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The Effects of Infertility on Female Vocalist Identity

Laura Curtis, *The University of Western Ontario*

Supervisor: Wright, Ruth, *The University of Western Ontario*

A thesis submitted in partial fulfillment of the requirements for the Master of Music degree in Music

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Abstract

This phenomenological research study explores the impact on female singers' musical and gender identities when confronted with the socially stigmatized issue of infertility. Participants include women actively involved in singing ($N=2$), who have experienced the phenomenon of infertility. Participants were recruited primarily through the social media platform of Facebook and participated in three one-hour personal, semi-structured interviews over the course of six weeks. Interview transcripts were analyzed to isolate recurring themes within the narratives. While each participant's experience with infertility was unique, analysis revealed a common tendency for life course alteration due to their experiences with infertility. These alterations impacted the personal and professional identities of the two participants, including interpersonal relationships, education and career paths, and physical and emotional health. This innovative research positively contributes to the fields of vocal health, pedagogy, and performance by creating a space for open communication on the stigmatized topic of infertility among singers, vocal health specialists, and voice pedagogues.

Keywords: Voice; Infertility; Identity; Vocal Health; Vocal Pedagogy; Stigma; Singing; Life Course; Fertility Treatments; Sex Hormones

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This research, and my graduate studies in general, are rooted in my personal experiences with infertility and singing. Through these experiences I have learned that while life may come with unimaginable challenges, amazing opportunities can be found within them if you keep an open mind and an open heart.

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Introduction

Infertility is a stigmatized phenomenon (Cook & Dickens, 2014; Goffman, 1963) affecting sixteen percent of Canadian couples (Government of Canada, 2013). Among this population are female singers, choral directors, and voice instructors whose gender and musical identities may be impacted by their experiences with infertility. Recent research points to a need for investigation into the effects of infertility on the female voice (Curtis, 2017); a topic which has thus far been ignored within vocal health and pedagogy literature (Abitbol, Abitbol & Abitbol, 1999; Abitbol et al., 1989; Kadakia, Carlson & Sataloff, 2013; Nacci et al., 2011; Newman, Butler, Hammond & Gray, 2000). This research, sparked by the author's own experiences with singing and infertility, has as a broad aim the intent to stimulate open communication and further research regarding the impact of infertility and the fertility treatment process on the female voice. This will be accomplished through an exploration of women's perceptions of their experiences with infertility and singing, including those of the author. A more specific explanation and statement of the research objective and questions now follows.

The female population is most strongly impacted by the stigma of infertility, as both society and biology place an expectation on them to conceive (Gold, 2012; Gotlib, 2016). Constructing and defending a child-free gender identity in a pronatalist society can be challenging, and for a female singer dealing with issues of infertility, a challenged gender identity formation may also impact her musical identity. Existing literature reveals that musical identities, like gender identities, are constructed through normative social influences such as enculturation, institutionalization, and mass media (Green, 1997;

MacDonald, Hargreaves & Miell, 2002). Challenging gender and musical identity norms may pose a threat to a singer's capital within these fields. This introductory chapter will explore the phenomenon of infertility as it relates to female singer identity. Literature surrounding gender and musical identity, as well as the physiological, psychological, and social impacts of infertility, will be discussed.

Sex Hormones and the Female Voice

The connection between female sex hormones and vocal health has been subjected to considerable analysis in the fields of music performance and music education (Kadokia et al., 2013). Areas covered by the existing literature include the effects of puberty, the menstrual cycle, contraceptives, pregnancy, and menopause on the female voice. Fertility treatments, however, are rarely considered. As the hormonal fluctuations experienced during the fertility treatment process are both similar to—and potentially more extreme than—those experienced during the menstrual cycle and pregnancy, the impact of these events will be discussed below.

The hormonal/vocal connection. Numerous studies have been conducted for the purpose of determining whether hormone receptors exist within the larynx. (Abitbol et al., 1999; Abitbol et al., 1989; Nacci et al., 2011; Newman et al., 2000). The results, however, are often contradictory. Conflicting findings among past and current research on the subject of hormone receptor sites within the larynx does not diminish the impact of hormones on the female voice. Studies show that during periods of hormonal fluctuation, women experience physical and psychological changes which impact vocal production. Some of those studies are described below.

Menstruation. The two phases of the menstrual cycle - the follicular and luteal phases - have been shown to produce physical and psychological symptoms which can negatively impact vocal production (Abitbol et al., 1999; Benninger, 1994; Hogikyan, Thurman, & Klitzke, 2000; Kadakia et al., 2013; Mullendor Brown, 2015; Thurman, Emanuele, & Klitzke, 2000). The impact of both estrogen and progesterone during the menstrual cycle is discussed in detail in these studies. Discussions include the physical symptoms of dysmenorrhea (painful menstruation) such as lower back pain, abdominal cramping, nausea, vomiting, headaches, diarrhea, dizziness, and fatigue, which can cause severe disruption to efficient vocal production.

The term dysphonia premenstrualis, or Premenstrual Voice Syndrome (PMVS), is applied to vocal symptoms related to hormonal fluctuations experienced during the luteal phase of the menstrual cycle. The symptoms of PMVS can lead to a decrease in vocal control and changes to a woman's overall voice quality. Women may also experience swelling of the vocal folds and thickening of the mucous membrane during the luteal phase of the menstrual cycle, contributing to a loss of elasticity in the vocal folds. Another symptom of the hormonal fluctuations experienced during the luteal phase of the menstrual cycle is gastroesophageal reflux disease, or GERD. Common vocal symptoms of GERD are swelling of the vocal folds, hoarseness, and limitations in vocal production. Although these physiological alterations are temporary and often subtle, they have the potential to modify a singer's overall vocal tone, compromising both her ability to sing in a performance setting, as well as to effectively demonstrate good vocal technique while teaching.

Pregnancy. Similar to the menstrual cycle, the fluctuations of estrogen and progesterone production during pregnancy induce physiological changes which may negatively impact vocal production (Benninger, 1994; Lã & Sundberg, 2012).

Pregnancy's similarity to premenstrual syndrome (PMS) is evident in the body's increased retention of water and salt, as well as a decrease in gastric motility. Water and salt retention may induce swelling of the vocal folds, while a decrease in gastric motility may cause constipation. As a result of constipation, pain and discomfort in the abdomen may reduce a singer's ability to support her voice efficiently. In addition to these physical symptoms, an increase in laryngeal vascularity may increase the risk of trauma within the vocal tract (Benninger, 1994).

In Lã and Sundberg's (2012) study, correlation was found between increased levels of estrogen and progesterone during pregnancy and a reduction of vocal fold motility and an increase of glottal adduction. A notable difference in brightness of the study participant's sound was observed. The authors concluded that these measured vocal changes were associated with the effect of increased levels of estrogen and progesterone on vocal fold thickness and viscosity.

Side effects of fertility drugs. Each individual drug administered during fertility treatment cycles has its own adverse side effect warnings. These side effects, as noted on the online medical database *UpToDate.com* (2016), have been reported in clinical trials, as well as in real-life situations (Choi et al., 2005; Revelli, Casano, Salvagno, & Delle Piane, 2011), and have been classified by incidence percentage on the online database. Many of the known side effects of fertility drugs are common to other hormonal events experienced by women, however, there are some side effects which are specific to the

drugs themselves. Side effects listed on the *UpToDate* database (2016) pertain to the following bodily systems: central nervous, endocrine and metabolic, gastrointestinal, genitourinary, ophthalmic, neuromuscular and skeletal, respiratory, and cardiovascular. Psychological symptoms of the drugs, such as anxiety, depression, and irritability, are also noted. As the voice is an instrument within the body, it is possible that many physical and psychological side effects experienced by a singer during the fertility treatment process would impact vocal production in some way. More research, however, is needed to examine in detail the physiological, emotional, and psychological impact of fertility drugs on the singing voice.

“Vocal sound is one of the defining features of humanity” (Welch, 2005, p. 239). If this statement is true, then the questions may be asked ‘what features of the singing voice define an individual?’ and ‘is an individual’s singer identity affected by changes to the features of her voice?’ In his chapter, “Singing as Communication,” Welch (2005) describes the correlation between humans’ musical experiences, and their ability to express and identify emotion through vocal communication, as “emotional capital” (p. 247). In the event that hormonal fluctuations brought on by treatments related to infertility compromise a female singer’s vocal production, regardless of how subtle or extreme the fluctuations may be, does she effectively lose some of her emotional capital? In what ways might these changes alter a female singer’s musical identity? Further to the discussion of the physical impact of fertility treatments on the voice, it is important to examine the impact of infertility *without* the experience of fertility treatments. What other aspects of a female singer’s identity might be impacted by the experience of

infertility, regardless of whether she participates in fertility treatments? These questions will be explored in the following pages.

