Singing For Two: Experiencing Pregnancy as a Classical Singer

by

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A thesis submitted in conformity with the requirements for the degree of Doctor of Musical Arts

Faculty of Music
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Abstract

The purpose of this study was to understand more fully the experience of pregnancy for the classical singer. Though research has uncovered the physical implications of pregnancy for the non-singer, aspects which can impact the classical singer, such as breath mechanics, hormonal fluctuations, and the many other physical changes brought on by pregnancy, have not been fully investigated. My first objective was to find out how the physical aspects of pregnancy impact singers as they continue to perform through these changes.

My second objective was to discover what the emotional implications of pregnancy are for the classical singer. Did emotional changes instigated by pregnancy occur that influenced the singer’s performance anxiety, routine and sense of self as a performer?

My final objective was to investigate the social implications of pregnancy for the classical singer. How are pregnant classical singers viewed and treated within the performance realm? Is there support for singers who become pregnant? What are the implications for career trajectory and timing?
This study uses mixed methods to enhance and expand the range of information gathered. In-depth interviews were conducted on two pregnant and one recently pregnant classical singers. An exploratory survey was conducted with 444 participants from around the world. Extensive data was collected from both groups, including a large amount of qualitative data from the survey group in the form of additional comments made online. After analyzing the data sets separately, the survey and interview results were merged to provide deeper meaning to the findings. This resulted in additional questions which were posed to the interviewees through written conversations. This study provides insight into the experience of pregnancy for the classical singer, explores factors which contribute to positive learning and growth for the singers involved and uncovers numerous questions for future research.
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Dedication

I dedicate this doctoral thesis to the many singing mothers who uplift us with their voices and inspire us with their parenting.
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Chapter One: Introduction

“Life is always a rich and steady time when you are waiting for something to happen or to hatch.”

~E.B. White, Charlotte's Web

My Research Story. When I think back on my decision to research the experience of pregnancy for the classical singer, it is difficult to remember that I wasn’t even pregnant at the time. For entry into my doctoral program, I had been asked to write a brief paragraph describing the research I would undertake. Caught off guard by this request, I came up with a quick sentence or two about the role of women in art song and identifying key character portrayals. I would later write an essay on the subject before realizing that this idea wasn’t one that interested me enough to commit my research energies.

What was interesting to me at the time was a personal matter that seemed completely removed from my work as a doctoral student: What would it be like to be pregnant, and how would the experience change my singing, my career and my life? Surprisingly, it did not occur to me until much later that this interest could intersect with my academic work and become the subject for my dissertation.

Researcher Reflexivity. Jeffrey Kottler writes, “You can’t understand qualitative research without understanding your personality - that is, your own motives, interests, values, and goals” (7). Qualitative researchers embrace the idea that objectivity on the part of the researcher is not only
impossible, but attempting to eliminate subjective reasoning is counter-productive to understanding lived human experience; the role that the researcher plays is paramount in understanding the interplay between researcher and subjects. Being open about a researcher’s identity and possible biases allows that knowledge does not take place in a vacuum, but rather is a “shifting” entity that is “based on social, cultural, and political contexts” (Skott-Myhre et al. xii).

Identifying one’s viewpoint as a researcher must be continually addressed in order to bring clarity to the research results (Acker 190, Skott-Myhre et al. xvi). Through self-reflection and questioning, the researcher can better understand herself and her subjects, because, as Ellis and Bochner argue, “by understanding yourself comes understanding of others” (Ellis and Bochner 738). In order to fully disclose my life experience as it intersects with my research and to situate my research questions in the context of my personal narrative, I share my own story here.

Beginnings. Singing has always been important to me. Laying in bed at night, cozily tucked under my blankets, I would make up songs and melodies, singing with abandon until my brother would shout from his bedroom down the hall, “Be quiet!” Car trips, washing dishes and any other activity that didn’t require speaking or eating would be filled with song, either alone or with members of my family. By the time I had graduated from high school and began my studies as a voice major, I knew that I wanted to sing for my profession and was eager to learn more about my voice.
Through studying singing, I was introduced to a world in which my mental and physical health was of the utmost importance. Learning to use my body as an instrument demanded that I was aware of its unique challenges and changes. I often wonder, if I had not become a singer, would I have been similarly in-tune with the rhythm of my breath, the impact certain foods have on my body or the way in which my emotions influence my overall health? Becoming a singer has deepened my understanding of myself in ways that will stay with me well past my final performances.

It was in this context that I began to consider pregnancy. When I started this research, (as a thirty-three year old doctoral student), I knew I wanted to have children. Many discussions took place regarding the decision to begin my doctorate and postpone a family a few more years, and though I opted to begin school again, thoughts of a baby were never far from my mind. As my first year of course-work came to a close, the subject of starting a family returned to me and my husband. While in the music library doing other research, I thought I might take a look at some pedagogical books that could offer information about pregnancy so that I would be more fully prepared when, and if, it happened. I was surprised when I found little or no information on the library shelves which would help guide me through this transformational experience. It was then that it occurred to me that this subject could be both my journey of personal discovery and my dissertation topic.
Even once I realized this topic could be a possibility for me, I still questioned its validity:

At first I wondered if focusing on this topic and then perhaps becoming pregnant myself would seem too cliché insular or contrived. My less confident self (which still pops up from time to time) wondered what people would think and if I would gain approval. I talked this through with my husband and my friends, all of whom were encouraging. I decided to commit to this new topic. When I told colleagues what I was writing [about], I would often add in, "No, I'm not pregnant." I assumed that they would wonder about it and wanted to let them know right away that I was simply interested in the topic. This wasn't entirely true, since I did indeed plan on trying to start a family, but I also felt a certain need to protect myself since I wasn't sure if I would be able to conceive when the time was right. Again, various sides of myself were intersecting, this time my academic and personal selves. I now appreciate and love the gift of researching something that I am truly invested in from a personal standpoint, though at the beginning, my tendency was to separate these components of my life. (Self-reflective essay for Narrative Perspectives class, 2014)

Putting my doubts aside, I began to focus on discovering what I could on the subject: this time, not only for my own personal interest, but also in the context of future research.

*Pregnancy, Research and a Birth.* I became pregnant in December of 2013, the second year of my doctoral studies. Not only was this a joyous event for me personally, but it was an exciting
development for my curious mind. I wondered how pregnancy would affect my voice and how
my changing body would influence my singing. By this time, I had done extensive research on
pregnancy in the form of a literature review for my doctoral requirement. Though I was able to
find a few studies which delved into the effects of pregnancy on the classical singer, they were
aimed at uncovering technical details, (like measuring vibrato rates) or they involved small
sample groups (many were case studies of one woman only).

I have always enjoyed reading books that contained personal anecdotes and stories which shared
the details of lived experiences, but the studies I had found were woefully lacking in this
element. I was in the midst of a major transformative event and I wanted to read about and talk to
singers who had experienced pregnancy before me. Guessing at the personal factor among the
scarce facts and numbers that I had uncovered in my research did not satisfy me, and so I aimed
to create a study which would share the human experience of pregnancy for the classical singer.

In the midst of my research, my daughter arrived. What had been a source of wonderment and
questions -What will she be like? How will my voice be affected? What will motherhood be
like? How will I balance my new life with my singing and research? - was now a lively, flesh and
blood being who demanded my time and love like no other. I realized that pregnancy was only
the tip of the iceberg as far as impact and influence on the classical singer’s voice and life. And
yet, for the pregnant singer, understanding this transformational experience one stage at a time
was the only way to proceed.
NEED FOR THE STUDY

Singers are deeply attuned to their bodies. This is not only necessary for the proper functioning of the vocal instrument, but it also is key in maintaining performance consistency through the natural ebb and flow of life. Because of this kinaesthetic awareness, the physical changes which occur during pregnancy are perceived within an atmosphere of heightened awareness.

The emotional landscape that singers maintain is also important to their success. Keeping a clear head, handling performance anxiety and managing the technical challenges that inevitably arise are skills which are highly valued in classical singers. Partnering these needs with the social influence of pregnancy creates an interesting challenge for the singer, who must not only navigate the ups and downs of their career, but is now also riding the hormonal and personal waves of transformation brought on by pregnancy.

Despite the fact that these interactions - physical, emotional and social - have clear impacts on the ways in which classical singers perform, there is little research on the subject. Though the physical impact of pregnancy has been researched, articles which connect the physical challenges of pregnancy with singing are sparse. Though there are studies on the impact of pregnancy on the speaking voice (to be discussed in Chapter Two), the participants are not classical singers and therefore do not place the same demands upon their instruments. In the handful of studies that focus on pregnancy and the classical singer, sample sizes are small: in some cases, the study consists of an investigation of the physical experience of one woman. As
of yet, there are no studies on the emotional and social impact of pregnancy for the classical singer.

In the time between this study’s commencement and its conclusion there have been several new contributions to the literature. This reality in itself shows an increased interest and need for a deeper exploration of the subject. However, none of these more recent studies have surveyed a large population, nor has the overall experience of pregnancy been investigated. Furthermore, very little information on pregnancy for the classical singer can be found in vocal pedagogical literature; in fact, only one book out of thirty I surveyed at the University of Toronto library even mentioned the subject.

The number of women interested in participating in this study also speaks to its need: classical singers who are considering pregnancy want to hear about the possible challenges and benefits. In the feedback I received from survey participants, many women expressed their desire to contribute to this study’s body of knowledge and to learn from its findings. One participant wrote:

I wanted to say that I’m very much looking forward to reading the results of your research. I have found a distinct lack of readily available answers when I've had questions regarding pregnancy and singing. My Ob-gyn is/was unhelpful in this regard and I've found the best way to get answers was other singers; and my fear is that much of the information gathered this way is mostly anecdotal, since it involves such a small number of women. I wish you good luck in getting many women's experiences documented!
Becoming pregnant is a decision most women do not make lightly. For classical singers, the impacts of pregnancy can directly influence voices and careers, giving this decision further weight. Gathering stories, understanding tendencies and sharing strategies within a large group of classical singers is an important contribution to this topic which deserves full exploration. This study is an important step in beginning a conversation about the experience of pregnancy for classical singers.

THE PURPOSE OF THE STUDY

The purpose of this study is to understand more fully the experience of pregnancy for the classical singer and to explore its physical, social and emotional implications. This study aims to share the lived experiences of classical singer mothers and mothers-to-be in order to provide a well of knowledge that will inform and instigate conversation about the experience of pregnancy for the classical singer.

Research Question

What is the experience of pregnancy for the classical singer?

Sub-Questions

1. How do the physical realities of pregnancy intersect with the physical act of singing?

2. What is the emotional experience of classical singers regarding pregnancy and how does it intersect with an individual’s sense of self as a performer?
3. How does pregnancy impact the careers and lives of classical singers?

LIMITATIONS OF THE STUDY

The experience of pregnancy for the classical singer is unique to each woman. The data and stories shared in this paper are a representation of the women I studied and are not meant to predict future outcomes or describe universal experiences. This study offers a description of the experiences shared by a particular group of women.

Having recently experienced pregnancy as a classical singer, I am intimately familiar with the topic I am studying. Knowing this, I realize that it is important that my familiarity does not influence the way in which I view the data. My intention is to use my experience to gain trust from the community of classical singers in order to encourage them to more fully share their stories, but I need to take care not to make assumptions based on my own experiences, or to coat the experiences of others in a lens that reflects my own hopes for the outcome.

One final limitation takes place in the intersection between pregnancy and motherhood. Firstly, though there were many survey participants who were pregnant at the time of their participation, the majority were not. This choice means that I am relying on the memories of the women in question, some of whom gave birth decades ago. Secondly, it has become difficult to distinguish between the effects of pregnancy - a finite time period - and the lasting impacts of motherhood, which are on-going. For example, asking how pregnancy has influenced singing without acknowledging the resulting child and the changes involved in becoming a mother is not only
limiting, but is impossible. Therefore, though this study focuses on the experience of pregnancy, aspects and influences relating to motherhood cannot be ignored and are discussed when relevant.

OVERVIEW OF THE DISSERTATION DESIGN

Chapter 1 introduces my story and my research context, describing the need for this study as well as my intentions for this paper. The research questions are outlined and the limitations of the study are described.

Chapter 2 presents a review of the literature as it pertains to this study. Though academic work on this subject is limited, I have attempted to not only draw from those which exist and which are currently being published, but to also describe studies in parallel disciplines (acting, dance, teaching) in order to more fully provide a context for my findings.

Chapter 3 defines mixed methods research, outlining characteristics of both qualitative and quantitative methodologies, explaining their combined use and benefits. The process I undertook during this study is also described, as well as the research perspectives that guided my steps in conducting the study.

Chapter 4 presents the interview data for analysis, while highlighting major themes which emerged from coding the transcripts.

Chapter 5 presents the survey findings: both the quantitative data from the survey proper, and the qualitative data drawn from the many stories shared throughout the comment boxes of the survey.
Chapter 6 merges the survey and interview data, comparing and contrasting the findings. Further conversations with the interviewees resulting from questions which arose in the process of merging the data are described and major themes are presented.

Chapter 7 summarizes the findings of the study and presents questions for future study. The impact of the study on myself and my participants is discussed as well as a call for further research to be undertaken.
Chapter Two: A Review of the Literature

“The possession of knowledge does not kill the sense of wonder and mystery. There is always more mystery.”

~ Anaïs Nin

EXPLORING THE SUBJECT

Though the subject of pregnancy for the classical singer has not been fully explored, it is important to know what research exists in order to situate this study’s findings in the literature. Furthermore, parallel studies in other disciplines which have commonalities with classical singing are offered here in order to provide a glimpse into what we may uncover in the realm of the classical singer. Current scholarship on the impact of pregnancy on the body, voice, emotions and social factors are also presented here, as well as a description of vocal literature which provides a context for our discussions on the singer’s reliance on kinaesthetic knowledge and emotional factors that may impact performing.

Conversations about the Relationship between Voice and Body. As a classically trained singer, I have spent countless hours tuning into minute changes in my body and posture. Conversations with various voice teachers about vocal technique often turn to describing the feeling of the rib cage resisting collapse or the subtle change in laryngeal pressure as I release tension in my tongue. References to these feelings regularly appear in singer biographies and interviews. Jerome Hines' Great Singers on Great Singing is one such example of the focus placed on the kinaesthetic experience of singing. The book consists of forty interviews with famous opera
singers and invariably their conversations lead to each singer’s own description of vocal technique. An excerpt from an interview with Placido Domingo illustrates this focus:

> “Describe to me what you think when you take a breath,” I said [interviewer Jerome Hines]. “If a note is properly supported,” he explained, “when you are singing, somebody might even be able to hit you” - he indicated the stomach area- “and that note is still there. I used to breathe like this…” He demonstrated by lifting his chest and shoulders high. “You cannot support, and many people sing that way. It should be deeper”- he gestured with his hands to show expansion, indicating filling his whole abdomen from the ribs on down- “everything is expanding out… So my feeling is that when I am singing, I should be able to push anything that is against me.” (Hines 104)

In the interview with Luciano Pavarotti, his imagery is imaginative and quite personal:

> “What sensation do you have when you take a breath before singing?” I asked [interviewer Jerome Hines]. “The sensation is very simple. I don't know how you are going to describe this,” he said in a discreet tone of voice, “but you take a breath and stay in the position as when you are in the bathroom…and you keep this position until the phrase is finished. You’ll have to explain this, perhaps…with other words… You must push, like a woman in labor, giving birth…it is the same thing. When you push like that, the diaphragm comes up” (220).
First person descriptions from famous opera singers make books like *Great Singers* immensely popular. Renée Fleming’s autobiography *The Inner Voice: The Making of a Singer* remains a best seller for its category on amazon.com, though it was published in 2005. The book’s candid portrayal of her successes and struggles include descriptions of a personal kinaesthetic language relating to her vocal technique:

I think of my voice as an hourglass. The bottom has breadth and width and a colour that is deeper and darker…The passaggio is slim and focused, and there can be no pressure of weight there, just as you wouldn’t want to put any weight on such a delicate passageway of glass…Every voice is different, and many singers might think of their voices as a column that is even all the way up and down, but for me the defining feature is the curve, the passaggio (44-45).

**Shared Knowledge of Physical Descriptions.** Given the popularity of these books and others like them, the singer’s need to share narrative regarding the process and sensations of singing from a first-person perspective is clear.

Pedagogy books also reference the importance of a clear personal concept of one’s own body during singing. The first chapter of *What Every Singer Needs to Know About the Body* is called “Body Mapping, Kinaesthesia, and Inclusive Awareness” and is devoted to promoting the notion that an accurate awareness of the subtleties of one’s anatomy is essential (Malde et al. 1-11). Malde insists that singers must train their kinaesthetic senses much in the same way they have
trained their auditory senses in order to become attuned to the feelings of effort and release required to sing consistently (5).

The first questions posed to twenty "exemplary vocal pedagogues" in Elizabeth Blades-Zeller’s book *A Spectrum of Voices: Prominent American Voice Teachers Discuss the Teaching of Singing* focus on the topic of overall body alignment and kinaesthesia, and involve descriptions of the various ways these teachers bring the subject into their lessons. All agree on the supreme importance of body alignment, many of them teaching posture and “body-ease” first and foremost with new students. Cynthia Hoffman stresses the importance of finding “an inner sense of balance and poise” (3), Ed Baird feels that posture “is the prerequisite for all good breath support” (2), and Lindsay Christiansen begins her response with the proclamation that “the whole body is the instrument” (4). My own teacher, Wendy Nielsen, often stresses the importance of the “housing” of the instrument in producing a positive result; the overall balance and well-being of the body is clearly central to good singing.

Our bodies have a wide range of systems which yield helpful information regarding bodily sense. Our internal systems communicate information about balance and posture from the inner ear, friction from skin receptors provides information about pressure and temperature, receptors in the organs give us knowledge about our nutritional state, and our muscles provide us with clues about weight and effort (Eiland et al. 13). This incomplete list of bodily senses serves as a reminder as to the complex and comprehensive sensory indicators that are often taken for
granted. Whether conscious or not, as singers we must tune into communication provided by our bodies in order to use our voices successfully.

*Coming Up Empty.* The intimacy with which singers must attune themselves to their bodies is undoubtedly an essential step in their development, and thus any physical changes which may occur would be perceived with increased awareness. Yet, in a search through over thirty well-recognized vocal pedagogy books in the shelves of the university library, pregnancy and the resulting implications to a classical singer are only mentioned once. In contrast, references to another common hormonal shift which affects singers, the male changing voice, abound. Titles like *Training the Boy’s Changing Voice* by Duncan Mackenzie, *Teaching Singing to Boys and Teenagers: The Young Male Voice and the Problem of Masculinity* by Martin Ashley and “Male adolescent transforming Voices: Voice Classification, Voice Skill Development and Music Literature Selection” by John Cooksey offer pedagogically- and psychologically-based suggestions appropriate for teachers who mentor young male singers.

The lone mention of pregnancy in the many vocal pedagogy books I searched through is found in volume five of Robert Caldwell and Joan Wall's *Excellence in Singing* series, the volume which focuses on vocal health and disorders. At the end of the book, past the lists of vocal health issues including infections, smoking, cancer and various neurological disorders, is one short entry which briefly outlines some physical changes which might affect the pregnant singer. The final sentence leaves us with the recommendation to “discourage your pregnant student from singing if the level of her abdominal support is substantially compromised” (124). Clearly some of the
pedagogues who worked together in the writing of this volume found it necessary to provide that warning, however, they gave no further explanation as to how the singer might identify her compromised support and what to do if they find themselves in that position with upcoming contracts to fulfil. The enormity of this situation for the individual woman is overlooked and the resources to support a pregnant singer are lacking.

PHYSICAL REALITIES OF PREGNANCY FOR SINGERS AND NON-SINGERS

Current Research. Scholarly research has begun to explore the physical relationship between pregnancy and the voice. As one might imagine, there are a myriad of physical changes that occur during the nine months of gestation - some subtle and some more obvious - which have direct bearing upon the singer. The details of these changes are an important framework for this discussion.

Much of voice science research has focused on the hormonal implications of premenstrual and menopausal vocal syndromes, the effect of birth control pills or of puberty on the voice. The limited research that is available on pregnancy and the voice is often conducted on non-singers or involves case studies on individuals.

Hormonal Implications. A study by Abitbol and others conducted in 1998 on 197 women is no exception, and though it only briefly mentions “the child-bearing years,” (444) it is one of the most referenced studies on the subject. Though this study is large in scope and does much to clarify the effects of hormones on the voice, the women in the study were not, for the most part,
vocal professionals, nor were they pregnant. Of the voice professionals included in this study, we receive only a tiny clue into the true impact of hormonal changes on their lives and careers, although in this case the change is caused by menopause; “(they) felt as if the hormonal earthquake caused by menopause was upsetting the entire balance of their emotional lives and vocal careers” (440). This brief but dramatic description of the turmoil caused by menopausal changes gives us merely a glimpse into the internal life of these women and speaks to the gravity of the effects of changing hormones in a singer’s life and work. The remainder of the study describes the researchers' findings and recommendations (which involve vitamin supplements as an aid to hormonally based vocal syndromes), but does not discuss further the personal ramifications of the syndromes.

Case Studies on Individual Classical Singers. A handful of studies focus on analytical measures in an effort to reveal changes in vocal efficiency and production throughout pregnancy for the classical singer. Though these studies are conducted on one individual only, their contribution to our knowledge on the subject is important. Baptista Lã and Sundberg’s case study on a pregnant classical singer explored the final twelve weeks of pregnancy and eleven weeks postpartum. Their results suggest reduced vocal fold mobility and vocal fold efficiency in the final trimester, as well as increased glottal adduction and decreased vocal brightness.

Dickson’s dissertation on the acoustic and aerodynamic impacts of pregnancy on the classical singing voice used multiple rating tools which tracked changes in respiratory, acoustic and aerodynamic measurements. Among her results, Dickson discovered that vibrato rates remained...
consistent throughout the participant’s pregnancy and although there was a decrease in agility and laryngeal valving efficiency in the third trimester, values remained within a healthy range.

In “The Impact of Pregnancy on the Singing Voice: A Case study” author Stephanie Adrian shares a more intimate vision of the singing voice during pregnancy by focusing on her own experience as a pregnant singing professional. Her study involved measuring acoustic and aerodynamic functioning as well as her own observations which described her perceptions of her own voice as her pregnancy progressed. Adrian felt some timbral changes in her voice that she attributes to several factors related to her pregnancy, however, no visible changes were detected in the vocal folds. Of special interest to this study are her personal observations, which, though succinct, provide a small glimpse into the subjective reality of the singer:

Within the first and second trimester the medical literature describes an interval of "good vibration"--a rounded, well carried sound due to the exceptional lubrication of the vocal folds. I enjoyed that roundness of voice and effortless breath support beginning in week 19. The coordination of breath and voice, melismatic passages, and long phrases were unproblematic. (269).

Though Adrian’s study offers more clarity into the experience of pregnancy for the classical singer, it is reflexive of only one individual and therefore limited by its nature.

Research on Non-Singers. Hamden et al conducted a study on twenty-five pregnant non-singers in order to assess vocal symptoms such as hoarseness and vocal fatigue. Though no significant
differences were found in the incidences of vocal symptoms compared to non-pregnant women, reports of vocal fatigue were more prevalent. Hamden also found that maximum phonation time decreased during the final trimester.

Although Pacheco’s study on pregnant non-singers found that respiratory rates are not affected by pregnancy (8), this conflicts with Dickson’s case study, which showed that vital capacity (the maximum amount of air a person can expel after a maximum inhalation) decreased for her participant during weeks 36-39 (43). Further exploration is needed in order to clarify these conflicting results.

In a study by Cassiraga et al, forty-four women pregnant in their third trimester participated in acoustical analysis and a questionnaire in order to uncover vocal changes. Though the women who participated were not classical singers, it is of interest that most pregnant women who participated showed a reduction of phonation time, abnormal rates of breathiness and hoarseness, and displayed a tendency for clavicular breathing and a higher incidence of gastroesophageal reflux: all factors which are of importance for the classical singer and which can impact voice quality. However, like Hamdan et al and Hancock and Gross, no changes in acoustic measures were noted over the course of the pregnancy.

Like Hamdan et al, Saltürk et al found that maximum phonation time decreased during the third trimester for the fifty pregnant non-singers they studied. Subjective self-analytical tools were
also incorporated into this study and revealed that women had more difficulty with their voice quality in the third trimester (Saltürk).

Hancock and Gross investigated the correlation between hormone levels and aerodynamic function, glottal efficiency and a visual exploration of the vocal folds in their study on one pregnant non-singer. Their findings show only a slight decrease in aerodynamic functioning.

Though these studies are important in furthering our understanding of the impacts of pregnancy on the voice, some results have conflicted and further inquiry is needed. Additionally, though new studies have been conducted in increased frequency during the writing of this dissertation, at this point no one has studied the experience of pregnancy on a larger population of classical singers. Qualitative methods have largely been ignored. Though the analytic measurements of vocal processes are necessary and vital to our understanding, the in-depth experience of the individual has been overlooked.

*Understanding Hormonal Impact.* As stated above, much of our understanding of pregnancy’s effects on the body comes from studies on non-singers. It is important, however, to acknowledge and understand these physical impacts as we continue to learn about how they influence the singing voice.

When a woman becomes pregnant, the normal cycle of estrogen and progesterone modulates, allowing progesterone - which promotes growth of the fetus - to dominate (Jahn 19). This
hormonal change impacts not only the genital tract and reproductive system, but also the muscles, bony tissues, mucosa, the cerebral cortex and the larynx of the pregnant woman (Abitbol 435). The hormonal impact on the larynx is of special interest to the classical singer, as changes in the hormone receptors which are found in the larynx influence the tone and timbre of the voice (Avery-Hill 12). As part of Abitbol’s study, women were given vocal fold smears on the same day as they had cervical smears; the same hormones present in the cervix were also in found in the vocal folds (Abitbol 435). Changes in the balance between progesterone and estrogen in the larynx can cause the widening of blood vessels (vasodilation) and fluid retention (vocal fold edema), (Avery-Hill 4) both of which can cause a thickening of the vocal folds and often result in hoarseness or perceived heaviness of the singing voice (Adrian, Abitbol, Baptista La et al., Cassiraga, Dickson).

Renowned Otolaryngologist and singer, Dr. Robert Sataloff has explored the impact of sex hormones on the female voice associated with menstruation. Symptoms include vocal fatigue, hoarseness, loss of high notes, decreased efficiency and “muffling” of the voice. Although his research does not specifically encompass the experience of pregnancy for the classical singer, he suggests that similar symptoms to those related to menstruation may occur during pregnancy (Sataloff, “Evaluation”).

Disruption of the thyroid gland can result in physical symptoms that may impact the classical singer. During pregnancy, the thyroid gland is under particular stress. In order to maintain hormonal balance between systems, the thyroid gland must increase its production of thyroid
hormones (Pacheco et al. 28-29). In some women, (2.5% of pregnancies), the thyroid does not produce enough of the hormone T4 in order to maintain balance. Though hypothyroidism is relatively rare, symptoms include weakness, tiredness and hoarseness (Stagnaro-Green 1081), issues that are especially relevant for the classical singer.

Although most pregnancy hormones cause only temporary changes in the woman’s body, some can cause permanent changes. Androgen, a male hormone which can be produced in excess by developing fetuses, can cause a permanent masculinization of the mother’s voice, although this is rare (Avery-Hill 5). Besides the laryngeal changes generated by hormonal fluctuation in pregnancy, the pregnant body undergoes a wide variety of other symptoms which affect the singing voice.

**Other Physical Realities of Pregnancy.** Besides the hormonal impact, various other physical changes which occur during pregnancy can impact the classical singer. Gastroesophageal reflux disease (GERD) is another physical symptom which may be experienced by expectant mothers and which can bear special significance to a singer. GERD is caused by changes in the physical barriers which prevent the reflux of gastric juices, and is reported by 40-85% of women (Adrian 267). Because of the contact of acid on the vocal folds, GERD can cause inflammation resulting in hoarseness and difficulty singing high notes.

Irritation of the throat can also be caused by morning sickness, since the gastric juices must pass through the throat when the woman vomits. This irritation can not only cause the larynx to rise
(which is undesirable in the proper production of tone), but it can also create inflammation of the pharynx (Jahn 20). A North American study by Whelan shows that 50-75% of women experience morning sickness (Whelan 45), making this concern valid for the majority of pregnant classical singers.

The abdominal muscles of the pregnant singer are another area that change physically during pregnancy. As the fetus grows, the linea alba (the connective tissue which connects the two sides of rectus abdominis) stretches and becomes weaker (Will 2). Maintaining the strength of the linea alba is important for the proper use of other abdominal muscles during singing and its weakness can adversely affect the singer’s ability to properly support a tone.

Adjustments to postural alignment due to the distension of the abdomen are also a factor in maintaining proper breath support. As the fetus grows, the mother’s centre of balance moves forward (Noble 27). The abdominal muscles, along with the muscles of the lower back, become weaker due to their extended position (23) yet their ability to engage remains an integral part of supporting the tone. Interestingly, the slight extension of these muscles can initially make support easier, according to Dr. Jahn, a professor of otolaryngology at the Columbia University College of Physicians and Surgeons and author for Classical Singer magazine (Jahn 20), though as the pregnancy progresses, support can become more difficult. Andrea Pittman Will’s dissertation, “Pregnancy and Postpartum: A Guide for Singers” focuses on an in-depth look at changes in abdominal muscles for pregnant singers, as well as recommendations for exercise to remedy any issues which may arise.
Lung capacity can also decrease as the pregnancy continues, the growing fetus limits the area in which the lungs can expand (Will 12), and the crucial descent of the diaphragm is restricted by the rising uterus (Jahn 20). The severity of these symptoms vary during the pregnancy's progression and are impacted by the unique attributes of the expectant mother. Variables such as the mother’s height and size of pelvis, or how high or low the baby is positioned in the body are factors.

During pregnancy, a woman’s blood volume can increase by 50% which can result in various changes in the airways, skin and digestive tract (Adrian 266, Pacheco 4). An increase in blood volume also causes ligaments to swell and loosen. This, combined with the addition of the hormone relaxin, (which appears during the second trimester and which, as its name indicates, relaxes the tendons and joints in the mother’s body), makes the woman more susceptible to dislocations and injury (Jahn 20).

Another symptom of pregnancy that is a concern for classical singers is an increased frequency of rhinitis (nasal congestion) caused by the swelling of mucosa in the nasal cavities and which is experienced by 22% of pregnant women (Hamdan 491). Rhinitis can cause irritation of the vocal folds, a sensation of plugged nasal resonators and on occasion, hoarseness.

A general feeling of fatigue is another common symptom that can affect pregnant women. The hormonal changes that occur during pregnancy can invoke sleepiness (Lancel, M. et al), and
fatigue caused by fitful nights, either due to physical discomfort or emotional turmoil can further aggravate the situation. This overall tiredness is typically felt in the first trimester and is often replaced with a renewed feeling of energy in the second trimester (Will 14), although some researchers mention that sleep may be compromised in the third trimester due to the need to sleep in unfamiliar positions in order to remain comfortable with a foreign body shape (Jahn 21). The National Sleep Foundation’s poll, “Women and Sleep” found that 78% of pregnant women reported that their sleep was disturbed more than any other time in their lives during pregnancy; sleep disturbance can certainly contribute to feelings of fatigue for the classical singer who may have to participate in vigorous staging or long rehearsals while pregnant.

Changes in the mother’s brain during pregnancy are significant. According to neuroscientist Craig Kinsley, “These changes represent a separate developmental period every bit as important as sexual differentiation or puberty” (Young 38). However, our understanding of these changes is limited. Though popular culture has described “baby brain” or “pregnancy brain” and pregnant women tend to report cognitive problems, (in surveys, as many as four-fifths of pregnant women report more trouble remembering numbers or with complex language tasks than before pregnancy), there is little scientific evidence to support this claim (Young 38). Some scientific studies have found that the capacity of a woman’s brain is not impacted by pregnancy, (Mann) and yet, others have proven that significant impacts arise, for example, that spatial recognition memory ability is reduced in the second and third trimester (Locke). While the truth of “mommy brain” is currently being disputed, the way in which classical singers experience their cognitive
function during pregnancy has not been explored. Memorizing foreign languages, staging and other complex directions while performing are areas in which cognitive changes (if they occur) may impact performance ease and success.

*Online Guidance.* Several blogs and websites offer advice to the pregnant singer, though from a personal, not scholarly, perspective. For example, in Ruth Gerson’s article for Huffington post, she writes: ‘There’s much we can physically overcome when we are “on”: on stage, teaching, or presenting. However, when your primarily tool is compromised for over nine months of work, you have to strategize and do all you can to limit the ills.” What follows is a list of voice and body care recommendations that the author has used with success in her own pregnancies, though they generally don’t stray far from the typical advice pregnant women receive: rest, eat well and exercise. Several other websites exist which provide tips and tricks acquired through personal experience (singwise.com, voicestudio.kristinaseleshanko.com,) but not from a scholarly perspective.

All of these physical changes have varying degrees of impact on the body during pregnancy and their study is important and ongoing. This clinical research should not be disregarded, as the ‘truth-finding’ aspects of science are of critical importance to our understanding of our bodies and ourselves, as well as providing an important framework for this discussion. However, the quantitative data that exists is often based on studies that rely on the experience of one woman, or on a larger group of non-singers. More research is needed in order to more fully understand this experience. Furthermore, the subject of pregnancy for the classical singer is severely lacking
in the lived experience of the individual: the subjective experience which hides beneath the surface has been overshadowed by analytical measurements. To focus solely on the physical and hormonal interplay in a pregnant woman’s body is to neglect much of the experience of the pregnant singer herself: a woman who by her very occupation has been trained to be aware of her embodied experience.

EMOTIONAL LANDSCAPE OF PREGNANCY

*The Interplay of Emotions and Performance Success.* Besides the physical changes which occur during pregnancy, the emotional influence of pregnancy on the classical singer deserves further exploration. The ability to sing well requires a calm, stable emotional state and a willingness to express emotion without allowing it to overtake the technical needs of the performance. In *A Spectrum of Voices*, pedagogue Joan Wall describes the importance of balancing the integration of body and emotion in singing. “Interfering tension in singing can be physical, emotional, or mental. Physical relaxation, emotional focus, and mental attitudes can support easy, free, flexible singing, as well as expressive performance” (Blades-Zeller 78). Dr. Sataloff stresses that the psychological state of a singer has physical affects on the singing mechanism. Because psychological events are mirrored in the functioning of the autonomic nervous system, systems under its control (such as mucosal secretions and other functions which impact the singing voice), are influenced (“Professional Singers” 253).
Robert Caldwell’s *The Performer Prepares* focuses entirely on the mental aspects of singing. Devoted to helping singers with performance issues like anxiety and stage fright, *The Performer Prepares* is a work-book designed to take the singer through an interior journey, uncovering deep emotional beliefs that may be hindering their performance. Caldwell puts the focus on the singer's emotions and believes that the rest will follow. This summary at the end of the book shows clearly the emphasis Caldwell places on the singer’s state of mind.

So, all these ideas boil down to a single concept - the art of performance is the art of pulling yourself together for the time on stage. It all begins with you, so you might as well pay attention to what you want, your objections, and what you need to solve them… Your performance will work when you develop what you want in the music. Your desires will include states of mind, emotions, attitudes, skill acquisition, career achievements (149).

Caldwell's philosophy is shared by many singers (as well as vocal pedagogues), and underlines the fact that one’s personal state cannot be separated from the body and its functioning.

In *The Inner Voice*, Renee Fleming recounts a conversation with soprano Leontyne Price who counselled her during a particularly difficult emotional period by saying “It’s funny the way people talk about the voice as if it is a separate entity, like it’s another being separate from us… It’s not” (72). Similarly, psychologist and singer Paul Freinkel describes this very concept in his dissertation titled, “Transpersonal Implications of Singing” explaining: “a person’s inner state is
mirrored in the voice by the way they use the vocal tract.” (81). The experience of pregnancy is arguably one of the largest physical and emotional changes in a woman’s life and likely a cause for an altered “inner state” which could be expressed through the voice. In Women’s Ways of Knowing, Belenky et al. asked 135 American women, “What is the most important learning experience you ever had?” Many women answered childbirth. Often motherhood is the beginning of a personal and epistemological transformation (Benkeley, et al. 35) and yet, its impact on the countless singing mothers within the classical tradition is largely overlooked.

Insights from Studies on Non-Singing Pregnant Woman. Surprisingly, the number of studies regarding emotions during pregnancy in normal, full-term pregnancies is relatively small. Current studies tend to focus on emotions during pregnancies with additional health concerns, such as drug addiction and cancer, or on other unique challenges such as emotions in pregnancy for teenage mothers or for those who have previously miscarried. However, some studies have focused on the emotional impact of pregnancy on women generally, though not specifically on women who are also classical singers. Despite this, much can be learned from what is available.

In a qualitative study conducted on twenty-one women in 2005, Patel, et al. found that pregnancy often involved a “reorganization of self-identity” and a shift in the woman’s own view of herself within the larger framework of society (348). Further studies explore the elevated sense of emotional sensitivity that may occur during pregnancy through the lens of pregnant non-singers. Wynn characterizes this as a “deepening of their moods” which are often “frighteningly clarifying” (13). In “My Baby Body, A Qualitative Insight into Women’s Body-Related
Experiences and Mood during Pregnancy and the Postpartum,” of the fifteen women interviewed, all participants experienced this elevation of both positive and negative moods (Clark et al. 342).

In a Czech study on nearly 5,000 pregnant women, Tyrlik et al. found that the way in which women experience pregnancy emotionally changes over the course of the pregnancy in one quarter of women (18). These changes can be due to varying factors, including the age and health of a woman, her social relationships and her preparedness for motherhood. Almost one fifth of women studied experienced an increase in happiness, while only 5% experienced a decrease in overall levels of happiness (21). Knowing that emotions are integral to effective performing, it is essential that we investigate how changes to emotions manifest in classical singers who sing while pregnant.

Using Emotional Control for Positive Outcomes. In a study that focused on methods which help to maintain positive emotions during pregnancy and labour, Carter and Guittar found that by conditioning one’s mind, their participants were able to exert control over their emotions; “Keeping the mind occupied” served as a method of emotional management with success (1023). Clifton Ware reminds us that classical singers are adept at focussing the mind in order to perform with success. In *The Basics of Vocal Pedagogy* he writes:

> As with most activities requiring complex skills, the main way to reduce anxiety is to focus on the external goal, or task at hand - for example, an expressive rendition of the song’s message for the benefit of listeners - rather than focusing on self-conscious
concerns such as “What are people thinking?” or “How do I look?” or “Am I singing well?” In this, as in other situations, our thoughts govern our actions (Ware, 23).

While singers become adept at maintaining focus during performances and “conditioning” themselves to deal positively with mental challenges which may impact performances, scholarship has yet to explore whether or not this added skill can contribute to positive emotional outcomes for pregnant classical singers.

Though scholarship has not yet investigated the emotional impact of pregnancy on the classical singer specifically, the experience of pregnant actors has been explored somewhat through Schiffman’s article, “The Craft: Acting While Pregnant.” Since classical singers are required to act in staged productions and to portray emotions in recital and concert work, this comparison, though not exact, is worth noting. Schiffman explains that actor Dana Lewenthal found her emotions to be closer to the surface during pregnancy and thus easier to use in a performance situation. Dana explains, “With all the hormones, I’m much more in touch with my emotions.” During her pregnancy the actress portrayed a character who cried and became hysterical onstage, and Dana was initially concerned about how these intense emotions would affect her baby in utero. Eventually she felt comfortable with the situation, saying, “I think the baby gets used to it” and repeatedly told the baby, “Mommy’s okay. Mommy’s working. We’re fine.” The situation Dana experienced is one in which a classical singer might find themselves if they are engaged in an opera role that involves dramatic emotional content. An exploration of the interplay between
these “deepened” emotions and the required clarity of mind and emotional balance needed for successful classical singing has yet to be explored.

SOCIAL IMPLICATIONS OF PREGNANCY

Current Scholarship. In “Pregnant Bodies and the Need for Privacy - An Embodied Reading” Jelena Komljenovic found that pregnant women placed great value on the feeling of being supported and connected to the people around them (142). Carter and Guittar found that social interactions were one way in which women positively managed challenges during pregnancy (1026), underscoring the importance of social support and human interaction. Much like any pregnant woman, pregnant singers need support from their family and friends; they also require support from their voice teachers, colleagues, conductors and professional contacts. In “The Experience of Pregnancy: A Hermeneutical/Phenomenological Study” Lundgren and Wahlberg found that pregnant women expressed a strong need for relationship and interpersonal support, especially from the child’s father (19). The participants in this study described a vulnerability which increased the pregnant woman’s need for relationship with others (50). Though these women were not classical singers, their experiences illustrate a common need for pregnant women. How a pregnant woman’s need for support intersects with the classical singer’s performance environment has yet to be investigated.

Parallel Experiences. The study of pregnant teachers can provide a parallel glimpse into the experience a pregnant classical singer may encounter; both vocations require women to be in the ‘public eye’ while pregnant. Teaching can be seen as a kind of ‘performance’ and the reactions of
students (who are not unlike an audience) can help to illuminate the undiscussed territory of the pregnant classical singer.

In *The Teacher’s Body: Embodiment, Authority and Identity in the Academy*, two teachers’ stories are especially pertinent to this discussion. Amy Spangler Gerald noticed that during the semester in which she was visibly pregnant while teaching at a university, her course evaluations were markedly lower than in previous sessions. The written comments made by her students indicated that these lower ratings were connected, at least in part, to her physical state. In response to the question, “What changes would you recommend the teacher make next time s/he teaches the course?” some students responded, “Don’t be pregnant” or “not have another baby” (182). Though Gerald was somewhat hurt by these remarks, she also recognized the possible immaturity of her first year class and addressed the idea that perhaps her students were not sure how to respond to her pregnant body. The physical evidence of pregnancy leaves no doubt that the life of the authority figure in question (in this case, the professor) encompasses very human elements, including sexuality. Gerald goes on to discuss how she could have eased this relationship by altering her teaching style or discussing her pregnancy more often with her students, all to soften “the taboo of the pregnant woman” as referenced by Gerald from *The Laugh of the Medusa* by Helene Cixous.

