TX 75285
Sher Institute for Reproductive Medicine	7777 Forest Lane, Suite C-638	Dallas, TX 75230
Advanced Fertility Center	10901 Katy Freeway	Houston, TX (Memorial City)
***Advanced Fertility Center**	17198 St. Luke's Way, Suite 410	Woodlands, TX
Advanced Fertility Center	1602 Rock Prairie Road, Suite 400	College Station, TX
***Houston Fertility Institute**	Memorial Hermann Medical Plaza, 6400 Fannin St	Houston, TX
Fort Worth Fertility Clinic	1800 Mistletoe Blvd.	Fort Worth, TX

IVFMD	7501 Las Colinas Boulevard, Suite 200	Irving, TX
IVFMD	600 West Mayfield Road	Arlington, TX
IVFMD	1631 Lancaster Drive, Suite 225	Grapevine, TX
***Effortless IVF**	1701 Park Place Ave	Bedford, TX
Center of Reproductive Medicine	7400 Fannin St. Ste 1180	Houston, TX 77054
CRM (Memorial City)	9230 Katy Fwy #540	Houston, TX 77055
CRM	1015 W. Medical Center Blvd #2100	Webster, TX 77598
CRM	2344 Dowlen Rd	Beaumont, TX 77706
CRM	10907 Memorial Hermann Dr. Ste 340	Pearland, TX 77584
Texas Center for Reproductive Health	Baylor Medical Plaza 3600 Gaston Ave. #504	Dallas, TX
Fertility and Advanced Reproductive Medicine Clinic	1801 Inwood Rd. Suite 616	Dallas, TX 75390
BCM Reproductive Endocrinology and Infertility	One Baylor Plaza	Houston, TX 77030
Aspire Fertility Houston IVF Clinic	7515 S. Main St. STE 500	Houston, TX 77030
AFH satellite	7900 Fannin St. Suite 4400	Houston, TX 77054
Aspire Fertility Dallas IVF Clinic	16415 Addison Road STE 900	Addison, TX 75001
Aspire Fertility San Antonio IVF Clinic	19296 Stone Oak Parkway	San Antonio, TX 78258
Aspire Fertility Austin IVF Clinic	911 W. 38th St. Ste. 402	Austin, TX 78705
CCRM	8380 Warren Parkway Suite 201	Frisco, TX 75034
CCRM	8160 Walnut Hill Lane, suite 208	Dallas, TX 75231
CCRM	929 Gessner Suite 2300	Houston, TX 77024
CCRM	7400 Fannin Suite 190	Houston, TX 77054
Collins Family Planning Clinic	2900 SE Loop 820	Fort Worth, TX
Family Planning Clinic Rockport	2871 Highway 35 N.	Rockport, TX
***HealthPoint-Family Planning**	1103 Woodson Dr.	Caldwell, TX
Family Planning Clinic	1012 North Dr.	Copperas Cove, TX

Family Planning Bell County	509 South 9th St.	Temple, TX
Midway Family Planning	1500 Terrace Dr Suite 35	Brownwood, TX
***Wilson Family Planning Clinic**	1301 3rd St. #100	Wichita Falls, TX
Family Planning Clinic Beeville	1400 W Corpus Christi St #4	Beeville, TX
***Family Planning Clinic Corpus Christi**	4455 S. Padre Island Dr. #30	Corpus Christi, TX
Family Planning Clinic Sinton	301 S. San Patricio St. Suite C	Sinton, TX
Family Planning Clinic Robstown	515 Pat Shutter St #121	Robstown, TX
Family Planning Clinic Kingsville	1218 N Armstrong St.	Kingsville, TX
Southeast TX Family Planning	6671 Southwest Fwy	Houston, TX
Family Planning Clinic STFPHC	4455 S. Padre Island Dr. Suite #29	Corpus Christi, TX
South Texas Family Planning	1700 E Saunders St.	Laredo, TX
***Natural Family Planning Center**	321 Calumet Ave.	Dallas, TX
***A Choice for Women Center**	154 Babcock Rd.	San Antonio, TX
Lone Star Circle of Care	2300 Round Rock Ave. #208	Round Rock, TX
Corpus Christi Family Planning	1702 Horne Rd.	Corpus Christi, TX
Women's Health and Family Planning Association	1114 Lost Creek Blvd #110	Austin, TX
Community Health Services	611 Martin Luther King Dr.	San Marcos, TX
***Texas Panhandle Family Planning and Health Centers**	901 Wallace Blvd.	Amarillo, TX
UT Texas Medical Center Family Planning Clinic	2014 N 10th St.	Orange, TX
Austin FertilityCare Center	2026 Guadalupe St.	Austin, TX
UTMB Health RMCHP/WIC	1100 Gulf Fwy #108	League City, TX
Texas Children's Hospital Partners in OB/GYN care	6651 S Main St.	Houston, TX
***OBGYN Medical Center Associates**	7900 Fannin St. Suite 4000	Houston, TX
OBGYN Care	2010 N Loop W #260	Houston, TX
Women's OBGYN Care PLLC	7777 Southwest Fwy #454	Houston, TX
Plaza OB/GYN	1801 Binz St. #500	Houston, TX
Cook Paul MD	6400 Fannin St #1900	Houston, TX