Musical identity

The experience of infertility is unique to every woman, making this field of inquiry a rich source of knowledge. When faced with a diagnosis of infertility, a woman may be faced with choices which have the potential to interrupt her life course. These choices range from not having children to seeking out medical interventions for the treatment of infertility, both of which may impact a woman's personal life and career path. For a female singer, disruptions in her personal or professional life caused by the experience of infertility may impact vocal production, as well as the ways in which she uses her voice both personally and professionally. Regardless of the magnitude of this impact, a female singer's musical identity may be altered as a result.

Harrison (2014) discusses the personal nature of the singing voice and its potential to communicate individual identity, as well as the link between a singer's self-realization and her desire to control vocal production. If, however, a singer's physical control of her voice is impaired by her diagnosis of infertility and/or the fertility treatment process, it may affect her perception of herself as a singer. This impairment may not be directly linked to physiological issues, as the emotional, psychological, and social impact of infertility is potentially greater than that of the physical. Given Harrison's (2014) proposed connection between voice and self, there lies the potential for change in a female singer's self-perceptions as she navigates the emotional, psychological, and social aspects of infertility.

The process of “being, having and seeking identity/identities” (p. 221) is coined by Bergesen Schei (2009) as ‘identitation.’ In this unconscious and continually evolving process, identity is viewed as unstable, rather than something realized and sustained consciously over the course of one’s life. The author applies a Foucauldian approach to her research on the construction of singer identity by means of discourse analysis. From this perspective, the author considers the ways in which the research participants ($N=3$) are guided and regulated by “power embedded both inside and outside of the music institutions, media, performing arenas and individuals” (p. 223). Accepted ‘norms’ for singers are created through power dynamics established both within and outside of these institutions. The singer may be unaware of the existence of these norms, though her identity has been shaped by them. Bergesen Schei (2009) states that “It is usually only when norms are broken that the individual realizes the existence of norms” (p. 231). A female singer experiencing infertility may be unaware of the influence under which she ‘identitates,’ until she is faced with having to make choices which may alter her life course and, thus, her identity. These choices could involve seeking treatment for infertility which may have a negative impact physiologically, emotionally, and psychologically. Given that a singer’s instrument is her whole body, any challenges or impediments imposed upon her body have the potential to disrupt ‘identitation’. This disruption may be temporary, however, and individual experiences of infertility are unique and complex, as are treatment processes. The quality of a singer’s voice is dependent upon “concentration and energy” (p. 233), both of which may be hindered during the experience of infertility and the fertility treatment process, due to the often physically invasive nature of the treatments. Vocal qualities such as timbre may also be

affected by the emotional experience of infertility as, according to Bergesen Schei (2009), vocal timbre “is not only influenced by technique, but also by a singer’s feelings” (p. 233). It is important to note, however, that for some singers, such as those in Bergesen Schei’s (2009) study, the voice may be distinguished as a separate entity from one’s emotions (p. 233).

Infertility as Identity: Gender, ability, shame, and life course disruption

The stigma that surrounds the phenomenon of infertility is perpetuated by a lack of public knowledge (Cook & Dickens, 2014). Women are at the heart of this stigmatization, as both society and biology place an expectation on them to conceive (Gotlib, 2016). Failing to meet this socially-constructed (and biologically-based) expectation can leave millions of involuntarily childless women to question their gender identities. Socially-constructed female identities, according to Whiteford and Gonzalez (1995), are built around the “social norms expressed in dominant gender roles” (p. 35), and the dominant role of a female, in many societies, is perceived as that of a mother. Through a series of interviews, Whiteford and Gonzales (1995) explore the stigma attached to infertility. Based on the perceptions of women who have experienced infertility and the fertility treatment process, the authors conclude that the stigma of infertility stems from “the sense of having broken a group norm” (p. 29). This seems especially salient within pronatalist societies that view infertility as a medical condition, despite the fact that it has not ‘legitimately’ been labeled as an illness or disability. Women who find themselves experiencing infertility may self-identify as ill or disabled, given the medicalized perceptions of infertility prevalent in dominant discourses on the phenomenon. Unfortunately, the emotional and physical labour involved with taking part

in medical treatments for infertility are not only negatively impactful to a woman's gender identity through physical, emotional, and psychological trauma, but may also be socially isolating based on the time, effort, money, and energy needed to participate in these treatments (Whiteford & Gonzales, 1995).

Sternke and Abrahamson (2015) explore the notion of labelling infertility as a disability, and the ramifications of such a label, including legal and personal, that need to be considered. The authors conducted interviews with 23 participants who struggle with infertility, to gain perspective on the stigma that surrounds the phenomenon. Through an in-depth discussion of the background of infertility, the authors exposed many perceived truths regarding the social and psychological impact of the diagnosis and treatment of infertility. The narratives of the study participants uncover a desire among them to label infertility as a disability to legitimize their pain, both physical and psychological. Sternke and Abrahamson (2015) conclude that more research is needed to examine the legal, social, and medical consequences of labelling infertility as a disability. For female singers experiencing infertility, the label of 'disabled' may impact their perceptions of themselves as able-bodied and, thus, able-voiced singers. Due to the close connection between the body, mind and voice, a singer's self-perceived disability – invisible or otherwise – may negatively impact her musical identity if she perceives her voice as functioning at a less than optimal level due to the physical and/or psychological impact of infertility.

Valeras (2009) discusses the concept of infertility as a hidden disability in relation to Butler's (2007) theory of gender performativity, in which gender is perceived through the eyes of others based on one's performed actions and ways of being. These

actions and ways of being may include, for example, the clothes one wears, the way one speaks, and/or the way one moves through space. Valeras (2009) states that “the choice, to be or not to be disabled, has important implications for the way we conceptualize disability, and the concept of identity as a whole. Gendered social expectations impact these decisions on a constant basis” (p. 1). Valeras (2009) examines “gendered disability ‘performance’” (p. 5), and the role of socially constructed gender norms in the lives of women experiencing hidden disabilities. Women experiencing infertility may identify as possessing a hidden disability due to the internal biological aspect of the condition. Involuntarily childless women who identify as disabled, however, may be compelled to expose their disability through social interaction should questions arise regarding either their lack of children or their position as an adoptive or foster parent. Valeras (2009) discusses the gendered social expectations of women from both a disabled and able-bodied perspective, stating that “women are supposed to be submissive, sensitive, romantically appealing, and dependent, while appearing healthy, due to the social value placed on their bodily appearance and nurturing role” (p. 5). These expectations place a burden on infertile women as their condition may not allow for such a socially accepted gendered performance. Taking on the role of Mother, for example, may be perceived as the ultimate sign of a woman’s female gender identity. Failing to achieve motherhood, then, may position childless women as ‘other’ within the female population, thus disrupting – or ‘disabling’ - their female identity.

Identity is an unstable concept, and, when faced with infertility, women’s identities may shift permanently or, as Chester (2003) and Loftus and Namaste (2011) discuss, temporarily. This is due to the unpredictable nature of infertility, wherein women

may experience infertility for a short period of time and then conceive successfully, or for the duration of their lives if they are unable to conceive or make a choice to remain childfree. In Chester's (2003) exploration of infertility and the transformation of identity, the author uses her own reflective narrative to explore the concept of socially constructed ideologies surrounding motherhood and female identity. She describes her perception of the "socially constructed identity of motherhood" (p. 779) as being "so deeply embedded, it had become a part of my very core" (p. 779). Through her own experience with infertility, Chester (2003) describes the stigma created by the chronic loss felt as a result of infertility as it relates to acknowledgement, blame, and/or sympathy expressed (or not expressed) by others. Chester (2003) describes her experience of identity transformation brought on by infertility as being "5 years trying to hold on to an identity that I did not create or even yet possess. Mother. Unmother" (p. 779). This powerful sentiment is a testament to the temporary and/or transformative nature of the 'potential' identity of motherhood discussed by Loftus and Namaste (2011).