In Kimberly Wallace-Sanders essay, “A Vessel of Possibilities: Teaching through the Expectant Body” she states, “Our bodies betray truths about our private selves that confound professional interaction” (188). When a classical singer portrays a character or poetic emotional state in a
performance, the suspension of belief that is often needed to fully embrace an artistic endeavour may be more difficult for the audience to achieve since these ‘truths’ regarding the singer’s private life (in the form of a pregnant belly) are in full view. The pregnant woman can also be distracted by her own pregnancy while engaging in professional activity. Wallace-Sanders illustrates this point as she discusses her son’s activities in utero while teaching. During lectures he was quite active and she would often feel a kick which would jostle her mid-sentence (194). Add to that the delicacy of a demanding vocal phrase or subtle nuance and the impact of this kind of fetal activity could be magnified.

Parallels in Musical Theatre. Audra McDonald, a six-time Tony award winning musical theatre performer and actress announced her pregnancy in the summer of 2016. Though this was a joyous event for the performer, controversy arose surrounding her announcement because her show, *Shuffle Along* was cancelled after merely three months of sold-out performances. Producer Scott Rudin explains this event by saying, “The need for Audra to take a prolonged and unexpected hiatus from the show has determined the unfortunate inevitability of our running at a loss for significantly longer than the show can responsibly absorb” (Paulson). Many have weighed in on this decision, expressing surprise that the show would not continue with its significantly star-studded cast and sold-out performance record. Others have criticized the producer for laying blame on McDonald’s pregnancy. Alicia Samuel of BroadwayBlack.com wrote:
Equal rights for women in the work place is an uphill battle. When you add on pregnancy you usually end up rolling back down that hill wild and fast. Audra McDonald’s only job security is the fact that she is “AUDRA MCDONALD”. If she were anyone else, the possibility of her returning to the show after her pregnancy probably wouldn’t have been an option.

Blogger Christine Burk of scarymommy.com also wrote in support of McDonald:

In a business where women face cut-throat competition, body shaming from male directors, fewer roles for talented older actresses and no paid maternity leave, now actresses and their unexpectedly fertile uteruses are expected to carry the full weight of multimillion dollar Broadway shows?

These two examples represent the multitude of articles that have appeared on the subject since Rudin’s announcement. Though this situation has arisen in the musical theatre industry (one which arguably has a higher profile in the eye of the general public than the opera world), the reaction to Rudin’s implication that McDonald’s pregnancy is responsible for the show closing certainly provokes thought regarding the role pregnant women play in sustaining operatic productions. As this story illustrates, the career implications of pregnancy for the classical singer deserve exploration.
Job Loss and Career Attitudes. Perhaps in response to the hidden nature of the pregnant singer’s reality, the lack of resources available and the fear of losing work, the culture of performing sometimes leads women to hide their pregnancy in order to remain viable in their chosen industry. Some of these attitudes encourage a separation from full embodiment while the performer continues to “do her job.” Actress Dana Lewenthal explains, “When you’re a pro, you do the work and your body does what it’s doing” (Schiffman, “The Craft: Acting While Pregnant”). Her subtle implication that a woman who cannot work due to pregnancy-related issues is not considered "as professional" as her working counterpart represents a general attitude among singers who learn to sing through colds, illness or other hardships in order to continue to be perceived as professional, sometimes with limited concern for overall health and wellbeing. According to actor Melissa Greenspan, “actors want to hide their pregnancy as long as possible” (Schiffman). One could surmise that some pregnant classical singers may experience the same desire.

The reality of the pregnant woman’s body can also be seen as in conflict with their professional roles. Robyn Longhurst asserts that the pregnant woman’s sometimes uncontrollable bodily fluids (i.e. morning sickness, water breaking) tend to threaten our social beliefs regarding what is or is not appropriate (41). A body which is on the verge of vomiting is not appropriate for the “respectable public realm”; usually only small children and drunks are in the category of those who might vomit in public (45). A pregnant woman may feel challenged by wanting to obey social norms while in public and experiencing various “unacceptable” bodily functions. This could result in limiting or discontinuing her public involvement during these times.
"Grace days," in which singers were not expected to sing during their periods, are now just stories of the past. Today, women can control their hormones using birth control pills, some elite athletes will go months without a period in order to enhance their performance and according to the documentary “The Business of Being Born,” New York City women can now schedule the cesarean birth of their babies in conjunction with a tummy tuck. Technological advances have provided us with the sense that we can control many aspects of our life and health, and have perhaps contributed to a separation of our instinctual, basic needs from the glossy veneers of our professional personas.

Searching for Balance. Today many women are torn between wanting to build their careers and their families. Happily, some structures are in place which work to protect a woman’s right to motherhood and a career. In October of 2013, New York City Mayor Michael Bloomberg signed a law that prevents employers from discriminating against pregnant women in the workplace and forces them to provide “reasonable accommodation” for the woman’s pregnancy. Here in Canada, most full-time employees are provided with maternity and parental leave in order to assist in the easy transition of welcoming a new child into the world: a portion of their pay is received while on leave. However, because most classical singers are self-employed, the luxury of a paid leave is only available if the singer had the knowledge, foresight or income to pay into Canada’s Employment Insurance program and if they have contributed enough to benefit by the time they become pregnant. (I myself looked into this option, but not early enough to benefit). Since most singers work from contract to contract, the pressure to keep commitments and to
return to work quickly could likely be heightened when compared to people who are on salary and have the comfort of knowing that government structures are in place to help them keep their jobs if they choose to keep working after pregnancy.

**Societal Pressures.** Social pressures surrounding pregnancy have been explored in scholarly research to some extent, but not specifically for pregnant singers. In “Doing Pregnancy: Pregnant Embodiment as Performance” Elena Neiterman discusses the societal expectations placed on pregnant women in regards to their health and welfare of their child:

> The social norms surrounding pregnancy suggest that responsible, good, women—those who can be placed at the top of the social ladder of motherhood—would be constantly aware of their pregnancy, would be willing to sacrifice their own wellbeing for the welfare of the child, and would be ready to fully invest in their child. Moreover, since pregnancy is often presented in the context of potential health risks that the woman's irresponsible behaviour can cause to a baby, the failure to follow prenatal regulation may -be seen not only as endangering the woman's position on the social ladder of motherhood, but also as directly harming the child (377).

Assuming that pregnant singers are exposed to the same societal pressures as other pregnant woman, the dichotomy between their desire to be ‘good’ mothers and to continue participating in performing could make their balancing act a difficult one. Fears of hurting the baby during strenuous rehearsals, worry about injury from physical touching during a lesson or masterclass (sometimes a teacher will press quite strenuously on the lower abdominals to help the student
engage their support system) or concern about the impact on the fetus from the stress of performance (travel, performance anxiety, irregular schedules) can all work to complicate the issue. This can be especially daunting if the singer in question has not yet revealed the fact of her pregnancy to work colleagues.

Geographer and scholar Longhurst touches on this issue with one musician she happened to interview in her chapter on pregnant bodies in public spaces:

**ROBYN:** So you found out you were pregnant?

**SONYA:** Yeah, on tour [with a band of musicians]…It was actually kind of a harrowing experience really ‘cause I couldn’t tell anyone. I hadn’t told my boyfriend and I had morning sickness and they all thought it was travel sickness and they were giving me travel sickness pills. And um, one of them guessed [*laughter*] when I didn’t take the travel sickness pills (43).

The pressure to perform consistently and without special dispensation is particularly relevant in the somewhat over-saturated field of classical singing, where eager replacements seem to abound. All this can be exacerbated early in the pregnancy when the woman is not yet ready to reveal her condition and is therefore expected to perform with a 'business as usual' attitude.

*Non-Singer Pregnant Women in the Workplace.* In "Putting Pregnancy in its Place: Conceiving Pregnancy as Carework in the Workplace", Caroline Gatrell argues that women my find it
difficult to balance work-place expectations with health advice. She cites WebMD which states: "A healthy lifestyle is vital. Here's what you should (and shouldn't) do." Among the detailed instructions which "ensure a healthy baby" is the advice "not to get overtired, since rapid growth of the baby can compound the burden on your heart, lungs and kidneys." Though this advice, among others, is given with the health of both mother and baby in mind, it may be difficult to adhere to while working. Caroline states, "health advice might contain underlying inferences that pregnancy carework may most appropriately be performed at home" (396). Gatrell's study of fourteen working pregnant women in the United Kingdom found that participants were inundated with health advice during their pregnancy from well-meaning colleagues, family members and friends. This finding supported previous research on the subject by Longhurst and Davidson. However, her participants also felt pressured (either overtly or subtly) to down-play their maternal needs while pregnant. One participant explained:

I have been given the impression [at work that] if you are pregnant you are required to ignore it; you are required to forget that you are pregnant. This is quite difficult, especially when the baby starts moving, it is quite difficult to just say ‘oh none of that matters’ because obviously everything changes so vastly and your diet changes and you are physically changing, too and trying to deal with that (399).

Another participant, who worked at a University, was told by her employer that her pregnancy was "very inconvenient." In response to this, she worked to adamantly prove that her pregnancy would not impact her job performance, saying "I never missed anything when I was pregnant, I
was hyper-vigilant about that" (400). Swan also notes this tendency, explaining that women who are pregnant in the workplace are often seen as "problematic" which leads some of them to conceal the "imagined femaleness inherent in their bodies" (319).

This reality has remained unexplored for the classical singer. In a profession that has less stability than the typical nine-to-five job and has fewer protections afforded to its contract-based employment system, the treatment and experience of pregnant classical singers must be explored.

*Public Ownership.* The fetus is often thought of as a public concern, with an ownership that reaches beyond the mother and her intimate family, and which can lead to unwanted touching of the stomach, advice from strangers and an overall feeling that the mother needs to be contained and supervised (Longhurst 55).

A colleague of mine who is currently in her second trimester revealed to me that during a recent performance when the audience was applauding, a member of the crowd called out, “how did the baby like it?” referring, I imagine, to the performance which had just concluded. My colleague ignored the comment and went on to introduce her next song group (Dufton). This example illustrates the social belief that a woman’s pregnancy is not an entirely private issue and commentary on her status is therefore available to the public at large. If these types of remarks are at times uncomfortable for the average pregnant woman in public spaces (for example, in shopping malls or grocery store line-ups), how is the impact magnified when the woman in question is in the very public position of performing onstage?
**Attitudes within the Singing Community.** My own participation within the singing world has given me some indication of attitudes among my colleagues and mentors when it comes to pregnancy. Upon my engagement to my husband and graduation from my masters program, one of my mentors wished me luck and advised “just don’t get pregnant.” The insinuation was that any chances we may have for our performing careers to flourish might be compromised if we had a family. I can only imagine the angst a pregnancy would have produced at that point as well as the understandable desire to hide the truth for as long as possible.

Another personal anecdote is more recent; months before my acceptance into the doctoral program at the University of Toronto, I received more advice that was an enlightening indicator of the general culture of motherhood vs. work. I expressed to a colleague the desire to begin my DMA as well as to start a family. Here the advice was similar; women think they can have it all, but they can’t. In other words, I needed to choose between a doctorate and having children. In fact, when I first thought seriously about looking at the experience of pregnant singers as a topic for doctoral research, I wondered about the reaction from colleagues and mentors if I became pregnant during the process. After getting over my initial question of “what would people think,” I realized that my interest in my own pregnancy and this research fit perfectly. The separation of mind and body, woman and student, scholar and singer can’t be sustained: Each facet of ourselves influences the other and adds depth to the inquiry.
CASUAL RESOURCES

*Online Resources.* Given the lack of holistically centred resources and research available to pregnant classical singers in scholarly research and pedagogical resources, it is not surprising that the topic of pregnancy comes up repeatedly in various online forums. Of the forums available online (such as “The New Forum for Classical Singers” and “Classical Voices,”) “Opera Mom” is unique in that it focuses on all aspects of pregnancy and parenthood for the classical singer.

The Opera Mom forum has been running for the past ten years and has a devoted following. A common theme to the threads that are posted is seen in questions about the ability to sing and perform while pregnant and the subsequent timing of planned pregnancies. Responses most often include personal anecdotes and words of encouragement from other singers. One thread titled “How late did you sing while pregnant” had only two comments, but showed that 453 people had viewed it (2beenot2b). Another thread titled “Diastasis Recti - Anyone else have it?” had 1,669 views and only seven comments (sopranogi). Whether or not women are commenting on these topics, the number of views speaks to the need for these questions to be answered. Although the shared anecdotes and words of encouragement offered on these web-based sources are important means of support for women, the answers given are not subjected to rigorous scholarly formats or inquiry. The need for a deeper look into the experience of pregnancy for the classical singer remains.
Super-Star Divas as Resources. Singers with superstar status tend to be voices of influence for the general singing community. Some of these performers have spoken openly about their experiences with pregnancy. Renée Fleming opened up about her experience during an interview for the New York Times in 1999:

Nobody’s going to pretend that opera singers are the greatest athletes in the world, but the breathing mechanism has to be really strong to support the amount of sounds we’re making. During the pregnancy it’s really easy - the baby provides support naturally, so you have to work a lot less, though as the pregnancy gets later you don’t have as much room to breathe. But after you’ve had the baby, all of those abdominal muscles are stretched out and tired. From sheer determination I was able to do those Otello performances at the Met, but then six months later I was saying, “Gee, why am I still so tired?” (Rehak).

Russian Soprano Anna Netrebko has also spoken candidly in an interview with Opera News about her experience with pregnancy and its relationship to her singing:

Since I have a baby, I start to change a lot, not only physically but mentally…Somehow, after the baby, things change, and the voice became very big suddenly. It’s much easier to sing, for me. I can do many more things than I used to. I can do mezzo voce…The high notes is easier, the low register is easier (Giovetti 25-26).
In an interview for Daily Mail (United Kingdom), soprano Kate Royal shared her experience of motherhood: “The only way you can be a mother and an opera star is to admit that you need help.” She goes on to describe the fact that she has a professional nanny to help her balance career and family life: “I accepted that if you work and you are a mother you cannot do everything 100 percent - something has to give” (Olivier). Kate’s description of her lifestyle and attitude towards balancing motherhood and career are candid and reveal the need for outside support for the classical singer.

Though these anecdotes are revealing and helpful to the pregnant singer in need of support, the public nature of their careers may influence what and how much they choose to share regarding their pregnancies. Interestingly, none of these articles featured images of either singer during pregnancy: only the glossy and glamorous publicity photos that we so often associate with singers of their elite superstar status were presented.

In fact, the public display of pregnant women in media is rare. One need only look to Demi Moore’s example to realize the private implications public pregnant bodies conjure. Vanity Fair’s cover photograph in 1991 depicting the naked and eight-month-pregnant actor caused quite a stir, resulting in the magazine being pulled from some supermarket shelves and being re-packaged with an outer protective layer in others, in a format similar to the packaging for pornographic materials. The implication here is that women’s pregnant bodies should remain private, an intimate image saved only for close friends and family. The social implications for the pregnant
classical singer whose physical state is on display during performance requires further exploration.

_Private Teachers as Resources_. In search of a more personal perspective, singers may turn to their private teachers for help and advice. In fact, voice teachers and coaches are in a unique position to be able to guide their singers through the experience of pregnancy. Close work with these individuals provides them with an especially thorough knowledge of the qualities of each singer’s instrument and allows them to discern subtle changes which may take effect gradually in their work together during the pregnancy. Teachers and voice coaches are also often in tune with their student’s emotional well-being and sensitivities and thus have the ability to guide them through difficulties in their personal lives or careers.

Unfortunately, there is little training provided to these teachers when it comes to mentoring pregnant singers. Some voice teachers have children of their own and can provide singers with their own personal experiences: some do not. Realizing traditional pedagogical literature lacks information regarding pregnant singers, I turned to online sources. In a search through online vocal pedagogy syllabuses, my search for topics relating to hormones and pregnancy came up empty. On a _Classical Singer_ forum discussion board (a forum which is no longer in service) one voice teacher asked, “Help! I have a pregnant voice student! Any tips?” Again women replied with stories of their own pregnancies, but the need for a more in-depth discussion of this topic is needed.
SCHOLARSHIP ON SINGERS AND BODY IMAGE

Body as Product. The singer's relationship to her body is a complex one. Guides for singers abound regarding weight management and proper attire, often with the outer intention of promoting the health of the singer, but always stressing the importance of “the whole package.” The emphasis often is that not only must the singer perform well (with consistent technical finesse, musicality and emotion) but that the singer must look the part; in the singing business, body shape and size matter. Deborah Voigt was publicly dismissed from a production of Adriane auf Naxos in London because the director said she was “too heavy to wear a sleek black cocktail dress that (was) deemed integral to his concept.” Voigt’s dismissal is a very public example of body image and presentation carrying “weight” in the hiring and firing of singers (Jezebel). (Interestingly, she was re-hired for the same production - four years and a gastric-bypass later - to wear the same cocktail dress, albeit with a weight over one hundred pounds lighter than previously admitted.)

In 2011 and 2012, Classical Singer Magazine ran a series of articles under the heading “Does Size Matter?,” highlighting the need for discussion on the topic of body image, both from the singer and teacher’s perspective. In “Does Size matter? An In-Depth Look,” soprano and opera director Sherri Greenawald maintained that body image was always a factor in her career:

As a lyric soprano, I had to always be conscious of how I looked, because I was singing roles where the women in question were dying of consumption, not overconsumption.
You can’t be a 300-pound Mimi. No one is going to buy it unless you change the offending disease to diabetes (Latour 41)

Julie Bishop describes a similar attitude regarding her pregnant body in the article for Classical Singer Magazine titled, “Singing and Pregnancy: A Singer’s Perspective”:

When my uterus and breasts began to grow during the first trimester, I started to obsess about changes in my outward appearance. My clothes were a little snug and shirts were shorter. Like most women, I looked as if I had gained some weight, but my pregnancy was not yet obvious. This resulted in frustration when regular clothes no longer fit but maternity clothes remained too big. As a soubrette, I knew that I would be less marketable if overweight, and I worried I would never regain my pre-pregnancy figure.

In another article in the same magazine, voice teachers were asked, “Do you think body image among singers is a problem?” This question was met with a resounding “Yes!” (Latour, “Does Size Matter? What Voice Teachers Really Think” 54). In response to the question, “Do you feel your body image impacts your singing?” 93% of respondents said that they felt their body image impacted their performance and success in communicating while singing (Latour, Does Size Matter? Find out what Singers Really Think” 36). The implications of weight gain associated with a healthy pregnancy (approximately 25-35 pounds as recommended by most resources) may be complicated by the classical singer’s desire to “look the part” or simply to keep contracts made before the pregnancy was known.
Singers’ use of their bodies as musical instruments and to portray characters could be perceived as merely occupational, but according to Grosz, our relationship with our body is never strictly utilitarian; we often feel strong emotions associated with parts or all of our bodies (81). Add the physical impact of pregnancy to the aesthetic and musical layers of meaning a singer might associate with her body and we find a complexity worth exploring. Studies on non-singers find that the rapid physical changes which occur during pregnancy are often associated with particularly extreme and negative emotions. Descriptors such as "fatness, disability, incapacity, discomfort and ugliness" were often used when pregnant women in Longhurst's chapter "Pregnant Bodies in Public Spaces" portrayed themselves (50). In a qualitative study based on forty interviews with pregnant women Sarah Earle found that, contrary to the belief that “the primacy of women’s physical appearance…is no longer significant during pregnancy,” the pregnant women she studied were concerned with their body image and weight gain during pregnancy (250).

In fact, for those of us whose use of our bodies extends beyond the personal realm and into the public eye, the relationship between these changing feelings and the use of our bodies as instruments is particularly complex and needs further exploration. The public nature of a singer's career can allow this investigation to have a greater impact on our understanding of these emotional transitions. Barbour asserts that artists and performers must share their embodied experiences as a contribution to the outside world: “Artists have the potential to significantly contribute to the generation of new understandings, not only of artistic practice, but also to
knowledge and to society in general” (Barbour 86). In other words, we have a responsibility to investigate the hidden knowledge of our artistry and to share this knowledge with others.

NARRATIVE STUDIES ON PREGNANCY AND SINGING

Narrative and the Arts. Though there are no qualitative studies on pregnant classical singers, there are several studies on non-singers, which can help clarify the role of research in sharing lived experience in the arts. Narrative is not only important for the participant in "situating (herself) in the world" but is also essential to scholars who seek to illuminate these experiences. Barbour describes the unity of narrative and scholarship this way, “I feel deeply in my bones that the specifics of my embodiment as a woman and a contemporary dancer living in Aotearoa are integral to my engagement in qualitative research” (15). This enhanced means of expressing narrative has been used successfully to shed light on several aspects of the arts, including singing.

In “Singing a Woman’s Life: How Singing Lessons Transformed the Lives of Nine Women,” voice teacher and researcher Ann Patteson explores the ways in which eight of her voice students find meaning in their life experiences through studying singing. Using narratives and interviews, the women studied share the way in which singing has served as a parallel for their voices ‘being heard’ in their everyday lives. For many of these women, singing encouraged them to take off their 'armour' and to stop editing their emotional expression in order to produce an open, resonant tone. Patteson’s look at these women’s experiences enlightens the reader as to the connection between their progress as singers and their development as human beings. As well as
discussing the transformation of her students, Patteson writes about the profound learning that took place for her as a researcher (she is the ninth woman referred to in the title). “I now realize that when I sing to an audience, I am singing them the gift of my life and being as a woman” (193). This mutual learning between researcher and subject is a hallmark of narrative research and embodied study.

Another study that explores an embodied view of singing through personal narrative is M.D. Douglas Schneider’s report “A Personal Experience of Unfolding Self Through Singing.” His focus is on the somewhat elusive experience of transcendence during singing. In his narrative he describes the feeling of “oneness” and complete peace that he experienced during a voice lesson and explores the possibility of training to find this state, much like meditators pursue nirvana. Studies like Schneider’s and Patteson’s do much to elucidate the embodied experience of singing, though neither of their subjects include pregnancy.

Narratives and the Experience of Pregnancy. Various aspects of pregnancy are beginning to be explored by scholars from an embodied and narrative viewpoint, though not through the particular lens of the classical singer. Francine Wynn reveals Merleau-Ponty’s phenomenology of the body through an exploration of pregnancy in “The Early Relationship of Mother and Pre-Infant: Merleau-Ponty and Pregnancy” using narratives taken from the journals and writings of pregnant mothers. Wynn explores the potential for relationship between the mother and infant during pregnancy, not merely the obvious interaction that occurs after birth. How this possible
intertwining is affected by the physical and emotional landscape of a classical singer has not yet been examined.

In “Weighty matters: Negotiating ‘fatness’ and ‘in-betweenness’ in early pregnancy”, Meredith Nash studied the anxieties many women have regarding weight gain and changes in body image during pregnancy, especially before the pregnancy is obvious. Though previous studies found that women’s body image was not negatively impacted by the weight gain associated with pregnancy (Richardson, Charles and Kerr, Wiles), Nash’s qualitative study contradicts this earlier research.

Though not from a woman’s viewpoint, “Male Experiences of Pregnancy: Bridging the Phenomenological and Empirical” is another example of the use of narrative and embodied knowledge which shed light on the experience of pregnancy, albeit from the husband’s perspective (Rehorick 33).

Hocking used art therapy tools to illuminate women’s experience of pregnancy and found that significant changes occur in the way in which these women view themselves (163). Her inquiry used narrative tools to uncover hidden truths about women’s experience of pregnancy. These accounts contribute to the growing body of knowledge surrounding pregnancy and the experience of its participants. Further investigations into the experience of pregnancy for classical singers will surely illuminate and inform our views and are a much needed addition to this growing body of work.
CLOSING THOUGHTS ON CURRENT LITERATURE

Narrative research is ‘fertile’ ground to investigate the phenomenological experience of pregnancy and the classical singer. Though the kinaesthetic awareness inherent in singers makes them an ideal group with whom to explore the transformation that occurs during pregnancy, a scholarly investigation of this subject has not yet fully begun. Clinical research which has investigated the physical and hormonal implications of pregnancy has provided an objective framework upon which to build a richer narrative. Parallel studies on the emotional and social impacts of pregnancy give us a glimpse of what might be uncovered if we look further into the experience of pregnancy for the classical singer. Scholarly research has only begun to investigate the body of knowledge that exists in the many women who have continued singing during their pregnancies. Narrative research has begun to explore the experience of pregnancy thorough various viewpoints, though not yet through the lens of the classical singer. As artists and women we have a responsibility to ourselves and to future generations to claim a more abundant and comprehensive sense of the world in and around us: in this case, to more richly discover and illuminate the experience of pregnancy for the classical singer.
Chapter Three: Methodology

“Your process is what determines the weight of your journey. Submit to your process so that your journey can be great.”

~ Bidemi Mark-Mordi

AN EVOLUTION IN THOUGHT AND DISCOVERY

Beginnings. My methodological choices for this research evolved slowly as I made discoveries while speaking to and researching pregnant classical singers. When I began my research, I wasn’t fully aware of all the implications of methods and means, but I did know that I wanted my dissertation to fill a much-needed gap in the scholarship. As a soon-to-be mom, I wanted to be able to draw from the lived experiences of those who had become pregnant before me, and to create a pool of information that informed, comforted and created community.

Narrative inquiry not only allows the subjective experience of individuals to be heard, but it provides researchers an opportunity to find points of resonance in their stories and to create a web of understanding for themselves and their readers. According to narrative researchers Barrett and Stauffer, it is through these stories that we are better able to understand our past, our present and our future (7). I wanted to better understand experiencing pregnancy as the classical singer, not only for my own future, but also for the women who would come after me. I decided that a narrative study involving in-depth interviews with pregnant classical singers would best contribute to this subject.
Digging Deeper: Focusing and Dividing Focus. The more I read, the more I realized what was lacking in this topic. Yes, researchers had explored the physical impact of pregnancy on women, but a very few had focused on classical singers who became pregnant. The emotional and social implications of pregnancy had begun to be discussed, but again, not often from the unique standpoint of the classical singer mom-to-be. As well as investigating the personal stories of pregnant classical singers, I realized that I wanted to find out more from as many women as I could reach, in order to provide a backdrop upon which to frame the stories from individuals whom I planned to interview. This need led me to create an exploratory survey, which would provide additional stories and open up my questions to a larger population. Although my research would continue to favour a narrative viewpoint, the addition of the survey pushed my study into the realm of mixed methods.

Mixed Methods: A Background. Historically, the relationship between qualitative and quantitative research has been a rocky one. Quantitative researchers aim to produce accurate, objective, and finite scientific results, empirically justifying their stated hypothesis (Johnson 14). Proving formulas, predicting patterns and finding concrete answers, all pursued in an environment of objectivity, are prized as attributes of carefully produced research. Qualitative researchers, on the other hand, value the lived experience of its participants. Its data is non-numerical, and seeks to answer the “why” and “how” of the research question in detail, as opposed to the “what” of quantitative work (Carroll 3480).
Though both means of study offer excellent tools with which to study a given research question, neither qualitative nor quantitative methods are free from weakness. While quantitative research quickly produces replicable, numeric data that can predict trends and prove hypotheses, it can also yield knowledge that is difficult to apply to individuals and local situations. The quantitative researcher may also miss out on important or at the least, equally valid discoveries because of the tendency to focus on proving the hypothesis (known as confirmation bias) (Johnson 19).

Qualitative research on the other hand, is useful for exploring complicated phenomena involving individuals and bases its research categories on the layers of meaning revealed by its participants, as opposed to limiting investigation along the researcher’s intentions. As Loftus, Higgs and Trede explain, “qualitative research does not test theory, it generates theory” (3).

However, qualitative study can be costly and slow, and may result in data that is inapplicable to individuals outside of the realm of study. The specificity and scope of qualitative work can make it less desirable to administrators and research boards who are looking for quick, concise and clean answers to their research questions (Johnson 19).

*Exploring Mixed Methods Research.* Hesse-Biber writes, mixed methods research “pushes the boundaries of long-held foundational assumptions concerning how knowledge is built, what we can know, and how knowledge building ought to proceed” (Hesse-Biber 1). Other researchers agree: Mixed methods allows researchers to use “the best of both worlds” and to carefully tailor their research methods to the particular needs of each study. As Johnson and Onwuegbuzie
explain, “words, pictures and narrative can be used to add meaning to numbers” (21). Johnson et al. further defines mixed methods research in his statement which combines nineteen scholar’s definitions. “Mixed methods research is the type of research in which a researcher…combines elements of qualitative and quantitative research approaches… for the broad purposes of breadth and depth of understanding and corroboration” (123).

The simplicity of this definition does not reflect the complex research, data collection and analysis issues which arise when conducting mixed methods research, but it is helpful in understanding the basic elements of this diverse method.

Bergson’s Box and Rothe’s Framework for Mixed Methods Research. In my attempt to understand the relationship between the use of quantitative and qualitative data in mixed methods research, I came across an interesting metaphor which clarified the concept for me. Rothe describes mixed methods research through use of “Bergson’s Box,” a description of two “ways of knowing” attributed to the French philosopher, Henri Bergson. According to Bergson, there are two ways of knowing an object: by gaining entry (from the inside) and by observing the object as it moves through space (from the outside). Rothe’s framework extends this philosophy to mixed methods research by equating the discoveries made while exploring the inside of the box with the subjective meaning of qualitative methods and the objective examination of the outside of the box with quantitative methods. Rothe explains:

Inside the box is subjective meaning—the person’s experiential ‘lived reality.’ This reality is directly accessible only to that individual, through personal reflection. However, that
reality can be examined one step removed when it is relayed to others. Thus, qualitative researchers may ‘look in’ by asking participants to relay—as fully as possible—their own experienced reality…Whereas knowledge that arises from ‘inside the box’ involves subjective meaning (‘looking in’), the knowledge that arises through examining the ‘outside’ of the box (‘looking at’) represents objective meaning. Here, the quantitative researcher aims at providing generalizable answers, for example, identifying risk factors for a particular injury. This relies on structured, parsimonious language and seeks to classify characteristics and experiences to permit quantification, thus permitting statistical analyses (3482).

Rothe asserts that while the objective and subjective perspectives are opposing ways of investigating phenomena, if they are represented by the outside and inside of a box, neither can exist without the other: that “the division between them is fluid rather than fixed” (3483). He continues:

These perspectives explore different dimensions of the same phenomenon. Moreover, they are interdependent, depending on each other for clarity of understanding. Each reality is valuable, yet neither perspective is adequate alone: When these ways of knowing are combined in a complementary manner, the phenomenon under study are understood in terms of both outside generalities and inside particularities, which differ in their levels of reconstruction and their relationships (3483).
Rothe’s framework allowed me to visualize the relationship my quantitative and qualitative data would have with each other; viewing these separate elements as two different sides which could inform and compliment each other strengthened my resolve to conduct a mixed methods study.

*Understanding Mixed Methods Research*. Though my use of mixed methods research evolved naturally as my inquiry into the experience of pregnancy as a classical singer unfolded, I wanted to do further reading to make certain that I handled the integration of the two methods in a manner that would serve my research as well as satisfy scholars with experience researching in this mode.

During this exploration I came across Greene, Caracelli and Graham’s five reasons to use mixed methods which was first published in 1989. Though others have written about various ways to classify mixed methods research, I found this set of categories (based solely on research purpose) to be especially helpful in my understanding. Greene and his colleagues assert that every mixed methods study correlates with one or more of these purposes. I would like to briefly describe them here as a way of explaining further my intentions for this study, exploring the challenges involved and identifying key benefits to undertaking a mixed methods study.

*Reason #1: Triangulation*. According to Hesse-Biber, triangulation is most often referenced when studies of mixed methods are discussed (3). Triangulation is the use of more than one research method in order to “enhance the credibility” of the research findings, making the results
amenable to both qualitative and quantitative enthusiasts. This idea is a tricky one for me, as it seems on the surface to be a way to please everyone, but can perhaps be used to cloak a belief that one method cannot stand alone without support from its counterpart. (Most likely this philosophy would be used to the detriment of qualitative methodologies - the historical underdog- implying perhaps that qualitative results remain incomplete without quantitative data to provide validity). In fact, according to Morse, the majority of mixed methods studies privileges the quantitative element (2003), bringing in qualitative aspects in a “supportive role” (Morse 198). It is often presumed in these studies that “there is an objective reality in which a given truth can be validated” (Hesse-Biber 14) whereas a qualitative paradigm allows that more than one subjective reality is a valid wellspring of information (16). These questions epitomize the “paradigm wars” that have been so hotly debated over the past half century.

As I delved further into my research, I held this struggle in my mind, hoping to produce a study that allowed an integration of the qualitative and quantitative elements, with the narrative contributions of my participants (both survey and interview) to take the lead.

Reason #2: Complimentarity. While triangulation is used to “secure the validity” of a research project, complimentarity focuses on producing two sets of data which deepen our understanding of the issue at hand. Complimentarity allows the researcher to combine numeric, quantitative results with the narrative findings of the qualitative data in order to illuminate all aspects of the study. Carroll and Rothe define complimentarily as “an epistemological design to understand human behaviour through the use of separate but dialectically related research
approaches” (3479). They further explain that the combination of the objective and subjective realities of experience combine to aid us in understanding “the complexity and context of the phenomenon.” Complimentarity relates to the relationship between the inside and outside of the box as espoused by Rothe; both aspects exist as equitable and harmonious, albeit divergent, counterparts. This research purpose appealed to me and mirrored my intentions as I considered administering a survey to classical singers.

Reason #3: Development. The use of mixed methods can also contribute to the development of the study itself; in a study which explores both qualitative and quantitative aspects of the same research question findings from either side can inform the other. In my case, information gleaned from the stories I heard during the interviews process influenced the questions I would later ask in my survey. Hesse-Biber calls this a “synergistic effect” in which findings from one method can help inform the other (3). Various scholars agree with this sentiment (Creswell, Morgan, Johnson & Ongwuebuzie) and the benefit of deepening one’s knowledge on the subject by widening one’s frame of reference in this way is clear.

Reason #4: Initiation. One of the challenges of mixed methods is that data from qualitative and quantitative methods can be contradictory (Creswell and Clark 6). However, this challenge also has a benefit: findings from conflicting data may initiate new realms of study, further contributing to our knowledge on the subject (Hesse-Biber 4). “Developing a tolerance for some chaos and ambiguity” (Hesse-Biber 174) is an important skill for the mixed methods researcher
to acquire and can yield powerful clarity in the research questions that emerge from contradictions.

*Reason #5: Expansion.* Using mixed methods tends to expand and extend the depth and range of the study (Greene et al. 259). In fact, when considering undertaking a mixed methods approach, many scholars recommend asking whether or not the time and resources to do so are available (Creswell, Hesse-Biber, Johnson & Onwegbuzie). In order to fully retain the benefits of both approaches, the researcher is required to delve deeply into both qualitative and quantitative worlds, a reality which in itself requires more time. Additionally, the researcher must learn about multiple methods in order to mix them successfully, requiring an expanded study of the relevant methodologies. In their list of fourteen principles of mixed methods research, Niehaus and Morse stress “the more you know about research methods, the easier mixed methods will be” (154).

Analysis of the data can also require a more prolonged integration period than studies that focus on one method or the other, as the data may or may not coincide. Creswell et al. describe the challenges of integrating qualitative and quantitative data this way:

> Making an interpretation based on integrated results may be challenging because of the unequal emphasis placed on each dataset by the investigator or team, the accuracy or validity of each dataset, and whether philosophies related to quantitative or qualitative research can or should be combined (8).
However, because of these unique challenges, mixed methods studies can result in a deeper understanding of the question at hand; “In many cases the goal of mixing [methods] is not to search for corroboration but rather to expand one's understanding” (Johnson and Onwuebuzie, 19).

Closing Thoughts on Mixed Methods Research. Though mixed methods is becoming an increasingly popular mode of research, its definitions and boundaries remain in flux. Because of the myriad of combinations, preferences and procedures of mixed methods researchers, it is considered an “eclectic” methodology, one that can metamorphosize around the needs of the research question at hand. According to Hesse-Biber, “Undertaking a qualitative approach to mixed methods is like taking a journey without always being in control of your destination” (211). Morse and Niehaus agree, stating simply: “the possibilities are endless” (155).

THEORETICAL LENS

Feminist Standpoint Theory. Once I had explored mixed methods as a way to delve into my research inquiry, I realized that there were other frameworks that were superimposed over my mode of study. Feminist Standpoint Theory stood out to me as a relevant perspective to consider as my work unfolded. Though I have not consciously called myself a feminist, I have explored the female frame of reference in earlier research, dating as far back as a high school research paper on the media’s impact on the body image of young women. In fact, my initial idea for a doctoral investigation was to explore the portrayal of women through art song of the 19th century. Given that the experience of pregnancy for the classical singer is a uniquely feminine
viewpoint, I felt I should explore the contributions of feminist researchers in order to contribute to the subject with an awareness of my feminine perspective.

Hesse-Biber explains that Feminist Standpoint Theory “considers women’s everyday experiences while analyzing the gaps that can occur when women work to fit themselves into the general culture’s way of understanding women’s positionally” (151). This focus on the feminine perspective resulted from an academic culture which has historically preferred the objective, sanitized voice, speaking “authoritatively about everything in the world from no particular location or human perspective at all” (Harding 4). Feminist Standpoint theory allows that knowledge has a social context and that the untapped experiences of marginalized groups have important contributions in understanding and exploring all aspects of the world (Harding 5). Horstfall and Titchen explain: “Stories of how people experience the institutions and practices of society can illuminate how larger social structures affect the everyday lives of people and vice versa” (241).

Feminist researchers are especially interested in aspects of women’s experience that are often under-examined in order to gain deeper understanding, to empower and to advocate for difference and multiple perspectives (Hesse-Biber 131). Thinking back to my experience in the library as I searched for information on the pregnant singing voice, I remembered the many books I found about the male voice change during puberty and the surprising lack of resources on the hormonal changes women experience during pregnancy, not to mention menopause. The feminist perspective has been lacking from voice research and discussion. Feminist researchers
tend to focus on knowledge that other research approaches have marginalized (Hesse-Biber 131) and place value in a woman's lived experience. As Sandra Harding explains, when marginalized groups are left out of research about or concerning them, their standpoint is often ignored or mis-interpreted: “Why [else] were women who were menstruating, birthing, or going through menopause treated by the medical profession as if they were sick?” (5). The remedy for this misinterpretation, according to Feminist Standpoint Theorists is to focus research on women’s lives and experiences in order to produce more complete insights and to encourage women themselves to engage in the process. Magda Lewis explains, “(women) have been denied the status of meaning makers: we have been excluded from the stories we are told, as well as from those we are encouraged to tell to and of ourselves” (70). These stories we tell (or don't tell) help us to "name ourselves and situate ourselves in the world" (Wahler and Castlebury 297). Naming the experience of pregnancy for classical singers may have a transformative effect, not only for the women who share their stories, but also for the way in which others view and react to them.

*Qualitative Research and Feminism.* In the past, qualitative methods have been equated with feminist research. Some have insisted that only qualitative methods can “capture the subtleties and nuances of women’s lived experiences” (Miner-Rubino and Jayaratne 300), but according to Hesse-Biber, feminist researchers do not inherently follow one methodology or the other. She is careful to distinguish between the tools a researcher uses (the chosen method) and the research stance. A feminine perspective would permeate my research as a framework that informs my process, but my mixed methodological choice would only serve to support, not to define my research praxis.
Balancing Power. Like qualitative research, feminist standpoint theory accepts that research does not take place in a vacuum. The power imbalances between the researcher and the researched must be explored and carefully considered, as well as the personal standpoint of the researcher and its impact on all aspects of the research. Sandra Harding insists that the transparency of the author’s standpoint creates a truer representation of the lived experience and that attempting an objective viewpoint as a researcher tends to obscure the realities of those who are researched. She explains: “The more value neutral a conceptual framework appears, the more likely it is to advance the hegemonic interest of dominant groups, and the less likely it is to be able to detect important actualities of social relations (6).”

Auto-Ethnography and Personal Narrative - Putting the “I” in Research. Long before I had delved into the scholarly aspects of my studies, I kept a journal. Knowing I would be writing in some capacity on the experience of pregnancy in my doctoral work, and anticipating the experience of pregnancy for myself, I knew instinctively that keeping a journal would be important and useful, both personally and for my future research.

Though most of my journal writing took place during my pregnancy, I did document some of my research experience as well. This excerpt was written during the interview process:

The day after one of the interviews I mentioned to Tracy that it was interesting that body image came up with both of them, though in different ways. I said that I was curious to
see if my third classical singer (who has yet to be chosen) would mention body image
too, and I was interested to see how the women's stories would intersect, or not. Tracy
asked, "Did body image come up with you?" It took me a minute to understand what she
was talking about because I had forgotten that my own story is a part of this dissertation
too, in fact was the reason I chose this topic. "Yes? I think so?" is what I said, "but I'm not
sure how." I then remembered the journal I had started at the suggestion of my supervisor
and felt extremely grateful that I had that resource to refer to. At the time, I felt that I
would never forget any of the feelings and experiences I was having as a pregnant woman
and singer and yet I am amazed at how foggy that time seems. It's strange to have a set
amount of time encapsulated like that -- 9 months of my life-- as usually years, schooling
or major milestones are the clearest ways for us to look back on our own history. I do
remember important moments, like both baby showers, like the moment we knew we
were pregnant, the call to the midwives... keeping it a secret for a while. But the range of
emotions and daily thoughts and feelings from that period seemed fogged over, the
questions I had then answered by the reality of my little daughter whose insistent life-
force has been welcomed to the forefront of my life now. I'm grateful that I recorded my
thoughts in writing and I'm grateful now to be revisiting that time through these women!
(Personal journal, November 21, 2015).

The admission that the researcher is also a person with contributions, perspectives and influence
on the study at hand is not only a tenet of feminist standpoint theory, but is also an important
aspect of qualitative writing. Ellis and Bochner have found that although, in theory, the
perspective of the author is held in importance in qualitative writing, in practice, “the “I” usually disappeared after the introduction and then reappeared abruptly in the conclusion” (200). They insist that we must retain some “personal accountability” in our research, and not simply as a nod to the request for personal acknowledgement, but as an integral part of our writing and research practices (200). Horsfall and Higgs explain that when we bring our standpoints as researchers to light, “making ourselves visible and vulnerable,” we have the opportunity to yield the most powerful results (53). Carefully distinguishing between exerting my personal viewpoint on my participants and sharing my experiences as both a member of the group I study and as a researcher has been an important point of understanding for me.

Barrett and Stauffer (2009) also stress the transformation the researcher experiences in the collaborative narrative process. They state, “this research relationship is one in which the researcher too can be changed. In this process, narrative inquiry becomes to varying degrees a study of self, of self along-side others, as well as of the inquiry participants and their experience of the world” (12). The inclusion of my own experience has been an important way in which I relate to the women I studied, but also in my own understanding of myself in this process.