Woman's PBGYN Specialists	7400 Fannin St. #2650	Houston, TX
Methodist Willowbrook OB/GYN Associates	18220 Texas 249 Access Rd #200	Houston, TX
Med Center OB/GYN	6550 Fannin St #2221	Houston, TX
Southwest WomanCare OBGYN	7789 Southwest Fwy #400	Houston, TX
David Galvan MD	7737 Southwest Fwy #895	Houston, TX
Right OBGYN	1315 St. Joseph Pkwy #1810	Houston, TX
Women's Integrated Healthcare	1625 Lancaster Dr.	Dallas, TX
OBGYN Dallas	8160 Walnut Hill Lane Suite #219	Dallas, TX
OBGYN and Maternal-Fetal Medicine Clinic (UT Southwestern)	5929 Harry Hines Blvd. #300	Dallas, TX
***Yolanda Lawson MD**	3310 Live Oak St. #210	Dallas, TX
Dallas Obstetrics and Gynecology	7777 Forest Lane Building D #550	Dallas, TX
Drs John Bertrand and Julie Hagood	8305 Walnut Hill Ln #200	Dallas, TX
Dr. Natalie Light MD	Margot Perot Building 8160 Walnut Hill Ln #116	Dallas, TX
Advanced Women's Healthcare	12201 Merit Dr. #350	Dallas, TX
Steven Harris MD	3801 Gaston Ave #200	Dallas, TX
Dr. Sandra Brother MD	3600 Gaston Ave. #300	Dallas, TX
Magnolia OBGYN	3600 Gaston Ave. #601	Dallas, TX
Trinity Women's Center	3920 W Wheatland Rd. #108	Dallas, TX
***Dennis Abbas MD**	6300 Samuell Blvd.	Dallas, TX
***Wesley Anne Brady MD**	8215 Westchester Dr. #111	Dallas, TX
Carolyn Matthew MD	3410 Worth St.	Dallas, TX
***Lacy Coker Kessler MD**	2420 Wycon Dr.	Waco, TX
***Waco OBGYN at Hillcrest**	120 Hillcrest Medical Blvd, Building II Suite 201-2	Waco, TX
Dr. Chia-Lien Wang MD	2410 Wycon Dr. #204	Waco, TX
Scott and White OBGYN Clinic	405 Londonderry Dr.	Waco, TX
Katherine Haynes	601 W Hwy 6 #101	Waco, TX
Mark Moore MD	same as above	

OBGYN Associates of Waco	2501 Ambassador Dr.	Waco, TX
William R. Beaty MD	7030 New Sanger Rd	Waco, TX
Anna Beceiro MD	7950 Floyd Curl Dr. #300	San Antonio, TX
Northeast OBGYN Associates	250 E Basse Rd. #205	San Antonio, TX
Women Partners in OBGYN	502 Madison Oak Dr.	San Antonio, TX
Mission Trail OBGYN Associates	3327 Research Plaza	San Antonio, TX
Dr. Neera Bhatia MD	1303 McCullough Ave #237	San Antonio, TX
Dr. Houmam Al-Hakeem	7430 Barlite Ave. #237	San Antonio, TX
Serrano OBGYN	20726 Stone Oak Pkwy	San Antonio, TX
OBGYN San Antonio: Dr. John Kellum	3903 Wiseman Blvd	San Antonio, TX
The OBGYN Group of Austin	1301 W 38th St. #300	Austin, TX
Austin Area Obstetrics, Gynecology, and Fertility	12200 Renfert Way Suite 100	Austin, TX
Capital OBGYN Associates of Texas	12201 Renfert Way #220	Austin, TX
Austin Southwest OBGYN	4316 James Causey St. Bldg F, Suite 200	Austin, TX
River Place OBGYN	6611 River Pl Blvd #202	Austin, TX
Women Partners in OBGYN	1305 W 34th St	Austin, TX
Austin Regional Clinic	12174 N Mopac Expy Suite A	Austin, TX
Christine Mileur MD	2911 Medical Arts Square #3	Austin, TX
Balcones OBGYN	3705 Medical Pkwy #540	Austin, TX

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