When viewing infertility from the perspective of identity theory, as Loftus and Namaste (2011) do, one can begin to understand the difference between what the authors call the "potential and actual identities" (p. 36) of women faced with this phenomenon. The authors state that "in identity theory, the self is not a singular entity, but rather a system of various identities" (P.40). They discuss the 'potential' identity of motherhood, and the 'actual' (though possibly only temporary) identity of childlessness, and the physical, psychological, and social consequences faced by many women experiencing one or both of these identity issues. The risks involved with a temporary identity may impact a female singer's professional life drastically. Career opportunities may be put on

hold while she makes decisions regarding her future as a potential mother. A woman's current position at work may be affected by the time and energy required to participate in fertility treatments, which may be detrimental to her career. Loftus and Namaste (2011) found in their study that their female participants identified themselves as "wife, daughter, daughter-in-law, woman" (p. 41). Each of these identities was connected to specific "behavioural expectations" (p. 41), one of which was to attain motherhood. The authors observed that their participants gave up at least one other aspect of their identities, such as their connection to family and friends, or even their career, in their pursuit of motherhood, which tended to isolate them socially. Loftus and Namaste (2011) argue that when women are unable to achieve their ideal identity of Mother, their identity becomes what Goffman (1963) terms a 'spoiled identity' (p. 51). This concept may apply to any aspect of one's identity and may influence many aspects of a female singer's identity affecting self-esteem and leading to decisions she makes regarding her life course. The aspects of identity affected may include certain socio-demographic characteristics (gender, employment/economic status), one's patterns of behaviour, and/or one's lifestyle choices.

Exley and Letherby (2001) discuss the impact of emotion work on life course disruption in relation to infertility and involuntary childlessness. Through an exploration of the literature, the authors find that an expectation is placed upon women by society to conceive and bear children (p. 117). When this expectation is not fulfilled (i.e. the experience of infertility and involuntary childlessness), the life course disruption that this situation creates "clearly challenges any notion of an expected or pre-defined lifecycle for individuals" (p. 113). By challenging the expected life course, women's identities may be

at risk of damage and stigmatization (p. 118). Exley and Letherby (2001) explore interview respondents' perceptions of the emotion work involved in their experiences with infertility. The authors find that, despite wide-spread negative societal perceptions of infertility and involuntary childlessness, some respondents discussed "positive aspects to these experiences in terms of self-growth" (p. 120). Similarly to Loftus and Namaste's (2011) study, Exley and Letherby's (2001) participants discuss the emotional work involved in the experience of infertility as it pertains to social interactions. A perceived social awkwardness surrounding the topic of infertility led some to avoid the topic altogether, while some were selective of who they talked to about their experiences. (pp. 122-123) Social interactions between infertile women and society thus become bogged down by the emotional labour required by infertile women to maintain balance between social propriety and the development and preservation of their identities. Much of the social awkwardness experienced by women experiencing infertility may be caused by shame and self judgement, as Galhardo, Pinto-Gouveia, Cunha and Matos (2011) discuss.

In their study, the incidence and impact of shame and self-judgement on men and women experiencing infertility is explored. The authors hypothesize that "experiencing infertility may correspond to the idea of being incomplete, flawed, inferior, and not meeting one's own and others' expectations, which may therefore lead to shame – either inner or external" (p. 2409). The authors measured participants' levels of depression, anxiety, negative self-perceptions, and self-judgement, and found that female participants "tend to be more depressed, to perceive themselves in a more negative way and to be more self-judgemental" (pp. 2412-2413) than their male counterparts. Through an exploration of the literature, Galhardo et al. (2011) found that women who experience

infertility may “see themselves as existing in the minds of the others as someone with negative characteristics, as unattractive, worthless, defective or inferior” and may also “perceive themselves negatively as inadequate, different, unlovable and unworthy” (p. 2412). For a woman who holds a public professional position as a singer, voice instructor, music therapist, or choral conductor, the ramifications of negative self-image may be destructive to her career and personal life, and, thus, her identity.

Gender and musical identities

Gender and musical identities are closely linked within music education and performance literature (Dibben, 2002; Green, 1997; Ramsay & Letherby, 2006; Rolvsjord & Halstead, 2013). For female singers, this link is formidable due to the historical, social, and cultural contexts within which women perform the act of singing. In her chapter “Gender Identity and Music,” Dibben (2002) considers the development and maintenance of gender through music from a social constructivist viewpoint. While the author focuses on the socially constructed approach to identity formation, the first section of this paper, discussing sex hormones and the voice, proves that, for singers, it is also important to explore biology’s relevance to gender and musical identities (Abitbol et al., 1999; Abitbol et al., 1989; Nacci et al., 2011; Newman et al., 2000). Female singers, particularly, are deeply enmeshed within complex ideologies surrounding gender roles, which play an important part in shaping the development of a female singer’s voice. Through discussion of the connections between musical practice, taste, memory, and the representation of gender within each of these domains, Dibben (2002) concludes that music plays an important role in gender identity, and vice versa.

In *Music, Gender, Education*, Green (1997) explores the role of music in gender identity formation, as well as the role of female identity on musical practices. An important discussion in Green's (1997) book is that of the role of a woman's femininity in the perception of musical meanings. This discussion takes place in relation to singing in chapter 2. Through the concept of "display" (p. 21), Green (1997) positions women and men at polar opposites on the spectrum of gender, where masculinity is defined as "active, rational, inventive, experimental, scientific, unified, as a catalyst to culture and an emblem of the controlling powers of the mind" (p. 27). At the opposite end of the spectrum, femininity is defined as "passive, reproductive, caring, emotional, contrary, as a part of nature, controlled by the body" (p. 27). Within these contexts, Green (1997) also discusses gendered performance spheres, whereby public performance may be considered masculine, and private performance, feminine. Green (1997) suggests that women's singing, regardless of the performance sphere in which the act takes place, "largely reproduces and affirms patriarchal definitions of femininity" (p. 27) by means of the fundamental nature of the embodied voice and the act of display which takes place during a vocal performance. The unity of displayed body and embodied voice thus creates a dichotomy of power and vulnerability within the female singer's performance, which, in turn, may either threaten or placate the aforementioned definitions of femininity (Green, 1997, p. 28).

Through the use of the voice, gender is positioned as open to disruption and interruption. The possibilities for these disruptions and interruptions are examined by Rolvsjord and Halstead (2013) through the personal narrative of 'Susanne', who possesses a voice pitched lower than might be considered 'normal'. The concept of a

feminine voice is discussed in relation to social and cultural expectations of vocal performance. The authors state that “gender and sexuality are considered a central part of both the historical and contemporary experience of music” (p. 421), and as such they play an important role in constructing identity. This discussion encapsulates Butler’s (2004) theory of gender performativity, by which the performance of gender is described as “the condition of creating an identity through the enactment of the specific roles and behaviours that define that identity” (p. 421). Drawing on Green’s (1997) work on gender and musical identity, Rolvsjord and Halstead (2013) examine the social acceptability of the act of singing as a ‘natural’ feminine pastime. This perceived ‘naturalness’ relates to the association between women and the act of caring for children and performing domestic responsibilities, described by the authors as “core constructions of femininity” (p. 423). These constructions, according to Rolvsjord and Halstead (2013), may be based on women’s susceptibility and sensitivity to “the functions and nature of their bodies through the cycles and rituals of menstruation, childbirth, lactation, and so on” (p. 423). The relationships drawn between the act of singing and feminine ideologies are thus potentially disrupted by female singers who do not fit the constructed role of Woman, such as those experiencing infertility. This may impact these singers’ musical identities, regardless of the manner in which they are involved with singing activities.

Many female singers choose to pursue a career within the academic institution by way of private voice instruction, choral direction, and research. Ramsay and Letherby (2006) discuss societal expectations of both mothers and non-mothers within the field of academia. Through an exploration of the literature on womanhood, the authors explore these identities and the “tension that is shaped by the ideological dichotomy of ‘altruistic

mother' and 'career woman'" (p. 27). The authors discuss ways in which "the relationship between non-motherhood, careers and work identity" (P. 31), is problematized within academic organizations. The authors include reflections from their own perspectives as non-mothers in academia, stating that

we feel we are at times expected to place the organization at the centre of our emotional lives and extend our mothering capacity to our students, colleagues and to the greedy institution. Indeed, at times women 'without' children may be viewed as having no responsibilities outside the organization and therefore able to give their all to work. (p. 40)

This may be an especially problematic, and even stigmatizing, situation for women in academia who have not made a choice to be childfree, but who experience childlessness through infertility. For infertile female singers working and, specifically, publicly performing within the academic institution, Green's (1997) concept of 'display' becomes especially salient. These women may feel vulnerable, exposed, and more open to criticism and judgement based on the public nature of their display.