**Body as Knowledge: A Framework.** Singers’ relationships with their bodies are particularly intimate. The kinesthetic skills required to sing at a high level require an intimate knowledge of one’s instrument. Knowing this, I approach the subject with a keen sense of curiosity about how the experience of pregnancy overlays on the singer’s bodily senses.
Perhaps in response to the separation between mind and body that has been prevalent in scholarship and science of the past, an expanded interest in the body is moving us away from “somatophobia” or a “fear of the body as a site of knowledge” (Grosz 5) and toward an embodied experience which holistically takes into account a person’s emotional, artistic, gendered, spiritual, somatic, and intellectual experience (Barbour 88).

In the last decade, there has been an increase in books about the body (Schweitzer 137). Sociologist Kathy Davis insists that the current interest in embodiment studies among academics has been encouraged not only by the focus paid by feminists on the body and its societal ramifications beginning in the 1970’s, but has also been provoked by “contradictions in academic discourse which have emerged in the wake of postmodernity.” In other words, in a world in which it is increasingly difficult to distinguish truths within our politics, science, medicine and media, the body represents the only “hard facts of empirical evidence” (Davis 3-4). Grosz furthers this idea with the assertion:

If the subject is to gain knowledge about the external world, have any chance of making itself understood by others, or be effective in the world…the body must be seen as an unresistant pliability which minimally distorts information, or at least distorts it in a systematic and comprehensible fashion so that its effects can be taken into account and information can be correctly retrieved (9-10).
This resurgence of interest in embodied knowledge in scholarly research has a long history among philosophers and phenomenologists. Writing in the first half of the twentieth-century, Merleau-Ponty’s work stresses the necessary interconnectedness of mind and body. For Merleau-Ponty, the body is never treated as a physical object, but instead as an embodiment of intention (Rehorick 46).

Throughout this research, the assertion one’s bodily experiences have something to offer us is maintained: the first-person physical accounts of pregnancy and singing offer a deeper view into the inner world of each woman. Rather than gloss over the impact one’s bodily changes have during pregnancy on the classical singer, the words and stories of the women I studied are shared in detail, and the influence of physical changes on emotional or social aspects of experience from each woman’s perspective are explored and valued.

METHODOLOGY IN PRACTICE: INTERVIEWS

Finding Interview Participants. When I received approval for my Research Ethics Board application on December 14th, 2015, I immediately began to search for possible women to interview. At this point in my progress the possibility of conducting a survey had not yet been conceived and so I focused my efforts on finding women who were currently pregnant, continuing to perform and who would be open to talking to me about their experiences. The first place I turned was Facebook. I belong to a private group called “Performing Moms!” which consists of moms and moms-to-be who work in the arts. The 500 women in this group are made

1 “Performing moms” is a pseudonym in order protect the privacy of the group.
up of actors, writers, and performers of all kinds: especially important (for the purpose of my research) is the fact that many of them are classical singers.

I posted a brief description of my research with the request that those who were interested send me a private message so that we could further discuss their involvement. My initial inquiry yielded five responses and I followed up with each woman to ask them a few questions about their stage of pregnancy and intended performance schedule. Joelle Harvey and Shareese A. stood out particularly to me. They both seemed eager to speak with me and they also both had interesting performing situations and experience. I set up preliminary interviews via Skype with both of them in order to more fully explain my research intentions and to get to know these women a little better before we both committed to each other.

Adding to the Group: Experience in Opera. One element that was missing from the women who had reached out to me thus far was staged opera experience. Though all the women I planned on interviewing had some operatic experience, neither of them of them intended to participate in staged opera while pregnant. I wanted to include this perspective because I felt that questions about costumes, staging, character development and stamina needed to be addressed. I reached out to “Performing Moms” again, this time to ask if there were any women who were pregnant or recently pregnant and who had been in or intended to be in a staged opera while pregnant. Seven women responded. I narrowed down this group and contacted those who fit my initial request. Several women did not respond, but of those who did, Meagan Miller agreed to speak with me.
Conducting Interviews. All of the interviews I conducted took place via Skype. I felt it would be important to see each other as we talked; I wanted to create the feeling of a personal connection as opposed to simply speaking on the phone. After some initial conversations and explaining my intent Shareese A., Joelle Harvey and Meagan Miller became my main interview participants. All three women were open and accessible, and I felt we had an easy rapport right away. Shareese and Joelle were currently pregnant while Meagan had delivered her daughter four months prior, but her particular experience performing in a staged opera while pregnant warranted an exception to my original plan to interview only pregnant women. Shareese and Joelle both agreed to three hour-long interviews with me during the progressing stages of their pregnancies. I would later interview Meagan twice.

Unstructured Interview Style. My interviews were unstructured and though I had some guiding questions based on my own experiences and research, I wanted to allow the participants the freedom to lead the conversation. Morse and Niehaus calls these “grand tour” questions; though the researcher interjects up to six questions, the participants are invited to tell their story without interruption or further adherence to structure. According to Bryman (320) these types of interviews, known as unstructured interviews, are the most common qualitative strategy in mixed methods research. Bryman allows that although the researcher may have some questions to ask the participants, he/she cannot anticipate all the answers (332). This approach may lead to new questions and new directions, and I felt it important that my research follow the path my participants wanted to take, rather than to dictate the direction I may have anticipated. Social researcher and author Brené Brown explains that when you conduct unstructured interviews,
“there is no way of knowing what you will find” (82). This also made sense to me from a feminist perspective. I was cognizant of wanting to step out of the way of what my participants’ valued and truly hear what each woman was telling me about her experience, without overlaying my own agenda or experience.

Finding my Voice as an Interviewer. Morse and Niehaus stress that the interviewer must play the role of passive listener (129), careful not to interject, interrupt or otherwise bring personal judgment into the interview process. In the first two interviews I conducted, I attempted to remain passive in a manner that I felt was professional and serious. By the end of this second interview, I didn’t feel this was working for me. I could hear the women I spoke to asking me for approval or confirmation in their experiences and I wanted to give it to them. Our conversations had already become rather intimate, starting with each interviewee sharing with me their decision to become pregnant and their journey to pregnancy. Already I felt as though I were chatting with a friend and it felt cold to simply respond with what amounted to a “yes, go on…” when prompted. When I allowed myself to engage in the conversation from a more human perspective, (which included the fact that I too had been performing while pregnant not so long ago), I felt an ease and a deepening in my connection to the women I interviewed. Horsefall and Higgs’ chapter “Boundary Riding and Shaping Research Spaces” explores this subject in detail. The two write about the boundaries that exist between the observed and the observer in qualitative research; in the past, qualitative researchers were expected to remain detached in order for their research to be viewed as serious and valid. Through personal anecdotes throughout the chapter they reflect:
I still remember the advice I was given - in the tones of an order - when I began working with people who have disabilities, ‘not to become involved.’ But my experience showed me that only when I became involved did any change take place, both in the person with a disability and in me.”

Indeed, “telling people’s stories can be a powerful experience for both the tellers and the listeners” (Horsfall and Titchen 239). Horsfall and Higgs explains:

The relationships central to qualitative research are often seen as superfluous to the process of research. Yet clearly they are not. People do qualitative research; qualitative research usually involves people working with other people. Talking about research relationships, however, is still a marginalized practice and this makes it difficult to do (52).

Knowing that others had thought about and struggled with this issue helped me to understand what I was experiencing and also informed how I continued my interviews: with an open, responsive and more human sensibility, knowing that I needn’t distance myself from the stories I was hearing in order to produce valid work. As Horsfall and Higgs suggested, I believe this new stance provided me with a deeper understanding of each woman’s lived experience.

\textit{Wrapping Up}. Both Shareese and Joelle’s interviews roughly followed the trajectory of their pregnancies; I began my interviews with each of them during the beginning of their second trimesters and completed the interview process shortly before they gave birth. Throughout our
conversations, I allowed them to explore topics which came up for them and also asked about events which were specific to their timelines. (For instance, how a particular gig had gone or what they had decided about participation in a competition). Meagan’s interviews were mostly an exercise in recollecting her experience and focused more heavily on one particular operatic experience which had relevance to my study for many reasons, although we also discussed many elements that influenced her mindset during pregnancy.

*Early Analysis.* The process of analysis in qualitative research is not a linear and finite one. Unlike quantitative data, in which graphs and numbers emerge after the data collecting process is complete, I began seeing connections and making patterns as soon as the interviews began. It is natural for our brains to want to order things: this is how we make sense of the world. While speaking with Joelle, Shareese and Meagan, I would frequently jot down a word here and there, noticing when one woman had a similar experiences to another, when repetitions of early themes would appear, or when I would become curious about a “why” or “how” in their storyline. This process did not end when the interviews concluded. Even as I wrote final drafts of this paper, I continued to mull over the significance, ordering and meaning of the stories I heard. Glaser and Strauss explain:

> Constantly redesigning the analysis is a well-known normal tendency in qualitative research (no matter what the approach to analysis), which occurs throughout the whole research experience from initial data collection through coding to final analysis and writing (101-102).
This over-lay of analytical stages, (which is typical in qualitative research), continued as I looked more closely into the experience of my participants.

*From Conversation to Transcription.* Doing my own transcriptions was beneficial to me because I was able to write notes about tone of voice, laughter or word emphasis as I went, further heightening my sensitivity to the meaning behind the words. These non-verbal cues are important to understanding the nuances in our conversations and to ensure that the conclusions drawn have a level of reliability (Easton 703). According to Stuckey, “the quality of the transcription can impact the quality of the analysis” (6). The notes I had originally scribbled during our interviews grew more dense and more detailed as I paused the interview tapes to review the stories we shared. The very act of writing out our conversations allowed me to become more deeply immersed in the world of these women and to hear their stories more clearly.

*Coding the Data.* Once the transcription process was complete to my satisfaction, I began by colour-coding significant words or ideas throughout the notes and transcripts. The themes at this point were clearly visible on the surface and revolved around easily recognizable points of interest. For example, the mention of a physical challenge was green, talk of keeping secrets was blue and the use of the word “fat” when speaking about one’s pregnant body was magenta. By the time I was finished I had used all the markers, coloured pens and highlighters in my house - a total of thirty-two. Each of these thematic concepts had various subcategories which fit under the
main theme, but also deserved their own mention. Under physical challenges, various symptoms constituted the subcategories, from weakened immune systems to nausea to hypothyroidism. By doing this preliminary work, I was able to begin to see what topics were most important to the women I interviewed and organize them in my mind. This process is referred to as “open coding” (Strauss 101) and its main intention is “to create descriptive and multi-dimensional categories which form a preliminary framework for analysis” (Simon 2). Noticing major themes, patterns, and occurrences as well as areas in which the experiences of the women I studied diverged is the focus of this procedure.

Next, I re-read the transcripts, allowing the themes I had noted to pass through my consciousness, while also searching for missed ideas, hidden and deeper meanings. By this time, I started to see deeper patterns emerging. I began to group themes that fit together. Looking for how initial categories are linked is the second stage of coding as espoused by Strauss and Corbin, and is known as “axial coding” (123). Coding is not only meant to describe the experiences being studied, but its intent is to gain deeper understanding of the subject (Simon 3). Corbin and Strauss describe it as “reassembling data that were fractured during open coding” (124). As I looked through my notes, the transcriptions and my multi-coloured list of categories, I felt I needed a preliminary way to visualize the patterns that I was seeing. I took a blank piece of paper and drew a circle in the middle of it. In the centre I wrote the word “Flexibility.” I had seen many instances of flexibility in the experiences of the women I interviewed, and wanted to “think out loud” so to speak, about its ramifications and test whether or not this theme would have lasting influence. I continued to play in this manner with other over-arching themes I had identified,
crossing out the central word and replacing it as I saw the way in which it worked as an axel with sub-categories around it. In this manner I came up with the three main categories of importance which I will discuss in detail in the Chapter Five: Flexibility, Interconnection and Perspective.

Following-Up. After having written the bulk of the interview analysis chapter, I found that I had further questions for my participants. I also needed their approval for the way in which I had situated their words. I sent all three women copies of my draft with their sections highlighted for quicker proofing. I also asked a few questions via email which they answered succinctly. Including these notes helped to situate their feelings in the context of their lives with newborns and also to clarify any questions that had arisen. According to Oakley, this process is called “member-checking” and it involves sharing data findings and interpretations with research participants. This process helps to strengthen confidence in the reliability of the research findings (Oakley 62-63). Checking in with interviewees was also an important step in controlling for researcher bias. I wanted to ensure that I was representing each woman’s voice accurately without imposing my own research agenda.

METHODOLOGY IN PRACTICE: SURVEY

The Creation of the Survey: Defining the Questions. I relied on three realms of knowledge to create my survey. First, I drew on the research I had done conducting a literature review of the subject. I was aware of the areas of lack and had made notes about what specific information was missing: I now consulted these notes as I created the survey. Secondly, I thought about what I had learned during the interview process. More questions had arisen during my conversations
with Joelle and Shareese and I added these to the list. Finally, I drew on my own experience as a pregnant classical singer and referenced my own memory and journal writing. As I edited and refined my questions, I knew that the quality of my questions would have a direct impact on the answers I would receive (Fowler 100) and so my goal was to be precise and in clear in my language, but also comprehensive in the subject matter I covered so as to truly create a broad realm of knowledge on which to draw.

Creating a “Safe Place” in the World of the Survey. It was important to me that the women who took part in my survey felt a sense of safety which allowed them to disclose information that may be of a personal nature. To achieve this, I began with a short paragraph that introduced me to the participants and described my research. I wanted women to feel that they knew something about me so that they would be willing to share details about their experience that they may not otherwise disclose. Sharing part of my personal story in my introductory paragraph was a way for me to accomplish this: I, too, was a classical singer and had recently been pregnant (see Appendix B). Assuring confidentiality was another important factor in creating a sense of “safety” for my participants. According to de Vaus, “assuring confidentiality improves the quality and honesty of responses, especially on sensitive issues” (56).

Developing Themes. Once I the questions were written, I looked for themes and categories so that I could order them in a concise and logical way. Each page of the survey provided me with an opportunity to insert a title and I wanted these titles to reflect the themes of the questions on
each page. These categories (which served as organizing frameworks and page titles) were presented as follows:

1. Statistical Information (age, voice type, country of origin)
2. Details of Fach change
3. Vocal Changes relating to pregnancy
4. Physical Health during pregnancy and its impact on the singing voice
5. Emotional Well-Being during pregnancy and its impact on the singing voice
7. Professional Impact and Career Choices
8. Re-Ordering Priorities and Overall Impact on Singing and Career

My aim was to begin with easy statistical questions and then progress to more in-depth and personal subject matter. De Vaus recommends this approach, saying that question order should represent a logical progression that moves from easy and more concrete questions to questions that are more abstract and difficult (111).

The length of the survey was another consideration. I was concerned that a survey that was too long would cause participants to drop out or to refuse taking part in the first place. A survey that was overly brief could diminish the importance of the study and of the women’s experiences. There are various opinions on the length of surveys, but it is difficult to prove any cause and effect as various factors impact a participant’s completion of any one survey (de Vaus 112). However, as Dillman recommends, I wanted the experience of doing the survey to be a positive,
enjoyable and rewarding one for the women who participated, and so I took care to eliminate any repetitions and to make my questions as succinct and clear as possible (38).

*Question Variance.* Throughout the creation of my survey, I allowed the needs of each question to dictate the type of question that was used. This resulted in a varied questionnaire, which used a variety of question styles, including multiple choice and Likert scale questions. Although surveys are thought of as quantitative, it is possible to maintain a relatively qualitative perspective by filling the answer grids with qualitative information. For example, questions can focus on numeric data, or they can be more descriptive and objective (Tashakkori 128, de Vaus 6). Wanting to maintain a loosely qualitative feel, I often used a wide variety of adjectives or descriptions instead of number ratings.

Throughout the survey I chose to use all closed-ended questions, except for the final question which was open-ended. I did this for a variety of reasons, drawing on Bryman’s list of advantages of using closed-ended questions in surveys; closed ended questions are easy to process, enhance the compatibility of answers, can clarify the meaning for participants, are easy to complete and reduce the possibility of variability (148). They do, however, guide the respondent in ways that may discourage spontaneity in their answers and could result in casting answers in a light which projects my intentions, not those of the women involved. In order to combat this disadvantage, I included the use of “other” categories as a possible response to many questions. I also ended the survey with a general, open-ended question about the experience as a whole in order to allow women to share anything the survey may have missed.
The Use of Comment Boxes: An inclusion of qualitative data. In an effort to maintain autonomy for the survey participants and to further balance the constraining effects of the closed-ended question format, I included comment boxes which were used extensively by my participants. Use of comment boxes can be attributed to various rationale; to capture information that may be missed by closed-ended questions, to provide depth in the form of narrative illustrations (Borg and Zuell 206), to increase certainty in answers provided throughout closed-ended questions (Smith 42) and to clarify the respondents’ responses, “permit[ting] one to understand the world as seen by the respondents” (Patton 21). I felt that the women’s use of comments fulfilled all four of these uses, and more. Using comment boxes also helped me to gauge which questions incited the most reaction and participation in the comments. Furthermore, the overall popularity of the comments indicated to me that the subject was an important one to the participants and that they weren’t simply going through the motions of filling out the survey, but were engaging with it in a thoughtful and genuine way. I was especially grateful for the way in which the comment boxes allowed me to maintain a qualitative feel throughout much of my survey, providing me with rich, detailed descriptions from the women who participated.

Defining Parameters. I also needed to decide who I would survey. My initial focus throughout the proposal process of my study was to interview classical singers who were currently pregnant to get fresh insight on their experience as it evolved. I decided to include classical singers who had been pregnant with one or more children, as well as those who were currently pregnant. For
this portion of my survey I would rely on the good memories of my participants during this transformative time in their lives.

I was happy to have 444 women participate in my survey. My goal in conducting this survey was not to produce a theory which would ultimately describe the experience of singing for the classical singer - the issues involved are complex and particular to the women I surveyed. My intent, instead, is to use the survey results as a backdrop to the in-depth commentary my interviews provide, to give readers an idea of the trends experienced by the 444 women who completed my survey, and to explore a broad range of issues to help open up the conversation around pregnancy for classical singers.

*Next Steps: Teasing out the Threads.* As I went through the survey for the first time, questions arose regarding variations in answers. The first such question had to do with the issue of fach changes. I had access to the participant’s current voice types as well as the original voice type listed for those who felt that their voices changed fach in relation to their pregnancy(ies), and Survey Monkey (my choice in online survey facilitation) provided me with the percentages of both. However, I needed to look at the individual responses in order to track each woman’s voice fach changes. (For example, even if 50% of women classified themselves as sopranos originally and 50% of women classified themselves as sopranos at the time of their participation, there was no way of knowing that these were the same women - except through examining individual responses.) In order to reveal the trajectory of each woman’s vocal changes and to look at overall trends, I created a list of possible voice fach changes, assigning each a number. Next, I looked
through each woman’s responses and categorized them accordingly. I then correlated the two answers in order to see the significance between that variables of the women’s original and current voice types.

Application of Filters and Categorization. As I continued to review the data, more questions emerged. Survey Monkey allows the application of filters to individual questions in order to more fully understand patterns in the smaller groups within the community of participants. I made use of these filters in various cases and discovered interesting patterns which are discussed in the analysis chapter. Filter types included age range, voice type and year of most recent pregnancy.

I also continued to create meaningful categories when needed. For example, when using a Likert scale I would often combine the “agree” and “strongly agree” categories to obtain the percentage of agreement, if the percentages in both groups were similar. If the numbers were not similar, I did not combine the percentage of agreeance, realizing that there was likely significance in the diversity.

Analyzing the Narrative Data of the Survey. Reading the comments sections was a pleasure for me as I combed through the results of the survey. I loved hearing the individuality of each woman’s voice and experience. Choosing which comments to include was difficult because I wanted to represent the population well but also felt including outliers or lengthier comments would result in a more interesting study. Various scholars have written on the methods of
selection when it comes to the comment boxes in surveys but not all agree on the selection process: Church and Waclawski recommend using “representative sample quotes” (198) while other researchers suggest selecting “particularly interesting” comments (Borg and Zuell 207). I chose to do a bit of both, carefully indicating when the comment represented the group as a whole and when the comment was significant because of its diversity. I continued to use the related percentages for each question to frame the context.

*Coding the Comments: A Qualitative Approach to the Survey Responses.* I also made use of my experience coding qualitative research in some questions. I did not code all comments from all questions, but those that were significant in identifying trends and patterns were carefully analyzed for themes. In the section regarding vocal changes I coded all comments and found that often the same words or phrases were repeated. I used these repeated words to strengthen the quantitative knowledge I had gained on the subject.

**MERGING TWO DATA SETS**

*The Interviews and Survey Combine.* Sosulski writes that the combination of methods can present unique challenges, but “profound results prove the effort worthwhile” (122). I found this to be true in the process of integrating the data. At first, commonalities were obvious: the cases in which the majority of the survey respondents and the interviewees experienced a phenomenon were clear and straightforward. However, there were times when the experiences of the survey participants did not parallel our discussions in the interviews, or were absent from the data.
Furthermore, the way in which to present the combination of both sets of data was not always clear. It took time reading and reviewing the data sets to see how they informed the other. I had hoped that new conclusions could be drawn, or at least ideas for further research could be generated. This did indeed come to be, but not without careful comparisons and thought. Unlike the more straight-forward presentation of the separate data sets in Chapters Four and Five, the combination chapter was more complex, with much thought to be given to what each data set contributed to the other. The process of writing Chapter Six was not a linear one, but rather had many starts and stops, and also various instances of “checking in” with interviewees via email as questions arose. As Sosulski says, “Mixing methods substantially increases the likelihood and the ways that unexpected turns can influence project design” (136). My journey combining the two data sets was tricky at times, but it yielded results that would not have been possible had I maintained a purely qualitative or quantitative methodology. Bryman explains that in some cases, a mixed methods approach can “reveal much more than could have been gleaned through one approach alone” (461). Though mixing methods was more complicated than I had initially assumed, I was pleased to have found benefits to using this strategy. In exploring the experience of pregnancy for the classical singer, using all the tools at my disposal (survey and interviews) offered a rich portrayal of a subject, which has many facets and has been under-explored.
Chapter Four: Survey Data Findings

"A single voice cannot make a choir. A single tree cannot make a forest."

~ Ron Lizzi

INTRODUCTION

Who took the Survey? Women from around the world participated in this survey. The majority were from the United States (69%) and the second largest group were from Canada (19%). European countries represented 8% of the participants and smaller numbers came from countries as far flung as India, Switzerland, and Portugal.

Figure 1.

Survey Participant Countries of Origin
Almost half of the participants were between the ages of thirty and forty, but many were in their twenties and a few are older than seventy. 70% of women who participated gave birth between 2005-2015, making the results an indication of more recent experiences. 23% of the singers were pregnant at the time they filled out the survey.

Figure 2.

### Aches of Survey Participants

**General Physical Symptoms.** The survey asked women to indicate if they had experienced a wide range of physical changes during various trimesters. Every participant experienced one or more symptoms, with the most common being nausea (76%) and vomiting (35%), an increased sensitivity to scents (64%) and fatigue (68%) in the first trimester, and breathlessness (53%),

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swelling (55%), and difficulty sleeping (69%) in the third trimester. Increased frequency of urination was common throughout all three trimesters, with over half of women experiencing this throughout their pregnancy. Heightened emotions were also common throughout the entire pregnancy, as well as an increasing tendency to experience GERD, especially by the third trimester.

Though 78% of women experienced some physical changes that impacted their singing during the 2- and 3- trimesters, most were able to continue performing. During the 3- trimester, only 21% of women surveyed indicated that the physical changes they experienced caused them to stop singing for any length of time. In the first trimester, 50% of women experienced little or no physical changes that impact their singing. Many participants described a combination of positive and negative physical affects:

In my first trimester, I was struggling with extreme fatigue and almost constant acid reflux and frequent nausea, which made performing exhausting and unpleasant. My second trimester was the easiest, with increased energy but a rapidly changing ability to engage support muscles. During my third trimester my breath support has really suffered, and standing for long periods of time has become more difficult.

The changes were both detrimental and beneficial at the same time. Morning sickness and fatigue were a drawback, whereas extra support and noticeable improvement in quality of tone were rewarding.

Nausea and Vomiting. Since nausea was one of the most common complaints in the first trimester, it is no surprise that the women I surveyed had many comments on the subject. One respondent described her experience with nausea and vomiting during a staged performance; “I had to ensure that there were bags strategically placed so that if I needed to throw up I was covered. Thank God for kind dressers!!”
Some women found that singing made their nausea worse:

During the first trimester my morning sickness caused my gag reflex to become stronger and opening my throat, particularly in the lower register, made me gag. I couldn't sing below a middle C, which was normally my happy place.

I am experiencing intense nausea and vomiting, now into my 17th week, and have canceled various performances due to this. In addition, I find that singing acts as a trigger to my nausea, especially long melismas on [a].

Luckily, instances of nausea and vomiting decreased significantly after the first trimester, decreasing below 10% by the third trimester.

*To Eat or Not to Eat*... Food consumption was closely related to the symptoms of nausea, vomiting and GERD. Many women described the careful balancing act that revolved around food, performance preparation and their physical challenges. More than half of women surveyed noticed an increase in their appetites in the 2nd trimester and balancing hunger with a variety of physical symptoms was challenging for many participants. Some women said that though they needed more fuel to perform, eating too much was more likely to cause heartburn, reflux or an uncomfortable fullness which affected breathing and support. Not eating enough could result in light-headedness or nausea and vomiting. These factors often resulted in women paying closer attention to their needs before a performance.

One anonymous respondent wrote, “Before I was pregnant, I would eat two or three hours before a performance. During my pregnancy, I would eat right up until walking on the stage and during intermission.” However, some women found it was a fine line between feeling too full and feeling hungry. “In (the) 3rd trimester I would be ravenous, eat all that I could manage, which maybe wasn't very much, then feel disgustedly full, then within an hour be ravenous again, over and over.”
Fatigue, Stamina and the Immune System. Many women reported that they felt more fatigued, especially during the first (68%) and third (56%) trimesters. For the classical singer, this can impact performance stamina, especially if the woman continues performing major operatic roles or intense concert schedules. Partnered with the fact that a pregnant woman’s immune system is suppressed in order to prevent the fetus from being rejected, the classical singer can face more challenges in maintaining a healthy and energized body throughout performance. Many women noticed that their energy levels were lower:

…Long rehearsals were just physically more taxing in 2nd trimester. Being on my feet for 8 hours at a time was doable, but harder obviously than roles before pregnancy.

In my third trimester- at exactly 29 weeks- I began experiencing edema [swelling] of the vocal folds. I never have trouble with my middle voice, but suddenly, it was very difficult to phonate and I had trouble tuning in my middle voice. I also became vocally tired much quicker. I stopped singing as much, and even got out of several gigs I had agreed to do because I didn't want to represent myself in a bad light.

The morning sickness and exhaustion of the first trimester made it hard to perform. Also reflux affected the consistency of my tone. In the second trimester things are mostly normal, but my decreased resistance to colds and my reluctance to take meds have affected how often I can perform.

Balancing physical health and stamina was an important topic for many women and sometimes forced them to choose between maintaining their physical well-being and fulfilling performance obligations.
Changes in Ability to Focus and Learn Music\textsuperscript{2}. During the first and second trimesters, 43\% of women disagreed with the notion that their pregnancies affected their ability to learn and memorize music. In the third trimester, almost 60\% of women disagreed with the statement; the women who participated in this study were more likely to feel their cognitive function was impacted in the third trimester.

Whether it was due to illness, great emotional changes, soreness in my body or the actual physical change in my belly - there were definite changes in my ability to perform. Most notably, my third trimester brought a great difficulty in sight reading. I don't know if it was just an inability to focus, but I made many more errors later in the 8th and 9th months.

Memory!! I'd never struggled with memory work before, but I was doing Frauenliebe und Leben, studied for months and could barely remember the words. This had never happened before!!

Breathing and Support\textsuperscript{3}. Not surprisingly, changes in breath function and support resulting from the growing fetus was a common experience among classical singers I surveyed. The third trimester was the most difficult from this perspective, with 86\% of women noticing increased difficulty singing long phrases and 84\% finding coloratura passages more challenging than pre-pregnancy. 93\% of women surveyed had difficulty achieving depth in inhalation during the third trimester, an unsurprising finding given the restricted movement of the diaphragm and the stretched abdominal muscles as the baby grows.

Struggled with breathing deep enough to sing long phrases. For example, I sang a very fast version of Schubert's Ave Maria at a family wedding when 36 weeks pregnant.

\textsuperscript{2} The data for this question is sourced only from Singing for Two, 2.0 (333 participants) due to an error in an earlier version of the survey; multiple boxes could not be checked in the initial survey which limited answers to questions with multiple time frames (i.e. comparing trimesters).

\textsuperscript{3} See footnote #2.
I found that later in my pregnancy, sustained notes higher in my range with very challenging and I could go flat [due] to breath support issues, so I avoided those pieces. I also added in lots of breaths where I normally did not need them.

*Learning through Physical Change.* Although most participants experienced physical challenges related to their pregnancies, not all impacts were negative. In the second and third trimesters, 71% and 75% of women felt they gained a greater understanding of appoggio, the sense of “leaning” needed for successful breath support. One can surmise that the increasing girth of the woman’s womb puts more pressure and awareness on that part of the body, perhaps aiding in a sensation of width and openness, and helping to understand the sense of “lean” which defines appoggio.

One survey respondent describes her experience this way:

I found that with the uterus expanding in my front lower abdominals, I could not access a low breath, which actually helped increase my reliance on rib expansion for a good inhalation. Into the second trimester, I am finding it increasingly difficult to access my epigastric abdominals to "pulse" for tricky notes. As a result, I need to support more steadily through maintaining a sense of appoggio through the back and sides of my ribcage - all the better for sustained, legato singing, of course! Having a baby bump highlighted my dependence on my lower abdominals to support high notes, and actually helped me learn to rely more on actual breath support using a steady supply of air.

Another felt similar improvements in her concept of appoggio:

Pregnancy was one of the best things that has happened to help me understand the breath! Wow- within 2 months and a little more weight in that specific area- I felt that appoggio like never before.
For some women, the muscle memory and physical learning that took place over the course of the pregnancy continued after the baby was born.

Towards the end [of my pregnancy] there was an increased awareness of breath and abdominal engagement, which made a lot of things seem easier. I still use the feelings / experience / awareness found in that time.

I learned how to breathe from being pregnant. It changed my concepts of breath control!

My biggest challenge was simply breath capacity, but pregnancy also taught me better breath management!

Though 82% of women surveyed found they had greater ease in breath support and 82% had greater ease in abdominal engagement in the second trimester, by the third trimester, only 44% of women agreed with these statements. This suggests perhaps that once the baby had grown to a certain size, many of the benefits of expansion in the torso were overshadowed by feeling too much width and pressure. Many women found breath support to be challenging, especially in the final trimester. One survey respondent wrote, “[I] never felt like I could get a good breath, even when not singing. [I] felt like I was drowning for the last three months of each pregnancy.” This woman’s comment summed up the both positive and negative realities of pregnancy experienced by many of the survey participants:

First trimester, I was exhausted. I never got morning sickness, but my fatigue was severe. Second trimester, I felt unstoppable. If anything, pregnancy gave me energy, strength, and command of my instrument in ways I’d not achieved. Everything just flowed--breath, musculature, and tone aligned seamlessly. Third trimester, there was no room for my lungs anymore, so my capacity for technical execution diminished. I had to breath more frequently and the results were not my prettiest, but I never had to give up on performing.
Her determination to continue singing is not unique among the women I surveyed, despite the dynamic challenges of pregnancy.

*Flexibility of Technique.* A common theme among the women’s survey comments was the need to be flexible and to adjust breathing techniques as necessary in order to continue performing at a high level. The ways in which women changed their breathing technique in response to their changing bodies varied, but a need for change was common. Some women made reference to breathing “behind” the baby, accessing part of their ribcage and diaphragm that were not as intimately affected by the growing womb. One survey respondent noted, “I had difficulty breathing until someone suggested I breath into my back more during my later trimesters. Once I figured that out, it made breathing and my support easier.” The idea of breathing into the back while singing pregnant was common among respondents:

> The biggest change in my singing was breath capacity. Because the baby was sharing the same space as my diaphragm, I found that I had to change my phrasing or breath "into my back" to get the air I needed.

Being able to respond to one’s evolving physical needs during pregnancy was an important factor for the women I studied. One survey respondent points to her training as a singer as a key element in the success she found during pregnancy.

> During pregnancy, I was incredibly grateful for the muscular training of a classical singer. My breath and posture had trained my core muscles for the incredible demand placed upon them for the duration of the pregnancy. Though I felt like I had no room in my own body in the final two months, I am certain it would have been much more difficult without my vocal training to guide me and calm me as my body grew.
The women I surveyed found the physical changes experienced during pregnancy became interwoven with their singing process. Though the changes they experienced sometimes created difficulty or required adjustments, many women learned to be flexible and some women even found that their singing improved.

**Pregnancy Hormones.** As discussed in Chapter Two, it is undisputed that significant hormonal shifts occur during pregnancy and that because the vocal folds house hormone receptors, these changes directly impact the singing voice. Stories have been exchanged about sopranos losing their high notes during pregnancy and women changing their fach due to these changes. After all, it is a similar process (albeit a different set of hormones) that cause a young man’s voice to drop during puberty. One survey participant related the changes she felt during pregnancy to her experience of her voice during another time of hormonal fluctuation: her menstrual cycle.

[During pregnancy] I found my upper register to be severely diminished and the colour of all parts of my range to be darker and less consistent. In some ways, it was similar to the week of my menstrual cycle in terms of tightness and swelling of the cords, but in other ways, my voice felt freer and less inhibited, particularly in my lower register.

Hormones are a powerful and sometimes unpredictable force for the singer to consider and can have a notable impact on the timbre and range of the singing instrument. The survey investigated this phenomenon by asking women about changes in their voice type.

**Vocal Changes**. When asked to respond to the statement, “My voice type changed after/in connection with my pregnancy/pregnancies,” 31% percent of women surveyed agreed. More sopranos said their voice type changed (34% compared to 24% of mezzos), but both numbers were higher than I anticipated. When continuing to filter the data based on voice type, I found that the lighter the instrument, the more likely the woman would experience change. Lyric

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4The data for this question is sourced only from Singing for Two, 2.0 (333 participants) due to an error in an earlier version of the survey; multiple boxes could not be checked in the initial survey which limited answers to questions with multiple time frames (i.e. comparing trimesters).
mezzos and lyric sopranos had very similar rates of change, around 20%. Soubrettes were most likely to experience a change in their voice type (52%) followed by coloraturas (48%). The voice type least likely to experience change was contralto, with only 10% experiencing change.

In most cases, if the voice type was to change during pregnancy, it happened in the first pregnancy (60%), with percentages lowering drastically on each consecutive pregnancy: (28% for second pregnancies and 12% for third or more pregnancies). However, some women whose voices changed more drastically didn’t experience these changes until during their third or more pregnancy. One example of this was a survey participant who began as a coloratura and ended up as a dramatic soprano. Another woman began as a lyric soprano, but after her third pregnancy, stabilized as a lyric mezzo. Here she comments on the range changes she experienced:

While I was pregnant with my third child, I was actually able to comfortably sing in the contralto range but hadn't [yet] lost my high notes. Within six months of stopping
nursing, I began losing some of the lowest notes as my muscles thinned out & my ligaments tightened up.

Of those women who experienced change in their voice type, 43% found that the change was permanent. This effect was more evenly dispersed among voice types; Despite the fact that the coloraturas and soubrettes who participated in this survey were much more likely to experience pregnancy related changes to their voices, they were not more likely to experience permanent change.

*Trends in Vocal Change; Increased Richness.* The permanent change experienced during pregnancy resulted in women either taking a step up in heft of the voice (for example, starting as a soubrette and ending up as a lyric soprano) or dropping in range and/or tessitura (starting as a soprano before pregnancy and ending as a mezzo afterwards). The overall population of participants reflects this finding when percentages of fachs represented by all survey participants are compared to the previous fachs of women who experienced change after pregnancy: the women surveyed showed a trend towards 'heavier' voice types post-pregnancy.

Among the comments from those women who experienced change, the adjectives used also correlated with this general trend. The phrase “more richness” was most often used to describe these timbral changes, but other adjectives with similar meanings were also common, including “heavier,” “warmer,” “fuller,” “bigger” and “more dramatic.”

Comments indicative of this trend include:

My voice became easier throughout the range, rounder, darker and fuller. I always knew I had a low voice, but pregnancy helped me find my true contralto.

My voice felt heavier and richer in my second and third trimesters, especially. The upper register felt harder to access the further I went along.
My voice had a richer tone and body during pregnancy. Being a coloratura soprano I enjoyed the ease and fuller sound that was present in the low and middle range while pregnant.

Another participant describes an increase in richness as well as a change in range. Though still pregnant at the time she took the survey, her attitude regarding the changes she is experiencing is one of curiosity and excitement.

My voice seems to have shifted down about a half step. Some days I wake up swearing I could be a mezzo! I am definitely a soprano, and still a soprano in my pregnancy but I have noticed my lower register is stronger than normal and the timbre of my voice seems to be darker and richer. It's a sound I really have enjoyed, however finding my squillo particularly in my third trimester has been a new discovery. I'm really curious to see how this all unfolds postpartum.

*Trends in Vocal Change: Loss of High Notes…and Gains!* Many women who experienced change explained that the highest notes of their range were either more difficult or inaccessible:

Near the end of my pregnancy, I noticed a substantial drop in my tessitura. It lowered by nearly a major third. As a lyric soprano, I began exploring mezzo rep with shorter phrases and with less melismatic passages.

I consider myself a lyric soprano with a coloratura extension. Although my upper range never left, I found it a bit more difficult to negotiate the right balance of sub-glottic pressure in the passaggio and upper register. I performed repertoire [that] did not require me to dwell in those areas as much.
So I would still call myself a lyric coloratura, but I used to just love to sit on the top. I could stay there all day. Now it is not that way. I have the same range, but not the same ease.

There were outliers, however. A few women actually evolved in the opposite direction, starting in a lower fach and ending up higher, though this was rare. One participant switched from lyric mezzo to lyric soprano, and one woman who was a contralto prior to pregnancy became a coloratura soprano afterwards. Two women (one a mezzo and one a soprano) described gaining an extra extension in their upper ranges. Two participants went from lyric mezzo to dramatic soprano. (Though it can be argued that a dramatic soprano fach is heavier than lyric mezzo (in the case of the first two participants), the change in range and comfort in a soprano tessitura is of interest here). Two women who experienced greater ease in their high notes describe their experience this way:

I feel my higher range is more comfortable and now I experience difficulty in the lower passages. I'm not sure if this will stay around or go but there is more ease singing higher now. I always moved between being a sop and mezzo but feel that although I have retained the warmth in my voice the lower range is not as strong. Perhaps this is linked to breath.

I do remember singing with a more beautiful tone, and greater ease in the higher register, as well as a smoother transition between vocal registers.

All other participants who experienced change either stayed within their main vocal designation, (lyric soprano to dramatic soprano) or moved into a lower fach (lyric soprano to lyric mezzo). Of interest was the fact that some women who answered that they experienced changes in their voice type listed themselves as the same fach before and after pregnancy. They did, however, clarify in the comments that their vocal changes related to changes in registration, tessitura, range, loss of high notes or timbre. These changes must have felt substantial to the women.
involved to warrant their answering “yes” when asked if they experience permanent vocal change, despite the fact that their vocal fach remained the same.

**Weighing the Impacts.** A vocal shift in timbre or fach can take place for various reasons during a singer’s career, regardless of whether the singer experiences pregnancy. To complicate things further, the women who participated were in a wide variety of career and vocal developmental stages. However, most of the women surveyed attributed the changes they experienced to their pregnancies, either from the changes in their hormones or from the new physical sensations brought on by pregnancy. Some of the participants did acknowledge the difficulty in attempting to isolate each factor that contributed to their vocal changes. One woman wondered if her feeling of exhaustion contributed to a loss of high notes:

> I've lost my high notes but I wonder if that's also because I'm just worn down and haven't been singing as much.

Another acknowledged that the overall vocal changes she experienced might have had more to do with her maturity rather than the pregnancy itself.

> Well, my timbre was slightly fuller/darker during my pregnancies. However, my overall vocal changes, I believe, were more due to my own maturity than to pregnancy. It's very typical for light lyric coloratura sopranos to develop into full lyric sopranos. I didn't lose the coloratura facility, but I've developed a fullness that is more common for a lyric soprano.

Several participants found it difficult to distinguish between various causes of timbral change.

**Repertoire Adjustments Due to Hormone-Induced Vocal Change.** Of the women I surveyed, roughly half made some adjustments to their repertoire because of the physical changes they experienced during pregnancy. Mezzos were more likely to either answer “yes” or “no” to the
question of adjusting repertoire; Sopranos were 10% more likely to say that they “somewhat” made changes. Perhaps this is due to the fact that sopranos have more fach designations. According to Richard Boldrey in his Guide to Operatic Roles and Arias, there are ten soprano fach designations and only three possibilities for mezzos. Sopranos are, by definition, known for their high notes. Somewhat adjusting their repertoire could have been as subtle as sustaining a high note for a shorter period of time, or re-working a cadenza to include a more comfortable range. One soprano alludes to this idea in her comment on the question of making repertoire adjustments:

I still sang my repertoire but adjusted cadenzas, as the top of my range was a challenge. It seemed that no amount of water was enough and I often felt dehydrated. I can normally vocalize to an F6 and perform a D6 in public. The D was very challenging for me after my first trimester and I was only comfortable singing to a C6 in public.

Various participants of all voice types commented on the changes they needed to make during their time performing while pregnant. One woman describes the adjustments she made to accommodate her vocal changes:

While pregnant my voice dropped at least an octave and I lost the top octave. I had to rework an entire solo recital in Switzerland as I could not sing the repertoire I had planned. This remained the case until 15 months after giving birth.

Another regretted that she did not make more changes, but instead went ahead with her original program, despite the fact that she was experiencing some vocal difficulties due to her pregnancy:

I found at the beginning of my 2nd trimester my top got really fuzzy and hard to control. I was to give my graduate recital that month- but decided to keep the top-heavy pieces in recital. I wish I had just scrapped them.
Other women described the need to cut out repertoire that highlighted their challenges, especially towards the end of their pregnancies.