The experience of infertility may pose a threat to women's gender identities, given the prevalent social ideologies surrounding gendered expectations of motherhood (Chester, 2003; Exley & Letherby, 2001; Galhardo et al., 2011; Loftus & Namaste, 2011). In singing, gender may be expressed in a multitude of ways. Physiologically, the voice may be a key indicator of gender through differences in range and timbre displayed by the voice, although this is not always the case (Rolvsjord & Halstead, 2013). Gendered roles in vocal performance may also be projected through repertoire selection, performance attire, and body language. These indicators of gender identity tend to

conform to social ideologies surrounding public vocal performance (Green, 1997). In other forms of singing activities, such as music therapy, voice instruction, and choral conducting, ideologies differ, though the therapist, teacher, and choral director are still on public display. These uses of the voice, therefore should also be considered when researching the effects of infertility on female singer identity.

Dominant Discourse and Infertility

Women who are unable to conceive naturally may feel pressured by the media, the authoritative voice of the medical world, and society in general to undergo fertility treatments to exhaust all avenues in their quest to fulfill their perceived ‘role’ in society. These pressures are communicated through dominant discourses such as print news media, medical and sociological academic journals, and societal ideologies. For female singers experiencing infertility who play a public musical role within society, the perceptions of others, regulated through dominant discourse, may impact her singer identity. Public knowledge of a singer’s experiences with infertility, or simply her childless/childfree status, has the potential to both positively and negatively impact the perceptions of others regarding her ability to most effectively ‘play her role’ within society.

Letherby (2002a) challenges the dominant discourses on ‘infertility’ and ‘involuntary childlessness’ by comparing the literature on these topics to personal stories of female participants in her qualitative study. Letherby (2002a) argues that, given the individual nature of women’s reproductive situations, the classification of ‘infertility’ - a “biological condition” (p. 277) - differs from that of the “social experience” (p. 277) of

‘involuntary childlessness.’ Looking at these situations from a multitude of perspectives allows researchers to be more sensitive to the perspectives of the women participating in their studies, as well as to be more receptive to the possibility of numerous identity issues faced by those women. Letherby (2002a) states that:

Non-mothers or women who achieve motherhood in unconventional ways are defined in lay, medical and even some social science and feminist literature as ‘problematic,’ ‘unnatural,’ ‘abnormal.’ Further, the power and status accorded to medical science encourages us to seek biological (and medical) solutions to social problems. Thus, dominant discourses concerned with expectations of women, the value of biological identity and the power of medical science collide and support each other. (p.285)

This ‘collision’ of discourse, identity, and medical science, according to Letherby (2002a), situates women who have experienced infertility as “‘other’ to the womanly feminine ideal” (pp. 285-286).

The author notes that the negative feelings expressed by some participants could be seen to “support the view of the ‘infertile’ as less than whole, unfulfilled and ‘desperate’: the dominant representation presented by the media (and indeed in much medical and academic discourse)” (p. 282). Letherby (2002a) also problematizes the medicalization of infertility through “the discourse of social loss, the discourse of biological identity and the discourse of hope” (p. 281) and argues that these discourses may contribute to the stigma surrounding infertility. Focusing discourse on the “biological experience” (p. 283) of infertility, and the medical solutions offered for this condition, compels women experiencing this phenomenon to seek medical treatments to

‘fix’ the issue. Participant narratives from Letherby’s (2002a) study led the author to conclude that “‘fixing’ the biological problem of ‘infertility’ ...sometimes led to further distress” (p. 283).

Sangster and Lawson (2014) discuss the experience of infertility as it is portrayed within Canadian print news media discourse. According to the authors,

Canadian news media tends to construct infertility as a serious and prevalent disease for which high levels of external coping are possible through medical intervention. Further, the analysis revealed that Canadian print news overwhelmingly presents infertility as a women’s issue. (p.492)

Sangster and Lawson (2014) argue against the use of high-alarm discourse surrounding infertility, stating that the use of such a tactic in Canadian print news media “can serve to marginalise the experience of those diagnosed with infertility who experience no or only temporary distress” (p. 493). When reviewing the literature, the authors found that from both a social and medical perspective, the experience of infertility may not always be viewed from a negative perspective, and yet the experience is most often discussed in negative and even alarming terms. This, in turn, can “exacerbate the distress related to infertility” (p. 487), especially where pronatalist ideologies pervade societal attitudes. Through the analysis of numerous Canadian print news articles, the authors conclude that “Canadian print news media tends to present an alarming portrayal of infertility that adheres to a biomedical perspective that often conflates infertility with involuntary childlessness” (p. 486). Canada is not unique in its biomedical perspective of infertility, however.

In a review of research on women experiencing infertility, Greil, McQuillan, and Slauson-Bevins (2011) discuss the role of women in various cultures and the ways in which infertility is constructed within those cultures. The authors explore the role that society plays in categorizing involuntary childlessness and infertility as an “abnormality” (p. 736), thus marking the experience as a “secret stigma” (p. 736). The authors (2011) examine the complex nature of involuntary childlessness through a sociological lens so as to raise the point that not all women who experience infertility consider the ‘abnormality’ of their childless status to be a problem. The authors explain that the medicalization of infertility within pronatalist societies places a stigma on women affected both negatively and positively by their childless status, and that a sociological exploration of the phenomenon provides “an ideal vantage point from which to study such features of health care as inter-societal and cross-cultural disparities in health care, the relationship between identity and health, gender roles, and social and cultural variations in the process of medicalization” (p. 737). Greil, McQuillan, and Slauson-Bevins (2011) also raise an interesting question: “How are we to classify a woman who would be considered infertile according to the medical definition but who does not see herself as having ‘tried’ to conceive and who does not consider herself to be infertile?” (p. 740). The authors conclude that although women who experience infertility “are not merely passive products of their socio-cultural environment...the socio-cultural environment does profoundly shape the experience of infertility” (p. 742).

The present study was designed to explore participants’ experiences with infertility and singing, and the ways in which their experiences impacted their female singer identities. My main research question was Does infertility play a role in female

singer identity formation and development? Sub-questions derived from my main research questions were 1) Does infertility affect female gender identity, and if so, how? 2) Does infertility affect women's musical identity, and if so, how? 3) Does infertility affect female singers' life course, and if so, in what ways?

Methodology

Phenomenological Research

I sought to identify themes within participant narratives which relate to their identities as female singers, and the ways in which these identities have been impacted by their experiences with infertility. The individual nature of musical and gender identities made it important to explore in detail women's experiences. For this reason, a phenomenological approach was taken to provide a comprehensive approach to rich data collection. As defined by Cohen, Manion and Morrison (2018), phenomenology is “a theoretical point of view that advocates the study of direct experience taken at face value and which sees behaviour as determined by the phenomena of experience rather than by external, objective and physically described reality” (p.20). This was the best approach to adopt to answer my research questions because it allowed me to explore the ways in which participants' perceptions of infertility and singing were influenced by their positions within society throughout their lifespan, while also examining their perceptions of potential future selves. The phenomenological approach I took, built on Seidman's (2006) phenomenological framework, included the collection of data from recruited participants through a process of three one-hour, personal, semi-structured interviews, conducted over a six-week period in the spring of 2018. Seidman (2006) explains that to make meaning out of a phenomenon, participants must reflect on the ways in which their past experiences brought them to experience the phenomena in question (in this case, infertility and singing). They must also explore the concrete details of the phenomenon and how both their past, and the phenomenon itself, led them to their current life and work situations.

A Feminist Methodology

While it was important that I be aware of my own personal biases and assumptions toward the subject of this research, conducting the study through a reflexive feminist methodological lens was imperative to the aims of this study. The feminist approach to epistemology and methodology in research, as discussed by Code (1995), encompasses “questions about what makes knowledge possible, about the research strategies best suited to particular subjects of enquiry, and about discovery and justification, certainty, fallibility, and relativism” (p. 19). Within the realm of sensitive research, it is imperative that the research methods be clearly thought out. Therefore, this research was undertaken with great thought and sensitivity to my experience and knowledge of the phenomena of infertility and singing and the ways in which these factors may impact the research process in its entirety. Engaging in three one-hour interviews was a conscious decision on my part to ensure that the participants had ample opportunity to explore and reflect on their experiences in depth. The interviews took place over the course of six weeks and were spaced an average of two weeks apart for each participant. While the interview schedule was based on participant availability, it also allowed them time to reflect on each interview. It also allowed me to reflect on my own experiences, and the emotions connected to those experiences, on multiple occasions throughout the study.

Thought was given to Ary, Jacob, Sorensen, and Walker’s (2014) description of the process of bracketing, whereby the researcher examines any and all biases and assumptions on the phenomena being examined. This process involved reflecting upon my past experiences as a singer and voice teacher, as well as my journey with infertility and the fertility treatment process. These reflections were recorded before the study

began, as well as during and after the data collection and analysis phases. This process helped to minimize the possibility of any biases, assumptions, and beliefs impacting the data collection, analysis, and reporting processes of the study.

In addition to the bracketing process, I also accounted for the impact that my in-depth familiarity with the studied phenomena may have on both the research participants and myself as a researcher. This impact included any emotional labour (Carroll, 2012) invested by both parties throughout the interview process. Given my close emotional attachment to the subject of infertility, interviewing was often an emotionally difficult task. Like Carroll (2012), I experienced moments of emotional struggle upon hearing participants' accounts of their experiences with infertility and the subsequent testing and/or treatment processes. I reflected on these moments of difficulty both during and after each interview. Participants were made aware of my experiences with infertility, as well as my involvement with singing, to some degree, which aided in creating an open environment for discussion of the topic.

Participants

Participants ($N=2$) for this study were selected using a purposive sampling method. This method allows the researcher to recruit participants who can “provide maximum insight and understanding about that which they are studying” (Ary, Jacobs, Sorensen & Walker, 2014, p. 456). Given my knowledge of the experience of infertility from both academic and personal perspectives, purposive sampling was selected as the most effective method for establishing a field for data collection most representative of the experience of infertility. Due to the specific correlation between female sex hormones

and the voice (Kadakia, Carlson & Sataloff, 2013), as well as the prevalence of female-oriented medical procedures for the treatment of infertility (Chehab, M., Madala, A., & Trussell, J. C., 2015), participants in this study were required to be identified as female in the biological sense. A minimum of two female participants, over the age of eighteen, were required for this research. I chose this minimum number based on my desire to conduct an in-depth exploration within the timeframe I had to complete the research. I desired more than one participant because I hoped to examine a broad range of perceptions regarding the subject of my research. Participants must have actively participated in singing activities (solo/choral singing; choral directing; voice instruction) and have experienced the phenomenon of infertility at some point in their lives.

Recruitment of participants took place upon approval of the research project by the Western University Research Ethics Board (www.uwo.ca/research/) (See Western Research Ethics Board Approval at Appendix 1). Recruitment was conducted primarily through the social media platform of Facebook, although recruitment emails were also sent to two choirs with which the researcher was personally and professionally connected (See Social Media Recruitment Poster and Recruitment Email Script at Appendices 2 and 3). The two participants contacted me directly via email and were subsequently provided with a letter of information describing the study in detail. Participants signed and returned a copy of the letter of information and consent form to me before interviews began (See Letter of Information and Consent at Appendix 4). Interviews were conducted in person in both public (coffee shops) and private (participant's home) spaces as chosen by the participants. Each interview was audio recorded with the signed consent of participants.

I hoped to recruit participants with experience in each of the following four categories: choral singing, choral directing, solo performance, and voice instruction. These recruitment requirements limited the size of the participant group for the present study. While the two participants who took part in this study provided a rich source of data, a larger sample size would benefit further research in this field. For the purpose of this study, a small sample size was sufficient, as I did not seek to make statistical generalizations. This research instead sought to provide an in-depth view of women's perceptions of the phenomenon of infertility in relation to their careers in singing.

Data Collection

The in-depth interviews were semi-structured, allowing participants the freedom to discuss their experiences at a deeper level if they so chose. This interview format also enabled the responses of the participants to "dictate the direction of the interview" (Cohen, Manion & Morrison, 2018, p. 535). I arrived at each interview with a list of open-ended questions (See Interview Guide at Appendix 5) to guide the interviews in a fluid manner. I also asked questions based on participant responses as opportunities arose.

The first interview served to collect contextual data of a personal historical nature. Participants were asked to discuss, in broad terms, their involvement with singing and the role that it had played/currently plays within their lives. Participants were also asked to discuss reproduction and motherhood and the role, if any, that these concepts had played throughout their lives. These questions were important for situating the participants within the field of singing, as well as their social strata (Chester, 2003; Dibben, 2002;

MacDonald, Hargreaves & Miell, 2002; O'Bryan, 2015; Rolvsjord & Halstead, 2013).

This first interview gave me an opportunity, upon analysis, to identify important topics for further exploration in the remaining two participant interviews.

The second interview sought to reconstruct the details of the participants' experiences with infertility and singing, as both isolated and combined events. During this interview, participants were asked to discuss actual events that took place in direct relation to their experiences with infertility and the fertility treatment process (if applicable) and singing activities. This interview also explored the ways in which participants' infertility diagnosis, and any applicable testing and/or treatment processes, affected the participants' gender and musical identities. The questions posed in this interview were loosely based upon the literature connected to the impact of infertility on identity (Cook & Dickens, 2014; Greil, McQuillan & Slauson-Blevins, 2011; Sangster & Lawson, 2014).

The third interview gave participants the opportunity to reflect on the meaning of the experiences discussed in the first two interviews. Based on the literature (Bergesen Schei, 2009; Exley & Letherby, 2001; Galhardo et al., 2011; Greil, McQuillan, & Slauson-Blevins, 2011; Letherby, 2002a; Loftus & Namaste, 2011; Whiteford & Gonzales, 1995), as well as my own personal experiences, I expected that these experiences, and the perceptions of these experiences, would be unique to each participant.

Data Analysis

Data was collected via audio recording of participant interviews and transcribed onto my personal computer within one week of each interview. All participant identifying information was coded to retain confidentiality throughout the study. Through repeated and in-depth reading of the transcribed interviews, participant experiences, and their perceptions of those experiences, were analyzed. Analysis of this data took place through the processes of horizontalization and reduction, as outlined by Ary et al. (2014). Horizontalization refers to the identification of “significant statements or quotes” (p. 502) within participant narratives. Once identified, significant participant statements were analyzed and grouped into themes, allowing me to further identify recurring themes among each participant’s narratives. Reduction is the process by which the researcher describes the overall meaning of the phenomenon being studied through “thoughtful attentiveness” (Ary et al., 2014, p. 503) to recurring themes found within the aforementioned statements and quotes. The process of reduction allowed me to clarify the participants’ perceptions of their experiences with singing and infertility by exploring connections between, as well as disconnect among, significant statements and quotes. Identifying and analyzing recurring themes found within participant narratives allowed me to gain a deeper understanding of participant perceptions of their experiences. In addition to transcriptions of participant interviews, the reported reflections of my own experiences were also analyzed using the same method of horizontalization and reduction.

Ethical Considerations

As a researcher working through an accredited university, I am bound by the Tri Council Policy Statement II (Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, and Social Sciences and Humanities Research Council of Canada, 2014). Adhering to this policy statement ensured the safety of my participants and the integrity of my research. The policy is framed by three core principles – “Respect for Persons, Concern for Welfare, and Justice” (p.6). Through strict adherence to issues of consent, fairness and equity, privacy and confidentiality, and awareness of conflicts of interest, as outlined by the Tri Council Policy, my research was conducted ethically and framed by the core principles of the Tri Council policy. I outline my ethical research practices here.

Due to the sensitive nature of the subject of infertility, the qualitative approach to the data collection, and my personal biases towards the subject matter, ethical considerations played a key role in the research methodologies. Ethics approval was sought from the Western University ethics board (www.uwo.ca/research/), and no recruitment or data collection took place before receiving ethics approval for this study. My main ethical concern was that of the protection of the study participants. It was extremely important that participants fully understood the research study’s aims and the procedures that would be followed throughout the study. Participants were provided with a letter of information, which fully explained the purpose of the study, as well as the data collection methods. Participants were encouraged to ask questions regarding the study through three different avenues: telephone conversation, email, or in person. Participants were asked to sign a letter of consent once they had read and understood the letter of

information and had asked any questions they may have had regarding the study. Questions and comments were encouraged at each of the three personal interviews.

Participants were informed of my understanding of the sensitive nature of the subject matter as well as of the qualitative approach to the research. Participants were provided with an extensive list of resources for the purpose of understanding the study, and for use in case of emotional or psychological upset before, during, or after the research study was conducted. These resources included, but were not be limited to, contact information for counselling services local to the participants, as well as helpful websites relating to infertility. Participants were reminded at every interview that at any time during the study, they were free to not answer questions that they perceived as uncomfortable, and that they would also be free to stop participating in the study at any time. This information was provided to all participants in the letter of information, as well as at the beginning of each interview.

Participants were informed of the confidential nature of this research study. This information was provided in both the letter of information and in person at the beginning of each interview. Participants were informed of the methods by which their confidentiality would be maintained, such as the use of either a false name or a numeric code for identification purposes (Ary et al., 2014). Identifying information such as participants' workplace or home contact information are not mentioned in this study, and all data collected from the participants has been stored on my personal audio recording device (temporarily), personal computer, and personal external hard drive (for up to 7 years, as per ethics regulations). All storage devices will be kept in my possession at all times or be stored in a locked room when I am not present.