Towards the end of pregnancy I didn't have as much air capacity, hence [I] chose arias for auditions with shorter phrases... it did limit options.

Up until month 8 I was able to sing most of my repertoire very well. In month 9 I made an audio recording for a job interview and removed "Dove Sono" because my breath support was not as good. I was VERY pregnant with a big baby by this point.

Many of the women I surveyed cited, once again, the need for flexibility during pregnancy - this time as it pertained to repertoire choices. Being flexible with repertoire choices allowed many of the women I surveyed to continue to sing at a high level, despite the on-going timbral and range changes they experienced while pregnant.

**Conclusion of Physical Impact.** The many physical changes described above affected the women I surveyed in various ways. The third trimester had the most impact on the women’s ease of singing, yet only 39% of women felt that the physical changes related to pregnancy made singing difficult for them during this time. In the second trimester, 37.5% of women felt that the physical changes they experienced were beneficial to them, compared to 12% during the first trimester. Despite the difficulties of the third trimester, 29% of women surveyed felt that the physical changes they experienced during this time were beneficial to their singing.

This woman’s description of her pregnancy sums up a common experience for many of the women I surveyed:

First trimester, I was exhausted. I never got morning sickness, but my fatigue was severe. Second trimester, I felt unstoppable. If anything, pregnancy gave me energy, strength, and command of my instrument in ways I'd not achieved. Everything just flowed--breath, musculature, and tone aligned seamlessly. Third trimester, there was no room for my
lungs anymore, so my capacity for technical execution diminished. I had to breath more frequently and the results were not my prettiest, but I never had to give up on performing.

The combination of physical challenges, new vocal discoveries, a need for flexibility, as well as a drive to continue performing was characteristic of many of the women I surveyed.

EMOTIONAL IMPACT

Though postpartum emotional changes have been investigated, the emotional impact of a full-term, normal pregnancy on women has not been fully explored by scholars: contradictions in data have arisen. In the comments of the physical impact section of the survey, several women mentioned some psychological and emotional challenges they experienced while pregnant including hallucinations, panic attacks, increased stress, depression, and anxiety. Though the physical impact section did not ask specifically about the subject of emotions, many women felt the need to mention their experience, signalling to me that perhaps more women would have shared this information if asked specifically about their emotional struggles during pregnancy.

Though the survey did not delve into emotional challenges and changes brought about by pregnancy, it did, however, ask about the emotional impact of pregnancy as it pertains to singing. 59% of women surveyed felt that their emotions were more accessible to them during pregnancy. One woman states: “Every emotion was heightened during this time of my life.” 70% of women I surveyed found that the emotional changes they experienced during pregnancy not only affected their daily lives, but also impacted their interpretation and emotional connection to their performance repertoire.

Re-ordering of Priorities. 71% of women surveyed either agreed or strongly agreed with the statement, “During my pregnancy/pregnancies, I experienced a re-ordering of priorities which impacted my performing.” The way in which these priorities were re-ordered are different for each individual, but when I looked at the additional comments for this question, two distinct positions seemed to fall into place.
Priority Shift #1: Singing is Less Important to Me Now...Therefore, I’m Better At It. Many women expressed being liberated by the knowledge that they were pregnant; Feeling their priorities shift away from their careers and towards their unborn babies helped many women perform at a higher level and with more ease. One respondent puts this sentiment quite simply: “Singing became less important and helped me [to] be a better performer.” Another respondent goes into more detail about how being pregnant impacted her attitude about singing:

Regardless of how it impacted my technique, becoming pregnant gave me something else that I cared even more deeply about. Suddenly rejection or knowing I hadn't sung my best in an audition didn't matter nearly as much as it had before becoming pregnant. It was a very liberating feeling.

Of the women surveyed, 50% of them felt their attitude towards competition and rejection change when they become pregnant. One woman found her anxiety about an opera role fade once she realized she was expecting:

I found out I was pregnant the morning of the first day of staging for an opera. I had been anxious about it because it was the first time I would be in a production in a long time. Once I knew I was pregnant, being anxious about the opera seemed trivial and it freed me up to relax, sing well and do great work.

Another participant agrees:

Most of the effects I've experienced have been mental, I think. It has more so affected my perspective on auditions and helped me not [to] take them over[ly] seriously- there are more important things in life now!
Many women felt that becoming pregnant took the pressure off of singing, which resulted in more relaxed and successful singing and performing experiences. A slightly different reaction to pregnancy also resulted in a positive outcome for one woman’s performance career. She describes her experience this way:

I felt stronger in my conviction to keep singing and auditioning. I felt that, after all of my years of self-doubt, if I couldn't tell my child that I kept trying, I would be a horrible parent. It became a catalyst to pursuing more gigs and seeking out performing opportunities. During my maternity leave (12 months) I sang 3 workshops, 2 operas and maintained my church gig. It was part of what kept me sane.

Thinking about how her singing pursuits would be perceived by her future child and anticipating the need to set a good example for him or her impacted the way this woman approached her career goals. This woman's reference to keeping herself “sane” hints at her need to balance her own pursuits with the wellbeing of her child, another theme which reoccurs with frequency in throughout the survey’s comment sections.

One woman explained that though she doesn’t sing full-time, she feels a deeper fulfillment when she does perform:

I will say this: having two children has greatly increased my "IDGAS" [I don’t give a (expletive)] factor. I have almost zero performance anxiety now, and thoroughly enjoy performing, which is ironic since if I'm lucky I do 2 shows a year, rehearsals are worked around my day job, and fees are small…An unexpected benefit of not giving a [expletive] anymore is that I decided to get back to my roots, which is in acting/theatre, and I do at least as much of that as I do in classical music at this point, if not more. It has taken me a long time but I am finally accepting that at this point I am a "semi-professional" - I take whatever professional gigs will have me and which I can fit into my schedule, out of love.
Many women expressed that “caring less” about their singing gave them increased freedom, ease and fulfillment in performance, whether they continued performing full-time or on a semi-professional basis.

Priority Shift #2: I was Forced to Listen to my Body. Not all pregnancy-related priority changes had a positive effect on the survey respondents’ singing careers. Some women struggled with balancing the physical challenges they were experiencing with pursuing singing related activities:

I had to put my health first, and that meant giving up on performing altogether for certain periods of time.

The body can only do so much, and I had to listen to that and not over-schedule teaching and singing.

I'm currently 30 weeks pregnant, and having a difficult pregnancy. My priorities have shifted in that I feel like my main priority is to use my energy to help me and my baby be healthy rather than using my energy to seek out performance opportunities.

Being forced to change how intensely a singing career was pursued was difficult for some women. This participant describes her experience:

I became less interested in my career, and more interested in my total physical/emotional/mental well-being. Because I was particularly tired and sick, and had a number of symptoms to manage, I started to realize I had to let my usual life things go in order to do "building a baby" well. When I gave myself a lot of rest, good food, exercise, and meditation, I felt really good and happy. When I did not do those things, and got my "work" done, I got migraines, vomiting, and depression. I think my system was not up for
doing my usual high-intensity life AND baby-building at the same time. It was very sad and hard to let go.

Another participant was less conflicted about this change in her priority and wanted to focus her attention and energies on her new life as a mother:

During my second pregnancy, I was in a Master's program and felt very protective of my time and my family. I wanted to spend as little time as possible at school, rehearsal, and socializing/networking. I felt like my role as mother needed to take centre stage.

These women experienced a re-ordering of priorities brought about by physical challenges which were difficult at times to accept.

*Performance Anxiety: Before, During and After Pregnancy.* 84% of the women I surveyed experienced some form of nervousness or anxiety before performances prior to becoming pregnant. The survey did not explore specific manifestations of these symptoms, but merely asked about its existence. I was interested mainly in how these pre-performance emotions were or were not affected by pregnancy.

*Decrease in Anxiety.* The survey found that 19% of women had a noticeable decrease in their pre-performance nervousness/anxiety and 22% said there “may” have been a decrease, for a possible 41% of women who had a positive outcome regarding their performance anxiety during pregnancy. Various factors contributed to this result, including the re-ordering of priorities discussed in the previous section. One woman attributed her decrease in performance anxiety not only to the changes she experienced during pregnancy, but also to the increase in support she felt from the audience due to her physical state:

I was generally a lot calmer and a lot more easygoing while pregnant. My nervousness before performances is more like excitement, agitation, butterflies in the stomach. I do
not have stage-fright, I like the adrenaline before going on stage. During pregnancy, it was a more cheerful agitation before performances, maybe also related to the increased support from the audience.

Anxiety Increases. While 42% of women said that there was no change in their pre-performance emotions during pregnancy, 9% experienced an increase in anxiety. Of the women who commented on an increase in their pre-performance anxiety, many of them experienced physical changes that impacted their singing, creating new challenges throughout their performances:

The reduced stamina caused me more concern before and during performances.

I had nervousness before pregnancy but I was always confident that I knew what was going to happen. I was prepared and I knew what my voice would do. During pregnancy I became VERY nervous because I didn't know what my voice would do that day. Would my high notes be clear? Would they come out at all? Would I have a dizzy spell? I had a fear of the unknown. Now that I am no longer pregnant, these feelings are no longer there and I am one again confident onstage.

A Bit of Both! Some women experienced a combination of increased and decreased anxiety for various reasons, or they experienced changes in the reasons they were anxious. This seemed to relate to the stage of pregnancy that the individual experienced while performing. One woman states:

I felt a decrease in performance anxiety early on in my pregnancy, but during late 2nd and all 3rd trimester I experienced increased anxiety.

Another noted that her level of awareness about her pregnancy affected her anxiety level before performance:
There were times when I felt my anxiety decreased, and there were other times that I became too conscious about my pregnancy and my anxiety increased.

*After Pregnancy: Decrease in Anxiety.* The women I surveyed were especially interested in sharing their experience with pre-performance anxiety or nervousness after giving birth; the comments for this section were especially lengthy and detailed. Though 23% of women were pregnant at the time they participated in the survey, 37% of women (who had already given birth to one or more children) describe feeling empowered by their pregnancy/pregnancies and attributed their gained confidence regarding their singing to the challenges they faced while pregnant.

Especially after giving birth, I felt like I could conquer the world after doing what I did, and no other "performance" in my life I’d face with fear. This has remained true for performing since I gave birth three years ago. No anxiety. Much more confidence.

I think because I went through so many physical and emotional changes during the pregnancy and I was able to do more than I thought I could, so it was empowering. So now, I think, hey, you did this while pregnant - you know you can handle this.

One woman attributed her experience of labor to the increased confidence she feels as a singer now. The use of her voice during this time was a powerful tool which helped her in the birthing process and which positively impacted her future singing.

I had both at home with a midwife. To ease my pain and breathing, I went through a few arias in the shower. The warmup was very helpful. All through the labour, I sang rounds with my team, who are also professional musicians. I was encouraged to scream, of course, and found I went higher than I can usually. Nearly popped some eardrums, though I learned later I should have gone lower to help with birth. I was worried I'd injure my voice. But I also had to deal with the possibility of death, and letting myself out of my
body with my voice. I achieved some of the most profound singing I have ever done, and since then, I have been far less nervous to explore and merge my inner and outer voices. Fear was abandoned, and some of that has always stayed with me.

Anxiety Increased Postpartum. 13% of women found that their anxiety increased after having given birth. One woman shared her struggle in finding a place in the singing world now that she is a mother. She describes how these feelings impacted her performance anxiety:

After having my children, the adjustment to the many life changes of motherhood were intense. I experienced several years of extreme performance anxiety which had never been an issue for me before. This wasn't apparent to me during my pregnancies and was much more related to my feelings of isolation and relevance to the industry as a mother. These feelings were the most difficult after my second pregnancy and they are ones I have been actively (and messily) working through this year in my performances.

Generally, the women I surveyed found that pregnancy either improved their performance anxiety or made no change, with a smaller group finding an increase in their nervousness pre-performance.

Pre-Performance Routine. I was curious to find out if all of these emotional and physical impacts affected pregnant singers’ pre-performance routines. The survey found that 42% of women either agreed or strongly agreed that their pre-performance routines were impacted by their pregnancy, while only 24% strongly disagreed or disagreed. 34% remained neutral on the subject, though in other questions some women revealed that they did not perform during their pregnancy, a factor which may have caused women to check “neutral” in response to this question, since there was no “other” or “non-performing” box for this category.

The question regarding pre-performance routine had the most responses in the optional comment window than any other survey question. Out of 297 women who answered this question, 107
wrote additional comments to supplement their answers. There were definite patterns in the comments that these women made regarding their pre-performance routines. The most common theme was that of balancing food and liquid intake; 53 of the 107 comments mentioned a change in the amount and timing of eating or drinking that happened before and during performances. Women also made mention of the need to plan bathroom breaks and control water intake because of an increase in urination frequency. Participants also described needing to make more time for naps and resting before performances than they did prior to pregnancy. Often it was a combination of these factors - adjusting food and drink, planning for bathroom breaks and taking time to rest - that created a change in the women’s routines. Some indicative examples of these changes are as follows:

I am more conservative with my physical energy. Before I was pregnant, I would go to the gym to try and get rid of some of the excess energy, to release my muscles and to calm down. Now, I have a nap.

I just had more considerations for my diet--making sure I had a variety of items ready and available for frequent, little meals. I drank water like it was going out of style. Trying to carve out more time for a brief nap or rest in my day became critical.

Less time practising and warming up, more time eating.

Some of the women interviewed found that their pre-performance routine became more calm and less anxious during their pregnancy:

I've found that any pre-performance nerves I used to suffer from before I was pregnant have disappeared. And my attitude has become more relaxed- I'm just relieved to get through the concert at the moment and am far less critical about my own performance. So my pre-performance routine has also become more relaxed.
Usually I am a perfectionist when it comes to appearance. During my pregnancy I wasn't as focused on spending a full hour doing my hair, etc. I have found a more relaxed and I would say, mature and calm ritual. My warm up routine has also been less intense. I work on specific sections and feel more trust in myself- I would describe it as surrendering to the music.

Many women made mention of warming up in a more relaxed fashion. The inclusion of stretching and yoga routines were also frequently mentioned:

Warmed up in a gentler way: rather than in one large chunk right before the performance, I sing throughout the day for shorter amounts of time - 10 or 15 minutes. Also added stretching similar to a warm-up for a workout - some very light prenatal yoga.

Most of the women who commented spoke about changes in their routine. Of the 24% of women who said their routines did not change, very few made comments. One woman regretted not changing her routine and preparation while pregnant:

I should have practiced an aria I have sung a million times when not pregnant more than I did before an audition, because I ran out of air at the end of phrases twice during the audition and surprised myself. So my prep should have changed but didn't!

A Sense of Self: How Pregnant Singers Feel About Their Bodies. I wanted to know if the changes women experienced due to pregnancy led them to feel differently about their bodies both on and off the stage. The survey first asked women if they felt comfortable on stage in their non-pregnant bodies in order to gauge the participants’ overall level of self-esteem and confidence in regards to their bodies. 25% of women surveyed strongly agreed and 54% agreed with the statement “I generally feel comfortable on stage in my non-pregnant body” for a total of 79% of women who felt generally comfortable with their bodies onstage. 12% of women answered that they felt neutral towards the statement while 7% strongly agreed and 2% disagreed.
The survey then asked women to respond to the statement, “I feel/felt comfortable onstage with my pregnant body.” Here, the numbers were very similar to the previous question: 25% of women strongly agreed with the above statement and 52% of women agreed, bringing the total number of women who agreed on some level to 77% vs the 79% who agreed when not pregnant. 11% of women remained neutral (vs 12% in the previous question) and though a consistent 2% strongly disagreed with both statements, the women who disagreed increased from 7% to 11% when asked about their pregnant bodies onstage.

After tallying these results, I decided to apply a filter to find out if those who were confident onstage in their non-pregnant bodies remained so while pregnant. While there was some continuity, body comfort onstage didn’t remain consistent for all women throughout the physical changes they experienced. If women agreed or strongly agreed to the statement, “I generally feel comfortable in my non-pregnant body”, 78% of them remained confident about their pregnant body, the most confident of the previous groups. However, of the women who didn’t feel comfortable with their non-pregnant bodies onstage, 71% felt they were comfortable in their pregnant bodies. Those who were neutral before their pregnancies, felt slightly less confident at 69% than their counterparts.

No one who was either neutral, strongly disagreed or disagreed with the statement about their body confidence onstage non-pregnant strongly disagreed with feeling comfortable in their pregnant body, while some women who agreed or strongly agreed that they were comfortable in their non-pregnant bodies, strongly disagreed that they felt comfortable in their pregnant body; In other words, feeling very or moderately comfortable in one’s non-pregnant body onstage did not guarantee a feeling of comfort onstage while pregnant. Conversely, not all women who were uncomfortable onstage in their non-pregnant bodies continued with this attitude while pregnant - many gained confidence in their pregnant bodies that was lacking prior to pregnancy. Happily, the majority of women in all groups felt comfortable with their bodies - either pregnant or non-pregnant - onstage.
Themes Emerging: A New Appreciation. A few themes emerged from the comment section of these questions that were indicative of the groups’ experiences. Some women described the way in which becoming pregnant allowed them to appreciate their bodies more than they had previously.

I felt beautiful when I was pregnant.

I have always been a tall girl who didn't quite fit in, and during my pregnancy I felt like my body fit suddenly.

Body image changed hugely for me during and following pregnancy. I felt more beautiful and proud of my body while pregnant, and even though I gained weight following my pregnancy (had been very thin before) I had so much more love and respect for my body, and quit judging myself over petty little imperfections that had plagued me my whole life before. This anxiety about my body always added an element to how I felt onstage, worrying about how I looked to others. Having my son freed me to love my body and be confident.

When I became pregnant, I felt a powerful psychological shift, in that I began to feel simultaneously that my body is no longer my own, but also affirmed in the strength and power and beauty of a body that is capable of producing life. On the one hand, we have to submit ourselves to all sorts of physical exams in pregnancy, not to mention when we begin to feel baby moving around all on its own! For a few years, during pregnancy and breastfeeding, our bodies are a vehicle to create and support another human life. On the other hand, however, I think we get so much more permission to care well for our bodies, through a nutritious diet, exercise, and allowing ourselves to rest. This all has contributed to a greater sense of well-being and overall confidence in my own body.
The shift this participant describes above reflects a common experience for the women I surveyed and resulted in many women gaining a newfound respect for their bodies which positively impacted their singing.

Some women described the enjoyment and pride they felt as their bellies grew.

My body structure has always been tall and full, and as I've been pregnant, I always found it encouraging that I was proud of my belly, whereas before I constantly felt the need to hide that area.

I used the maternal "glow" for all it was worth. Knowing that I was supposed to have a big belly, I enjoyed showing it off.

_An Awkward, In-between Stage._ Although many women enjoyed the outward physical changes they experienced in their pregnant bodies, some women mentioned the awkwardness they felt when their pregnancies were not yet entirely obvious to others.

I didn't feel all that great about my body until I actually looked pregnant. Prior to pregnancy, I had lost 45 pounds, and the first four months just looked like I had let myself go. Once the bump was more visible to others, I became more comfortable.

Several women commented on the reaction of singing colleagues regarding their bodies before they were obviously pregnant. Use of the word “fat” was common in these descriptions, as well as the need these women had to explain they were pregnant.

I took a major audition at the beginning of my second trimester and wanted to say something because I didn't want people to think I’d gotten "fat" (as an accompanist asked me before I walked in). Later in my pregnancy, I didn't bother, because it was obvious.
One scene partner ‘wondered why I was getting so fat’... then I laughed and said I was pregnant. He looked relieved...

I was asked to step down out of a Zerlina because of my pregnancy which affected how I felt about my body. And, with the bed rest/no exercise rule, I got bigger than I anticipated and again, felt huge on stage. Plus, I had audience members tell me after that they just thought I was a "heavy" girl and then realized it was me and I was pregnant. UGH.

*Feeling Negative: Pregnant Bodies Onstage.* Though most of the survey respondents described feeling proud and confident when it came to their pregnant bodies, not all women experienced these positive feelings. As one woman states about her pregnant body onstage, “I felt gigantic and unwieldy.”

Though one woman felt uncomfortable with her pregnant body in general, this feeling changed when she performed onstage:

Ironically, being on stage with my pregnant body felt like a badge of honour. Look what I can do while pregnant. In turn, I'm very uncomfortable with my pregnancy body in general because of the weight gain and changes. I was very athletic and, honestly, very vain, pre-pregnant so that has been hard. It's been interesting that this doesn't translate on the stage. It's more like stating "look what I can still do even when pregnant."

*General Thoughts on Body Image.* Though 77% of women felt more comfortable onstage in their pregnant bodies, this did not always indicate a feeling of positivity about one’s body in general. Only 52% of women either strongly agreed or agreed with the statement, “I feel/felt more positively towards my body while pregnant.” When filtered for age, I found that women 29 and under felt slightly more positive about their pregnant bodies than their older counterparts; nearly 60% of this younger group felt more positive, almost 10% more than their older counterparts. 32% of women were neutral about the statement, meaning that perhaps they felt the same about
their bodies whether or not they were pregnant. 17% either disagreed or strongly disagreed with the above statement.

Pregnancy had an impact on the emotional landscape of the classical singers I surveyed. Whether it was a re-ordering of priorities, a deepening of emotions, changes in performance anxiety, pre-performance routine or body image adjustments, pregnancy is an important factor in the ways in which the classical singers I surveyed perform and prepare to perform.

SOCIAL IMPACT OF PREGNANCY ON THE CLASSICAL SINGER

Having discussed the impact of the physical and emotional changes brought about by pregnancy on the classical singer, I wanted to know what the resulting social impact was in terms of career choices and outcomes, community support for and during performances, as well as its impact on the practical matters of performing while pregnant.

Career Choices. Women were asked to describe how much their career plans influenced the timing of their pregnancies. Only 3% said that their careers were the most important factor in making the decision to become pregnant, but one of the largest groups (22%) felt it was an important factor among others. 14% of women said that their pregnancies somewhat influenced the timing and 8% said that their careers didn’t influence the timing much. Surprisingly, the largest group of women (23%) said that their careers had no influence over the timing of their pregnancies.

I checked this last statistic with an age filter to see if I could determine a changing trend for this answer and found an interesting result; 30% of women age forty and over felt their careers had no influence over the timing of their pregnancies, while only 18% of women under forty felt the same. In other words, women under forty were more likely to take their careers into account when becoming pregnant. The reasons for this were not discussed in this survey, but one might surmise that the changing acceptance for women to both work and mother may have influenced
these answers. The final group of women were those who had an unplanned or surprise pregnancy (21%) and could not answer this question.

Whether or not women indicated that their career was a factor in their decision to become pregnant, many of them continued performing throughout their pregnancies. Of the women who performed during their pregnancy/pregnancies, the average number of performances was between one and six in the first trimester, with the majority of women performing one or two times. In the second trimester, women performed slightly more, with the majority performing between three and six times. During the third trimester, there were more women who stopped performing altogether, but those who continued performed one or two times on average. During the period of their pregnancy, some women performed more than thirteen times during each trimester. I am assuming this indicates tours or runs of the same show, but whatever the case, these women certainly maintained busy careers while pregnant.

**Decisions to Share Pregnancy News.** Throughout these ongoing performances, the women I surveyed needed to decide when and whether to disclose the fact that they were pregnant. 45% of participants who took part in auditions during their pregnancy withheld the fact that they were pregnant to the audition panel, while 34% did not. 22% did on occasion, but not with consistency. In the comments section on this question, many participants describe their decision making process on the subject. One frequent sentiment was that women only discussed their pregnancies if they felt it necessary and relevant to those for whom they auditioned:

> I let my belly do the talking - if they didn't notice, I didn't bring it up. And no one did, I don't think.

> If I knew the pregnancy would not affect the time period in which I would be participating in a production or program, I withheld information about the pregnancy.
Though some participants struggled with knowing when the time was right to disclose this information, many women seemed confident in their choices:

It was really no one's business if it did not affect the piece being performed.

If I knew the pregnancy would not affect the time period in which I would be participating in a production or program, I withheld information about the pregnancy.

Once hired for a job, the number of women who withheld news of their pregnancies dropped significantly. Only 19% of performing pregnant women withheld their news while 49% shared their pregnant state with colleagues, conductors, directors and those with whom they worked. 32% of women shared their news when they deemed it appropriate.

An age filter was applied to this question to check for changing trends. I found that women over fifty were 20% less likely to withhold news of their pregnancy. More research needs to be done in order to find out why this is the case.

Many women shared news of their pregnancy after the first trimester, a practice which is common among the non-singing population as well. Although many of the women surveyed kept their pregnancies to themselves in the first trimester, one woman mentioned her choice to let someone at each gig know her current state:

In the early stages of pregnancy, I made sure I had one person at the job who was aware I was pregnant, but did not choose to share the news with everyone.

There was no reason given for this behaviour, but one might surmise that it gave the woman a sense of peace and safety to know that someone close to her knew she was pregnant in case she had a health concern or emergency on the job.
Sharing News on Social Media. In this day of digital media, I would be remiss if I didn’t ask classical singer women when they chose to release their pregnancies on social media. Though some participants were not pregnant during or since the appearance of the Internet, of those that were, 39% withheld news of their pregnancies on social media for professional reasons, and 61% did not. These numbers were fairly consistent for those over thirty, but women age 18-29 were much less likely to withhold news of their pregnancies. In this younger age-group, only 19% withheld news of their pregnancy on social media. This result is not surprising given that this is the generation that has grown up, more or less, with the Internet. Other factors may contribute to withholding the news of pregnancy, however. One woman whose pregnancy was unplanned described her experience this way:

As it was an unplanned pregnancy, I was afraid of what professors, directors and conductors I had on Facebook would think of me, and was worried it would affect my career as I am not an established artist.

Another woman also withheld news of her pregnancy on social media, but for a different reason.

As long as I feel confident in my own ability to deliver a top-notch performance according to my own standards, I don't think it necessary for professional circles to be informed just for the sake of knowing.

One woman who chose to announce her pregnancy expressed feelings about the fact that some of her colleagues withhold this information:

I waited for our announcement to make sure baby was ok. After that, I saw no harm in sharing our joy. However, many of my professional pals have made no mention of their babies until the month they are due. How ridiculous is it in the 21st century that women are made to feel professionally apologetic for continuing the human race?!?!
Another fully embraced her use of various forms of social media and chose to inform the public of her pregnant status:

I even used Facebook and my website to explain that I'd had a baby and that is why I wasn't singing originally scheduled performances.

Though opinions seem to be polarized, there is a trend in the group I surveyed to share the news of pregnancy online, especially for women under thirty. Other factors besides age (such as the timing of the pregnancy and the status of the woman's career) may contribute to classical singers’ decisions on the subject.

To Sing or Not to Sing: Support to Continue Performing While Pregnant. Women were asked whether they felt supported in their decision to continue performing during pregnancy by various people in their lives, from their husband, partner and family members, to agents, conductors, and audience members. Happily, most women felt very supported by those closest to them: 87% of women surveyed felt supported by their husband or partner, 74% felt very supported by their family members and 71% felt very supported by their voice teachers and coaches. Numbers dropped significantly as the level of intimacy dropped. Of those women who had agents at the time of their pregnancy, 42% felt very supported, 13% felt somewhat supported and 30% felt neither supported nor unsupported. 14% felt their agents did not support their performing while pregnant and 2% felt their performing was discouraged. Numbers were similar for other professional contacts: 47% felt very supported by conductors, 33% by director and 36% by administrative staff. 61% felt very supported by audience members. When I used a filter for age-related difference in order to gauge whether trends of support have changed over time, I found that women over 40 felt on average 10% less supported by those around them than their younger counterparts, except in regards to their husbands and partners, by whom they felt only 5% less supported.
Some women felt that those around them were concerned about their continued performing while pregnant, though they continued to perform:

Because I had some health problems in the past my family and husband didn’t want me to travel or perform during the pregnancy. Of course I kept performing until I could.

Some women expressed the feeling of support they had from colleagues and cast members:

I am 20 weeks pregnant now and just showing. The cast of my current show and my upcoming gig are actually very excited and totally willing to go with the flow and allow the pregnancy to just be what it is or even written into the character in regards to my upcoming project in May.

Others expressed a lack of support, which brought challenges to their careers:

Killed my career at an early stage due to wave after wave of prejudice and poor accommodation of my circumstances, frankly.

My agent did NOT want to tell people I was pregnant. In the end, her fears were founded as I was asked to step out of a role.

Whether women felt supported in their decision to perform while pregnant by professional and personal contacts, many women expressed their strong need to perform:

Besides my husband, my closest friends (also performers in some way and mothers) were my strongest advocates to keep going. I think my other family members (parents, siblings, grandparents) were more concerned about how the kids would be if I was gone at crucial times of the day - they just don't understand my NEED to be a singer and a
mom at the SAME time, and how being able to sing, even if not consistently during my children's infancy stages, is crucial to me being a good mom.

Conductor's Conduct. Many women commented that though they felt support from others, conductors were often either wary or worried about their pregnant state:

Often felt that externally people were judgmental about my decision to continue to work at the level that I was. Conductors seemed "wary" about me in a way that conductors (whom I had in many instances worked with before) not acted previously.

Fellow choristers were helpful, caring, interested and very supportive. The conductor was quite apprehensive, especially as our major performance was 10 days before my due date.

Audience Reactions. I wanted to explore how audiences reacted to seeing a pregnant woman onstage; Without access to the audience members themselves, I asked women who had performed pregnant what kinds of comments they received from those who witnessed them performing. Audience members were much more likely to comment after a performance, and though rare, some comments were made before or during performances. Women reported that most of the comments they received from audience members expressed congratulatory feelings (72%) while other common sentiments were feelings of amazement (58%) and approval (50%). Questions regarding the baby were fairly common (48%), and slightly less so was the use of humour and jokes (32%). Audience members rarely expressed shock at seeing the pregnant performer, though some did (8%). Even less common were feelings of disapproval from audience members (2%).

In the comments, a few survey participants mentioned how other women in the audience reacted to their performances:
I felt that there was always a positive feedback. I remember a performance of Ives, I was 5 months pregnant and I talked about one of the pieces and how I was expecting: it was barely noticeable at the time as it was my first pregnancy, but people loved it. I found that I often had a lullaby in my repertoire and people found it so appropriate and really were touched, especially women.

Women were very impressed that I could sing and act, telling me that when they were pregnant they were barely able to move.

Some women mentioned feeling discomfort if the focus of their performance shifted away from the production and centred on their pregnancy:

I have slight anxiety performing pregnant because I worry that that is all my audience is seeing/focusing on. I am really fascinated by and love connecting with my audience and communicating a message. I sometimes worry the only message I communicate is "Oh, boy I hope she doesn't go into labor!"

Audience comments that took place during a performance contributed to this discomfort:

They were not necessarily ill-intentioned comments, but they change the focus of the performance. And sometimes people called out loudly during the show... Honestly. It was so embarrassing, and you don't know how to respond. I felt uncomfortable. However, when people come AFTER the show, it's fine, and actually very nice. Because then, I'm just a person, not a character, not working. Pre-show and during-show are not okay.

Though the women I surveyed were generally likely to feel supported by those around them, the importance of this support or lack thereof was highlighted by the participants comments. Feelings of pride in their accomplishments when supported or shame and anxiety when they did
not feel support must have felt significant: many women remembered and recounted stories from previous years about various instances of support or lack of support.

*Career Impact of Pregnancy: Job Loss.* Though the survey did not ask specifically about instances of job loss due to pregnancy, the topic came up throughout the comments sections of various questions. Several women reported losing jobs or being let go from jobs because of their pregnancies:

One company asked me to withdraw from their production - I refused, as they insisted my bump would affect the 'concept'. The production required me to lie in bed for most of the show, so who would know? I won - they had to pay me!

I had been cast as Kate Pinkerton in a summer opera production, a part for which I had auditioned before I became pregnant. When I told the company I would be 6 months pregnant for the performances, they withdrew the offer.

I was fired from a job after I informed them of my pregnancy. The job would have been in my third trimester. Due to 'artistic differences' and the fact that they would not be able to mask my physical appearance, my contract was cancelled. I received no payout or contract replacement.

One director who has hired me several times, neglected to invite me to an audition (for a show that would begin rehearsals 4 months AFTER my due date) because I was having a baby.

One of the worst things that happened in my career was that I was fired because I was pregnant. I called a conductor who I considered a friend - we'd worked together almost every year for 10 years - to let him know that I would be seven months pregnant by the time I was slated to sing a Messiah with him. I told him that I didn't anticipate any
problems but that he might want to have someone on hold. He and his board fired me. Utterly illegal - a violation of the civil rights act - but my management wouldn't go to bat for me and although I thought of any number of ways to "go public" I also thought that I would be labeled for speaking out. Just in case we thought misogyny was finished in the arts...

I can imagine that many of these job loses had an impact on the lives and careers of the women who experienced them, although this survey did not explore this subject in depth. Comments such as these open the door to more questions on how pregnancy impacts job opportunities and career trajectories.

*Job Gains.* There were also women who wrote about various times that they were hired either, in part, because of or in spite of their pregnancies:

I did an audition at 39 weeks - there was no hiding it! And I got the job (and repeat work, after) because I made such an impression on the conductor, waddling up there and bringing my A game! :)

I had two auditions during my pregnancy, one when I was not yet showing and one when I was VERY obviously pregnant. The first one I didn't mention it, and I didn't end up getting the part. The second one I couldn't conceal it, and the director ended up casting me, mostly because the rehearsal schedule led right up to my expected due date, and then the performances were not until a few months later. It worked out really well!

There is a sense of pride in these women's comments. Perhaps the added challenges and implications of pregnancy made these audition victories even more sweet. Further research is needed here.
Practical Matters in Performance and Rehearsal: Staging. I was curious to find out what practical accommodations were made for pregnant classical singers, especially in staged operatic performances, where costumes and staging become factors. Participants were asked to respond to the following statement: “During staging rehearsals my pregnancy was an issue.” Noting only those women who participated in gigs requiring staging, I found answers were almost divided into thirds for this question: 31% of women strongly agreed or agreed with the above statement, while 26% remained neutral and 41% strongly disagreed or disagreed. Women over 40 were 10% more likely to strongly disagree or disagree with the statement (51%) and 10% less likely to strongly agree or agree at 21%. Similar to those under forty, 29% remained neutral to the statement.

When women commented on the subject, many of them mentioned their fatigue, need for more frequent bathroom breaks or adjustments in some of the physical requirements of their staging as the factors which were at issue during staging rehearsals:

[My pregnancy was an issue…] Only when being spun around during a staging rehearsal by my partner during a very nauseous first trimester!

It was difficult to stand for long periods of time, and to get down on the floor. But I still did it.

I took frequent breaks that I felt were disruptive to rehearsals. I also had a hard time remaining stationary for such long periods of time - sitting or standing.

One woman lost a job due to her pregnancy and issues of staging, but was re-hired after giving birth:

I was asked to leave my contract for a highly choreographed version of The Mikado (during my 2nd pregnancy) because the director was too concerned about my ability to
safely perform the movements while 6 months pregnant. (The company hired me for the 2 following seasons).

Another participant described the reaction of the stage manager to her staging, despite the changes she made:

In my first pregnancy I was in a production that required me to collapse onstage. It made the stage manager very nervous, but I was very careful. Since I was in a nun habit I just quickly squatted and rolled onto my side, rather than collapse forward or onto my knees.

One woman felt her pregnancy contributed positively to one of her opera roles from a staging perspective:

I performed Magda Sorel from Menotti's "The Consul" and my pregnancy was an asset for that role. It never got in the way I wanted to portray the role, nor in the idea the director had on mind.

In most of the comments on their question, pregnancy impacted the staging or rehearsal schedules of the women involved. In one woman’s experience, staging impacted the timing of when she shared the news of her pregnancy:

I was on a fest contract in Germany and told our casting director when I was two months along as there were performances with very athletic and somewhat dangerous choreography.

Women were also asked if they requested changes to staging because of their pregnancy. Only 12% answered yes, they had requested changes, while the majority of women, 78%, answered no, they had not requested changes. The remaining women did not do stage productions during their pregnancy and could not answer the question.
The careful balance between needing accommodation and wanting to fulfill the director's needs was evident in the comments. One woman’s concern about being too close to the edge of the stage ended up in an improvement in the lighting.

We moved a piece of the set a little further from the edge of the stage so I didn't feel like I was going to fall off. It ended up being better light after we moved it, so it worked out.

Though she shouldn’t have needed justification for her request, it seemed to make her feel better, (or at least, less of an inconvenience to the show) that her change benefited the lighting. Other women mentioned trying to please their directors while also being aware of their physical needs. This balance seems to have been a difficult one for some participants:

I said several times that I could not be on the floor and get up quickly and gracefully. The director wanted that staging, so he had another singer help me up. In the end it worked well, but the rehearsing got exhausting.

One woman regretted not asking for more changes in her staging while pregnant.

I tried not to ask for changes in staging and wish now I had been more vocal. Perhaps I wouldn't have torn the placenta.

Striking a balance between taking care of one’s physical needs while pregnant and attempting to remain a willing member of a staged production was a difficult line for many women.

Special Accommodations. In the following question, women were asked whether special accommodations were made for them because of their pregnancy during rehearsals and performances. Only 25% of women felt that special accommodations were made, 34% answered that special accommodations were somewhat made and 37% said that no special accommodations were made on their behalf. 10% answered that the parties involved were not
made aware of the pregnancy. With a filter for age, I found that women under 29 were more likely to have special accommodations made for them, (at 31% vs 25%) and 10% less likely to answer that no special accommodations were made (27% vs 37%). Perhaps this is indicative of a growing acceptance of pregnant women in the performing workplace: women who are comfortable asking for special accommodations may be more likely to receive them. In the comments section of this question, women frequently mentioned being allowed to sit when other cast members had long periods of standing, being given dressing rooms with easier access to bathrooms, as well as being offered adjustments in staging and/or costumes. Despite the fact that many women found those they worked for and with very accommodating to their needs as pregnant women, some participants felt that they needed some special consideration and did not receive them.

The director of a company, when I explained my situation of being too sick to even leave my house some days, was actually dismissive and unhelpful. He claimed that there were women who sang seven to eight months pregnant with no issues, so I should be able to do the same. Note that I am medicated to be able to eat and have already lost at least 10 lbs in a little over a month.

Though over half of women felt that special accommodations were made in some way on their behalf during their pregnancies, some women prided themselves upon not needing any special accommodations. One woman felt that it was her responsibility to make sure this was the case: she described her philosophy this way:

I made sure of this [that no special accommodations were made on my behalf]. My discomfort and inconveniences were mine alone. If I couldn't physically sing, I cancelled well in advance if I could, otherwise, I made sure it never got in the way.

More Practical Matters: Costumes and Concert Attire. Survey participants were asked whether their pregnant bodies were an issue during costume fittings. Noting only those women who
participated in gigs requiring costume fittings, my data found that only 7% of women in this group strongly agreed with the statement and 27% agreed. 30% remained neutral to the statement, with the largest group disagreeing with the statement at 32%. 5% strongly disagreed. Several women described having changes made in their costumes for increased comfort and ease. Many expressed gratitude for these adjustments:

I sang in the chorus of La Traviata during my 2nd trimester, and the costume was painful for me - the bustle and weight of the skirts was pressing down on my belly and causing pain. The costume designer altered my costume so that it would be lighter.

My breasts were extremely tender during the 1st trimester of my first pregnancy, so the costumer kindly adjusted my costume to make me comfortable. As the season went on and my belly increased I was fortunate to be given a lovely costume with lacing up the back. I was still able to wear this costume after giving birth.

I had the most amazing experience with the costume department at Utah opera. They worked with me and made adjustments so my performing pregnant was never an issue. My costumes always fit well and they even went to the extreme of finding me gowns which were comfortable if such a thing exists! I was so so grateful.

Differences in costume needs between opera chorus members and principal characters were mentioned by one woman:

If you are a chorister, it type casts you as a certain on stage character, often they use it to their advantage.... As a principle, being heavily pregnant is a game of "hide the bump" for character purposes.

Another participant described how her pregnancy was concealed, supporting the idea that hiding the pregnancy was important for some operatic leads:
For an opera when I was 6 months pregnant, the costumer was able to minimize my pregnancy amazingly in all 4 of the costumes that I wore. It was incredible!

_Concert Attire_. When women were not in staged productions, just over half of them (52%) purchased maternity gowns, while slightly less than half (48%) did not. 62% changed shoe size or style for their performance foot-wear, while 38% did not.

Of those who did not purchase maternity gowns, many described in the comments their tactics for accommodating their changing bodies: Jersey knit and other stretchy materials were mentioned frequently, along with dresses with empire waistlines. Some women borrowed gowns from other singers or friends and many described “sizing up” in a non-maternity dress.

I didn't buy a specific maternity gown but I did by a gown that would accommodate my baby belly with a stretchy, comfortable fabric and empire waist. All the maternity gowns I looked at were horrendous.

They weren't specifically "maternity," rather they were gowns that were of a fabric or cut that worked well for pregnancy and I sized up.

A few women mentioned that they preferred more modest gowns while pregnant than they had prior to pregnancy, often in conjunction with the idea that their gowns needed to contain their swollen and growing bodies:

I had to buy many new dresses and costumes. I wanted longer dresses to cover my swollen legs/ankles.

…Attire - had to be comfortable, expansive and yet hold in all the places that needed holding! I went for less skin showing than I might have were I not pregnant.
Swelling was a common topic of discussion when it came to concert shoes as well. All kinds of footwear were mentioned as ways to find comfort performing with swollen feet. Most women said they wore flats and avoided their usual heels, but some participants mentioned wearing non-conventional performance footwear such as flip-flops, crocs and slippers. One woman made due without shoes:

I actually was not able to wear the flats I had for my recital at 35 weeks pregnant because my feet had swelled a bit before the performance. The recital was performed barefoot and seated.

Being able to wear heels was a point of pride for one woman: “My feet did not swell until the very end. So, at least I could still wear my heels!”

Throughout their pregnancies, the women I surveyed navigated the many choices they had between asking for accommodations, choosing accommodations and being refused accommodations. Even their attire was at the mercy of their ever-changing pregnant bodies.