Methodological Reflections

According to Denzin and Lincoln (2005), qualitative research “turn[s] the world into a series of representations,” (p. 3) leaving the researcher to interpret lived experience and phenomena “in terms of the meanings people bring to them” (p. 3). In framing this research within the qualitative methodologies of phenomenology and feminist research, I sought to understand both the phenomenon of infertility and the unique gendered perspectives that each of my participants brought to their experiences. The phenomenological approach seeks to derive meaning from lived experience through reflection upon “the social and cultural situatedness of actions and interaction, together with participants’ interpretations of a situation” (Cohen, Manion & Morrison, 2018, p. 21). Gathering thick, descriptive contextual data regarding participants’ personal and professional lives informed the process of interpreting meaning from these women’s perceptions of their experiences with infertility.

My own epistemological beliefs and values evolved through learning about feminist research methods. I came to feel strongly that, as women’s ways of knowing are shaped by our gender, including this perspective in my research was important to my aim of exploring the gendered meanings behind the ways that women experience infertility and singing. What I failed to realize in approaching this research from a feminist perspective, however, is that there is conflict between the phenomenological approach and feminist research. This conflict arises when the phenomenological researcher is expected to acknowledge her own experiences and knowledge (‘bias’) and set them aside so as not to impact the research in any way (‘bracketing’). This method of bracketing does not belong in feminist research, as one of the key points in feminist research is the understanding

that researcher subjectivity is inevitable. Code (1995) states that objective and value-free research ideals “are best suited to regulate the knowledge-making of people who believe in the possibility of achieving a “view from nowhere”...that seems to allow them, through the autonomous exercise of their reason, to escape the constraints that location within specific bodies and sets of circumstances impose upon all human knowledge-seeking” (p. 15). This positivist way of knowing is opposite to feminist ways of knowing, as the main objective of feminist research is to interpret and understand the world from our unique and value-laden positions within it.

Were I to do this research again, therefore, I would not shy away from the gendered position I hold within it, nor apologize for the insight that my lived experience with infertility and singing bring to this research. I would clearly and firmly position myself as a feminist researcher whose methodology is informed by her desire to co-construct knowledge with her participants. The in-depth interview process would not be constrained by the phenomenological process of bracketing, as I now have a better understanding of the importance of reflexivity in feminist research.

Results

The purpose of this study was to examine the connections between the phenomenon of infertility and female singer identity through the analysis of interviews I conducted with two women. All interview transcriptions were coded, and pseudonyms were used (Jillian* and Michelle*). The results reported in the following chapter were obtained through multiple readings of interview transcriptions, following the guidelines set out by Ary et al. (2014). Through the processes of horizontalization and reduction, significant quotes were isolated within the transcriptions and meaning drawn from these statements regarding the Jillian and Michelle's experiences with infertility and singing.

Adhering to the reflexive approach governing my feminist method of research, I remained sensitive to the differences and similarities between my own and Jillian and Michelle's experiences with the phenomenon in question while analyzing interview transcriptions. This approach proved beneficial in legitimizing the two women's testimonials, given the highly subjective nature of this research. This approach also benefitted the analysis and reporting of the results of the interviews. By maintaining awareness of my position as a woman who has felt that infertility negatively affected her gender and musical identities, and thinking and writing reflexively about my own experiences, I was also made aware of the positive impact of my experience with infertility. Through this reflexive approach, I became more cognizant of my reactions to Jillian and Michelle's perceptions of their experiences which felt contradictory to my beliefs surrounding the impact of infertility on female singer identity. I became much more conscious of my biases and made a concerted effort to set these biases aside while analyzing and reporting on Jillian and Michelle's testimonies.

Upon multiple readings of the interview transcriptions, it became clear that the phenomenon of infertility was a unique experience for Jillian and Michelle. Infertility's impact upon gender and musical identities was discussed at length during the interviews. Musical and gender identity formation and evolution are processes particular to each person and were dependent upon participants' individual life experiences. The overarching theme that emerged throughout the analysis process was the impact of infertility on each woman's life course. Jillian and Michelle's discussions of their personal and professional lives revealed a great deal about their gender and musical identities and the ways in which infertility played a role in the development of these identities. These concepts will be discussed below.

Participant History

Jillian is a 39-year-old music therapist, voice instructor, and choral director who also sings and plays percussion in a contemporary blues band. When Jillian was adopted at the age of four, she began singing in her church choir while attending church with her adoptive family. She continued to engage in singing activities throughout elementary and high school and into university. Originally, Jillian attended university for kinesiology but switched to music therapy after her first year. It was at this point in her life that she became interested in the connections between the body, mind, and music. Jillian has practiced music therapy for sixteen years and has recently completed her Master of Music Therapy degree. For the last sixteen years, she has directed a church choir and recently began directing a large community choir. Since graduating from university, Jillian has engaged in professional development within the field of choral conducting through workshops, masterclasses, and private instruction.

Jillian and her husband were given their diagnosis of infertility when Jillian was thirty-three years old. Since being diagnosed, they have undergone numerous fertility treatments, including artificial insemination, reproductive surgery, and two rounds of *in vitro* fertilization (IVF). These processes have thus far been unsuccessful. For the last six years, infertility has impacted Jillian's identity from both a physiological and psychological perspective and has affected her both personally and professionally.

Michelle is a fifty-three-year-old professional singer and voice instructor. She began singing at age seven when she participated in musical theatre productions. Throughout high school, Michelle sang in the school choir, and her choral singing continued throughout her years at university. She earned her undergraduate degree in vocal performance at a university in the United States. She continued her education to earn a one-year graduate diploma, and worked as both an apprentice at an opera company and a teaching assistant in a Master's program for voice performance and vocal pedagogy. Michelle's professional singing career began twenty-five years ago. Her professional singing activities include opera performance, solo recital performance, and voice pedagogy.

Michelle was diagnosed as infertile in her early forties. Her diagnosis came as less of a surprise than Jillian's, due in part to having always had irregular periods, as well as surgery to have cysts removed from her ovaries as a teenager. Michelle conceived a child at the age of 21 while in university, and had the pregnancy terminated due to her age and the desire to continue her post-secondary studies in music. When Michelle and her husband at the time were unable to conceive after approximately one year of actively trying to get pregnant, they sought medical intervention by means of fertility testing.

Michelle was diagnosed as infertile at the age of forty-two. She and her husband divorced within two years of her diagnosis. At forty-eight, Michelle believed herself to have become pregnant during a short-term relationship, but this proved to be a false alarm. Ultimately, Michelle's childless, or child-free, status has allowed her to focus on her career as a singer, contemporary voice specialist, and voice instructor, and at 53 years old, she feels no regrets about not having children.

Personal Identity

On a personal level, Jillian struggles to feel whole as a childless woman. When asked for a more detailed explanation of this feeling, she said

I always envisioned that I would have a child...my thought of what would be a complete person, a complete me, was having a child, so that certainly makes it feel like there's a piece missing, and...not being able to create a family...which includes a child...not being able to succeed with that has not made me fully the person that I could be.

Jillian's feeling of not being whole as a childless woman stems, in part, from her adoptive status. Jillian was always aware of the fact that she had no biological connection to the family she was raised by. This awareness sparked her desire, from a young age, to one day create a family. After unsuccessfully searching for her biological family when adoption records were opened in 2000, Jillian's desire to have children of her own intensified.

I always had wanted to, um, have my own blood family. Like, someone that was related to me through blood, you know? And then when I couldn't find- when I got this information and really didn't find anybody, it became more of that- that

feeling became much stronger where it was like, ok, I'm clearly- unless something happens, um, I'm probably not going to discover someone, so I really wanna have, you know, a child that, that, you know, in some way I can continue my genetics through, right? ...so yeah, that has been...one of the things that has been really hard to kinda get your head around

The feeling of being incomplete that Jillian discussed in our interviews has recently made her question her motives for continuing her education at the graduate level. This spring, she completed a Master's degree in Music Therapy and is now considering working towards a Doctoral degree in the same field. While she loves to learn and to keep busy with school and work, she wonders whether her desire to continue to further graduate education might be an attempt to fill the space she feels her childless status has created in her life and within herself. In our first interview she stated

I sometimes feel like I'm filling a void. Um, and I mean, I'm *not*, but I do wonder if part of my desire to, you know, keep busy and do things, and accomplish- um that's part of my nature anyways, but am I over the top with it at times because I have more time and because I, you know it helps me to, um, you know, gain a sense of self and a- that type of thing that I might get from having a child. Yeah I do think about that, for sure.

Jillian and her husband are currently considering whether they are prepared to attempt another round of IVF. Jillian is beginning to feel that her age may play a factor in the likelihood of successful treatment. She will turn forty later this year, which concerns her due to the elevated risk factors that may be involved with a pregnancy at this later stage in her life. Another prevalent concern for Jillian and her husband is the potential

stress that more treatment may put on their relationship and on their personal and financial lives. When I asked Jillian how she felt about the idea of waiting to try more fertility treatments, and what impact she thought more treatments might have, she replied

I think my husband and I have a good relationship- we, we talk a lot, um, about that and how that makes us feel, um, you know, um, and, and I think what we struggle with is the timing- when is the right time to try again? Um, you know, some of the- there's other factors obviously, money and, and, you know, what's going on in our lives, but, you know, is this the right time to try again? Um, am I ready to go through this another time? Like, physically, mentally, um, you know, is he- are we together, are we- is this- at some point is this gonna put a strain on our marriage, um, is it, yeah, is it gonna have a negative impact?

From a financial standpoint, the burden that infertility has put on Jillian and her husband has been heavy. Fertility treatments, especially more complicated ones such as IVF, can cost upwards of \$15,000.00 per cycle. While one of Jillian's IVF cycles was covered by a government grant, she and her husband paid out-of-pocket for the other. They also paid for the testing and other treatments prior to turning to IVF, which is often a last resort when other treatments have been unsuccessful. Jillian said she felt fortunate that they did not have to go into debt to pay for their treatments but resents that they had to draw money from their hard-earned savings to cover the hefty costs. As a result of spending their savings on fertility treatments, Jillian feels as though she and her husband have had to work harder to earn money than they would have if they had been successful in conceiving naturally. She said "it has affected our future in- I mean, that's hard to say

‘cause I don’t know what the future holds, but knowing that some of the money that we had put aside for the future is not there anymore, um, I feel like I’m- I feel like I’m working harder than I might be if we had had a child and we had that sort of knowing that the savings were there.” This additional burden creates added stress to men and women who seek treatments for infertility. For Jillian, like many other working women, she now felt more pressure to work through the difficult times while undergoing treatments.

Neither Jillian nor her husband were willing to turn to their families for financial help, which Jillian stated was due to pride and discomfort.

Definitely we could have [asked family for money]. Um, I know there would be different family members that- my brother, for one, that would have, you know, in a heartbeat, done it. So I think it’s a pride thing for sure, um, you know, it’s already something that we don’t necessarily want to be talking a lot about, and then to have- have to sort of go to someone and say “Look, um, this is our situation that already sucks, now could you help us out with, you know, a little bit of, of money.” It just was not something that was ever in our comfort zone at all.

Despite shouldering the financial burden alone, Jillian and her husband feel grateful to not be in debt as a result of their fertility treatments. Spending money on something that Jillian says she “should just be able to do with my husband naturally” has been emotionally difficult for her. The combination of spending large sums of money on procedures that were not guaranteed to work and knowing that people were profiting from their difficult journey was “crazy maddening” for Jillian. She chose to think about the financial strain as little as possible in order to cope better with the reality of being infertile.

In contrast to Jillian, interestingly, Michelle currently does not identify with being infertile. At the end of our first interview, she stated that she perceives her journey with fertility as “complicated,” saying “I wouldn’t call myself infertile. I would call myself somebody who has been fertile and then dealt with infertility and then maybe dealt with fertility and then, and then it’s just in this place right now which is really happy that I don’t have children (laughs).” Similar to Jillian, Michelle’s experiences with fertility and infertility have impacted her identity in a cyclical manner, causing her to identify with potential motherhood from different perspectives at different points in her life.

For most of Michelle’s life, she felt no desire to have children, which she perceives as being linked to emotional and physical abuse she suffered as a child at the hands of her mother. She stated she was afraid she may have inherited her mother’s “crazy gene” and feared her abusive upbringing might somehow negatively impact her parenting skills. She said “I didn’t even think about having kids. I didn’t think about it until I got married and then realized that maybe we...*should* start thinking about it. Mostly because my husband...would have been an amazing father and I didn’t want...for him not to have had that opportunity.”

Michelle and her husband sought medical intervention for infertility by means of fertility testing. At the time she was working as a voice instructor at a university but didn’t feel the testing processes impacted her ability to work, despite the sometimes painful and invasive testing procedures she endured. Michelle discussed not being overly surprised by her diagnosis of infertility, stating “it’s like, weird ‘cause I have...this ghost of, like, this experience [her abortion], and then- so [at] 21 I had- I was fertile, and then never- it never happened to me again. That I know of. It’s possible I had a miscarriage

one year...but I'm not sure." Michelle's diagnosis included strongly-worded advice from her doctor that she not attempt to conceive, as her age (she was 42 at the time) was likely to cause birth defects in the child. She discussed her reaction to her diagnosis in more detail, saying:

We never had a cry about it, like, we never kind of...I think I did. I mean, I don't really- like when I finally was, like, oh, so this is never gonna happen. I kind of went, wow, um, the finality of it kind of- ...it made me upset, I mean, I think I was more upset- um, I remember having, uh, like a moment with my- like thinking about the anniversary of my abortion...thinking oh you know, I could have had a child that was however old by now. I think that was maybe more emotionally kind of upsetting to me than the fact that- but I *do* remember, I do remember getting upset. I remember it affecting me, but I don't remember going- I kind of maybe had a cry and then went, ok well then, aren't I lucky 'cause now I can just focus on me! And...ok, there's an answer.

This statement reveals the complexity of emotions involved in a diagnosis of infertility, given the mixture of both negative and positive reactions that Michelle had to her diagnosis. Michelle and her husband ended their marriage after a few years but remain friends to this day. Her now ex-husband went on to remarry and have a family. When I asked Michelle whether she believes her marriage ended due to her inability to conceive, she said she didn't think this was the case. Michelle discussed the ways in which both she and her husband felt that something was missing in their marriage. They questioned what that missing piece could be and thought perhaps it was their lack of children. They discussed whether having children was something they wanted or needed

in their relationship, which lead them to begin actively trying to conceive. Ultimately, Michelle realized that the issue in their relationship was not their lack of children, stating “there was something missing maybe, in the marriage, which turned out to be the fact that we needed not to be married.”

Social Identity

Infertility has negatively impacted many of Jillian’s social interactions. She discussed the fact that she and her husband do not often discuss their fertility journey with others, saying “we’re just not big on broadcasting that stuff, big on keeping our privacy, um, and I suppose there was some, you know, a little shame or a little feeling of, um, you know, uncomfortable...” Jillian perceives this shame and discomfort as being partially caused by a sense of those she speaks to about her fertility issues “feeling bad or sorry for you.” She perceives this as a visual cue from others - a look of discomfort – as well as reactions of awkward silence from the listeners. Another perception Jillian has of discomfort is during social interactions with friends who have children. She states that she often feels resentment towards her friends who have big families and those who get pregnant seemingly by accident. This resentment is a difficult feeling for Jillian: “and I know that’s not a, it’s not a, you know that’s not a proud thing, but it’s there for sure.” This statement demonstrates that in addition to Jillian’s infertility creating a divide between herself and her friends and family, she suffers guilt for the discomfort and resentment created by this health issue that is out of her control.

Further to Jillian's sense of shame, discomfort, and resentment, isolation plays a key role in her social identity. She described the difficulty she faces with two of her closest friends:

My two best girlfriends both have families and, um, they end up doing a lot of things together because they're doing children-related activities...I have, um, been with them where we've done things like that and I find myself, you know, depending on where I'm at that day in my head, sometimes I just had to leave, sometimes, you know, and then of course that- I feel really guilty for just, you know, up and leaving my friends...other times I'd just get really angry and I would, and I would be sort of not acting like myself and they'd be kind of like, well you know, like, "what's going on with you? What's up?" And then I would have to apologize, and I would, you know I would get emotional and it was embarrassing because I'm getting emotional over something that they don't quite understand...we just don't see each other as much because they're reluctant at times to invite me in something that's involved with their kids because of my past reactions, and I'm reluctant to, you know, go and involve myself at times because I can feel that, ok this is just, I'm just, you know I'm tired and I can just feel that my emotions are gonna take over, right?