The social atmosphere in which the pregnant classical singers I surveyed perform and live has the potential to greatly influence lives and careers. Although careers were not the most important factor in the decision to become pregnant for the majority of the women I surveyed, jobs were effected in some cases. Happily, most women were supported in their decision to perform while pregnant, especially by those closest to them. Audiences, directors, conductors and colleagues all played a role in the way in which the pregnant classical singers I surveyed experience their pregnancies and their performances.
OVERALL IMPACT OF PREGNANCY

On Singing. I wanted to know if women felt that becoming pregnant impacted their singing, and if so, was the impact positive or negative. Women were asked to respond to the following statement, “Overall, becoming pregnant positively impacted my singing.” 68% of participants either strongly agreed or agreed, while 21% remained neutral. Only 11% strongly disagreed or disagreed.

Women were very forthcoming in the comment section of this question and gave a lot of insight into the impact becoming pregnant had on their singing. One woman describes her experience this way:

For all the heightened emotion and worry of pregnancy, I have been given a gift of calm that is pretty incredible. I am plagued with concerns, new challenges, and dozens of daily tasks like any new mom, but I am learning to draw from this calm that deep down, I know what to do, and it will be all right. Pregnancy has taught me to be aware of all that I am, all that I trained to be, and that I actually can do more than I ever thought possible.

Many others shared how the physical changes they experienced during pregnancy helped to improve their technique. One women explains:

There was new weight and new stretch to muscles that before had seemed invisible. They were always working but not in a way you could easily feel and manipulate. Having them working overtime allowed me to feel exactly what they were doing while I was singing and more easily manipulate them. Afterwards I had a much better sense of how everything was working.

I also learned how to expand my rib cage while pregnant, a breathing technique which I continue to find hugely beneficial after pregnancy has ended.
Still others cited the emotional changes they experienced as positive factors in their continued performing:

I know my instrument so much more now than I did before. Pregnancy provides unparalleled self-awareness.

I sing so much better now! My anxiety levels about my singing and career have totally flipped and knowledge that I can walk away at any minute and still be fulfilled has made my singing so much more passionate and my technique so much stronger. I am singing more in the moment and for the right reasons now :-)

It gave me greater depth as a person and a performer, and it shifted my perspective in ways that made me more open to risk taking (on stage, in lessons, etc.)

Many women explained that though they felt growth in their abilities as a singers, they also experienced difficulties and challenges.

It was a tough time for me emotionally because of how many ups and downs there were physically and professionally. However, I do believe I've taken that heightened sense of appoggio with me and my singing has only improved because I experienced childbirth. I wouldn't trade it, but also wouldn't want to re-live it!

Although it added certain challenges to sing during pregnancy (breath support mostly), the positive changes I experienced with regard to my own body image, confidence, emotional connection, and increased range and richness of tone far outweighed the challenges.

I would say both: Agree [with the statement, “Overall, becoming pregnant positively impacted my singing”]: The experience connected me with other mother/father
performers in a really lovely genuine way, which has led to more work via networks. My new body has a lovely rich tone and a better middle range. Disagree: My upper range has not returned, so I’ve lost my signature rep. Negative performing experiences (couldn't reach the high note in performance, settings had to be rearranged to accommodate my lower range, my new deep quality wasn't the shimmering silvery tone quality they had hired me for) seem to have ended my relationships with some directors. Maybe they will hire me later for something deeper...?

A few women mentioned a renewed passion for singing which came about after “letting go” of their careers and re-ordering their priorities:

I sing so much better now! My anxiety levels about my singing and career have totally flipped and [the] knowledge that I can walk away at any minute and still be fulfilled has made my singing so much more passionate and my technique so much stronger. I am singing more in the moment and for the right reasons now :-)  

The tone is distinctly richer. The experience of letting go of my career due to illness renewed and refreshed my desire to get back to it, as well as a greater understanding and support from my partner, which have led to greater practice commitment even in busy times. Something about being a mother now had changed my relationship to others - I am not as concerned about judgment. Partly I'm too busy to care :)

Though women who felt that pregnancy had impacted their singing negatively were in the minority, their experiences were not left out of the comments. One woman writes a succinct but powerful comment: "My voice was adversely affected, and I was terrified."

Another had to shift her career goals because of the impact her pregnancy had on her singing:

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I feel I became a better teacher of singing as a result of my pregnancy. But, the impact of the pregnancy and labor on my voice left me unable to complete my career goal of earning my DMA. I am now completing my PhD in musicology.

Pregnancy’s Impact on Careers. Whether the impact of pregnancy was positive or negative, there is no doubt that pregnancy was transformational for the women I surveyed as far as their singing was concerned. I was curious to see what women felt about the impact their pregnancies had on their singing careers. I asked women to respond to this final statement of the survey, “Overall, becoming pregnant positively impacted my singing career.” The numbers here were very different from the previous question, which focused solely on the impact pregnancy had on singing. Only 27% of women either strongly agreed or agreed with the statement, (vs 68% in the previous question) while 44% remained neutral. This suggests that 44% of women surveyed felt that their pregnancies had little impact, either positive or negative on their careers. However, 30% of women surveyed disagreed or strongly disagreed with the statement: these women felt that pregnancy had a negative impact on their careers.

Many women wrote about how their pregnancies and becoming a mother impacted their career goals; the comments in this section were particularly lengthy and detailed. (Since the question asks about how the finite time period of pregnancy impacts careers which are on-going, it was natural for the discussion to include how having children impacted these women’s careers. Though this study is focused on the experience of pregnancy, the resulting children and their impacts are an important part of the reality of becoming pregnant.)

Many women shared that it was not only the pregnancy, but having children that impacted their careers and goals:

The "becoming pregnant" did not impact my singing. The "becoming a mother" afterwards changed everything.
The hardest part of pregnancy for me was not during the pregnancy, it was afterwards. After my first son was born my body had a very difficult time recovering, I was exhausted, and my muscles just weren't doing what I need them to. It was easy to accommodate the big belly in the way but afterwards, when I had no obvious symptoms prohibiting me was when I struggled the most. Getting everything back in line and trying to function on no sleep. I could barely recall if I had had breakfast let alone 3 hours of Mozart opera. That was a huge struggle and unfortunately, people were less understanding about that in comparison to being pregnant. Fortunately, it was a huge learning curve and I can now balance so much more and learn music so much more quickly and efficiently then ever before.

Some women felt that having a family made it difficult to continue their singing careers:

While the quality of my singing and my work/life balance improved, my ability to take gigs, travel, live without health insurance, etc, became impossible. I completely abandoned my performing career to care for my children. Now I am a teacher, and I gig very modestly on the side. Having children made it impossible to continue in a performing career. The industry itself doesn't have enough opportunities that actually pay well enough to allow for performers with families.

Though many women continued performing, they also expressed the challenges of being a mom and a performer:

Pregnancy was not a problem, but having a little one made it difficult to continue performing, especially in the first couple of years. I did manage to do quite a bit, but felt under-rehearsed and under composed for not having time to myself to prepare properly.

My performing has greatly reduced since having my twins. I'd like to be busier singing. I think that for many people they assume that once you have kids you are focused on
parenting. I will say that it has changed which types of gigs I accept. Some of the work I had (church gigs, smaller ensemble things, etc...) I cannot do because the money involved doesn't really even cover the cost of child care so it doesn't really seem worth it. I focus more on the bigger gigs that pay enough money so I can either take the kids with me or have my mom fly in to stay and take care of them.

Some women felt that assumptions were made by others about how their careers would, and could move forward once they became pregnant:

I can't say how pregnancy impacted my career. Trying to have a career and get through school with two children might have had a negative impact in a lot of ways. The biggest impact is that many people assume that you are either not invested enough in your artistry because they think you will want to be in one place and that your family is a fixed location. They also make judgments about what you are capable of because you have obvious other priorities. People make assumptions about what you want and where singing fits into that. I think it is much different for men in the same position.

It really limited what I could audition for… I didn't know how that [having a baby] would impact my ability to rehearse, practise and perform. So, I decided to limit auditions and performing. I also didn't receive any further contracts from the state opera company after my first baby (after 7 years as a chorus member!). I completed one contract (after baby #1) because it was offered before the first pregnancy was known to management. I really feel like by having babies put me out to the picture to be considered for more work.

Others described the challenges of the on-going hormonal changes that take place due to nursing. One woman experienced major vocal changes due to nursing her children and expressed her frustration with feeling unaccepted in the opera world as a mother:
I feel that I have been punished for having a family even though my voice has greatly improved through the process. While breastfeeding, my voice changed dramatically and had a wide vibrato. I breastfed for 6 months before introducing food to my child. When the child started on solids, and I was breastfeeding or producing less milk, my voice started to sound like the old me. A week after stopping breastfeeding altogether, the voice was back to the way it was before I was pregnant with daughter number 1. After daughter number 2, my voice deepened and became larger and fuller but did not lose any high notes. The industry does not want to know that you as a woman have kids. They see it as an inconvenience for them. It is not family friendly.

Another participant described the physical challenges she faced and their impact on her career:

I had to cancel so many gigs (7 in all) between treatments and the bed rest that I needed a year to get back to my normal schedule. I couldn't help but feel I had been discriminated against for being pregnant - and worse - having to deal with complications to said pregnancy.

Some women felt that in order to be a good mother, their careers were negatively impacted:

Being the kind of mother that I want to be does not allow me to audition and sing as frequently as before.

Career Impact: Positive Results. While some women struggled with their careers after becoming pregnant and giving birth, some felt that their careers were positively impacted by their personal experiences:

I really changed repertoire and career direction after the birth of #1 because he inspired me to sing the music I wanted to sing and not what other people thought was appropriate.
or I thought would get me hired. I’ve had more success, frequency of paying gigs, and happiness since I made that change.

After the birth, I am much thinner, younger-looking and happier - and because it was a later in life pregnancy, people think I am younger than I am (although I am honest about my age). Also my voice has stabilized in the middle register, and I worry less about singing, so it also has improved.

When I was pregnant, I was rebuilding my voice after some vocal problems. Having a daughter reinforced my desire to continue singing and being a role model for her. I felt it was important that she watch me do what I love most as a career.

As in the previous question about pregnancy’s impact on singing, the idea of “letting go” of career aspirations and the career gains that followed were brought up here as well:

We were determined to make this work and our timing was perfect. It impacted my singing most because I was willing to actually give it all up to be a good mother. It turns out, I did not have to!..at ALL...I actually credit my pregnancy for a boost in my career!

Many of the women who participated in the survey were pregnant or recently pregnant with their first child and were not yet sure how their pregnancy would impact their careers moving forward:

Not sure yet [how my pregnancy will affect my singing career]. I'm sure that it will emotionally, but physically I am so drained right now it is hard to tell.

Time will only tell. I am still a young singer for my voice type, but as of yet I still have not accomplished what I want to in my career. Currently, I think the physical changes
from the pregnancy are benefitting me, but the life changes and the additional stress and responsibility of having a baby are taking away opportunities that I had before.

FINAL THOUGHTS
It has been remarkable to hear from so many women about their experience of pregnancy through the survey data. The physical, emotional and social factors which have impacted these women’s voices and careers as singers have both enriched and challenged them. The participants’ stories of strength and determination to keep singing, to maintain a healthy baby, and to balance career and vocal goals have been inspiring and candid. The need for flexibility throughout the process, as well as a re-ordering of priorities, were hallmarks of these women’s experience.

At the end of the survey, I asked women to share anything they felt the survey had missed. Many women responded, some of them asking for more research on the experience of motherhood on the classical singer (a subject that certainly needs more exploration!) and others continuing the conversation about their experience with pregnancy. Several women wrote final comments that summed up their experience as pregnant women.

Being a mother is the most strenuous, difficult thing any woman can do. I wish there was more support, more encouragement for mothers in general. Dealing with lack of sleep, tremendous stress, high emotions, sometimes depression, body changes, leaky breasts, sore stretched body, extra weight, AND being negatively labeled, looked down on, and not taken seriously is too much. A mother can bring emotions to her singing and stories on stage that no other singer can. She should be respected and supported.

Being pregnant has been the best thing for my heart, voice, ambition, and priorities. I am so grateful for what it has done for me, and my singing career...and personal life. It truly is a miracle!
There is a very powerful feeling sitting in a rehearsal with 40 other voices, singing difficult, beautiful music, and knowing that the baby growing in your body is hearing and physically experiencing it along with you. I loved singing, rehearsing and performing during pregnancy mostly for that reason. What an amazing experience to give your unborn child! Both of my girls love classical music, choral music, and listening to me rehearse, and I'm sure singing while I was pregnant has a lot to do with that.

Being pregnant has deeply impacted these women’s lives and voices. I am grateful for the 444 women who shared their experience with me.
Chapter Five: Interview Findings

"It takes a lot of courage to show your dreams to someone else."

~ Emma Bombeck

PARTICIPANT INTRODUCTION

Shareese A. Shareese was one of the first women to respond to my request for interviews on “Performing Moms”, the private Facebook group to which I belong. At the time of interview she was twenty-nine years old and, as well as pursuing a singing career, she was also working on her doctorate at the University of Kentucky.

Being a doctoral student myself, I was eager to see what Shareese’s experience was like as far as support for her pregnancy in an academic setting. At the time of conception, Shareese felt she was “just coming into her own” vocally. She is a soprano who sings bigger repertoire (such as Wagner and Strauss) and felt that she could just now sing the arias that had been recommended to her in the past by various audition panels and teachers. Though she had previously auditioned for various Young Artist programs, she had received the feedback that she should re-audition in a few years when she had “grown into her voice.” Balancing her own growth as a singer with restrictive age-limits for major competitions and young artist programs were considerations for Shareese as she navigated her career while pregnant.

Shareese performed actively while pregnant at various regional and scholastic settings. When we spoke initially, Shareese had just won the first round of the Metropolitan Opera National Council auditions during her first trimester and intended to compete in regionals during her third trimester. This would be the final year Shareese would be able to compete due to the competition’s age limit and I felt it would be interesting to hear more about how Shareese handled this juxtaposition of events.

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5 The Metropolitan Opera National Council Auditions is a prestigious competition sponsored by the Metropolitan Opera to discover and promote young opera singers.
Shareese was very open and engaging when we spoke: As soon as the first interview began, I felt Shareese would be a good participant for my study. I had intended our first conversation to be a way for me to get to know Shareese and to decide if she would be able to provide me with the kind of details and story-telling that would best serve my research. I had already searched for her online and had found her website which offered me her biography as a singer, as well as sound clips and a sense of where her career was heading, but it was still difficult to gauge her willingness to participate until we actually spoke. As soon as our interview began, however, Shareese was able to share her experience in an open and thoughtful way, and I felt she would provide me with a true sense of her emotions and experience. We agreed that we would do three interviews together to make up an important component of my in-depth interviews and to follow her pregnancy as it continued.

*Shareese’s Decision to Become Pregnant.* Shareese and her husband are practicing Catholics and had planned to use Natural Family Planning, a method for birth control which involves monitoring the woman’s cycle when engaging in sexual intercourse in order to avoid unwanted pregnancies. Shareese’s cycle had been quite consistent which helped her to feel comfortable with this technique. Her plan was to wait to become pregnant for another year so that she could finish her coursework and also participate in a few more voice competitions before “aging out.” (Many voice competitions have age limits, and 30 seems to be a common cut-off point). Shareese wanted to take advantage of her final “under 30” year before starting a family.

To her surprise, Shareese became pregnant while still in her coursework at school and before her thirtieth birthday. Despite this surprise, Shareese’s attitude was one of excitement and trust that all would be well.

This is - as far as my planning of my pregnancy, it's probably about a year off, a year early. But I think everything happens for a reason…and here we are in the last year of my coursework of my DMA and you know, we're having a baby!
Shareese’s positive attitude and strength of character as she balanced the various stages of her pregnancy with her performing and doctoral commitments were evident throughout our conversations and I was glad to get to know her as she opened up about her experience.

*Joelle Harvey.* When I first spoke to soprano Joelle Harvey, she was thirty years old and living in Virginia. Her singing resume includes roles at the Glyndebourne Festival, Royal Opera, Convent Garden as well as many American opera houses and symphonies (Arizona Opera, Houston Grand Opera, San Francisco Symphony and the New York Philharmonic, to name a few). Though Joelle typically performs both opera and concert works, she was only engaged in concert performances during the time she was pregnant. She continued to perform throughout her pregnancy, singing in Europe at the beginning of her pregnancy and closer to home in her second and third trimesters.

Joelle’s husband of four years is also her manager. Throughout his time as a manager, multiple women on his roster have had children, giving the couple a unique perspective - both from a personal and professional viewpoint - on the experience of pregnancy for singers. I was curious to hear how this element intersected with Joelle’s own decisions during her pregnancy.

Joelle’s personality is unassuming and gracious. She has an easy laugh and was able to openly share her experience with me as we spoke. I felt a comfortable rapport with Joelle as we spoke and was eager to follow her progress as her pregnancy continued.

*Joelle’s Decision to Become Pregnant.* Joelle did what she could to time her pregnancy in a way that best suited her life plans and singing engagements. Joelle explained that at age 26 - at the beginning of their marriage - she had felt the urge to start a family, but her husband suggested they wait and enjoy more time together, time they “would never have again,” before they considered children. Joelle agreed and was happy that they had waited.

Once the time was right, Joelle and her husband began trying to conceive. The first two times were, in Joelle’s words, “chemical pregnancies,” which according to Joelle are “really early
miscarriages.” This was very difficult as Joelle continued performing and experienced these losses a month apart.

The first time it must have been 6 weeks, and the second one it was barely 4 weeks, so I was hardly pregnant but it happened two times in a row. And it was really hard, especially the second time it happened. I was in the middle of a gig and I was like, “Woah, this is happening again.” And it’s not like the most awful thing in the world, but it was very disappointing and it’s kind of painful. It’s not like a regular miscarriage, I know that it’s nothing compared to that, but it was kind of hard.

Eventually Joelle did get pregnant, only about a month later than she had optimally planned. Joelle’s pregnancy timing did take her performing career into account. She explained that she had a window of a few months without a gig, and instead of actively pursuing singing work for that time period, she left it open, hoping it might coincide with the end of her pregnancy. Though the timing of her pregnancy was not exactly as she had hoped, it did still fit the opening in her career plans somewhat and Joelle was able to enjoy the final weeks of her pregnancy at home.

Meagan Miller. Soprano Meagan Miller was forty-one years old with an active international career when we arranged our interviews. She specializes in German repertoire, singing the leading roles in many Mozart, Strauss, Verdi and Wagner operas. Meagan’s career has brought her to many well-known opera and concert stages both abroad and at home, including the Metropolitan Opera, Carnegie Hall, Deutsche Opera Berlin, Vienna State Opera, and New National Theatre Tokyo.

At the time of our interviews, Meagan had already given birth. Though my intention was to interview women during the time of their pregnancies, Meagan’s story had many fascinating elements which warranted an exception. First of all, Meagan had two home-bases: one in the US and one in Vienna, Austria. Many of my survey participants were from Europe, but I had not yet
interviewed anyone who was living and working overseas regularly and was eager to gain this perspective.

The second note of interest involved a brief sentence I had found on her website after she had responded to my request for classical singers to come forward to be interviewed. Meagan had listed the role of “Elizabeth” in Wagner’s *Tannhäuser* at the Metropolitan Opera in New York, but below the listing I read, “Ms. Miller has withdrawn due to pregnancy.” I was curious to hear about her decision to withdraw from this high-profile engagement and was grateful that Meagan wanted to share her experience with me.

The final element that Meagan’s experience provided was the fact that she sang a lead role in a fully-staged opera during her pregnancy. I was very interested to see how being pregnant intersected with the added dimensions of character portrayal, staging and costumes that an operatic role would provide; I had no idea how compelling and complex this particular engagement would be and was grateful that Meagan shared her experience with so much warmth and candour.

Throughout our interviews, Meagan was engaging and warm. Because Meagan had already given birth, she was able to reflect thoughtfully on her experiences singing while pregnant, but she also recalled each aspect of her story with acute clarity. Meagan was open to the many questions I had about her experience and shared her feelings openly and with a sense of calm and confidence, despite the challenges she faced.

*Meagan’s Decision to Become Pregnant.* When I asked Meagan if she always knew she would have children, she said that from a young age she felt that she would not be a mother, but would instead put all of her focus into a singing career.

Meagan: I remember being 17 and having my first operatic role, and thinking, “I’m going to have this career!” …I really thought that I could not be the mother I wanted to
be and travel. I actually ruled it out when I was 17. Isn’t that interesting? And now of course…

Catherine: You’re doing it!

Meagan: I was totally wrong and it’s completely possible…. So far!

Being with the right person changed Meagan’s mind about the possibilities of having both a child and a career. She and her partner don’t always live in the same city, but without rearranging schedules to follow her fertile times, she found she was pregnant within five months of her decision to try to conceive. Though Meagan had no idea how quickly or easily she would get pregnant, (and had thought that it may not be easy), she was grateful that she became pregnant fairly quickly. Not knowing the timing of her intended conception, Meagan planned to cancel only what was needed once her due date was known; she did not allow her fully-booked singing schedule to influence her pregnancy timing and returned to rehearsals in Europe only ten weeks postpartum.

EMERGING THEMES
As I read and re-read the transcripts of each woman’s interviews, several patterns began to emerge. The need for flexibility was a common theme for the women to whom I spoke, both in regards to how their changing bodies impacted their singing and in their decision-making.

Interconnection was another theme that emerged and includes the relationship between partners, friends, family members, professional contacts and audience members. Ideas of interconnection (and lack of connection) and support (or lack of support) continued to play a part in each woman’s experience, affecting the way in which the women I interviewed responded to various challenges and choices they made throughout their pregnant journeys.

Perspective was the final theme which emerged from our conversations. This theme involves beliefs about one’s abilities and the abilities of others as well as attitudes that affected the women’s viewpoints and the way in which they perceived challenges. All three women
experienced changes which were a direct result of their experience being pregnant and which impacted their singing voices and careers.

FLEXIBILITY

Being Flexible in the Face of Physical Challenges. By far, the most common mention of the need to be flexible was related to physical changes that were experienced by the women I interviewed. All three women described various physical challenges that resulted in adjustments being made to action, attitude or outcome in relation to their singing and performing. Whether these changes involved the health concerns these three women experienced (increased frequency and duration of colds, hypothyroidism, deep vein thrombosis), or the more typical physical manifestations of their pregnancies, (nausea, forgetfulness, changes in food consumption or stamina), all three women described at first noticing the changes, and then adjusting accordingly.

Asking for What You Need: A Lesson in Creative Flexibility. One example of flexibility in response to physical change came from Shareese’s story of a recital she gave towards the end of her pregnancy. Having struggled with hot flashes during her pregnancy, Shareese described feeling quite overheated as the concert progressed. As the symptoms worsened, Shareese realized that she wasn’t able to focus well on her task as a singer. She describes her inner monologue as the concert continued:

Well, there was, I had probably about 7 songs to sing and each of them [were] about 3 to 5 minutes long. Probably around mid-way, I [thought], “I’m probably going to need to sit down because I'm incredibly hot and I'm starting to get dry mouth… I'm not really focusing on the task at hand which is to sing and perform and do all those wonderful things that we as singers do... And so I was like…maybe I can get through the next song, and then the next song came up and I was like, I think I'm ok… I think I'm ok....And I was trying my best not to sit down until I really really needed to, because I was hoping maybe it would pass, like the hot flash would pass. But by about the end of the fifth song I was
like, no, I’m going to need to sit down and it’s here to say.... Honestly, since I’ve been pregnant, I’ve never been in that position before.

Though Shareese had experienced hot flashes in the past, they had never influenced her performing to this extent. Needing to give into her physical needs required her to be flexible in what she felt was acceptable in a performance situation. A few songs before the end Shareese stopped performing and said to the audience, “I need to sit down, and so if it's alright with you, I’m going to find a chair.” Someone brought her a chair and she finished the performance seated. There was a small flurry of concern from the audience members, but after Shareese made a joke to “lighten the mood” the concert went on without issue and was well received. Though Shareese had not had to sit in prior performances, her physical needs demanded that she did so, and she sat without apology. In her telling of the story, Shareese explained that knowing how her body reacted to that particular performance allowed her to make plans for an upcoming recital which would require even more stamina; She asked the venue to provide a stool for her use if the need would arise, which it did. She sang her final doctoral recital seated and felt positive about the experience.

*Flexibility in Memory and Learning.* Shareese also experienced more difficulty memorizing her repertoire while pregnant. She explained to me that in order to memorize in the past, she had simply coached and practiced her repertoire consistently. While pregnant, however, this way of naturally absorbing the text did not manifest and it caused Shareese to be creatively flexible in the way she approached a now arduous task; Shareese added writing the text and making flash cards to her practicing regime. Shareese explained how this new challenge affected her preparation and performance:

The only way I felt…negatively impacted by my pregnancy has been memory. That is probably been the most difficult thing because pregnancy brain is real! It was just much more difficult for me to keep things in there for an extended period of time because usually I have no problem. I think there was actually one gig in which I was encouraged
to sing memorized… I was given the gig in such a short amount of time, I think it was two weeks. And normally I can memorize anything in the span of two weeks but while pregnant and still doing the other things I was doing…there was no way it could happen.

Shareese needed to remain flexible in the way she memorized repertoire, but also in what she agreed to in performance.

_Making Things Work and Making the Best: Singing Through Physical Challenges._ One of Joelle’s biggest physical challenges during her pregnancy was her almost constant nausea. Though the nausea continued throughout her pregnancy, her first trimester was especially problematic; she describes an “all-day sickness” which took a toll on her overall energy level. While in San Francisco for a concert production of _Fidelio_, Joelle had a particularly memorable incident:

We were nearing the end of the dress rehearsal…I knew we weren't going to get to my part, so I started to make my way back-stage…I knew I was going to have to go throw up. Of course, the [director] stops and says, “Ok, we're going to skip to…the finale” which [meant] I would have to sing. I just went on and ran to my dressing room and threw up afterward.

Joelle was able to curb her nausea enough to continue rehearsing, choosing instead to be flexible with the way in which she responded to her body’s needs. Joelle explains, “I was ok singing because I think…that part takes over and you don’t think about it.”

During the first performance of a _Carmina Burana_, Joelle was again challenged by her nausea and prepared to make accommodations to deal with it.
Because you don't sing forever (as the soprano) there's a long time where you don't do anything. I was sitting there thinking, “I’m going to have to walk off stage and throw up,” but I just tried to breath and be calm and it gradually passed and it was ok.

Joelle was lucky in these instances that she did not have to leave the performance in order to vomit, but she was prepared to give into her physical needs and allowed her idea of acceptable performing to transform based on her state.

_Hypothyroidism: A Diagnosis During Pregnancy._ Meagan was diagnosed with hypothyroidism for the first time during her pregnancy. Along with fatigue, weakness and intolerance to cold temperatures, one of the most relevant symptoms of hypothyroidism to the classical singer is hoarseness; In Meagan's case she noticed that her voice would tire more easily. Though she began to take medication, she was already in rehearsals for _Die tote Stadt_ in the demanding role of Marietta/Marie, and had to find ways to compensate for the vocal changes she experienced while the effects of the medication accumulated. Meagan had performed the role before and was therefore able to compare her stamina and vocal abilities before her hypothyroidism had become an issue, although she admitted that it was hard to pinpoint what exactly was causing her symptoms. Those around her were unaware of any challenges she was having and Meagan explained how she was able to make things work while her medication was stabilizing.

I was hoping that’s what it was [hypothyroidism], and I still don’t know, because how do you diagnose it? And you know, most people who didn’t know me and hadn’t heard the other performances were like, “Are you kidding? This is one of the hardest roles there is, so it’s fine… don’t you even worry.” And I also was thinking, maybe I’m just out of shape with the production and it’s challenging for me and that’s why it feels different? So, I don’t actually have the answer, but what I can say is that I lost stamina that always had been there, and [though] the high notes would always stay,… the middle and low notes would [disappear]… and I would decide, “let’s bring up the chest voice or let’s talk now”… (she laughs). But it’s good because at the end of the piece she’s crazy and
screaming, so that whole thing can just sort of become character voice. But I have to say, that’s not fun for me.

Meagan needed to be creative in order to accommodate the challenges she experienced; her flexibility in the way in which she interpreted Marietta’s character allowed her to continue performing, despite these challenges. By the last three performances of this production - (which ran for nine performances) - Meagan felt that her vocal challenges were alleviated.

Immunity: Changes in Overall Wellness. Both Meagan and Joelle noticed that they were sick more frequently and for longer periods of time during their pregnancies than had been previously experienced. As we spoke, Meagan described the challenges of catching “a million colds” while pregnant and unable to take the usual medications or remedies. She had a cold at the time of interview and explained that it wasn’t a usual occurrence:

I usually don’t get sick very much. And then in the past when I would get sick it would really be something. And I don’t medicate, like hardly ever, I don’t take Tylenol for headaches usually. But if I had a cold and it was preventing me from sleeping and I was up coughing, I would just take a big old swig of NyQuil and I would always fall asleep. But that couldn’t happen [while pregnant], I really didn’t take anything. I just drank my tea and water and tried to phonate. And so I remember like a normal cold lasting like 4 weeks, like the month after I learned I was pregnant. Ugh, it was like that all the time.

Meagan mentioned needing to “manage” her voice due to these challenges. When I asked her to further describe what this meant for her, Meagan explained:

So, basically the only solution for that was to make sure the voice was above the soft tissue. Because the soft tissue would be swollen or…the musculature would want to compensate or the spine wouldn’t be the way I expected it, or I just wouldn’t have room to expand the breath so my only choice would just be to go up! So, I was lifting the palate...
as much as possible, trying to expand my spine to the degree that I could… just be above it all.

Meagan needed to be flexible in her response to her voice and body during these challenging times. Specific technical changes were necessary in order for Meagan’s voice to function well. Her openness to change allowed her to achieve vocal success.

*On Breathing and Learning.* The impact of the growing fetus on each woman’s breathing technique was another way in which flexibility through physical means manifested. Both Joelle and Meagan described the changes they made in order to accommodate their transforming bodies.

Joelle spoke about the changes she experienced in her breathing and how she accommodated them:

> I do feel now (being in the third trimester) that the air feels different, and [that] the way that I intake air [has changed]… I'm more likely to do back breathing than I think I did somewhat previously, but now I know I'm going to have to access that. I don't feel like I run out of air necessarily… I’ve got Messiahs coming up and I was worried about a couple of the melismas in “Rejoice Greatly” that I usually do in one breath, and I [thought], “Oh gawd, can I still do it?” [Now.] I approach it slightly differently.. I don't know if I've figured out one hundred percent what I'm doing yet….I definitely feel like I can't breathe as low as I would to prepare for those phrases, so I guess that's [where] the back breathing thing [comes in].

As her pregnancy progressed, Joelle needed to continue exploring her new breathing needs as they too evolved. Joelle’s growing body required her to continually investigate and adjust for new changes to her breathing. She shared her process of preparation for an upcoming Handel’s *Messiah* during one of our interviews:
I’m always getting bigger now, so…it was different from what I had been practicing [in] the couple of weeks prior. I think that I just…thought about support less, which was weird, and I thought about my breathing more. [I needed] for my mind to make that switch… because in my mind my breathing comes fairly easily…but just on the runs especially, for “Rejoice,” I had to conserve slightly more air than I am used to, and for “I Know that my Redeemer Liveth,” I had to breathe in a couple more places, that are normal places to breathe, but that I didn’t normally have to breathe. The first time that it happened I was like, “Oh damn!” (She laughs) But it’s just the way it is this year and it’s acceptable. It’s not like I’m breathing in the middle of a word, so, fine.

Here Joelle describes not only needing to be flexible in the places she took a breath, but also to have a flexible attitude in her thoughts of her breathing needs, knowing that her body was continuing to change and to require fluidity in her choices. Joelle accepted these adjustments with an easy attitude and a determination to make things work; “If you can’t do it the way that you used to do it, you find an alternate way… and you have to do it. That’s the bottom line.”

Like Joelle, Meagan had to adjust the way in which she used her breath as her pregnancy progressed. While Joelle used “back breathing” to much success, Meagan did not find this technique worked for her. Meagan explains:

Right before birth I felt like I had trouble breathing deeply. I just couldn’t expand the diaphragm down at all, obviously, and advice, like “breathe behind the baby” didn’t seem to work for my particular body. So I was really choosing just to use the top of my back ribs the most and I was just sort of breathing above everything, to lift off of the tongue, lift off of the throat.

Meagan found a new way to breathe which worked for her body to manage the lack of space she experienced. Limiting water intake before a performance was also key, as she found her
problems were exacerbated by feeling too full in the stomach area as well. Adjusting in these ways allowed Meagan to continue singing at a high level.

*Flexible Body, Flexible Mind.* The women I spoke to not only showed flexibility when it came to the ways in which they responded to physical challenges, but also in the ways they reacted to outside challenges, including concert attire and planning for upcoming gigs.

During the course of our interviews, Joelle shared with me that she was trying to decide what to do about an opera gig that was scheduled for five weeks after her due date. In our second interview she explained what factors were influencing the decision, but allowed that there were elements over which she had no control: whether or not the baby would arrive “on time,” and how she and her new family would be feeling postpartum. Discussing the pros and cons was always partnered with this admission, and in the end Joelle chose to cancel the gig in order to allow for the unknown factors which could have arisen. Joelle felt relief in making the decision, though it required her to be flexible in her commitment to that particular gig. She wanted to be prepared for extenuating circumstances and to do the best thing for her and her family; these factors helped her make a difficult decision.

*Performing and Rolling with the Punches.* Performance clothing was a challenge in being flexible for Shareese. On the day of her doctoral recital, as Shareese got into her concert attire she realized that her body had changes considerably since the last time she had tried on her dress a month prior. Though her recital was an hour away, Shareese went home and found another dress that she had as a back-up. Her shoes also no longer fit and she performed her recital barefoot, and seated in a stool. I saw footage from this recital and Shareese looked and sounded beautiful; seemingly unfazed by this series of challenges. Her flexibility contributed to her success as she allowed herself freedom from adhering to the original expectations she had for concert attire on this occasion.
Self-Reflection: My Own Needs for Flexibility. During my final trimester, I performed twice; once at my brother and sister-in-law's wedding, and once at an event in Toronto where I sang Strauss’ *Four Last Songs*. As I was preparing for these performances, I noticed that my breath too had changed.

For the first time I felt winded - there’s a bigger section in the middle which builds to a climax and I found myself feeling breathless, but then actually needing to blow out air. It feels as if there is a slower response time reaction with my lungs/stomach/diaphragm - as if it doesn’t re-set as quickly. This improved as I worked on the piece. Yesterday I was in Toronto rehearsing the *Four Last Songs* for the Gallery 345 performance next week. Truthfully, I…..was concerned with my stamina and the breathless issue…When I was rehearsing and warming up on my own, I felt the same breath issues beginning in the first and third piece - both during sections in which there isn’t much of a break between long and challenging phrases. I found that I had to blow air out at the ends of phrases, as if the diaphragm could be held down while sustaining but then wouldn’t pop back up again and reset? It didn’t feel like the typical “stacked” feeling I have when I over-breathe - simply that there was too much air - which is surprising. I found some places where I could use up the air more efficiently during consonant endings - [for example in the word] “Luft” - really exhaling and resetting on the “ft” sound and took time between phrases as I could. By the time I rehearsed with the pianist, the problem was minimized and I believe I’ll be find for the concert next week, provided I keep singing (Personal journal, August 28, 2014).

My own practice and experimenting served to remedy the problem by the time of the performance. Had I continued to use the same tactics as I had in the past - (I had performed these pieces several times) - I would have encountered further problems which could have derailed the entire performance. Operating with a “business as usual” attitude would not have worked for me and I was grateful that I was able to make a few changes that worked.
When encountering challenges, all three of the women I spoke to were able to come up with solutions by being flexible with their technique and their expectations. Riding the waves of each challenge took creativity and pluck, and as I re-read the transcripts to our interviews, I was reminded of the courage it took for these women to try something new during a time of change.

INTERCONNECTION

The importance of interconnection came up throughout my conversations with all three women. From the partnership of close family members, partners and friends, to the connection made with costume designers, colleagues and audience members, instances of support (or lack of support) influenced each woman’s experience. All three stressed the importance of the support they received during their pregnancies, and they worked to protect themselves from situations where they felt less than supported by those around them.

*Partners and Family Members: An Intimate Interconnection.* Meagan, Joelle and Shareese experienced varying levels of support when it came to their partners and family members. All three women felt that their husbands/partner had been working hard to show their support and stressed the importance of this relationship in their success as pregnant classical singers. Shareese was particularly vocal about her husband and describes his support this way:

> We've been married three years in October and we dated almost two years before that. And my husband…is fantastic. He is a person and he has flaws, but he's fantastic. His desire to see me through my career aspirations is probably about as deep as my [own] career aspirations. He's great and very supportive and you know, he's always like, “ok, you've got this audition, what can I do to help you?” and “ok, this paper is due, what do you need?” I know that that's rare, but…that is something that you have to have as a woman and I'm so grateful to have that.

Though Shareese’s family was also supportive of her pregnancy and performances, Joelle’s parents hadn’t said much about her plans to fly to a gig besides, “be careful.” She felt that she
had been really lucky in the on-going support she had received from them throughout her career, and yet she felt they trusted her to take care of herself during her performing commitments. Joelle’s husband was very involved and supportive of her pregnancy while singing. Having experienced pregnancy from the perspective of singers on his roster gave him some knowledge of the process, but Joelle didn’t feel as if he was directing her in any given way; they were able to make choices together that best suited their needs.

I asked Meagan if she felt supported by her family members in her decision to become pregnant and continue singing. She responded this way:

I think my family has just sort of gotten used to the fact that I just kind of do what I want to do. But they definitely thought that I was maybe going a little too far this time. Especially because my partner lives in Vienna and I officially live in the suburbs of New York, I think they just thought, “How is this going to work?” “Is this selfish?” …And there may still be thoughts about that but they’re not telling me.

Meagan had initially believed that having an international singing career and being a mom did not go hand in hand, but came to realize that it was possible. Despite her family’s initial reactions, they grew to embrace the pregnancy and Meagan felt that they were genuinely excited for her new journey to begin.

But my family is just overall so excited about the whole thing that those details were less important after a while. It was a big surprise. I’m the youngest of my family -my parents are in their late 70s and were not expecting any more grandchildren - they only have one. They’re thrilled now but I think at first they were just like, what is going on here?! So that was surprising overall for them.
After having time to digest the news, Meagan’s family was supportive. All three women said that they felt supported overall, but not all of the support they received were from intimate family members and partners.

*Meagan’s Story: Die tote Stadt.* When Meagan was engaged to sing Marietta/Marie in *Die tote Stadt*, there were multiple instances which required support and understanding her professional colleagues. Though Meagan had not yet disclosed the news that she was pregnant to the director, (she is tall and it wasn’t yet physically obvious), the director explained that Meagan’s character was to be portrayed as pregnant in the final act. Though there is no mention of pregnancy in the score, the director had decided to add this element to the production to help reinforce the idea that Marietta/Marie’s character was a symbol of “Lebensenergie” (life energy). But the concept did not end there. The production was “very dark, psychological and upsetting” and the director wanted to portray a still-birth dream-sequence with Meagan’s character. Meagan was four and a half months pregnant at this point and felt that she just couldn’t spend the six weeks of rehearsal and nine performances engaging with such disturbing imagery. Though she was not intending to disclose the news of her pregnancy right away, Meagan revealed the news at the initial concept meeting, explaining her reasoning for refusing to participate in this particular element.

Happily, Meagan felt understood and supported when she shared her news; Accommodations were quickly made which allowed the director to keep her intended concept while adjusting Meagan’s role slightly so that she did not have to participate in the scene. (The still birth sequence was mimed behind Meagan and her staging did not require her to view what was unfolding.) During our interview, Meagan described the reaction to her request:

> Somehow, I guess everyone was ok with it. And I do recognize that the whole artistic staff around me was feminine [so] that maybe [contributed to] it. But also, the man who was singing opposite [me] had four kids. He had to participate in that scene, he had to watch it… it was for his character’s hallucinatory benefit. He had to interact with it and he was actually like, “Don’t look.” So there was a lot of support for that point of view.
Further complicating the issue was the fact that Meagan did not want news of her pregnancy to be public yet as she was still deciding how to handle two upcoming gigs which were slated for just after her baby’s due date - one of which was at the Metropolitan Opera in New York. Sharing the news of her pregnancy put Meagan in a tenuous position where she required those “in the know” to keep her secret until she and her manager could carefully handle the future engagements. Meagan explained, “The people that I told during the German job - which were not many - I swore them to secrecy and it seems that they did maintain it.” Valuing these relationships and relying on their support and understanding were key factors in maintaining the professional goals Meagan and her manager had for disclosing her pregnancy.

When I asked Meagan if she discussed the production with her family, she revealed that she did not.

Something inside me made me not want to discuss that. Because I do recognize that there are a few people in my family that think that this career doesn’t combine with motherhood, and there were a lot of skeptics… I think there are still people who probably wouldn’t tell me that to my face, but think that I shouldn’t be doing this. So whatever those feelings are, I may not be right about it, but something made me keep it in, not discuss it. I was able to discuss it with my cast members much more than other people in my life.

Meagan was able to find the support she needed by recognizing when and with whom she should share her pregnancy news. By following her instincts she was able to create a network of support while also asking for what she needed.

*The Need to Protect: Choosing which Relationships to let in.* Shareese also spoke about the need to choose carefully how or if she disclosed news of her pregnancy. She used past experiences to gauge how to make this decision, describing her choices this way:
I still haven't openly expressed on Facebook mainly because I didn't want the wrong people having the wrong idea of this experience… I wanted to kind of shelter myself, my mind and my child and my family from too many people giving their advice about what I should be doing with my career right now. I had a lot of negative feedback from people when I decided I was going to get my doctorate. Like, you know, “You are not a serious performer and you don't want a career.” “No, actually I do, there's just more of me in the way [that] I think that some performers just don't have. I enjoy researching, I enjoy sharing that kind of knowledge. And I don't think that that's weird.

This subject came up again for Shareese in our final interview. We had been discussing her participation in the regional level of the Met competition (which would take place during her third trimester) and I was eager to hear if she would be able to participate. Unfortunately, Shareese was diagnosed with deep-vein thrombosis, a hereditary disease which can cause life threatening blood clots. Driving for six hours could be dangerous and Shareese had to withdraw from the competition. Shareese chose to keep this news to herself, anticipating negative comments from others. Though she lamented the fact that she felt she needed to keep her withdrawal a secret, she knew that she needed to protect herself emotionally. She said she did not want to “continually discuss or defend why I’m not going. It should be enough to have a health concern.” She was concerned that others would ask, “Well, why didn’t you wait to have a baby?” Shareese did, however, feel supported by those closest to her. Though her husband was disappointed for her, he understood her situation and provided comfort in discussing her feelings. Shareese’s voice teacher was also supportive, contacting the competition to see if perhaps Shareese could attend another district earlier on in her pregnancy. (The competition made no exceptions to their rules regarding switching regions for Shareese’s unique situation.)

My own journal writing revealed a need to protect myself from unwanted negative commentary. I felt a lot of support during my pregnancy from my husband, family and friends, and also my musical colleagues and voice teacher. My challenge came in the form of comments from non-singers who found out I planned on performing later in my pregnancy. I received reactions like
“You’ll feel horrible then!” and “You won’t be able to stand!” but I chose to ignore them; singers I trusted had performed at the end of their pregnancies and I decided to follow their own advice as well as listen to my intuition which said, “You can do it!” Immediately after my final concert as a pregnant woman I reflected:

The other feeling I had while preparing for this concert was the need to justify why I was planning on singing so late into my pregnancy. I felt there as a bit of disbelief and perhaps disapproval at singing so late. Both a sense of doing something “risky” and also of making a spectacle of myself. This was mostly from non-singers who perhaps could never imagine singing in front of an audience and somehow paired with the fact that I was quite pregnant seemed ridiculous to them.

Knowing when and to whom to open up was a common theme for all of us. Feeling supported by those we relied on was important and helped to create a safety net in which we could perform freely.

Lifting Each Other Up: Feeling Supported by Other Women. Other women who had experienced singing while pregnant were among the most consistent and steadfast supporters of the women to whom I spoke. During our interviews, Joelle mentioned the experiences of other singing moms numerous times when reflecting on her own path. She felt her greatest resource when looking for support as a pregnant singer came from these relationships, as well as the support she felt from “Performing Moms.” Joelle explains:

I have _diastis recti_…and I just felt like I had done something wrong [to cause it] or had not done something I should have done, so I posted about that…and everyone was basically like, “You can’t avoid it.” So that was good as far as support.

Meagan also mentioned the importance of the support she received from the online community. When she found herself stuck for a performance gown last minute - (“All of a sudden, the
dresses I had that were supposed to be fine just didn’t fit…” - Meagan posted a message asking if anyone could loan her a dress. The result was that a direct competitor sent a dress overnight in the middle of her own production. Meagan described how the support she received from other singers had influenced her:

Meagan: I was talking with some of my friends [about having a baby] and one particularly said, “Just do it. I don’t know why you would even think about this.” And then I think there is a baby boom in our industry, there are so many women who are pregnant. And “Performing Moms” has made me feel better about the whole thing.

Catherine: Yes, there are so many people doing this.

Meagan: And it’s not ruining lives, and we all know which crib to get. (She laughs) I got a bouncy chair I was able to borrow at my last job. So maybe there’s something about the Internet that has made a difference? And the fact that we kind of have some solidarity. I don’t think any company now is willing to say you can’t breastfeed because I think they would have a revolt. It’s a different time.

Building connections, (either online or in person), between those who have experienced singing while pregnant came up frequently in our conversations. This line of support was one of the most influential for Meagan and Joelle.

Audience/Performer Relationships: Crossing Between the Personal and the Professional. All of the women I interviewed mentioned the ways in which audiences reacted to their performances. This was a topic about which I was especially curious having heard a few anecdotes that had peaked my interest. All three women noticed that audience members approached the topic of their pregnancies with amazement. Joelle explained, “Most people [said] ‘I just can’t believe you can do that while you’re that pregnant.’ Her reply came with a laugh, “Well, how pregnant do you think I am?”
Shareese echoed Joelle’s words, describing an almost identical audience reaction; “I can’t believe you can do that while you are pregnant.” I, too, reflected in my journal about this attitude and I wondered why audience members found it so surprising and amazing that a pregnant woman was on-stage;

After the concert with Bill Miller, a few audience members remarked that they were amazed I could “do that” while pregnant. It seemed to be a bit of a spectacle to be singing while so far along in the pregnancy. I didn’t get this reaction when I sang earlier (at Dobrochna’s recital) so it must have to do with my size as well.

Is there some image of fragility for pregnant women? On one hand I feel as though I need to watch out for myself, to take it easy and to avoid pushing things too far, but on the other hand, I feel stronger, bigger, and more powerful. My laugh is louder, my feelings are accentuated, and I feel generally as though I am magnified in my personality and power. So, it surprised me that people were amazed I could still sing. My voice feels strong and rich and warm. It feels great for my body to sing. Yesterday I sang the Four Last Songs through…and it was very fulfilling.

Though I was curious about the origin of the audience’s attitude, I still felt it was a positive commentary on my performance. Meagan’s situation took this reaction one step further. Because the production of Die tote Stadt was so dark, audience members were not only amazed that Meagan could “do that” while pregnant, but were also concerned for her well-being and that of her baby.

It became public knowledge right before opening night,…that I was pregnant, so there were people in the audience that knew and were really upset and worried. When I was greeting the public afterwards, they would say things like, “I can’t believe you did that”
and “Is everything ok” and “Please get yourself checked.” But I feel like, in the fact that I sing, you have to be able to fall on the floor. And I know how to fall [safely].

Whether or not audience members approved of these women performing while pregnant did not influence each woman’s decision to perform. However, audience reactions were noticed and discussed throughout our interviews. Though each singer’s relationship with their audience members was not necessarily personal, it did make up an integral part of how each woman felt they were viewed by others as pregnant singers, as well as formed an important part of the theme of interconnection which so often came up in our discussions and which contributed to the women’s sense of support.

*Relationship to the Unborn Child: Singing for Two.* One relationship that has been integral to the experience of the women to whom I spoke has been the connection to the unborn child in utero. Though this relationship does not offer the same characteristics as other support systems, it was still valued and impacted the women’s singing. Shareese spoke about the magical connection she felt with her baby and how this relationship influenced her:

The feeling of being able to sing with my child right now, it's just...an experience that transcends anything that I could explain to anyone. And I know you know how that feels. It's a magical feeling. And so to be able to share this very intimate part of my self, my voice and my singing, my artistry with my child in a very intimate way…I can't share that with anyone else in the world in the way that I'm sharing that with my child. So, I just I believe that my understanding of who I am as a person, my trust of who I am as a person and my desire and my wants…it's like my whole world is open in a way that it wasn't before.

Shareese later went on to explain that she had felt a deeper connection to the texts she performed while pregnant because of this relationship. Due to the fact that Shareese was pregnant during Christmas, much of her repertoire described Mary and Jesus. Having experienced motherhood
from the perspective of pregnancy, Shareese felt that her interpretation of these songs had intensified.

I think that having the life experience of being pregnant and being able to draw upon that…in interpreting those pieces, I think that if I had not been pregnant or had never been pregnant, it would not have been the same. In fact I’m interested to see…[if] I ever get to sing Suor Angelica again, what that would do to my interpretation…You know I never understood, when I was a younger singer … I didn’t quite understand when people would say, “Oh you can sing that, but you need experience to sing that.” I always thought that they said that because I needed more singing experience. But really it’s more life experience.

Her life experience as a pregnant singer was important for Shareese, not only in her connection and relationship building with her child, but also in her interpretation of repertoire. Meagan also enjoyed connecting to her baby in utero while performing, saying, “I…liked the whole thing, and loved all the cool sounds I thought she was experiencing.” Though she was aware of her baby “listening” while performing, Meagan didn’t feel that her singing was impacted for that reason, at least not consciously.

Joelle explained that she wasn’t focussing on her baby in utero during performances. In one performance, she noticed her baby responding to a certain baritone voice that was particularly resonant, however, during her own singing, Joelle was focussed on other elements.

I don’t really feel it when I’m singing and I don’t know if it’s just because I’m not checking in that way? Or if she’s just not moving because she doesn’t like being squeezed? Part of what was weird about being in a concert setting too, was [that] usually, in real life, when I feel her moving I just put my hand there automatically. Can’t do that in the middle of a concert! (She laughs). So, I had to be quite conscious about not doing
that. And also about not just splaying my knees. And I usually cross my ankles but I didn’t cross my ankles, I just kept my feet flat on the floor. These little funny things.

Joelle’s awareness was mostly directed towards appearing “normal” during performances, though while at home, as she sang through some Christmas carols with her husband, she did feel her baby’s movement. When I asked Joelle if an awareness of her baby in utero had impacted her interpretation of the repertoire she was singing, she said she didn’t think so.

Honestly, it was probably more preoccupied with trying to be normal, to be my normal when I wasn’t singing… not to be making faces or moving my legs too much or whatever, and.. I guess maybe because of that, I don’t know if that makes sense… I was more conscious of exactly where we were in the piece.

Joelle did surmise that if she had been singing different repertoire, her interpretation may have been influenced.

I too remembered being influenced by my awareness of my baby in utero. Driving home after teaching all day, I would sing to her, knowing that she could feel the vibrations from my voice. This awareness also influenced an audition I had while pregnant. In my journal, I wrote about how thinking about my womb helped me to overcome some audition jitters.

I had my first audition with the new pregnant body. It went very well, I think. What was interesting is that sometimes while auditioning I’ll get that nervous-energy-feeling which brings me a little above my centred, supported singing space and once that happens, it’s a little tricky to calm down and bring my energy lower. It began to happen in one of the arias, but then I thought about the energy in my womb and it was really easy to connect to my low support again. I’m not sure if this is because of the extra physical weight there or if it is simply an energetic awareness… Either way, it made for a good audition.
Though my thoughts were not of the baby herself, an awareness of my pregnancy was beneficial to my singing.

Whatever the relationship, having a feeling of connection and support was important to all of us. Whether this support came in the form of an internet conversation, the intimacy of a close partnership, the support of a professional colleague or the subtle relationship of an unborn child, we all were deeply affected by these connections.

PERSPECTIVE
In re-reading the transcripts for my interviews with Meagan, Shareese, and Joelle, I found that the idea of **perspective** came up frequently and in different guises. All three women experienced a change of perspective as a result of their pregnancies, which impacted how they saw themselves and how they responded to outside events. Though each woman’s personal lens was different, they all included elements of positivity which helped to frame their experiences and overcome challenges. While re-reading our conversations, I marvelled at the strength and determination shown by all three women.

**Shareese’s Perspective**

*Staying Positive, Accepting What Is.* Shareese found a new strength and confidence in herself while pregnant. During our third interview, she explained her conclusions about the impact her pregnancy had had on her singing and personal growth:

> So, you know… as far as the singing and performing…I’ve been continuously mulling over that question you asked me, “What about my voice has changed since I have become pregnant?” and nothing has changed vocally. I still stand by my point that it’s just my mentality. It’s… this new sense of confidence and really more body awareness, awareness of myself. Not to say I didn’t feel strong before I got pregnant, but being pregnant and creating this person from scratch has given me a whole other perspective on
strength and the capabilities of my body. And I really think that if anything’s changed, it’s just been my thought process.

Along with this new sense of awareness and strength, Shareese’s new viewpoint centred around finding positive aspects of each situation and making peace with her struggles. Though Shareese was disappointed that she had to cancel her trip to compete in the Met regionals, she accepted the situation and reminded herself of her priorities. Shareese explains:

So, it is what it is… you know… and I have been so overjoyed to have my son experience all the joys of singing that I’ve had when I’ve been pregnant with him and I want him to come out and see momma do awesome things. So, we’re going to protect his life and my life and other opportunities will come along.

Shareese chose to thoughtfully examine the situation and embrace those elements which were out of her control. Making peace with her situation and enjoying the positive elements of her pregnancy were important for Shareese and she repeatedly stressed the importance of a singer’s “mental space” throughout our conversations. Shareese felt that she began her pregnancy with a positive attitude - “I am capable of doing this and this is going to be fine” and she worked to maintain it. These choices helped Shareese to keep a clear and positive viewpoint that fuelled her confidence and served to propel her through any challenges that she faced.

Setting an Example: I Can Do It! You Can Do It! One aspect of Shareese’s perspective that prevailed throughout our conversations was the idea of wanting to let other women know of what they are capable. Shareese wanted to be an example of a pregnant woman singing with success, and in many ways, she was. In our second interview, Shareese explained her hopes for the Met competition regionals, which she would later have to cancel:
No one gets pregnant and does the Met competition! *(She laughs).* I don’t know, part of me really hopes that I go…because I do want other women who got pregnant and decided not to do this …[to know] you can do it.

When we finally spoke about her need to cancel her involvement in the competition, the idea of setting an example came up again:

I was hoping maybe that I could carry the torch and be awesome and hopefully that I would be able to compete…I could show people that pregnant women can do anything and they can. Again, it hasn’t affected me vocally - it’s just a matter of being able to sit in the car for six hours.

I reminded Shareese that she had already been an example of a pregnant woman advancing in the Mets as she was pregnant at the time of the first round of competition. I understood her desire to “carry the torch” and how it influenced her thoughts; I had had similar feeling regarding the pursuit of my doctorate. I felt a certain responsibility to complete my degree on time and to show other women that they too can have a baby and do a doctorate successfully. This sentiment certainly contributed to my outlook on my situation, and helped me to push forward when I was tired. Shareese and I spoke about our mutual desire to set an example for other women when she asked me about my doctoral work, and how it coincided with my pregnancy. I shared a bit of my story and then continued to encourage Shareese:

It’s amazing what you can do. Like the things that we [believe]… “Oh, I couldn’t possibly function with this amount of sleep,” but you can do it, you CAN do it. And it’s a finite period of time and you get through it.

Shareese echoed my sentiments when I asked her what she would tell other women who were thinking about becoming pregnant while continuing to pursue a singing career:
First of all, [I’d want them to know that] they’re amazing and that [they] should never let anyone’s perception of the life they should lead become the life that you have. You are capable of incredible things and…you should be allowed to do whatever you want!… Find people that are going to make you feel empowered and not ashamed…

Toward the end of our conversation, Shareese added:

Honestly, if there’s anything I can do to make other women and other singers feel empowered… I know I’m just one person, I’m not some famous opera singer, but I just don’t feel like there’s enough encouragement in this world for everyone to be wonderful. [I want to] let women know that they’re special and unique and that we all have something to offer.

Shareese had another aspect of this wish to encourage other women. She is a beautiful plus-sized woman who has noticed the stigma that is often placed on weight in classical singers. Adding the fact that pregnancy necessitates weight gain further complicates the issue and Shareese wanted to encourage other plus-sized singers who may be concerned about their body image. Though Shareese had received some negative comments from her health care providers regarding her weight and her doctor was concerned about the possibility of gestational diabetes, Shareese took the glucose test and passed. Shareese stressed that she wanted this fact included in my findings: “This is an important part to include because I don’t want plus-sized women to feel like they can’t do this, that it’s impossible.” Shareese looked stunning in her recital photos and was a strong representation to other singers that one can be plus-sized, beautiful and healthy during pregnancy — all while continuing to sing! Wanting to set this example provided a lens through which Shareese saw herself and helped her to remain focused on her goals while pregnant.
Joelle’s Viewpoint

Just Doing It: A Framework for Success. Like Shareese, Joelle experienced a change in perspective while pregnant. During our conversations, she frequently used phrases like, “you just make it work” and “you just do it,” indicating her attitude when it came to pregnancy-related challenges. Though Joelle experienced nausea and some physical discomfort, like Shareese, she accepted that there were elements that were out of her control. She explains:

It’s just going to happen the way it’s going to happen and you have sort of less control over it…I think giving into having less control over it makes it less stressful. Not thinking that I have to try to compensate for this or that; there’s no point! I was just proud I can fit into my shoes still! (She laughs)

Joelle ultimately felt that she had less stress or worry prior to performances as a result of this attitude. Knowing that she couldn’t control everything took some of the pressure off, and she found herself adjusting well to her challenges.

Understanding Hormones: A Shift in Acceptance. Joelle’s view of her emotions were another way in which this change of perspective manifested. Prior to pregnancy, Joelle felt that any emotional upheaval that took place before a performance would impact her success in performing. During pregnancy, however, and when a stressful situation arose with her dog forty-five minutes before a performance, Joelle found that she was able to accept her emotional reaction and then continue to the venue with ease.

It was…weird because I started crying a little bit (which I know is just pregnancy hormones), but then I went and sang a concert, whereas, before, if I had been crying, I probably would have gotten to the concert venue and been like, “Oh no! Now my throat is going to be closed since I was crying!” Instead I just didn’t [worry about it]. And because…I’m aware that it’s a heightened response due to the hormones, it’s ok. I don’t feel as bad about it.
Remembering that her emotions were likely heightened due to hormones helped her to feel less stressed about her singing voice.

**Feeling Lucky: Feeling Supported.** Joelle frequently mentioned feeling lucky about the situation she found herself in while pregnant. She was grateful that she happened to be booked with more concert work than operatic roles during her pregnancy (realizing that her pregnant body could be an issue depending on the character needs of a staged production). She also felt grateful that she was in a good position to cancel the role of “Nannetta” post-baby, both financially and career-wise. Joelle recognized that not everyone would have the luxury of being able to cancel and told me that she felt lucky to have that flexibility. She also used the word “lucky” to describe her current career position; “I’m just really lucky…. I’ve sung with enough conductors now that they trust me and being pregnant is not a big deal.”

She further explained that she was grateful to have had so many good experiences singing, and that no matter the impact of pregnancy on her singing voice, she would be “ok.” She also felt that because she had already somewhat established herself as an artist, she could take a break if she needed it and still be welcomed back when she was ready:

> And you know, if something goes wrong and I’m never able to sing again, that will suck and I’ll probably be depressed for a while, but I’ll figure out something else. It’s not like it’s the end of the world. I love doing it and I feel like I have done enough that it was fulfilling…Even if I had to take six months or a year off, I feel like I have enough people who support me - like people who do casting - that I feel like I wouldn’t be totally out of the game. Which again, is a really lucky position to be in.

Feeling lucky and feeling gratitude were important parts of Joelle’s personal lens, helping her to focus on the positive and feel relaxed when challenges arose.
**Meagan’s Perspective**

**Engaging with the Light: Choosing Joy over Darkness.** Meagan’s perspective during her pregnancy was one of joy and gratitude for the chance to experience being a mother. She also valued the ability to confidently accept any challenges that may come her way. She explains:

> I have to say… maybe it’s being older and being so thrilled to have this chance, I just thought whatever happens, I’ll just deal with it. And I just kind of fell into the water and that was it. I think if I thought about it more I would have been freaking out.

Meagan’s ability to remain positive and to “go with the flow” allowed her to respond successfully to the challenges she faced in the production of *Die tote Stadt*, which Meagan performed in during her pregnancy. Choosing the positive in the negativity of the still-birth sequence was important for Meagan and helped her to achieve a portrayal of Marietta that satisfied her director. Meagan shared her story this way:

> A lot of my repertoire has some of that quality [darkness/negativity] but… for some reason during the pregnancy, I didn’t want to include the negative energy at all. I don’t mean to be so “woo-woo” about it, but I just felt I needed to stay…positive and wholesome. And I wasn’t able to choose that. But what I could choose is where I was looking and how much I engaged in it. So for example, when I was pregnant, and all that stuff was happening behind [me]…I was trying to imagine that I was feeling something [movement from the baby], because at that point, I was just starting to feel movement… There was a really big climax where…I’m not kidding there was a guy banging a baby on the floor… I was just choosing…- and this was not even staged and no one told me to do this - but I chose to make those sounds in the crazy woman’s mind like, “Ah! The baby’s moving! And I’m so joyful about it.” And the director sort of went with it. She was like you are Lebensenergie - you are life energy and he’s just about death. She [the character of Marietta] was producing life, she was the case for living. So I just chose to embrace that energy regardless of what was going on around me and to just fight for that point.

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I don’t know if I would have included other nuances if I were not pregnant at the time. I hadn’t sung the piece like that before because she changed the whole concept — I mean this was not even the plot anymore. I just chose to find the best silver lining and play it so extreme that I would look crazy. That did work out actually. It’s weird what we do but I guess we all have to be creative in these moments.

Meagan rose to the challenge in this situation and kept a joyful perspective despite the uncanny nature of the production, which couldn’t have been more provocative for a pregnant woman. There were other elements that made Meagan’s involvement with Die tote Stadt difficult; She was required to do numerous falls, and though she is used to participating in physical productions, she ended up throwing out her back because her abdominal muscles were not supporting her as they had in the past. The stage was also raked and Meagan rehearsed on the raked stage for six weeks. She ended up struggling with feeling swaybacked and needed to adjust some staging to accommodate her tenuous back issues. Despite all of these incredible challenges, Meagan maintained an attitude of positivity and perseverance. When I exclaimed at one point over the challenges she encountered, Meagan responded: “Yes! And you know I was determined I would just do it until there was a reason not to, and I decided that there was no reason that I couldn’t.” This determination signified the perspective that Meagan chose to embody as her pregnancy progressed.

*Cancelling the Met: A Pregnant Pause*. Another challenge which appeared during Meagan’s pregnancy was whether or not to perform at the Metropolitan Opera six weeks after her baby’s due date. She had sung the role of “Elisabeth” in Wagner’s Tannhäuser already and felt that it would be in her powers to perform it again soon after her baby would arrive. It would be her second appearance at the illustrious Metropolitan Opera and the conductor was James Levine, someone with whom Meagan wanted to work but hadn’t yet met. Meagan decided with her manager that she would like to try to keep the engagement, (which contracted Meagan for a scheduled performance and as first cover), but she needed to proceed carefully with the release
of the news of her pregnancy and with approaching the Met for a request to begin rehearsing slightly later than her initial contract indicated.

Meagan’s manager made the request, disclosing the reason: Meagan was expecting a baby due in “late summer.” The Met’s response was one of concern and they asked her to “please consider” the situation. Meagan felt that she could have sung the performance and attended most rehearsals, but was requesting a later start date due to her baby’s due-date. Meagan explained, “I knew I would probably be unable to honour the contract in terms of the written rehearsal start date. I went into the discussion knowing a change needed to occur.” Once Meagan realized that the Met was unable to accommodate her request, her manager wrote back with the sentiment (in Meagan’s words) that “Miss Miller would never want you to be uncomfortable with anything she does!” and Meagan withdrew from the contract.

As soon as Meagan withdrew, the Met responded with warmth, congratulations and requests to see pictures of the baby when she arrived. A follow-up offer of a future role appeared shortly after, further strengthening the positive relationship between both parties. Meagan felt that the best possible result had come about. Though she had initially intended to try to keep the gig, she felt pleased with how the interaction had resulted. “It could have gone very differently” Meagan explained when she told me about the experience. Though there must have been some initial disappointment in the fact that the Met had not accepted her first suggestion of arriving late to rehearsal, Meagan viewed the whole experience with a positive lens. She was happy that she and her manager were able to carefully handle a situation which could have been difficult, and she was confident that her reasons for withdrawing were beyond reproach. “It would have been great because I have never even met James Levine. I would have loved to work with him, but ok, it’s the best reason in the world to cancel for anything.”

Meagan took yet another potentially negative situation and viewed it with a gracious and positive lens, appreciating the good that came from her experience.
Feeling Strong, Feeling Deeply. Like Joelle, Meagan also experienced an intensification of emotions during her pregnancy which has continued beyond the birth of her daughter. Meagan viewed her emotional changes as a strength and power that she welcomed.

I have been a big emotional mess, just so happy…I was much more likely to be emotional. And so there was the final scene, [in Die tote Stadt], in this production it became…the break-up moment and so I cried every time, every time. I mean, the piece is pretty, the words are good, but also…I was so present. That was really something and I’m like that now, I mean I can cry for any reason. It’s good. It’s power.

Meagan rose to the challenges she faced and maintained a positive perspective, which allowed her to make the best of her experience and to continue performing at a high level.

OVERLAPPING EXPERIENCES: THEMES BETWEEN PREGNANCIES
I Don’t Give a #%@$! (IDGAS): A Newfound Freedom. While all three women I interviewed had nuances to their personal viewpoint, their perspectives also had similarities. Shareese and Joelle found a new sense of freedom in their choices by caring less about what others thought about them. I’m calling this perspective the “I don’t give a $%#! factor, or IDGAS, based on a comment from an anonymous survey respondent who wrote, “I will say this: having two children has greatly increased my "IDGAS" factor.” Her comment made me laugh out loud, and later, as I transcribed my interviews, I realized that this was exactly what I was hearing from Shareese and Joelle.

Joelle’s IDGAS attitude was mainly in regards to her appearance. She made a few comments about searching for an “appropriate” gown that fit her growing pregnant belly and then laughing, revealed that she didn’t care what she looked like while pregnant. Our conversation went like this:
Joelle: For the one concert, (I'll have to send you a picture), I basically wore a dress that happened to zip, that was just like an old regular concert dress, mermaid cut and it had a lot of ruching. I basically looked like a fancy walrus. *(She laughs).*

Catherine: *(Laughing)* I can’t imagine that!

Joelle: It was fine. I just thought, I’m pregnant and regardless of what I wear I’m going to look pregnant. And if someone doesn’t like it, they can leave, I don’t care. If you have a problem with that, you have other problems in life. It fit and it was stretchy enough. The carol arrangement was about 10 minutes long, so I was only going to be on stage for 10 minutes so I just figured, to hell with it!

My conversations with Shareese also revealed an IDGAS attitude about her appearance, as well as other elements of her performing life. Regarding a particularly form-fitting recital gown, Shareese explained, “They’re going to have to get over it because it’s made out of cotton and spandex and I’m going to wear it!” Shareese expressed similar feelings when I asked her what she thought of the memory difficulties she was having on the day of her recital hearing: “I kind of just said, F-it!” Shareese realized that she had done all the work that she could have and it was now out of her control. She explained this attitude further in another conversation:

I think I was making a lot of decisions in fear and worrying: “Oh my gosh, are they going to like me?” Now I'm like, “This is my job, I'm going to sing. If you don't like me I don't care.” I don't know if that is the baby, I don't know if it's hormones, but whatever it is it's awesome.

Shareese enjoyed this newfound feeling of freedom from trying to please others and found that it alleviated some performance anxiety.
Meagan also felt some of her performance stress was alleviated by being pregnant: the fact of her pregnancy felt as though it cushioned her from critical commentary, either about her singing or about her body:

I was feeling pretty strong overall, and I sort of felt like it [being pregnant] was the most wonderful excuse for everything. I sort of thought, if everything is terrible people will just be like, ah, she’s pregnant. So I kind of felt ok about the whole thing.

Meagan’s experience also had some elements of the IDGAS attitude; throughout her pregnancy she followed her own intuition and ensured that she felt comfortable in each situation. The confidence she displayed in her own choices and singing didn’t allow for worry about what others “might think.” This reaction served to empower all three of the women I interviewed as they navigated their journeys through pregnancy.

_Perspectives of Performing: Pre-Performance Routines._ Both Shareese and Meagan felt that their pre-performance routines had been impacted by their new perspectives. A reordering of priorities seemed to lessen anxiety and change the way each woman prepared.

When I asked about Meagan’s pre-performance routine, Meagan told me, “I think it was really just accepting that maybe I didn’t need all that other stuff and maybe it can be simplified. And that I am capable of more than I thought.” She explained that being a mom “made me happier, more relaxed…It’s made me more confident.”

Though Meagan’s perspective at the time of interview was that of a mother with a young baby, her sentiments were echoed by Shareese, who also benefited from her change of perspective:

You know, overall…I used to feel so much performance anxiety. It was horrible, absolutely horrible. I would have to have this whole routine that I would go through. Like the night before I would have to take a bath before a major performance and I'd have to
have all these calming things around me and centre myself in a way. And now it’s like I've got this job to do, so let me go do it. For that I am grateful...If there's been a big change, that's one that I'm very grateful to have.

Shareese’s new confidence and belief in her own abilities helped her to prepare for performances with more ease; this new perspective was Shareese’s most important element of growth during her pregnancy.

*Seeing Yourself, Seeing Your Body.* Being pregnant changed the way all three women viewed their bodies. At times this change of viewpoint instilled more body confidence, while at other times, the line was difficult to draw between feeling pregnant and feeling “fat.”

Joelle’s feelings about her pregnant body changed depending on whether she was performing or not. She felt concerned that her concert attire was modest and that it fit well as her body changed. During a concert tour in Europe she had brought a dress which she planned to wear throughout the tour. At the first performance she remembered thinking, “I cannot wear this for the other concerts.” She felt the gown was no longer “flattering or appropriate” so she purchased a new gown to accommodate her body’s changes. The way in which she wanted to be viewed by the audience impacted her clothing choices and view of her pregnant body.

At other times, (while not performing), Joelle spoke about feeling emboldened in her clothing choices. While she wouldn’t usually wear leggings, she felt more likely to do so while pregnant. She said, laughing, “I don’t know why exactly, [but] I guess I feel the belly balances out whatever fat my legs have.” She didn’t agree when an elderly family member made a disparaging comment about pregnant women who wore tight shirts and leggings. “I thought, ya, I think I’m going to be wearing that! I think it’s awesome!…Why not, you only have it [your pregnant body] for a little while, so why not enjoy it!”
Use of the word “fat” to describe pregnancy was common amongst the women I interviewed. While Shareese felt a new respect for her body during pregnancy, she also was concerned with how she would lose the weight she had gained while pregnant after the baby was born. She explained: “I think I oscillated between, ‘I’m awesome and look at the fact that this body is housing a human being’ and ‘Oh, my gosh, how am I going to get this weight off.’” Though Shareese felt more positively towards her body while pregnant, like Joelle, her perception of her body image was complicated.

Meagan’s perspective of her changing body was a little more straightforward. She shared, “I knew that I had gained some weight but I thought that I looked awesome during my pregnancy.” I also felt good about my pregnant body, especially once it was clearly visible. I wrote in my journal that I felt a bit self-conscious during the early stages, before I had made my pregnancy known, thinking that others would just think that I had gained weight. Once my pregnant belly was obvious, however, I enjoyed showing it off.

I even wore a knit dress today which I usually don’t feel that comfy in because I think it accentuates my belly, but now that I’m pregnant and my belly is bigger, I actually really like wearing this. I enjoy being pregnant and I’m enjoying my pregnant body, even though it feels a little more tender and delicate (Personal journal).

Like Joelle, I was also concerned about dressing “appropriately” during performances. Though I had borrowed a lovely black dress for the concert I gave in my third trimester, I did wonder how my pregnant belly would be perceived. I wrote in my journal:

I felt a little self-conscious about my body. My belly button sticks straight out and so even though I wore a flow black dress, I was concerned that it would be distracting for the audience to watch my stomach and belly button move as I inhaled. I felt a bit exposed.
Feeling conflicted about enjoying our pregnant bodies and worrying about how they were perceived was common for Joelle, Shareese and I, and all of us were aware of our changing perspectives in regards to the physical changes we were under-going. This lens influenced our choices in different ways depending on whether we were performing or relaxing at home.

**Well, That Was Easy! Feelings of Ease, Despite Struggle.** From an outside perspective, each woman I interviewed experienced struggles and challenges, some of which were quite daunting. However, all three women felt that their experience of pregnancy as classical singers was rewarding and easier than they anticipated. Though Meagan threw her back out, had a diagnosis of hypothyroidism, rehearsed on a raked stage for weeks, had to navigate a miscarriage scene and cancel a gig at the Met, when I asked her about the pregnancy overall, she whispered, “I thought it would be harder than it was.” Though she went on to describe the discomfort she had sleeping, she felt that she had been lucky to experience such an easy pregnancy. Shareese had a similar attitude, saying, “I knew it was going to be awesome, I just didn’t know how awesome.” Despite her challenges, Shareese loved the connection she felt to her baby in utero as she sang.

Joelle also shared a similar sentiment. When I asked her if her experience was what she expected, she shared:

> It’s probably been easier than I thought it was going to be…minus the morning sickness! … and then I was thinking, this sounds bad, but maybe I’m just not complaining as much as some other people complain about it? Or maybe I’ve just genuinely been fortunate to have had an easy pregnancy. I mean I have aches and pains and I’ve been feeling nauseated but it’s not like unmanageable. I still go to the YMCA a couple of times a week - or just maybe once this week I think it was... (*She laughs*).

Though she was a bit embarrassed to say it, Joelle wondered aloud if she had truly had an easy pregnancy or if it was a matter of perspective. I too felt that my pregnancy had gone well. Given
our experiences, we would all encourage other singers to consider continuing performing during pregnancy. Though there were certainly challenges, the experience enriched and enhanced our personal and professional lives.

Conclusion. Though each woman I interviewed described a range of experiences and feelings while pregnant, it was interesting to see where our stories intersected. The over-arching theme of the interviews was that of determination and a positive perspective. Though challenges arose which required the women to whom I spoke to be flexible in their singing technique and their expectations, Shareese, Joelle and Meagan received support from those around them that allowed them to maintain a positive viewpoint. Listening to these women speak so candidly about their experiences was inspiring and strengthening: these women were simply making things work, doing their best and finding success while singing for two.
Chapter Six: Discussion

"The real voyage of discovery consists not in seeking new landscapes, but in having new eyes."

~ Marcel Proust

MERGING THE FINDINGS

As I re-read the findings from my survey data and interview transcripts, it was interesting to see the way in which the experiences of the larger group of survey respondents were reflected in Shareese, Joelle and Meagan’s stories. In many instances, my findings for both methodologies supported each other, and I enjoyed looking at the themes that emerged in the survey through the closer lens of the interviews.

PHYSICAL IMPACT

General Conclusions. In the case of the physical impact of pregnancy on the classical singer, many of the survey’s findings supported the stories that Meagan, Shareese and Joelle shared with me throughout our interviews. In alignment with the results from the survey, all three interviewees experienced physical symptoms that impacted their singing during pregnancy. Nausea, fatigue, heightened emotions, and difficulty sleeping (the most common of the physical symptoms experienced by survey respondents) were also experienced by the interviewees, though each woman did not experience every symptom.

Data Sets Align: Cancelling Gigs. The women I studied experienced a wide range of physical impacts due to pregnancy. Some of these challenges were significant enough to cause the cancellation of gigs or competitions. In the case of the interviewees, Shareese withdrew from the Met competition due to her diagnosis of deep vein thrombosis. Various survey respondents described needing to cancel engagements because of the physical impact their pregnancies had on their ability to perform:

During my first pregnancy, I didn't have these difficulties. But in the beginning of the third trimester with these twins, I've had great trouble with shortness of breath. It was so
bad, I had to lip sync during choral concerts! I really felt I could hardly sing a note, certainly not a phrase, and with great regrets I had to cancel two solo appearances with orchestra. However, the babies have dropped here at the end, and I'm singing again somewhat.

I had to stop singing because I was constantly out of breath, my blood pressure was increasing, and the doctors found that I had low amniotic fluid and didn't want the breath pressure to encourage the fluid to leak more.

I did experience the benefit of greater ease in my higher range, but breathing and sufficient energy/comfort to sing were serious setbacks. I gave up any performance during pregnancy and only did teaching.

I am experiencing intense nausea and vomiting, now into my 17th week, and have canceled various performances due to this. In addition, I find that singing acts as a trigger to my nausea, especially long melismas on [a].

When the physical symptoms experienced by the women I studied became too severe, or the symptom had the potential to adversely affect the fetus, women were forced to decline or cancel gigs. Though this was not the case for the majority of women, needing to cancel due to the physical symptoms of pregnancy was significant for the women involved.

*Breathing and Creativity.* The topic of breathing was important to both interviewees and survey respondents. Like Joelle, several survey respondents mentioned using “back breathing” to their benefit during pregnancy:

I did a lot of singing with my hand in the small of my back almost as if I was lifting my baby to breathe.
I had difficulty breathing until someone suggested I breath into my back more during my later trimesters. Once I figured that out, it made breathing and my support easier.

Meagan mentioned the need to limit her intake of food and water before a performance so that she didn’t feel too full while singing and to alleviate the difficulties she felt in achieving a deep breath towards the end of her pregnancy. When I asked her if she noticed a change in her pre-performance routine while pregnant she said:

I was mostly just making sure that my stomach wasn’t too full, that was a big issue for me, and making sure also that I couldn’t drink as much water as I normally would have… It was mostly to make sure that my stomach wasn’t too full so I could use whatever room I had to expand.

This idea was echoed by a survey respondent who wrote:

I experienced difficulty breathing in the last months if I had eaten too much in the hours before singing. If I ate well early in the day and then didn't eat for several hours before a performance, or just had a very small snack, my breathing felt better than ever.

Breathing was a common topic of conversation for both groups and seemed to have the most direct link to the women’s perception of their singing. Although other physical symptoms of pregnancy were more detrimental to the singing experience (no one commented that they had to stop singing specifically due to breathlessness or breath induced challenges), breathing seemed to be almost universally affected for both survey respondents and interviewees. In the survey, only 2% of women did not check any of the possible boxes for breath changes which impacted their singing; most checked 4 or more boxes, meaning that pregnancy induced breath changes impacted the majority of women and influenced their singing in multiple ways.

*Body Awareness and Lessons to Share: Implications for Pregnant Non-Singers.* The women I studied described their breathing techniques, adjustments and challenges in detail. Although
pregnant women from the general population, (non-singers), notice breathlessness and changes in their ability to take deep breaths, (Bothamley and Boyle 141) the women I interviewed and surveyed were very specific about the changes they noticed and the actions that they took in order to continue performing.

Comments like the ones below exemplify the more subtle sense of breath changes felt by the women I studied:

I could not access a low breath, which actually helped increase my reliance on rib expansion for a good inhalation. (Survey respondent)

[I] felt like there was no room for breath had to further expand to [my] back. (Survey respondent)

But I do feel now being in the third trimester that the air feels different, and the way that I intake air, that I'm more likely to do back breathing than I think I did somewhat previously but now I know I'm going to have to access that. (Joelle, interview)

Realizing that singers are especially attuned to kinesthetic body changes, I wondered how non-singers reacted to and spoke about pregnancy-induced changes in breathing. I looked online at several pregnancy forums (including whattoexpect.com, fertilethoughts.com cgbabyclub.co.uk, babyandbump.momtastic.com and bellybelly.com.au) in order to compare the comments from my survey participants and interviewees regarding breathing issues with comments made by non-singing women about their breathing. As I suspected, the comments made by non-singing mothers were much less specific and the impact of breathlessness more bothersome. These comments are representative of the many comments I read:

[I’ve been] experiencing shortness of breath and sometimes I can hardly breathe. (bellybelly.com.au)
And also this damn shortness of breath, and I'm not talking about when I'm walking [and] I'm talking [but] when I'm resting! It's awful! I feel like I can't breathe properly.

(babyandbump.momtastic.com)

I have noticed recently being more short of breath and catching myself huffing and puffing…I even find that I can’t take a deep breath at times and I have to really work at it. A horrible feeling. (Fertilethoughts.com)

While experiencing shortness of breath is a common complaint of pregnancy affecting 75% of women (Bothamley and Boyle 141), the way in which it affects singers vs non-singers is worth investigating. While some non-singers complained of shortness of breath while remaining seated, the classical singers I studied were, for the most part, noticing more subtle changes in their lung capacity and breath support which were only impacting them remarkably while singing. They described not only the difficulties they were having in more detailed terms (“I could not access a low breath” for instance), but they also described solutions for these challenges in fairly clear terms. Non-singers tended to be more vague and also more distressed by their pregnancy induced breathing issues saying phrases like “I have to really work at it. A horrible feeling” or “It’s awful! I feel like I can’t breathe properly.” Perhaps because classical singers have been trained to increase their lung capacity, to control their exhalations, and maximize their inhalations, the women I studied registered their breathing challenges at a higher level of physical activity.

The second note of import is that non-singer women did not seem to have the tools to adjust their breathing for even a slightly better outcome. Phrases like, “I have to really work at it” or “huffing and puffing” give the sense that the women who wrote these comments didn’t have clear knowledge of what was happening physiologically and throws into question whether or not they had the tools to impact their situation positively.
In a search of various online resources for pregnant women, I found that the advice given is somewhat vague or conflicting and highlights the fact that the breathing difficulties may women experience during pregnancy are normal and will likely pass when the baby drops. Actions to be taken include (from my Internet search): practice good posture, stand up, lay on your side, be patient, rest and participate in mild exercise (such as pre-natal yoga). Interestingly, on two sites I found the tip: “try breathing exercises” (askdrsears.com and newhealthadvisor.com). The breathing exercises described by both sites involve accessing expansion in the ribcage upon inhale, a technique used by many classical singers. Though I commend these websites for mentioning this possible solution, practically, a pregnant woman with no breath-work experience may not be able to access lateral breathing without more guidance.

Only 53% of survey participants experienced breathlessness during the third trimester, compared to 75% of the general population (Bothamley and Boyle, 141). Through their comments and my conversations with Shareese, Joelle and Meagan I learned that this breathlessness often took the form of making long phrases more difficult, and adjustments to technique or changes in breathing choices, not the kind of breathlessness described by non-singers, which impacted ease in breathing while resting. Singers may indeed have an advantage over non-singers in this case having more tools at their disposal for improving and adjusting their breathing. An increased lung capacity (Izraldy, Rodriguez) and honed breathing skills that are evident in singers could also contribute positively to this issue. A deepened sense of one’s body’s functioning could also help pregnant women respond and deal with the subtleties of their evolving bodies while pregnant, allowing them to perhaps avoid or at least, partially remedy their pregnancy induced breathing challenges.

Unearthing Experiences: Additional Physical Challenges. Though the survey listed many physical ailments which are typically associated with pregnancy, there were some important omissions. Neither Meagan’s hyperthyroidism nor Shareese’s deep vein thrombosis were listed as options in the survey question responses, and they also went unmentioned in the comments’ section. Though these ailments are not especially common for the vast majority of pregnant
women, their impact on Shareese and Meagan’s singing during pregnancy was enormous; Meagan’s vocal challenges during Die tote Stadt were thought to be related to her condition and Shareese’s participation in the Met’s competition was cancelled as a direct result of her diagnosis.

In the survey respondents, some women added more missed syndromes and physical symptoms to the survey’s list. Graves disease, sciatica, panic attacks, diastasis of the pubic symphysis (the separation of normally joined pubic bones), hyperemesis gravidarum (extreme nausea and vomiting, different in complications and side effects from morning sickness), anemia, nose-bleeds, involuntary urination, increased saliva, increased sensitivity in taste buds and pre-eclampsia were all mentioned by survey participants as physical conditions that arose as a direct result of their pregnancies and brought challenges to their singing, yet were not among the list of common symptoms in the survey. Though these ailments were less commonly experienced, again the influence of the symptoms greatly impacted the individual that experienced them. Here, one woman explains how an increase in saliva made her singing more difficult:

I remember increased salivation being an issue for singing during pregnancy - kept spitting when enunciating and needing to sacrifice breath marks to swallow!

Another woman describes her hyperemesis:

I had severe hyperemesis all 9 months and was near-incapacitated for almost all of my pregnancy. I did, however, continue to sing throughout - quite successfully for several auditions in the final trimester! It was incredibly difficult, however, and I certainly would not wish my experience on anybody.

Despite the fact that these physical issues were left un-mentioned in the survey questions, participants brought their existence to my attention. Given the wide range of individual experiences, pre-existing medical conditions and physiological changes during pregnancy, it is
not surprising that some symptoms were missing from the survey’s checklist, and I am grateful that these women shared their experience.

Looking back at the survey through the lens of the individual stories I heard from Meagan, Shareese and Joelle, I was reminded of the importance of each woman’s specific lived experience. In the survey data, a small note in the comments about a physical challenge which impacted singing ease has the potential to be looked over in a way that does not occur when you are speaking in detail to the woman in question. Comparing the two data sets helped remind me that each comment in the survey was simply the tip of the iceberg in the individual’s story; much like the stories and experiences I heard in the interviews, the experience of physical symptoms had an important impact on the survey participant.

*Lowered Immune System: A Question to Dig Into.* Another subject in which the two data sets were not fully compatible was the immune system. Though the survey did ask about stamina, it did not ask specifically about the women’s increase in colds during pregnancy. A lowered immune system was alluded to by some women in the comments section, but a direct inquiry was not made. However, both Joelle and Meagan described experiencing an increase in colds due to a lowered immune system. Having to “manage” through lingering colds and coughs was a challenge that had an impact for these two women, though the survey findings did not stress this particular ailment. Though some women mentioned rhinitis and sinusitis in the comments section, most women did not describe experiencing an increase in colds due to pregnancy. Whether this mention was simply an oversight (since the survey did not ask specifically about it) or whether the women I surveyed did not experience this phenomenon is unclear.

*Varying Results: Two Data Sets Disagree.* There were areas in which the survey stressed the impact of a particular symptom yet the interviewees were not representative of this view. For example, though nausea was the most common symptom in the survey respondents, only Joelle experienced this symptom with consistency; neither Meagan nor Shareese experienced nausea. Similarly, though instances of GERD were reported by the survey respondents (especially in the
third trimester) Joelle was the only interviewee who struggled with this symptom - although in her case, GERD was not pregnancy induced: she had struggled with this ailment prior to becoming pregnant. Additionally, an increased sensitivity to scents was a common experience of among the survey respondents, but neither Shareese, Meagan, nor Joelle mentioned this affliction.

Though the experiences for the interviewees differed from that of the majority of survey respondents, it is not entirely surprising, nor does it indicate that the results from the survey are wrong. Since the sample size of the interviewee population is so small, it is incorrect to analyze this group with quantitative tools such as percentages. However, noting that the women I interviewed did not experience some physical symptoms that were common for the majority of survey respondents is yet another reminder of the individuality of this experience. A classical singer who is hoping to predict the outcome her pregnancy cannot assume that the experience of the majority will be true for herself: Each woman’s experience will be truly unique. It is, however, interesting to note which physical symptoms are more common among a larger population and to then hear about how the occurrence of physical symptoms, whatever their characteristics, influenced the individuals who experienced them.

**Timbral Change.** Timbral and fach change was discussed at length by some of the survey respondents. Resulting repertoire adjustments and details of the colour changes, which occurred for a third of the women who participated in the survey, were in-depth and had a great impact on those involved. However, in the interviews, the only reference to self-assessed vocal timbral changes came from Joelle. In her 2nd trimester, she noticed a colour change in her passaggio that was “not unwelcome.” This change did not remain consistent throughout her pregnancy, but passed in a few short weeks. Like the interviewees, the majority of the survey respondents did not experience vocal change, but for those who did, the discussion about its impact and qualities brought in-depth commentary and reflection.

Meagan had an interesting experience with timbral change; although she didn’t notice a change herself, her voice teacher was aware of one. During a lesson, while only two weeks pregnant, she
asked Meagan if she was pregnant. This was shocking to Meagan who had not yet told anyone of her pregnancy. Meagan asked how her teacher had known this information and she replied that she “heard it in [her] voice” and that she “just knew by the colour.” Though Meagan herself had not observed a timbral change, her voice teacher (who presumably knew her voice intimately) had been able to recognize a colour change immediately, and without prompting. This was an example of a timbral change which was subtle enough that Meagan was unaware of it, but its impact was such that an outside person who knew Meagan’s voice well could recognize it immediately.

In reflecting upon my own experience, I found it difficult to tease out if the timbral warmth I felt after my daughter was born was directly related to my experience of pregnancy and the associated hormones. A general feeling of width and “groundedness” had remained for me after the physical sensations of living in a “bigger” body while pregnant and had provided me with a feeling of increased ease and suppleness, as well as counteracted my tendency to squeeze or tighten during higher ascending phrases. Whether there was actually a timbral change related to this is difficult to determine.

Shareese had experienced timbral changes, but since she had switched teachers immediately before getting pregnant, she believes that any timbral changes were due to technical changes she made. Neither Joelle nor Meagan felt that they had experienced lasting timbral changes (though Meagan’s teacher had noticed changes) and were both still allowing for recuperation and adjusting to their new bodies and roles when we last touched base. (Footnote: Meagan’s situation offers an interesting insight into the survey results on timbral changes. The validity of self-reporting timbral changes may be difficult to verify as the women themselves are responding to what they feel has changed as well as what they can hear of themselves from their own perspective. Although Meagan did not feel that she had experienced timbral changes, her teacher did, signalling that women may not be able to accurately access their vocal adjustments).
EMOTIONAL IMPACT

*Feeling Deeply: Delving into emotional changes during pregnancy.* Changes in emotional outlook or perspective, intensification of emotions and a reordering of priorities were topics that were important to the women I studied: For many women, these changes were especially relevant to their experience as singers.

Though the survey asked women whether emotions were more accessible during pregnancy, this line of questioning did not delve deeply into the details of the women’s emotional landscape. However, the topic of emotions permeated many of the comments written by survey respondents and the conversations had by the women I interviewed. Survey participants responded to many of the questions with their feelings in mind, describing their struggles with anxiety or depression and often explaining their experiences with the words: “I feel…” or “I felt.” Shareese, Joelle and Meagan also shared their feelings about every topic we discussed, valuing this element of their experience.

*Priorities and Perspectives: Aligning Survey and Interview Data*

Through my conversations with Meagan, Shareese, and Joelle I was able to understand the shifts in perspective that occurred as they navigated their pregnancies. For Shareese, the emotional changes that she experienced were paramount in her experience: “It’s like my whole world is open in a way that it wasn’t before.” Meagan and Joelle too spoke of their shifting viewpoints, which stemmed from feeling a certain way about themselves and their place in the world. For Meagan, whose baby had already been born by the time we spoke, her arrival altered Meagan’s emotional state in a big way: “She’s actually made me happier, and more relaxed.” Joelle described finding a new acceptance of her emotions as she became aware of their hormonal roots: Of an incident which caused Joelle to cry before a performance she states: “I’m aware that it’s a heightened response due to the hormones, it’s ok. I don’t feel as bad about it.”
Survey participants also described a shift in perspective, saying things like, “there was a big
shift” or “being pregnant thrust a different perspective on me.” One survey respondent wrote,
“[being pregnant] gave me greater depth as a person and a performer, and it shifted my
perspective in ways that made me more open to risk taking (on stage, in lessons, etc.)”
As many of the women surveyed were not pregnant or already had children, their comments
regarding perspective often mentioned the fact that an even bigger change occurred for them
once their babies were born. One woman wrote, “I would say my priorities did not get re-ordered
until after the birth. That was the real game changer.” Meagan confirmed what the survey
respondents were saying: she felt a major shift in the way she prepared and thought about
performance once her baby was born. Meagan shared: “I am capable of more than I thought…
Something has made me lighter, more easy going. And I just worry a little bit less. I usually have
what I need.” Observing the ways in which the interviewees navigated their emotional
transformations helped to deepen my understanding of the survey participants’ comments. The
emotional perspective of each woman is a tenuous and evolving factor which interacts both with
internal shifts and external events and stimuli. Though these factors combine to create a myriad
of experiences and viewpoints, some trends emerged.

*Origins of Changes in Perspective and Priority.* The shifts in priority and perspective that I
observed from my data stemmed from two places; the first was from knowing that a baby would
soon arrive and would bring with it new responsibilities and needs. Being better able to see “the
big picture” when it came to their singing lives was an aspect of this experience. The second
source of change in priority and perspective was due to major physical challenges brought on by
pregnancy, which forced individuals to make lifestyle and/or career changes. These viewpoints
are not mutually exclusive: some women who experienced major physical challenges during
pregnancy also viewed themselves differently when it came to their thoughts about performing,
and women who experienced major shifts in perspective were sometimes afflicted with physical
challenges. However, the majority of women fell into the first category: Being pregnant caused
most women to view themselves as singers differently.
Freedom in Caring Less. At times this new personal perspective allowed women from both data sets a new freedom in what they worried and cared about. This perspective, which I call, “I don’t give a #$&%!” (IDGAS) is borrowed from a survey respondent’s comment and is described in more detail in the interview findings chapter. Combining the survey and interview data allowed me to see the prevalence of this attitude amongst both groups. At times, having an IDGAS attitude helped women sing with more confidence; feeling that there was something more important than one’s career helped women sing at a higher level. At other times, it allowed women to make choices which they would not have made in the past which contributed to feelings of confidence and pride: from wearing different clothes to choosing different repertoire. This shift of perspective did not mean that the women I studied didn’t care about their careers, (though some women did stop singing after pregnancy to pursue other means of employment). The majority of women simply used this new viewpoint as a means to enliven, inform and improve their performing with confidence and ease.

Some comments that exemplify this attitude from both the survey and interview data include:

I sort of felt like it [pregnancy] was the most wonderful excuse for everything! (Meagan, interview transcript)

I will say this: having children has greatly increased my “IDGAS” factor. (Survey respondent)

Suddenly rejection or knowing I hadn’t sung my best in audition didn’t matter nearly as much as it had before becoming pregnant. It was a very liberating feeling. (Survey respondent)

If you don’t like me, I don’t care. I don’t know if that is the baby, I don’t know if it’s hormones, but whatever it is it’s awesome. (Shareese, interview transcript)
Most of the effects I've experienced have been mental, I think. It has more so effected my perspective on auditions and helped me not take them overly seriously- there are more important things in life now! (Survey respondent)

And if someone doesn’t like it, they can leave, I don’t care! (Regarding performance wear) (Joelle, interview transcript)

Happily, for the majority of women that I studied, both survey participants and interviewees, this shift had a positive impact on their singing, allowing an additional sense of ease and confidence enter into performances.

*Physical Challenges = Priority Shift.* For some women, however, a different shift in perspective and priority had taken place: the need to focus on one’s health and physical needs over other past priorities. Bowing to one’s own physical needs was not always what the women I studied wanted to do, but the health of their baby or themselves dictated their actions for them. When Shareese experienced early labor pains in addition to the typical Braxton Hicks contractions near the end of her pregnancy, she was instructed to rest and relax. Hearing this was not easy for Shareese who had been continuing a busy routine; “That’s like putting a house arrest ankle bracelet on me!” However, Shareese did as she was told for the sake of her baby’s health and her own.

Survey respondents also made mention of this shift saying:

Because I was particularly tired and sick, and had a number of symptoms to manage, I started to realize I had to let my usual life things go in order to do "building a baby" well. When I gave myself a lot of rest, good food, exercise, and meditation, I felt really good and happy. When I did not do those things, and got my "work" done, I got migraines, vomiting, and depression. I think my system was not up for doing my usual high-intensity life AND baby-building at the same time. It was very sad and hard to let go.
Unfortunately, I was on complete rest 2nd trimester so I was not able to sing after that.

I was a very sick pregnant woman, and the vomiting had a serious negative impact on my ability to sing. The fatigue that did not go away, and the impact of the resulting lifestyle change on my practice routine all led to negative changes in my singing.

This kind of shift in priority was less common in the women I studied: most women’s physical symptoms did not have such a large impact. However, those who experienced a shift in priority due to physical symptoms spoke about how difficult this reality was for them emotionally and professionally, and its influence is worth mentioning here.

*Change of Focus: Investment in the Future.* One additional influence on changes in women’s priorities, which was rarely discussed during the interviews, was the issue of money. Several survey respondents wrote that they either quit performing or changed the type of gigs they took because of financial reasons. Though pregnancy in itself does not warrant the need for a more stable income, the eventuality of a baby (with its financial ramifications) that pregnancy represents cannot be ignored in this discussion. Joelle made the sole mention of financial considerations when she discussed the possibility of cancelling her performance of Nannetta saying, “I’d just lose a lot of money!” However, besides this brief sentence, the interviewees were silent on the issue. Neither Joelle nor Shareese anticipated changing their careers or curtailing their singing once the baby arrived and Meagan had already performed in several productions with her baby in tow without mentioning financial considerations when we spoke.

For some survey respondents, however, having a baby was a catalyst that sent their career goals in a different direction. Whether this change was influenced by the career stability and success is worth investigating.
With two young children and a spouse who is no wealthier than I am, we are all dependent on us both making a steady income. Longer out of town gigs became impossible, and fees started coming down as well.

I had to cut back on my involvement in my studio as my it was expensive and we needed to begin saving money.

One woman experienced a combination of financial and physical influences as described below:

I decided to give up performing when I found out I was pregnant. Before finding out, I was planning to pursue further education and go into serious performing. I cancelled my plans when I found out due to financial reasons and extreme physical discomfort (vomiting etc).

Whatever the reason, many of the women I studied experienced a shift in priority or perspective. At its most extreme, this shift led some women to stop singing all together. For most women, however, changes in perspective and priority were a positive influence on confidence and performing success.

*Pregnancy Induced changes in Performance Anxiety: Following the Lead of the Survey Data.* Though less than half of the survey respondents noticed an improvement in their performance anxiety, all three interviewees felt that their anxiety had been lessened in some way by their pregnancies. As the interviewees are a small population, I was not surprised that they didn’t represent the whole in this matter. What did make me curious, however, was whether Joelle and Shareese continued to feel a lessening of anxiety pre-performance once their babies were born. The survey respondents were particularly vocal about this topic, and though less than 60% experienced some change after birth (either good or bad), those that did tended to write lengthy comments about these changes.
When I asked Joelle about her performance anxiety after having her baby, she wrote:

> I have had basically no performance anxiety! It's kind of crazy how very little thought is given to nerves or that sort of hyper preparation that used to happen before performances. Now my biggest concerns are making sure I won't be leaking milk during the performance and trying to get my hair and make up done as fast as possible. I obviously still practice and make sure that I'm prepared for my jobs, and that I look put together and whatnot, but there's more ease/acceptance to it now.

This sentiment was similar to some of the comments survey respondents made and connects the lowering of performance anxiety with the re-ordering of priorities of which many women spoke.

*Body Image: Looking Closer at the Use of the Word “Fat”*. When I compared the survey data with the stories I heard from Shareese, Joelle and Meagan about their attitude towards their bodies, I found that there were similar issues. Both Shareese and Joelle used the word, “fat” to describe their pregnant bodies, though not necessarily in a derogatory way. Though most women didn’t use this language, one woman stood out as commenting on her pregnant body in this way. For example:

> I didn’t want people to think I’d gotten ‘fat’

> One scene partner “wondered why I was getting so ‘fat’”

When Joelle used the word “fat” she was often joking about her pregnant body in the context of “not caring what people thought” and feeling more confident wearing leggings. Shareese used the word as a synonymous description of her pregnant body, as in “[my husband’s] cleaning the house so I can be fat and pregnant right now.” For her, feeling fat and feeling pregnant went together, but she also shared with me that she felt a new sense of amazement and appreciation for her body.
The use of this word did not necessarily mean that these women had a poor body image; Both Shareese and Joelle had an increase in body confidence or appreciation during pregnancy. However, in the case of the survey participant’s comments, though she answered that her body image pre-pregnancy was positive, she responded that her view of her pregnant body was negative, partly because she lost work as a direct result of her pregnant body size. Comparing the use of the word “fat” between the interviewees and survey respondent reminded me that the context is as important as the choice of words. When survey responses are viewed in an isolated manner, capturing the full story of each woman is difficult. This juxtaposition reminded me to dig deeper and to go below the surface of what the numbers were telling me.

Meagan’s enjoyment of her pregnant body was mirrored in the survey comments as well. Many women described how they felt that they had an increase in confidence in their body image during pregnancy; the comments were numerous:

I felt comfortable with my body during pregnancy, I felt there was less [of an] expectation about how I "should" look.

Being pregnant was freeing in many ways, including feelings related to my own body image.

My body took to pregnancy so well, I felt very lucky, blessed and strong while pregnant.

I was proud of my pregnant belly and didn't care at all about it.

I didn't judge my body while pregnant - I appreciated the job it was doing.

Feelings of appreciation, pride and freedom were common among the survey comments and were also present in the conversations I had with Shareese, Joelle and Meagan.
Interviews Inform Survey Filters: Synergy of the Methods. Throughout the interviews, the topics of performance anxiety, attitude regarding rejection and changes in pre-performance routines tended to merge together in our discussions; all three women experienced a change in their pre-performance routines and their anxiety, as well as a shift in perspective regarding their singing and frequently discussed these topics in tandem with one another.

In the survey, however, topics of anxiety, attitudes and pre-performance routines appeared separately, with one topic following the next. Re-reading my interview transcripts made me curious about the ways in which these topics might intersect for the survey participants; though the questions were not linked, I wondered if there was a similar relationship between these topics for the survey participants as there had been for my interview subjects. I decided to apply a filter to the survey data to see what I might find. It was fascinating to me that when I applied varying filters onto the questions with emotional content, percentage points changed only slightly; Try as I might, I could not identify any major differences between groups when it came to the emotional content. This remained true until I filtered for anxiety and compared the results for those who claimed that their anxiety had definitely improved during pregnancy with the rest of the population.

Women who experienced a noticeable decrease in their performance anxiety during pregnancy were also almost 20% more likely both to have changed their attitude regarding rejection and to feel that their singing was positively affected by their pregnancy. This correlation makes sense: Feeling that pregnancy had improved one’s singing and caring less deeply about rejection or competition could make one less anxious during or before performances. These elements link and support each other logically, and it was gratifying to see the percentage points change so drastically after trying various filters with no result. Women in this group (those with a noticeable decrease in performance anxiety) were also almost 10% more likely to have experienced a reordering of priorities than the larger group and to feel that their pregnancy had a positive impact on their career. Additionally, they were slightly more likely (between 3 and 6
percentage points) to have changed their performance routine, to be more comfortable in their pregnant body, and to claim that their interpretation of repertoire was affected by being pregnant. Clearly there is a link between how the women I studied perceived their singing, their anxiety, and their attitude towards performing and rejection.

I checked to see if the women who felt less anxiety had any other characteristics that could be measured, but each filter I tried came up with very similar results. These women were no more supported by their partners, nor did their ages play a role. However, when I ran a filter for the level of physical difficulty experienced by women against their level of anxiety, there was an interesting correlation: Despite the fact that the women who experienced less anxiety during their pregnancies also experienced physical symptoms that impacted their singing to varying degrees (and sometimes with even more severity than those in the larger population), they were almost 30% less likely to have stopped singing for any length of time during their third trimester due to physical ailments relating to pregnancy. They were also 15% more likely to feel that their pregnancy impacted their singing positively in their third trimester.

Having spent a lot of time experimenting with filters in the survey data prior to working on my interview data, I was surprised and pleased to see how the stories I heard from Shareese, Joelle and Meagan had influenced the subject of emotions and had led me to make a new discovery in the application of these new filters. This was precisely the kind of complementarity I had hoped for when I decided to undertake a mixed methods study. As described by Greene, Caracelli and Graham, seeing two data sets together aids researchers in uncovering new aspects which otherwise would not have been revealed.

**Overall Emotional Impact.** When I looked at the survey data and re-read the interview transcripts, I was reminded again of how much importance the women I studied placed on their emotional state during pregnancy. Noting this influence spurred me to dig deeper into what meanings lay beneath the surface of the brief survey comments in order to truly see more fully the women behind the numbers. Remaining curious about the relationship between anxiety,
singing perspectives and priorities in the interviews informed the way in which I filtered the survey data, revealing interesting correlations. The topic of emotions is particularly difficult to pin down in the less personal landscape of the survey format, yet emotions can play an important role in disease states (qtd. in Sukel, “Feeling our way”) and according to many performance psychologists, in the success of singer’s performances (Caldwell, Clifton, Hines, Fleming, and others). For classical singers, pregnancy has the potential to serve as a personal catalyst for emotional growth and change. For the majority of women who participated in my study, this change had a positive influence. For others, the negative effects of physical challenges and/or worry about money dictated a withdrawal from singing pursuits that was emotionally difficult. No matter the experience, the emotional state of the pregnant singer has the potential to influence all aspects of her singing and to colour her perception of the entire experience.

SOCIAL IMPACT

Resonances and New Discoveries. The women I studied shared their experiences about how their pregnancies impacted their social interactions and their careers with candour and in detail. The many comments throughout the survey served to support the in-depth stories I heard from the interviewees; this topic had many resonances between the two data sets.

When I compared the data sets, I saw several themes intersect. The survey data showed that the majority of women felt supported by those closest to them (husband/partners, family members and voice teachers) and in varying degrees by those with whom they had less personal relationships (agents, conductors, directors and administrative staff). This finding was true for Meagan, Joelle and Shareese who felt generally supported by those closest to them. However, the women I interviewed also felt supported by professional connections for the most part, despite the fact that the survey numbers showed a decline in support, especially from directors and agents.

Joelle received additional social contact from a costume designer who also sent her handmade burp cloths saying of the staff at San Francisco, “they couldn’t have been more supportive.”
Joelle also had the special circumstance of being married to her manager, and therefore knew he had no professional hesitation regarding her pregnancy.

Shareese felt supported for the most part by her professional contacts: coaches, pianists and her current teacher were all excited to hear her news. Only one professor expressed concern for Shareese’s plans to come back to school shortly after the baby was born:

Well, most of them were understanding. I did have one professor who wanted to give me the advice that I wouldn't want to come back to school after I had my baby and that I would want to take the time off. She seemed very concerned and sad that I was pregnant. Other than that, my other professors have been very kind.

Throughout her completion of the term prior to her baby’s arrival, the rest of Shareese’s professors continued to support her needs.

Meagan felt supported by the director and conductor for the production of *Die tote Stadt*. Meagan shared: “Yes, it was very interesting [the challenges of the production] but I do have to say that I felt very supported by having just women on the team, so that at least helped out.” The fact that both the director and conductor were women made Meagan feel that she was more easily understood in the nature of her requests for changes to staging.

Meagan also felt supported by her manager who gave her baby shower presents and said, “I’m so happy for you!” Meagan thought this was perhaps in part due to the fact that he is European: in her experience Europeans are more supportive of working singers having children. She explained:

In Europe I think women are just much more likely to just have a baby…There are some reasons: First and foremost, there are more protections in the government systems for women who are pregnant and have children. If you are a fest singer the schedule is ideal
for children. Just perfect. Normally the rehearsals are 10-1, then 5-8 or 6-9. So, it’s like you have the whole middle of the day, they can come home from school, you can send them off to school, by the time your partner comes home from his 9-5 job or whatever, you’re going to rehearsal. Even you’d be able to have dinner…It really works very well for most people, that’s if they have a fest job.

As Meagan continued she described another reason why she felt that the experience for singing mothers in North America was different than in Europe:

It’s an interesting situation and we’re not in a very strong position in the North American world. Because the number of opera houses is just not the same number. There’s more opportunity. Especially for the repertoire that I sing with those big orchestras, and all that German. So it’s interesting. That’s what I think. I think there’s like a cultural thing and I was talking with some of my friends and one particularly and she was just like, “Just do it! I don’t know why you would even think about this.” And then I think there is a baby boom in our industry, there’s so many women who are pregnant.

In Meagan’s case, feeling supported by her agent and other singing colleagues helped her to feel as though having a baby was possible.

After reviewing Meagan’s answers, I wanted to double check the survey data to see if there was a difference in levels of support felt by singers in North America vs those in Europe. Surprisingly, when I applied a filter to the survey data, I found that those singers who reside in North America felt slightly more supported by their agents than their European counterparts, though only by a percentage or two. However, this study’s European participants are in the minority and cannot fully represent the experience of this vast musical community. Further inquiries in multiple cultural contexts is recommended.
Balancing Support and Judgment. Although the interviewees’ experiences were positive for the most part, I found stories throughout the survey comments about feeling judgement or concern from outside parties. Most often, these feelings of concern came from people who were slightly distanced from the women themselves:

Everyone that knew me was fairly supportive, never discouraging. There were skeptics though, mostly people who didn't know me.

I was told if I had children I was wasting my talent. I was discouraged by voice professors from having more than 2 children if I wanted to have any kind of singing career.

My voice teacher was very much against my performing in my last trimester. She was being manipulated by someone else to do so. Very disappointing and isolating.

From some women’s perspectives, a lack of support meant not being rehired after pregnancy:

One director who has hired me several times neglected to invite me to an audition (for a show that would begin rehearsals 4 months AFTER my due date) because I was having a baby.

The majority of the survey comments told of negative reactions and lack of support, though except in the case of support from agents, the data shows that more than half of women feel supported by professional contacts. There were a few comments in which survey respondents revealed supportive relationships but they were in the minority.

Feelings of Concern and Audience Commentary. According to the survey data, audience members most often offered congratulations, and expressed approval or feelings of amazement when witnessing the women I studied perform while pregnant. However, when I compared the
survey data with the transcripts from the interviews, there was another sentiment which had not been noted. Both Shareese’s and Meagan’s stories revealed that audience members also showed concern for their welfare at times. In Meagan’s case, her role in *Die tote Stadt* was particularly physical and caused some distress among members of the audience who knew Meagan was pregnant:

I think they were worried for me…Eventually it became public knowledge - right before opening night actually! - that I was pregnant, so there were people in the audience that knew and were really upset and worried. So when I was greeting the public afterwards, they would say things like, “I can’t believe you did that” and “Is everything ok?” and “Please get yourself checked.”

Shareese also heard feelings of concern from her audience members when she had to sit down during a concert. When I asked her how the audience reacted to this she explained:

Yes, of course there were a couple [of people who said], “Oh my gosh! Someone needs to get her some water!” And I was like, “No, I really just need to sit down.” I think I just made some sort of joke like, “They don't tell you about this before you get pregnant” - you know, just [to] kind of…lighten the mood…To let everyone know that I wasn't dying and I'm fine.

In both cases, Meagan and Shareese felt absolutely comfortable with their performing choices: there was no hesitation in their voices as they shared their choices with me. Meagan felt good about the way in which she handled the physical demands of her character. In her words, “In the fach that I sing, you have to be able to fall on the floor. And I know how to fall.” Though Meagan’s audience was worried for her health, Meagan felt confident that she was handling the situation safely and appropriately.
Shareese had made a choice (to sit down) that would allow her to successfully sing the concert, and she did not consider stopping the concert because of her physical challenges in the moment. Despite the fact that her audience showed concern, needing to sit did not warrant worry for Shareese: it was simply a way for her to balance the physical demands she was placing on her body.

In the survey comments, no one mentioned that audience members expressed concern about women singing while pregnant. However, the option to check “concern” was not available in the list of adjectives provided to the survey respondents, who only had “shock” and “disapproval” to choose from as far as negative reactions. I am curious as to the results had the option of “concern” been available. Seeing that option could have triggered memories from my respondents which would have in turn encouraged them to share stories in which the audience expressed concern in the comment boxes. On the other hand, perhaps it is a rare occurrence for audience members to feel concern for the pregnant women they witness perform; Shareese and Meagan’s experiences may have been exceptional.

**Timing of the Pregnancy.** In the survey results, women over 40 were less likely to take their careers into account when considering pregnancy. Meagan seconded this notion: among my interviewees, she was the only one over 40 and also the only one to say that her career had no impact on the timing of her pregnancy. It is unclear in the survey, however, whether or not this finding had to do with those born in earlier decades or those who became pregnant later in life.

**Sharing the News of Pregnancy.** According to the survey data, the women I studied were more likely to share their pregnancy news once their upcoming gigs were secure. The interviewees reinforced this statistic: Meagan kept the news of her pregnancy secret until she had adequately handled her upcoming contract at the Met and Shareese withheld the news of her pregnancy on Facebook until six weeks prior to her due date, after she had decided not to participate in the Met competition.
Joelle shared her news of pregnancy immediately, but she was also the only one for whom no immediate gigs conflicted with her due date. (Although she ended up cancelling her appearance as “Nannetta” -which was booked for several weeks after her baby’s birth- the gig did not conflict directly and therefore, from an outside perspective, it was not a given that it would be cancelled.) Joelle also had the added benefit of being married to her agent and knowing intimately that he supported her pregnancy.

Whether the stability of one’s career impacted the timing of the release of the pregnancy is difficult to ascertain through the data. The interview data certainly points to this conclusion, though the survey respondents were not asked about this directly. The survey data did, however, indicate that there is a tendency to withhold news during auditions and to share the news once the gig was won, suggesting perhaps that those who have more stable contracts may feel more at ease in disclosing their pregnancies.

*Requesting Changes.* Delving deeper into Meagan’s experience during the production of *Die tote Stadt* helped me to see more clearly the patterns in the survey comments regarding requests to change staging. Meagan’s situation required her to request major changes, but the changes she made were due to the emotional content of the director’s concept, not the physical demands. Requesting changes to staging was not very common in survey respondents: only 12% did so. However, no survey respondents claimed to have requested staging due to the emotional content of the productions in which they participated, but rather noted the physical demands that impacted them as they considered requesting change.

The situation Meagan found herself in during the production of *Die tote Stadt* was a unique one; the likelihood that a pregnant woman’s role would include a still-birth scene is rare. Though Meagan’s show was quite physical, she felt she was able to accommodate her director’s wishes in this regard; like the majority of the survey respondents, Meagan made the physical aspects of the show work for her and was able to appease her director’s physical requests at the same time. Either directors are adequately anticipating the needs of their pregnant performers, or the women
themselves find ways to adhere to the directors wishes without needing (or wanting) to request changes, though some women might do so at their own expense and in order to avoid being labelled as “difficult.” However, noticing the difference between requesting changes due to emotional content and requesting staging due to physical demands helped me to see that the latter is far more common; Meagan’s situation was indeed extraordinary.

_JOB LOSS: Instances of Withdrawal and Pregnancy Discrimination._ All three interviewees had to step out of upcoming roles or competitions due either to their pregnancy or to the timing of the birth: Meagan withdrew from her engagement at the Met and Joelle cancelled her appearance as “Nannetta”, both of which were to occur shortly after their babies’ births. Shareese declined her invitation to the Met’s regionals during her third trimester. These withdrawals had varying impacts on the women involved and varying levels of choice. For Shareese, her withdrawal signalled the last time she would have been eligible to participate in the particular competition. Though she chose to withdraw due to health concerns, her teacher’s request for accommodations (and an alternate location for participation) were denied. Meagan was looking forward to working with James Levine for this particular production and felt that it was within her power to perform with success during this time period, but was encouraged to bow out of the engagement. Joelle had sung for this particular company before and chose to withdraw based on her anticipated needs.

In the survey respondents, job loss was also fairly common. In many cases, women were “let go” or were asked to step down from operatic roles because their physical state did not mesh with the concept of the show for which they were hired. One woman refused to step down and the company who contracted her had begrudgingly allowed her to perform. She describes her situation this way:

One company asked me to withdraw from their production - I refused, as they insisted my bump would affect the 'concept'. The production required me to lie in bed for most of the show, so who would know? I won - they had to pay me!
Opera companies cannot legally fire singers because of pregnancy, and many singers are aware of this law. However, many of the women I studied chose to step out of roles without financial compensation after being encouraged to do so. Meagan was aware that the Met had to tread carefully; In her words, the Met knew “they couldn’t fire me.” Yet, Meagan quickly withdrew from the contract without compensation once she realized that her relationship with them might be jeopardized. In Jennifer Rivera’s recent Huffington Post article, the mezzo-soprano explains that many opera singers value a positive relationship with opera companies over the pursuit of legal rights in this situation:

> Because for a freelancer, security means being well liked and re-hired by every company, and not being labeled “difficult” or making waves. Forcing a company to pay you will certainly lead to the end of an artist’s relationship with that company, as well as possibly other loss of work from being branded as recalcitrant.

Singers know that willing replacements abound, and perhaps temper their actions so as to remain more attractive for future gigs. When Joelle withdrew (of her own volition) from the role of “Nannetta", she remarked: “They have a young artist program and I know one of the sopranos there…she could very capably sing “Nannetta”. “ Knowing that singers are easily replaced puts women in a position of weakness when it comes to their legal rights in these cases. Perhaps this position is the reason behind the low percentage of women asking for accommodations to staging or making other pregnancy related needs known; Fear of being labelled as “difficult” could cause women to compromise their needs in order not to disturb rehearsals. On the other hand, some women did describe feeling supported in their needs to request changes, and even described situations where their director made the changes prior to their asking in anticipation of their needs, saying: “I didn't need to [request accommodations]. They were offered to me if I wanted them” or “This was an accommodation automatically made by the director without [having to] request… consideration.”
Though the circumstances surrounding the loss of job were variable, many women described being “let go” from various staged gigs due to their pregnancy. This subject requires further investigation; Evidently there are instances where women lose contracts due to their pregnancies, but the details have not yet been investigated fully.

*Private vs Public: Drawing the Line.* When it came to looking at the social impact of pregnancy, questions of balancing one’s personal and professional lives came into play repeatedly in both the interviewees conversations and in the survey comments. Though the women I studied had different ways of drawing this line, what was consistent was the elusion to its importance.

*Personal vs Professional During Gigs.* Many women were adamant that their personal lives (in this case, their pregnant status) should not be a factor when seeking singing work. Many survey respondents suggested the sentiment: “If I’m still singing well, it’s none of their business.” When asked if accommodations were made for her in terms of her pregnancy, one woman writes: “I made sure of this [that accommodations were not made]. My discomfort and inconveniences were mine alone. If I couldn't physically sing, I cancelled well in advance if I could, otherwise, I made sure it never got in the way.” This respondent was determined to keep her personal needs separate from those of the performance.

Shareese described similar feelings on the subject when her pregnancy was brought up in her recital hearing at University:

> When it comes to things of that nature, [Shareese’s recital hearing], I would rather [my pregnancy] not be spoken of, mainly because I feel like in a professional setting like that... I know that I know them all in some capacity outside of class, but when we're talking about a professional gig or anything, it does make me a little uncomfortable…I feel like I have to give some sort of excuse or that the pregnancy becomes an excuse or if I make a mistake you know are they thinking, oh well, she's 32 weeks pregnant. And I
don't want that to be a source of ..... I don't know…pity. I just don't want it to be a subject of interest at all when it comes to professional things.

Shareese didn’t want her pregnancy to be discussed in a professional setting because she felt it inappropriate and didn’t want to make excuses based on her physical state.

Another survey respondent echoed Shareese’s feelings when spoke about how she disliked comments regarding her pregnancy during a performance. In her case, comments were made during her performance:

They were not necessarily ill-intentioned comments, but they change the focus of the performance. And sometimes people called out loudly during the show... Honestly. It was so embarrassing, and you don't know how to respond. I felt uncomfortable. However, when people come AFTER the show, it's fine, and actually very nice. Because then, I'm just a person, not a character, not working. Pre-show and during-show are not okay.

Understandably, this survey participant did not feel comfortable with comments regarding her pregnancy during her performances: not only were they shifting the focus but they were also interrupting a musical experience.

Though many women aimed to keep their personal and professional lives separate during gigs and performances, one woman brought her pregnancy into the forefront and had positive feedback from audience members:

I remember a performance of Ives; I was five months pregnant and I talked about one of [the] pieces and how I was expecting. It was barely noticeable at the time, as it was my first pregnancy, but people loved it. I found that I often had a lullaby in my repertoire and people found it so appropriate and really were touched, especially women.
Although many women wanted to keep their pregnancy separate from their professional persona on-stage, some used their pregnancy to their advantage, much to the enjoyment of the audience.

Physical Needs vs Professional Persona. Accommodating one’s physical needs was another way in which the topic of balancing the professional and the personal aspects of the women’s lives intersected. When Shareese had to sit down during one of her recitals, she waited until it was absolutely necessary to do so, not wanting to bring her physical needs to the forefront. Shareese stood as long as she physically could: she waited until her private life confronted her professional one in a very tangible way.

This sentiment was also common among survey respondents: Here one woman explains how she attempted to continue performing without drawing attention to her physical state unless absolutely necessary: “I tried not to ask for "special" treatment, but when I had to, I did.” One survey respondent actually fainted during a performance “because the room was hot and I was huge.” I can imagine that this woman wanted to maintain a professional performance which caused her to continue singing, despite feeling uncomfortable physically. Though this is a more extreme example, it illustrates how the women I studied worked to maintain normalcy in their professional persona, even when confronted with personal challenges.

Joelle also did not want physical needs relating to her pregnancy to influence or distract during performances: she worked hard to keep these two elements of herself separate in order to perform in a professional manner during a Handel’s Messiah:

Part of what was weird about being in a concert setting too, was [that] usually, in real life, when I feel her moving I just put my hand there automatically. Can’t do that in the middle of a concert!(She laughs). So, I had to be quite conscious about not doing that. And also about not just splaying my knees…And I usually cross my ankles but I didn’t cross my ankles, I just kept my feet flat on the floor. These little funny things.
Fighting against these movements made Joelle feel more “antsy” during her performances of Handel’s *Messiah*, but it felt important to Joelle not to change the way she would usually be perceived on-stage.

*Private Life and Career Intersects.* Although Meagan didn’t speak directly about the need to keep her personal and private life separate, the way in which she handled herself during her pregnancy speaks volumes. Meagan carefully timed the release of her pregnancy news in order to support her career needs; Wanting the right people to find out at the right time was important for Meagan, especially because she felt that a mistake in the release of her private news could have a negative impact on her career. Another note of interest is that when I did an initial internet search for Meagan, I discovered that she has two Facebook pages: one for fans and one for personal contacts. This practice is quite common among singers who find that fans who they don’t know personally want to connect online. In both examples, Meagan kept a clean separation between her personal and professional lives in order to manage her career successfully, and also to retain some privacy from fans.

One survey respondent described their mixed feelings about sharing such personal news online and worried about the impact their pregnancy would have on their careers:

> As it was an unplanned pregnancy, I was afraid of what professors, directors and conductors I had on Facebook would think of me, and was worried it would affect my career as I am not an established artist.

Meagan told me that she knew several women who will not reveal their pregnancies online, keeping this aspect of themselves fully separated from their professional persona. She explains:

> I have a couple friends who hide the fact that they have children still. And there are some women I know who are hiding their pregnancies in the business and that’s sad. I mean,
there’s always the discussion what’s the voice going to be like after, is she ever going to be thin again.

Though none of the women I studied claimed to have hidden their pregnancies or children entirely, fears of career repercussions are an influencing factor in the balancing of personal and professional realms.

*Wanting and Not Wanting Attention: Straddling the Divide*

Not all women were fearful of sharing information regarding their pregnancies, however. Joelle frequently discussed her need to balance personal and private aspects of her life, and was generally open about aspects of her pregnancy publicly. She posted news of her pregnancy on Facebook fairly early on in her pregnancy and enjoyed when people asked about the baby.

I don’t get sick of people saying stuff about [my pregnancy]. I don’t mind telling people, “Ya, I’m 34 weeks,” or “I’m due February 1st.” And why not, I mean you’re not pregnant for that long, so why not?

Despite this, Joelle’s feelings about her pregnancy being acknowledged wasn’t always straightforward. In a later interview, Joelle described another way in which she navigated her personal and professional sides during a trip to Europe:

When I was in Europe in September and we had a long bus ride, I almost threw up… This cellist that I knew waited for me at the bathroom, before everyone else had made their way to the train. People kept an eye out for me more. And that made me feel close to them, but it also sort of made me feel like a pain in the ass.

Wanting her needs recognized and wanting to fit in with the group in a professional touring setting were at odds for Joelle. This balance between the recognition of her pregnancy and
maintaining professional normalcy was tricky; Joelle appreciated the courtesy her friend showed her, but also didn’t want to be seen as needing extra help.

Though the survey questions did not ask specifically about the women’s preferences regarding how others treated and acknowledged their pregnancies, this subject did come up quite often in the comments. Some women described awkward situations which made them feel uncomfortable about their pregnant state:

One person mentioned how beautiful he thinks pregnant women are. I had mixed feelings about that.

In Ukraine you are supposed to "guard" your baby bump. It's not a shame to be public about it but it is a bit uncomfortable. It's better to be with your husband and mine was away for months. It was awkward.

Although the pregnancy itself was a cause for celebration for these women, the attention that they received from others was not always comfortable. In other cases, women were grateful that those around them could accommodate their needs. For example:

Because of the dietary restrictions for pregnant women, I couldn't always eat the food that was provided (cold cut sandwich meat, etc), so people went out of their way to make sure there was always something I could eat.

In one woman’s case, her manager anticipated more pregnancy-based accommodations than were actually necessary:

I was doing a cabaret and I sat on a stool for part of the time. What was funny was that the manager assumed I would need more accommodation than I actually needed.
One women felt that her director did not understand her personal situation when it came to the physical challenges she was experiencing:

The director of a company, when I explained my situation of being too sick to even leave my house some days, was actually dismissive and unhelpful. He claimed that there were women who sang seven to eight months pregnant with no issues, so I should be able to do the same. Note that I am medicated to be able to eat and have already lost at least 10 lbs in a little over a month.

These examples show that the way in which other people acknowledge (or dismiss) the pregnancy can have positive or negative impacts on the participant’s level of comfort. Though each woman had different needs, they were all affected by outside comments regarding their pregnant state.

I asked Joelle if she would rather people didn’t acknowledge her pregnancy:

I would almost feel like if people didn’t say something about it, [that] they felt like they shouldn’t and so it was an awkward thing. If women or if men…want to ask “How far along are you?”...I don’t care, I’m happy to say.

Joelle preferred that the pregnancy be acknowledged, even if at times she struggled to maintain normalcy; this thought resonated with me as well.

During my own pregnancy I had experienced the awkwardness to which Joelle refers; In my second trimester, I adjudicated for four days without anyone commenting on my pregnancy. I had needed to make extra bathroom trips and felt that perhaps I needed to explain myself since no mention of my state had been made, as well as to justify why my belly was so big - just in case it wasn’t obvious. The lack of comments ended when my four days of adjudicating were up, and questions regarding my due date and words of congratulations were frequent. This signalled to
me that perhaps my hosts didn’t want to cross an unspoken line by discussing my pregnancy while I was working, as if the topic was too personal for that particular set of circumstances. The subject of keeping my private and professional lives separate reappeared as I re-read my journal in preparation for writing this chapter. I had noticed that when I was sharing the news of my pregnancy with my students, I felt the need to maintain some formality by using language that was less personal. I wrote:

When I told my students about my pregnancy, I noticed that it felt uncomfortable for me to say the words “I’m pregnant”… instead I said “I’m expecting my first child” or “I’m going to have a baby in September.” When telling close friends and family this wasn’t at all an issue so I think it has to do with the level of intimacy in our relationship. Saying I’m pregnant just feels too personal to tell my students - it’s some intimate information about my body which I usually wouldn’t share.

I hadn’t thought about the language I would use with students until it came time to tell them, and the slight embarrassment I felt was a surprise to me. Here, merging my professional and personal lives was a necessity - (I would be taking a term off teaching and needed to alert my students) - and though I knew many intimate details about my students, I realized that I was not comfortable discussing my private life with them.

The way in which women drew the line between their professional and personal lives varied, with some women wanting to fully separate their pregnancy from their performing and others integrating it with success. Though the data showed women on both sides of the spectrum, the frequency with which this topic appeared among both groups suggests that this balance is an important one for the women I studied.

The social impact of pregnancy on the classical singers I studied had enormous implications, not only for the level of comfort the women felt, the ways in which they shared their pregnancies with others, and their career.
OVERALL IMPACT: COMMENTS AND COMPARISONS

Impact of Pregnancy on the Singing Voice. When I took a look at the overall impact pregnancy had on the voices of the women I studied, I was pleased to find that the majority from both the survey and interviews felt their singing had improved due to their experience. Often this was because of a combination of new kinaesthetic awareness and technical discoveries (which were brought about by the physical realities of pregnancy), and emotional change which contributed to increased confidence and a re-ordering of priorities. Many survey respondents described these changes in detail:

My range increased post baby, as did my stamina (ha!). The range increase may be due to the expanded rib cage that became part of my pregnant technique: in order to sing around a 10 lb baby I had to use more back breathing, or maybe I just am able to access those muscles with more ease of use.

It gave me greater depth as a person and a performer, and it shifted my perspective in ways that made me more open to risk taking (on stage, in lessons, etc.). I also learned how to expand my rib cage while pregnant, a breathing technique which I continue to find hugely beneficial after pregnancy has ended.

While there were some physical difficulties and the loss of one gig as noted above, the emotional perspective gained from having children has been immense. Singing certain pieces (Brahms’ Requiem, for example) takes on a much deeper meaning now!

Pregnancy really helped me learn about my breath in a really positive way. This has led to a positive change in my own technique and therefore how I teach other singers.

Although it added certain challenges to sing during pregnancy (breath support mostly), the positive changes I experienced with regard to my own body image, confidence,
emotional connection, and increased range and richness of tone far outweighed the challenges.

The tone is distinctly richer. The experience of letting go of my career due to illness renewed and refreshed my desire to get back to it, as well as a greater understanding and support from my partner, which have led to greater practice commitment even in busy times. Something about being a mother now had changed my relationship to others - I am not as concerned about judgment. Partly I'm too busy to care :)

When comparing the survey and interview data, I noticed that most survey respondents were recalling vocal impacts postpartum, noting the physical changes of pregnancy as a catalyst for vocal change, but with the perspective of being several months into motherhood at the minimum. Though this study’s intent is to investigate the experience of pregnancy, it is difficult to talk about pregnancy’s lasting effects without acknowledging the postpartum period and resulting motherhood. Because of this, I had follow-up email conversations with my interviewees to find out how they recalled their pregnancy experiences and to see if they felt lasting effects from their pregnancies. This provided me with parallel data between the survey and interviews and reminded me of the slightly different perspectives of the two groups.

Meagan, whose baby is older by more than 6 months than the babies of the other two interviewees, had the benefit of time to help her clarify the transitions which occurred for her after pregnancy since our interviews took place postpartum. When describing her vocal progress after giving birth, Meagan said:

It stabilized… interestingly the first job, (10 weeks through 14 weeks after) and then 6 months and after were the best so far. In the middle, things were [more of a challenge]. It’s more solid now.
Meagan experienced one week postpartum that was particularly challenging due to an unfortunate convergence of events. She explains:

The one really hard time that I had was during my first postpartum period. That hit at a pretty inconvenient time and that was a tough one…It was also combined with [losing] a lot weight with the breast feeding and also the thyroid…With those three things going on, it made singing really hard for about a week. Like bad. And thank goodness it was ok. I had an opening night during that time. But thank goodness it was a high role and I was able to get through it. That was a stressful time but I was able to get through it. I think there is something about that first period.

Eventually, Meagan’s voice and body stabilized and she felt that her singing benefitted from the experience overall:

It’s better. Even though I do think that my abs are split still, so I still find it hard to get up from the floor. And I’m doing a crazy production which requires so much running right now and I’m always being thrown to the floor…. But at the same time, the middle voice has stabilized in a different way. This may have to do with breastfeeding hormones, maybe I’m relaxed? Maybe birth moved something, I don’t know but it’s better, it’s better.

Meagan found it difficult to pin down exactly what had caused the improvements in her singing, but overall, her experience of pregnancy, breastfeeding and motherhood impacted her performing in a positive way. Meagan explains:

I guess I just *have* to be better at things now, and so it makes me better at it. I guess it’s like a sink or swim — I have to figure this out or else it’s all over.
Despite the fact that Meagan felt a positive impact overall, she went through some difficult transitions through which she continued to sing. Though most survey respondents did not mention a transitional period, I surmise that a more directed question of that nature may have encouraged further disclosure regarding postpartum struggles. One participant who struggled during pregnancy also found her post-pregnancy singing to be challenging. She describes her experience this way:

It was difficult for me to sing during my pregnancy and I found it frustrating. It took me quite a while after my pregnancy to feel that my breath was working and I could access my voice in a way that satisfied me artistically. I felt like myself after about a year post pregnancy and am now attempting bigger repertoire.

One other survey respondent alluded to this transitional time saying, “I think the "fourth trimester" is probably the most difficult on a singer: The phase of getting to know the new baby and trying to find yourself again after pregnancy.”

Whether or not more survey respondents who felt that pregnancy had impacted their singing positively experienced this transition (but did not disclose it) is impossible to know. Future research which investigates the stages of recovery from pregnancy, childbirth and the postpartum period as it impacts the classical singer needs to be conducted.

Joelle also felt that her body was still recovering from pregnancy and adjusting to motherhood seven months after her baby was born. I checked in with her via email to find out if she had felt any lasting vocal affects. Here’s what she shared with me:

I'm still dealing with a slight diastasis recti [separation of the two front abdominal muscles] that somewhat affects my breathing (I think). After not thinking about support for so long, it has taken a bit of time to remember how it works. Also, I am more
fatigued and have some slight swelling on my cords, but I think part of that is just not practicing as much as I did before!

Like Meagan, Joelle felt that her abdominal muscles were not yet realigned after the stretching that occurred during pregnancy. However, though Joelle was struggling to regain her strength and confidence in her breathing, she also described some positive repercussions of pregnancy: her performance anxiety disappeared (as discussed earlier in this chapter.) Joelle’s change in perspective had ultimately created more ease in her performance preparation. Taking a look at her experience in the same manner as Meagan and the majority of the survey respondents (with some distance from her pregnancy) allows us to glimpse a more complete picture of the repercussions of pregnancy and motherhood. Time constraints will not allow me to follow-up with Joelle a year postpartum for the purposes of this study, but my own curiosity will not be satisfied until I do. An ongoing discussion of her vocal progress and her view of her vocal trajectory up to a year after pregnancy would contribute much to this research, if time allowed.  

Shareese also felt that her experience with pregnancy had impacted her singing positively. In a follow-up email she wrote, “I believe that in giving birth to my child I have also given birth to a deeper, creative self. Being a co-creator in life is an incredible experience and it has certainly changed and enriched my artistry.” Though Shareese hadn’t felt pregnancy impacted her singing directly, she felt that the changes in her priorities and emotional growth would have a lasting impact. She wrote, “My hope is that as more women are not afraid to be vocal about this particular and momentous life change that the business will also begin to understand that it only enhances and enriches the artist’s creativity and vocal abilities.” For Shareese, the experience of pregnancy (and motherhood) offered a new realm of insight and personal and vocal growth.

I too remember feeling that it took time for me to fully recover from pregnancy and childbirth, as well as to adjust to my new role as a mother. When I returned to lessons with my teacher almost five months postpartum, I had difficulty fully engaging my lower abdominal muscles and
generally felt disconnected from my body. I also was overtired and had found it difficult to memorize the music I was preparing. I had planned to give a doctoral recital around this time, but postponed it, realizing that I could benefit from the recovery time, both emotionally and physically.

Though the majority of survey respondents felt that their singing had been impacted positively by the experience of pregnancy, a closer look at the survey respondents experiences suggest that many women could have experienced a difficult transitional period postpartum. Up to 80% of women suffer from “baby blues” which can include weepiness, feeling sad or anxious, being fatigued or overwhelmed and a lack of appetite. However, these conditions usually disappear after two weeks (Nierenberg). According to the Centre for Disease Control, one in eight new mothers experience postpartum depression, another factor to consider when analyzing the data on pregnant classical singers and mothers. Though the women studied were in varying stages of pregnancy and motherhood, an inquiry into the transition between these stages could help illuminate any challenges which are particular to classical singers.

Impact of Pregnancy on Singing Careers. Just as in the previous question regarding the impact of pregnancy on the singing voice, the impact of pregnancy on career path and trajectory is a complicated one. Just as less than half of women surveyed felt that pregnancy impacted their careers positively, the interviewees' response to this question was mixed. Firstly, it should be reiterated that though the majority of the survey participants were able to reflect on the impact of pregnancy from a position distanced from the pregnancy itself, two of the three interviewees are not yet a year postpartum, and the third is just a year postpartum as I write. Knowledge of the long term effects of their pregnancies (and resulting children) on their careers has not yet been clarified for Joelle and Shareese: despite this fact, some interesting issues have arisen.

Already eight months postpartum, Shareese noted that her interest in performing as a sole occupation has waned. Finding a new passion as a researcher has been a surprising turn of events for Shareese who had always assumed she would continue pushing for a full time opera career.
I believe the biggest changes for me will be that the gigs I take now and in the future will be things I am incredibly interested in. As a person also interested in research and teaching I have several avenues in which to be creative.

Joelle has also experienced a shift which directly impacts her career. She explained to me via email that she now realizes that she prefers concert work to opera “at this point in my life.” Joelle also hinted at a more relaxed attitude as far as job cancellation was concerned. She wrote:

I did end up cancelling my summer work in Germany after a series of unfortunate events. But it was definitely the best decision for everyone. I may not get hired at that house again, but it honestly wouldn't bother me!

Along with the lessening of anxiety that Joelle felt postpartum, a shift in the way she felt about certain jobs had taken place. It will be interesting to see what path her career continues to take based on these new priorities.

Like Joelle and Shareese, many of the survey respondents were clear in their comments that although pregnancy had an important impact on their singing, once the baby arrived thoughts of motherhood and baby care surpassed their previous concerns.

I really feel like pregnancy wasn't the biggest impact on a professional career, but being a new mum was. The great unknown of how you will cope with a new baby and still have a voice, an identity and a career to go back to.

My biggest changes by far happened postpartum. No breath support, loss of range, stamina shot, lack of sleep, and raging hormones from the breastfeeding. Rough times!
I too arrived at this conclusion after my daughter’s birth: though the impact of pregnancy on the classical singer is important and deserves discovery, the impact of motherhood on the classical singer performer is in equal need of investigation.

At the time of writing, Meagan is pregnant with her second child. Having risen to the challenges of her first pregnancy with success and grace, I have no doubt she will do the same with her second. Though she continued to struggle with regulating her thyroid and finding the correct dosage of hypothyroid medication, Meagan felt that “overall…my voice has responded well post-birth and [to] the hormones of breastfeeding.” Her career continues to flourish and grow as she enjoys this new layer to her accomplishments.

*Underlying Themes for Continued Discussion and Exploration.* The intersection of the landscape of classical singing with an event of personal transformation (pregnancy and the resulting children) carries with it huge potential for growth, hardship and victory. Many of the women I studied acquired a new sense of confidence as a result of their pregnancies, and many felt a sense of accomplishment in themselves as women. The challenges of pregnancy and child-birth had a way of making other performance challenges pale in comparison, often providing a strengthened resolve and a decrease in performance anxiety. This change of perspective (as discussed in more detail in Chapters Four and Five) was a hallmark of many of the women’s experiences. Pregnancy and the challenges associated with it instigated new ways of seeing oneself and of being in the world, socially and emotionally.

Flexibility was another theme that emerged in both the survey and interview data. Finding one’s way through unpredictable and evolving changes while in the public eye offered elements of personal and vocal growth for the women I studied. Being open to new ways of approaching technique, of dressing, of relating to others and of perceiving themselves as performers and individuals was a characteristic of some women who had positive experiences of pregnancy. The importance of support should not be underplayed in the experience of the pregnant classical singer. Happily, most women who participated felt supported by those closest to them. However,
given the lack of scholarly information on the subject, one of the largest areas of support for pregnant classical singers comes from other pregnant classical singers. This informal support system was paramount to the women I interviewed and many survey respondents asked to either share information with me, or to be kept in the loop when my research had concluded; these women wanted to become part of a community of others who had been through the same experience.

The challenging impacts of pregnancy are also of importance and deserve mention. Though the majority of women experienced positive changes to singing, felt supported by those around them and discovered new perspectives that improved their performance skills, some women experienced job loss, discrimination, physical hardship and vocal challenges. Though this paper does not offer remedies to these unfortunate events, it does offer solidarity: Sharing these stories can not only serve to enlighten and reveal the possible challenges of pregnancy for the classical singer, it can also provide solace to those who may feel alone in their struggles. Ultimately, shedding light on the difficulties associated with pregnancy for the classical singer can create a more empathetic community of musicians, singers, directors and conductors, as well as instigate an inquiry into how we can better support women in this career as they balance pregnancy, motherhood and classical singing.

*The Element of Luck.* As I re-read my notes on combining the two data sets, I was struck by the element of luck which must play a role in each woman’s story. The timing of the pregnancy as it fit into the woman’s singing engagements and career path, the physical health of the mother throughout the pregnancy and her overall disposition when it came to these challenges, even the woman’s voice type: all of these factors are largely out of the singer’s control as she embarks on this journey of pregnancy, and yet can compound to create an overall easy pregnancy or a difficult one. Unravelling the mysteries of why things happen when they do is not within the realm of this paper, but an acknowledgment that many unimaginable factors contribute to the experience of each woman’s pregnancy is in order. Try as one might to “create” an easy pregnancy, there are many factors which remain out of our hands. Many of the women I studied
made this acknowledgment as well, often referring to the element of luck as they described their situation:

I was very lucky as I had very little sickness (only felt queasy while traveling really) and was tired but not so that it affected my singing much. (Survey respondent)

I believe I've been luckier than many women since my experience with morning sickness was very mild. I can imagine that if that had been worse, it would have impacted my singing much more. (Survey respondent)

I’ve been super lucky and I’ve sung with enough conductors now that they trust me and being pregnant is not a big deal. (Joelle, interview transcript)

I know this is just luck of the draw, but I was fortunate and didn't put on much weight while pregnant, and in my first pregnancy in particular I had a lot of energy. (Survey respondent)

My body took to pregnancy so well, I felt very lucky, blessed and strong while pregnant. (Survey respondent)

I was lucky enough to have a gown that stretched and a shawl that worked well over top. (Survey respondent)

I was very lucky to work with a very supportive team, willing to help whenever I needed. (Survey respondent)

Staying with the lens of luck and the factors which remain out of our control for a moment, I believe it is worth mentioning here that the potential for tragedy has not been discussed in this paper. The women I interviewed either did not disclose or did not experience stillbirths or
miscarriages, but the possibility needs mentioning as a reminder that each individual’s pregnancy exists within a myriad of variables and unforeseen circumstances. The impact of such events on the classical singer (as on any woman) would surely be weighty.

*Pregnancy and the Classical Singer: A Powerful Intersection.* Balancing the challenges of pregnancy could be difficult at times for the women I studied. However, it became clear through my research that singing was not simply a vocation for many of the women I studied, but an aspect of themselves. Many women described the *need* to continue, both as a means of self-expression, but also as an attempt at normalcy during a revolutionary time.

I was determined I would just do it until there was a reason not to, and I decided that there was no reason that I couldn’t. (Meagan, interview transcript)

We were determined to make this work and our timing was perfect. (Survey respondent)

They [other family members] just don't understand my *NEED* to be a singer and a mom at the SAME time, and how being able to sing, even if not consistently during my children's infancy stages is crucial to me being a good mom. (Survey respondent)

You just have to do it and you just make it work. That’s kind of my thing, that if you can’t do it the way that you used to do it, you find an alternate way to do it and you have to do it. That’s the bottom line. (Joelle, interview transcript)

I was heartened and inspired to hear the countless stories of success, personal growth and discovery that wound their way through the anecdotes which were shared with me throughout the process of conducting this study. In delving deeper into the personal stories of my interviewees, in reading the countless comments from the survey data and by forming a back-drop for these stories with exploratory quantitative data, much previously hidden knowledge has been gained and uncovered.
Chapter Seven: Conclusion

“There is no real ending. It’s just the place where you stop the story.”
-Frank Herbert

PUTTING THE PIECES TOGETHER

Synthesis of Key Thoughts. There was much to be uncovered in this study regarding the physical, emotional and social experience of pregnancy for the classical singer. The scope of this study was purposefully broad in an effort to illuminate the many facets of this topic, which have remained unexplored heretofore, as well as to instigate further discussion in all aspects of the experience and create a community for the participants as they shared their stories.

The experience of the pregnant classical singer is a unique one: the many ways in which a woman’s physical and emotional health, as well as the social climate in which she finds herself, intersect with the requirements of the classical singer and provides an almost infinite variety of interactions and results. An increased awareness of the variety of pregnancy induced symptoms and their impacts on singing can further understanding between pregnant classical singers and their families, friends and colleagues, creating an environment where pregnant classical singers feel free to express their physical, emotional and social needs. Support for the pregnant classical singer is important as she navigates major physical and emotional changes which can at times impact singing outcomes negatively.

As well as understanding the challenges, this study has brought to light the benefits pregnancy brings to the classical singer. Although not all women found pregnancy to have a positive influence on classical singing and performance, many women felt that becoming pregnant was a transformational experience which deepened musical interpretation, benefitted elements of performing (such as performance anxiety) and resulted in a re-ordering of priorities that was positive for the singer. Physical changes resulted at times in a deeper understanding of technical processes and learning occurred as adjustments were made. Realizing that pregnancy can indeed
result in better performing may help remove the stigma of pregnant singers in their work environment.

ANSWERING THE RESEARCH QUESTIONS

The Influence of Physical Symptoms on the Pregnant Classical Singer. Though there was variety in the physical symptoms that each woman experienced, as well as variety in the intensity of their ailments, the survey and the interview data allowed me to make a few conclusions about the women I studied:

1. The physical symptoms of pregnancy impact singing for most classical singers to some degree, especially in the second and third trimesters.

2. For a minority of women, the severity of their physical symptoms during pregnancy is significant enough to cause them to stop singing for some length of time.

3. Despite the prevalence of physical symptoms which impact the singing voice, most pregnant classical singers are able to make adjustments which allow them to continue singing and reduce the negative effects on their performances. While making these adjustments, some women made new discoveries, which resulted in improvements in their singing during and beyond pregnancy.

Emotional Impacts of Pregnancy on the Classical Singer: Through comparing the survey and interview transcripts and reviewing the stories these women shared, I was able to make the following observations about the women that I studied:

1. Shared knowledge from vocal pedagogues, performers and research on performance psychology tells us that one’s emotional state is integral to a performer’s success. This study found that the majority of singers experience emotional changes during pregnancy which may have a direct impact on performing.
2. Pregnancy offered many of the women I studied a shift in perspective. This shift was often instigated by a re-ordering of priorities which stemmed from the pregnancy itself and manifested as a positive impact on performing, or from physical challenges which came along with the pregnancy and forced the individual to make lifestyle and performance changes.

3. The women I studied placed importance on their inner emotional landscape while pregnant. This topic is important to the women I studied; participants valued their feelings when it came to describing their experiences singing while pregnant.

Social and Career Implications of Pregnancy for the Classical Singer. While looking closely at the ways in which the data intersected, I discovered the following regarding the social impacts of pregnancy on the classical singer:

1. Many classical singers are performing while pregnant with success and support, despite the fact that balancing all aspects of their experience can involve challenges.

2. Navigating the line between the personal and the professional as they experienced pregnancy was an important topic for the women whom I studied. Though the ways in which each woman navigated this challenge varied, descriptions of this balancing act permeated the data.

3. Some of the women I studied experienced job loss due to pregnancy, either by their own choice or by the choice of their employer. This job loss occurred due to the pregnancy itself or the timing of the birth. Jobs were also gained due to good audition experiences while pregnant, but not necessarily due to the pregnancy itself.
FURTHER KEY DISCOVERIES

Overall Impact of Pregnancy on Singing vs Career. This study found an interesting incongruity between how women perceived benefits and challenges to their careers while pregnant vs. their singing. Though the majority of women surveyed and interviewed felt that their singing had benefitted from the experience of pregnancy, the majority of survey respondents experienced negative impacts regarding their careers due to pregnancy and/or motherhood. (Though the interviewees did not make this claim, some did reference some small changes that were made to their career path - a longer inquiry which follows several women’s career trajectories would help to clarify this issue).

While the reasons for this disparity have not been fully explored, several factors can be attributed to this finding. Some prejudice may exist for hiring (and keeping contracts) for pregnant women. This could be due to casting conflicts (a visibly pregnant woman playing a pants role could offer some difficulty to the director), but it could be also due to concern on the part of the employers that the pregnant woman will not be able to uphold her usual standard of performance. From this study, we know that the majority of women are able to perform successfully while pregnant, and in fact, some experience periods of optimal singing due to hormonal changes and/or technical discoveries. The physical impacts of pregnancy are not to be underestimated, as the majority of women did suffer from a variety of physical complaints which impacted their singing, however, most women did not have to curtail their performing to accommodate their changing physical needs. Women who were forced to stop singing due to the physical demands of pregnancy were in the minority. Further investigation and sharing of stories will benefit not only women who intend to sing while pregnant, but a deeper understanding of the intricacies of this topic can reassure and inform employers who may be wary of using pregnant classical singers in productions.

IMPLICATIONS FOR FURTHER STUDY

Although this study uncovered a large amount of data in the form of stories and tendencies regarding the group of classical singers I studied, these offerings are simply the tip of the iceberg
in this under-examined subject. What follows are my most pertinent recommendations for further study, but they are by no means an exhaustive list. I am pleased to see that other researchers are in the throws of investigating the experience of pregnancy for the classical singer from several viewpoints; since the onset of this study, several more have been published and I imagine this trend will continue.

**Comparison Between Advanced Singers and Those in Early Stages of Career.** There were several instances in the data where women of diverse ages answered differently throughout the survey population. These inconsistencies were typically regarding the social ramifications of pregnancy, including instances of support, decisions to become pregnant and to share pregnancy news, and in accommodations made during staging rehearsals. How the interplay of these results weaves in and around our changing societal expectations of women as performers and mothers need further investigation. An in-depth, qualitative comparison between today’s generation of pregnant classical singers and women who have experienced this situation in the past would aid in our understanding of our current situation, as well as perhaps offer ways in which we can further evolve our concepts of working and singing pregnant women.

**Pregnancy, Singing and the Brain.** The subject of pregnancy and its impact on the brain has only begun to be explored. Results from various studies have produced conflicting results: there is much we do not know regarding this subject. A study which measures brain changes in pregnant classical singers while discussing each woman’s perception of her cognitive skills during and after pregnancy would contribute much to our understanding. Established classical singers are an excellent group upon which to focus inquiries about cognitive function since they are intimately in-tune with their own memorization and performance preparation processes and would notice subtle changes.

**Hormonal Trajectory: Comparing and Investigating Life Paths.** A large-scale exploration of the impacts of hormonal changes on the female classical singing voice is needed. A study investigating a larger population of classical singers women would help validate what the current
case-studies have uncovered. Furthermore, a long term inquiry which follows classical singers who become pregnant and contrasts their vocal measurements with those who do not could offer clarity regarding the vocal impacts of pregnancy on the singing voice versus the natural progression of the female voice as it evolves in timbre and maturity. Charting long-term trends between the two groups may illuminate further discoveries regarding the impact of hormonal changes on the singing voice throughout a woman’s lifetime.

Job Loss and Gains: The Working Atmosphere for Pregnant Classical Singers. A large scale investigation of job loss during pregnancy for classical singers would help us better understand this difficult subject. The large disparity evident in the data regarding improved singing vs. improved career trajectories during pregnancy leaves a gulf of unanswered questions. Employers terminating contracts or choosing women without children for subsequent roles is not the only factor here. The transformational experience of motherhood, changes in career trajectory and individual financial and life choices all play a role. Further inquiry is needed in order to begin to sort out the tangled threads and assumptions.

Classical Singers and Motherhood. Though this study focused on the experience of pregnancy for the classical singer, the significance of the resulting children and the transition to motherhood often made its way into survey and interview comments. Separating the two subjects was necessary in order to give pregnancy for the classical singer its due examination, however, practically speaking, this distinction is not entirely possible. Having passed through the bridge of pregnancy, I realized that I had gone on a journey from which I could never return; becoming a mother has had profound effects on my life and singing - physically, emotionally and socially. There is much to be learned from sharing the experiences of classical singer mothers, not least of which are the many practical considerations this population must consider when continuing to perform. Understanding hormonal impacts and social attitudes regarding breastfeeding as well as overall changes in lifestyle and time management due to motherhood could offer future generations a wealth of information and solidarity as they navigate this somewhat precarious and sensitive balancing act. At this writing, scholarly inquiries on this subject are woefully lacking.
IMPAcro AND INFLUENCE OF “SINGING FOR TWO”

Participant Impact. The participants of this study, both survey and interview, expressed a variety of emotions upon completing our work together. Many survey participants expressed the feelings of community they felt as they worked through the survey. One participant wrote, “I just filled out your survey. Even just reading the questions made me feel like I wasn’t alone in all the things I felt and experience when I was pregnant…I am so looking forward to reading your findings!” Several survey participants included their personal email addresses in the last comment with the offer to speak further about their experiences if I needed more information.

The interviewees were also positive about their experience participating in this study. Joelle wrote, “It’s great to read about other’s experiences. I’m so glad you are writing this!” Shareese felt strongly that her story be shared in order to let other women know “they can do it too!” Bringing this subject out into the open was important to the many women who shared their experiences: the number of participants and the length of the commentary are all indicators of this fact. I have also received many requests to share my findings once published. Not only have study participants asked to read my findings upon completion, but others who have stummed across my research website and continue to submit their email addresses in order to be kept up-to-date with the results of my study and future investigations.

Personal Impact. When I think of how this research has affected me, it would be minimizing things to say that it had a big impact. Experiencing my own pregnancy with an analytic eye and a mind that was seeking to understand nuances and patterns as they would contribute to my research helped to keep me firmly ensconced in the moment-to-moment evolution of my pregnancy journey. Life’s busy commitments didn’t distract me from what I was experiencing while pregnant, because for much of my pregnancy, life’s busy commitments were researching and writing about pregnancy. Having the gift of time to uncover what mattered to me, and in fact needing to focus on this subject when it mattered most during those nine months, was a luxury which deepened my experience.
Connecting with the survey and interview participants has given me an unequivocal sense of community and shared experience. Of course I had imagined that there were many classical singers around the world who were performing while pregnant: I knew some who had, both personally and anecdotally. However, connecting with so many women through the world of the internet and hearing their words in the form of the many comments and messages I received, was a gift I had not anticipated. The generosity and openness with which they shared both their joys and their struggles is something for which I will always be grateful.

CONCLUSION
Classical singers are an ideal group with whom to investigate the intricate influences of pregnancy on a woman’s body, mind and spirit, as well as her place within a working community. Not only are classical singers deeply in-tune with their body functions, sensations and evolutions, but they are also a part of a community of women who are trained to express their emotions through song. They are very tangibly in the public eye and are therefore exposed to the reactions of their audiences and fans in real time and in written criticism. Because of these characteristics, classical singers have much to offer by sharing their stories with the general population. Artists have a responsibility to society; yes, to elevate and to inspire, but also to use their public voices to enlighten and embolden. We, as classical singers, also have a responsibility to each other and to generations to come. In a causal, social way women have already been advising each other, sharing stories and standing in solidarity as their friends, sisters and colleagues walk through their pregnancy journeys. However, these stories and experiences deserve to be shared in a more public light. The experience of pregnancy has had a transformational influence on the women I studied and on my own singing. May we continue to share and learn from each other in order to better understand and value the gifts that the experience of “singing for two” brings.
I mourn a little for the end -
this first adventure into writing my life,
the lives of others.
How I long to remain in this cozy space!
My daughter napping, I writing away.
Knowing what fills each hour of my day, of every day.

And you. Your voices connecting me
Informing me
Inspiring me.
How many stories and lives and babies and songs are enough?
Each new life, each new experience deserves its place
along the line upon line of written word.
Each, a new discovery
waiting to be made.
But, here we are.
The conclusion.
The final thoughts worded in the shape of a bow,
an ending.

And yet, I know truly that this is the beginning.
Just as the end of pregnancy holds another journey
   -another whole universe, really-
so does this completion give birth to a new set of questions.
To new pursuits.
As the last words appear on my page,
I catch a glimpse of your faces
the multitudes of lives which are being lived
and songs which are being sung.
The journey has ended.

Now, let us begin.
References


Wallace-Sanders, Kimberly. “A Vessel of Possibilities: Teaching through the Expectant Body.”


Wiles, R. “‘I’m not fat, I’m pregnant’: The Impact of Pregnancy on Fat Women’s Body Image.”


Appendix A

Interview Consent Form

Please indicate your responses to the following questions:

1. Select the degree to which you want to remain anonymous in any written papers, presentations, or publications.
   _____ Anonymous (In this case, a pseudonym will be used. You can choose one for yourself.)
   _____ I would like to use my real name. Please specify here:
   ____________________________________.

2. Do you agree to the use of sections of your recorded interview in presentations?
   _____ YES _____ NO

I, ____________________________ have read, and understand, the above Statement of Purpose and Request (Given name - please print.) and agree to participate in this study.

______________________________________________________________
(Signature) (Date)

E-mail Address: _____________________________________________
Phone Number: ______________________________________________
Welcome to Singing for Two, a survey about the experience of pregnancy for classical singers. Thank you for taking the time to participate in this survey. If we haven't met yet, my name is Catherine Gardner and I'm a classical singer and mom to a one-year old. When I began to do research regarding my own pregnancy and its impact on my singing, I found that stories and experiences from singers who had experienced pregnancy were missing from the brief medical descriptions I encountered. In response to this, I decided to focus my doctoral work on the experience of pregnancy for the classical singer. Along with in-depth interviews that I have conducted with pregnant or recently pregnant classical singers, I have created this survey to collect a broader scope of experiences. Your responses to this survey will help create a well of information and stories about pregnant classical singers. The data collected from this survey will be included in my dissertation research on the topic, and will also contribute to a public online resource I plan on developing in order to further our collective knowledge, instigate conversation and provide support and information on the subject. This survey is intended for classically trained singers who have been pregnant one or more times or who are currently pregnant. All responses are strictly confidential.

This survey will take approximately 20 minutes to complete, depending on your responses. Thank you for taking the time to share your experiences. If you would like to contact me with questions, to share your story in more depth, or to submit a personal photo performing while pregnant for my website gallery, please email me at singingfortwo@gmail.com

Check out www.singingfortwo.com for updates on my research when it becomes available.
1. Statistical Information

i. In what country do you currently reside?

ii. Please indicate the continent(s) and/or countries in which you performed while pregnant.

- Africa
- Antarctica
- Asia
- Australia
- Canada
- Europe
- South America
- United States of America

iii. Please indicate your age by checking the appropriate box.

- 18-25
- 26-29
- 30-35
- 36-39
- 40-45
- 46-49
- 50-55
- 56-59
- 60-65
- 66-69
- 70-75
- 76-79
- 80 and above
iv. Please check the date of your most recent pregnancy (or indicate if you are currently pregnant).

__ I am currently pregnant with my first child.
__ I am currently pregnant and already have one or more children.
__ I was pregnant between 2010-2015.
__ I was pregnant between 2005-2009.
__ I was pregnant between 2000-2004.
__ I was pregnant between 1990-1999.
__ I was pregnant between 1980-1989.
__ I was pregnant between 1970-1979.
__ I was pregnant between 1960-1969.
__ I was pregnant before 1960.

v. Please indicate your current voice type.

__ Coloratura Soprano
__ Soubrette
__ Lyric Soprano
__ Dramatic Soprano
__ Lyric Mezzo
__ Dramatic Mezzo
__ Contralto

vi. I made adjustments to my repertoire during my pregnancy.

__ yes
__ somewhat
vii. My voice type changed after/in connection with my pregnancy/pregnancies.

__ yes
__ no

2. Changes in Vocal Fach

viii. What was your voice type prior to pregnancy?

__ Coloratura Soprano
__ Soubrette
__ Lyric Soprano
__ Dramatic Soprano
__ Lyric Mezzo
__ Dramatic Mezzo
__ Contralto
__ Other (please specify)

ix. I switched my voice type after my ____________ pregnancy.

__ First
__ Second
__ Third or more

x. My voice change has been permanent.
3. Vocal Changes

xi. I experienced the following changes in my breath awareness and function during these periods of my pregnancy/pregnancies (first trimester, second trimester, third semester). Please check all that apply.

__ Increased difficulty singing long phrases
__ Increased difficulty singing coloratura passages
__ A greater understanding of "appoggio"
__ A feeling of having too much air (feeling "stacked")
__ Difficulty achieving depth in inhalation
__ Greater ease in breath support
__ Greater ease in abdominal engagement
__ Increased difficulty with breath support
__ Increased difficulty with abdominal engagement
__ Other (please specify)

xii. During pregnancy I experienced the following vocal changes during these periods of my pregnancy/pregnancies (first trimester, second trimester, third trimester). Please check all that apply.

__ A feeling of increased suppleness in the tone
__ Changes in the passaggio
__ Greater ease in the upper range
__ Greater ease in the middle range
Greater ease in the lower range  
Huskiness in the voice  
More difficulty in the upper range  
More difficulty in the middle range  
More difficulty in the lower range  
Comments

xiii. During various stages of my pregnancy (first trimester, second trimester, third trimester), I experienced pregnancy-related changes in my instrument and ability to perform.

Strongly agree  
Agree  
Neutral/Neither agree nor disagree  
Disagree  
Strongly disagree  
Comments

4. Physical Health

xiv. During each time period (first trimester, second trimester, third semester), please indicate the impact of the physical changes of pregnancy on your singing voice.  
If you have had more than one pregnancy, please check all answers that apply to each pregnancy.  
If you are currently pregnant, please check up to your current trimester.

I experienced little or no physical changes that impacted my singing  
I experienced some physical changes that impacted my singing  
I experienced multiple physical changes that impacted my singing  
The physical changes I experienced made singing difficult for me
__ The physical changes I experienced caused me to stop singing for any length of time
__ The physical changes I experienced were beneficial to my singing
__ Other (please specify)

xv. Please check all physical symptoms that you have experienced during pregnancy (first trimester, second trimester, third trimester). Please indicated whether or not this symptom was present before pregnancy and remained the same, this symptom was present before pregnancy and worsened, or this symptom was present before pregnancy and disappeared during pregnancy

__ A feeling of having too much breath
__ Breathlessness
__ Difficulty sleeping
__ Fatigue
__ Gastroesophageal reflux disease (GERD)
__ Headaches
__ Heightened emotions
__ Increased appetite
__ Increased frequency of urination
__ Increased sensitivity to scents
__ Nasal dryness Nausea
__ Nose bleeds Swelling Vomiting
__ Other (please specify)

5. Professional Impact of Pregnancy

xvi. Please indicate the number of performances during each time period (first trimester, second trimester, third trimester). For those with multiple pregnancies, please check all boxes that apply.

__ none
xvii. How much did your career plans influence the timing of your pregnancy?

__ It was the most important factor
__ It was an important factor among others
__ It somewhat influenced the timing
__ It didn't influence the timing much
__ It had no influence
__ My pregnancy was unplanned/a surprise Other (please specify)

xviii. I felt supported in my decision to continue performing during my pregnancy by the following people in my life. (I felt very supported, I felt somewhat supported, I felt neither supported nor unsupported, I did not feel supported, my performing was discouraged, or not applicable).

__ Husband/Partner
__ Family members
__ Voice teacher/coaches
__ Agent
__ Conductors
__ Directors
__ Administrative staff
xix. Audience members commented on my pregnancy before, during or after performances.

__ Rarely
__ Sometimes
__ Often
__ Always

xx. Please check all boxes that apply.

If audience members commented on the fact that you were/pregnant while performing, their comments expressed their feelings of…

__ Amazement
__ Approval
__ Congratulations
__ Disapproval
__ Discomfort
__ Shock
__ Use of humour and jokes
__ Questions regarding the baby
__ I received no audience comments
__ Other (please specify)

xxi. I withheld news of my pregnancy during auditions.

__ yes
__ sometimes
__ no
__ I didn't participate in any auditions during my pregnancy
Comments

xxii. I withheld news of my pregnancy to colleagues, conductors, directors etc. during gigs.

__ yes
__ sometimes
__ no
__ Other (please specify)

xxiii. I withheld news of my pregnancy on social media (i.e. Facebook) for professional reasons.

__ yes
__ no
__ Other (please specify)

6. Emotional Well-being

xxiv. My emotions were/are more accessible to me during pregnancy.

__ Strongly agree
__ Agree
__ Neutral
__ Neither agree nor disagree
__ Disagree
__ Strongly Disagree
xxv. The knowledge that I was/am pregnant impacted my interpretation and emotional connection to my performance repertoire.

___ Strongly agree
___ Agree
___ Neutral
___ Neither agree nor disagree
___ Disagree
___ Strongly Disagree

xxvi. My attitude towards competition and/or rejection changed when I became pregnant.

___ Strongly agree
___ Agree
___ Neutral
___ Neither agree nor disagree
___ Disagree
___ Strongly Disagree

xxvii. I experienced difficulty in memorizing and/or learning repertoire in various stages of my pregnancy/pregnancies. (First trimester, second trimester, third trimester)

___ Strongly agree
___ Agree
___ Neutral
___ Neither agree nor disagree
___ Disagree
___ Strongly Disagree
xxviii. My pre-performance routine changed when I was pregnant. Please describe changes to your routine if applicable.

___ Strongly agree
___ Agree
___ Neutral
___ Neither agree nor disagree
___ Disagree
___ Strongly Disagree

xxix. Before becoming pregnant, I experienced some form of nervousness or anxiety before performances.

___ yes
___ no

xxx. Please check the box that best describes your experience.

___ During my pregnancy, I noticed a change in any nervousness or anxiety I experienced before performances.
___ There was a noticeable decrease in my performance anxiety during pregnancy.
___ There may have been a decrease in my performance anxiety; it's difficult to tell.
___ There was no change in my performance anxiety.
___ My performance anxiety increased during my pregnancy.
___ I don't experience performance anxiety. Other (please specify)

xxxi. Please check the box that best describes your experience.

___ The changes in my performance anxiety remained after my pregnancy.
__ Since my pregnancy, I have had less performance anxiety.
__ Since my pregnancy, I have had more performance anxiety.
__ My performance anxiety has not changed.
__ I don't experience performance anxiety.
__ Other (please specify)

7. Body Image

xxxii. I generally feel comfortable on stage in my non-pregnant body.

__ Strongly agree
__ Agree
__ Neutral
__ Neither agree nor disagree
__ Disagree
__ Strongly Disagree

xxxiii. I feel/felt comfortable on stage with my pregnant body.

__ Strongly agree
__ Agree
__ Neutral
__ Neither agree nor disagree
__ Disagree
__ Strongly Disagree

xxxiv. I feel/felt more positively towards my body while pregnant.

__ Strongly agree
xxxv. I purchased maternity gowns for performance during pregnancy.

__ yes
__ no
Comment

xxxvi. I changed shoe size or style for my performance foot-wear during pregnancy.

__ yes
__ no
Comment

xxxviii. During staging rehearsals, my pregnancy was an issue.

__ Strongly agree
__ Agree
__ Neutral/Neither agree nor disagree
__ Disagree
__ Strongly Disagree
__ Not applicable
Comments
xxxviii. During costume fittings, my pregnant body was an issue.

__ Strongly agree
__ Agree
__ Neutral
__ Neither agree nor disagree
__ Disagree
__ Strongly Disagree
Comments ____________________________________________________________

xxxix. Special accommodations were made for me because of my pregnancy during rehearsals and performances.

__ yes
__ somewhat
__ no
__ the parties involved were not aware of my pregnancy
Comments ____________________________________________________________

xl. I requested changes to staging due to my pregnancy.

__ yes
__ no
__ Other (please specify)

8. In conclusion…

xli. During my pregnancy/pregnancies, I experienced a re-ordering of priorities which impacted my performing.
xlii. Overall, becoming pregnant positively impacted my singing.

__ Strongly agree
__ Agree
__ Neutral
__ Neither agree nor disagree
__ Disagree
__ Strongly Disagree
Comments ____________________________________________

xliii. Overall, becoming pregnant positively impacted my singing career.

__ Strongly agree
__ Agree
__ Neutral
__ Neither agree nor disagree
__ Disagree
__ Strongly Disagree
__ Other (please specify)
xliv. Please feel free to share any thoughts or experiences this survey may have missed.

Comments

________________________________________________________________________