The situation described here by Jillian reveals the broad range of emotions involved in her social experience of infertility. Guilt, anger, embarrassment, isolation, emotional upset, reluctance, and shame all play a role in her daily social experiences. These feelings do not come up solely in social situations with friends, however. Jillian also describes the ways in which infertility affects her social life at work:

I work with a lot of people. When you're in music you connect with a lot of people and, unfortunately some people ask questions that perhaps are not appropriate and none of their business, but nonetheless they ask them and I always felt shame because I wasn't honest with them, um, you know, people asking you "oh, are you trying to have kids?" and I would just say no because I did not want to get into that, and, and really feeling like they knew I was lying. I could feel my face going red and, I- I'm, you know I don't like lying, so that- it was just this whole, like, you know, and yet I was certainly, in no way prepared to tell these people what was going on. So it was like this, I felt like I had to lie but then I felt shame because of that, um, and I really felt like, um, you know, when people asked that I got really angry that they were asking it and then I felt shame because I was, like, well, you know, they're really- they can ask whatever they want, it's really up to me to decide how I'm going to answer that, right?

This quote reveals how Jillian's role as a public figure within the musical community exposes her to numerous social situations that often leave her feeling isolated, vulnerable, and uncomfortable because of her childless status and journey with infertility.

Infertility has also had a negative impact on Jillian's interactions with family members; most notably with her parents. She stated that her relationship with her parents is not very close and, as a result, has "kept them on the outside" of her struggle to conceive by sharing very little information about her experiences with infertility. She feels guilty for not being more open with her parents. Jillian also feels guilty for not providing them with grandchildren the way her brother has been able to. She perceives her lack of children to negatively affect family functions, stating:

there is that sort of barrier where it's like that elephant in the room at times, that something comes up- so, my brother has kids. So if we're in a family situation, you know, um, that is, you know, somebody will say something and it is very, um, harmless, and yet it's that, there- then there's this awkward silence where it's like, "oh ok, well we can't really talk about that because we know they're trying and they can't," you know, and it's just like, oh man!...

Jillian's social interactions with family, friends, co-workers, and even strangers have been marred by her childless status and her experiences with infertility countless times, leaving her with feelings of guilt, awkwardness, discomfort, and isolation. She is unsure whether these feelings will ever dissipate, but she hopes that they will lessen over time.

In stark contrast to Jillian's negative social experience with infertility, Michelle perceives her childless status as a positive aspect of her social life. When asked how being child-free affects her socially, Michelle replied "It's great!" She enjoys the freedom of having to be responsible only for her own wellbeing, although she does enjoy looking after her friends' children very much. Michelle is happy she has the time to focus on her own personal and professional needs, saying "I like my self-focus, I like being self-absorbed." Although she perceives her own life as being fulfilled without children, she states "I admire my friends who have kids who are also able to have incredibly full lives as parents, as partners, as, um, creative beings...I have friends who...work full time and like, they have- they do all this stuff and they still feed themselves, their souls, and they still are good parents, and like, I don't think I could do that (laughing)."

When discussing whether infertility had affected her social interactions within the professional sphere, Michelle said that she did not feel that there had been any negative impact. She spoke of her experiences working with female performance artists who have children and said that, although at times it could be frustrating when the mothers brought their children to work, being around the children was a good opportunity for her to learn about herself and about the women she was working with. Overall, Michelle said that it is easy for her to be around children and not at all awkward.

From a family perspective, Michelle recollected only two instances where her fertility issues and child-free status were brought up by her parents. She and her husband at the time had told her father about the fertility testing they were going through, and her father had asked her whether they would consider adopting, as his own sister had done when faced with infertility. Adoption was not something that Michelle had any interest in doing, however. No other interactions occurred between herself and her father regarding having – or not having – children. Michelle did discuss having one negative interaction with her mother regarding not having children, which involved a letter that her mother had written to her:

I think before I even looked into fertility and it was before we even had decided to try for children, but she made a comment about me being barren and I was like, really- like it was a horrible thing for her to say. And, yeah, barren, like, first thing a) I knew that wasn't the case because I had had the possibility- I had been- I had a pregnancy, so I actually wasn't a barren person, but yeah, um, it was hurtful. It was ugly.

When discussing her younger sister who has two children, Michelle said that her sister had a strong desire to have children, even though she herself never had.

You know, my sister has two kids, I never got jealous about that. They're amazing kids. Um, she at 34 was like, "Oh my god, I need to get pregnant this very second" and so she did. And she got pregnant, like, one night, and then they got married, like, whatever, after she's- 5 months later, and, uh, you know, and it was like- and she's been with the same man ever since and they should have probably gotten divorced, like, a long time ago. But, yeah, she's miserable and has two great kids... We both had a traumatic childhood, which is probably why she's so fucked up and- just like my mother and, you know, but yet her kids are alright!

Overall, Michelle did not perceive her experience with infertility to have impacted her socially.

Professional Identity

From a professional perspective, the psychological impact of Jillian's experience of infertility has touched both her music therapy practice and her job as a choral director. The core of Jillian's philosophy of music therapy and choral conducting lies in her ability to connect with the people she engages with in a musical capacity. She spoke of "the satisfaction of connecting with another human through music;" a theme which emerged numerous times during all three interviews. Jillian relates both her music therapy practice and her choral experiences to Christopher Small's (2002) approach to 'musicking,' whereby music is viewed as a verb; something active that all people participate in,

whether actively or passively. Jillian applies this approach in all her musical endeavours and feels that infertility has had a negative impact on her ability to ‘music’ with others.

Jillian has struggled when working with children in her music therapy practice, at times losing the desire to engage with children and their parents due to the emotional strain she felt regarding her inability to conceive. The emotional impact of Jillian’s infertility has made it difficult for her to connect with her young clients and her choir members at times because of how certain repertoire affects her emotionally.

Some songs have just hit me so hard in what the song is about, about the words and, um, even sometimes a melody can just be so beautiful, um, if it’s something that- uh, I did a couple kids songs, songs that were written and were about kids and the, the melody and the, the power of that, and the simplicity, the sort of nursery rhyme, um, aspect of these melodies were, you know, your mind then starts to wander a bit and, and it really was very difficult. Um, and there were a couple times where...I was conducting and the same thing it was, it was just hearing the choir singing that and the, the impact of all of those voices coming at me and singing those words, and, you know, I’m trying to keep it together because I’m trying to lead these people and yet I can feel my- I can feel myself shaking, I can feel these tears and these emotions coming on.

At times, the emotional and psychological impact of infertility and the fertility treatment process have made it difficult for Jillian to connect with her choir in the rehearsal setting. She discussed her frustration with “not really being able to...create music and make music that was genuine because it wasn’t coming from a genuine place.” Jillian enjoys directing choirs immensely and stated that she has a lot of fun working with

the choristers and sharing music with them. In the weeks prior to, during, and after undergoing fertility treatments, however, she felt unable to enjoy her job as a choral director, saying “I was distracted, I was, um, unhappy, so I was just sort of faking it, and I hate that. I hate when I’m not myself, um, because I’m genuinely a happy person.” The changes in mood and personality that Jillian perceived were distressing to her. They affected her ability to engage in and perform her work to the best of her ability. These aspects of the process of fertility treatments are something which Jillian must confront every time she contemplates undergoing more treatments, making the decision to continue her fertility journey more complicated. These decisions may be more difficult to make when taking into account the physiological stress that fertility treatments can put on a woman’s body.

Physiologically, Jillian’s experience with the fertility testing and treatment processes caused her a tremendous amount of fatigue, exhaustion, and physical discomfort. She found that the fertility treatments she went through affected her ability to work, to the point of having to change the way she practices music therapy. One example of this is Jillian’s need to alter her approach to her therapeutic sessions so that they were not as active or physically taxing. The fatigue and physical discomfort she felt during the 6-week IVF cycles meant that she could not physically engage with her clients at her usual level of intensity. Jillian’s professional endeavours as a music therapist and choral director rely heavily on singing. Within the music therapy context, Jillian sings almost daily as she works with clients from premature babies to the elderly. As a choral director, Jillian leads her community and church choirs through rehearsals on a weekly basis.

During her second round of IVF treatments, Jillian perceived her voice to have changed. She described the first time she encountered this change while writing a song for work, saying she felt “like the timbre of my unique voice was different. It was- it wasn’t me, you know what I mean?” When asked whether this perceived change in her vocal timbre was permanent, Jillian replied “I feel like it did change it permanently. Not in a huge way, but I don’t feel like I sound the same now than what I did before.” The perceived change in the timbre of her voice led Jillian to feel as though her identity as a singer had changed at a deep level, causing her to question whether her voice was still her own. She has a deep understanding of the connection between the body, mind and voice, and she identifies strongly with her ability to communicate with, and connect to, others through singing. The change in timbre of her voice, which she discussed as something she was not made aware of as a side effect of fertility treatments by her doctors, caused Jillian to reflect upon her decision to proceed with fertility treatments. Her reliance on her voice to both earn a living and to feel fulfillment in her musical career was something that Jillian was extremely cognizant of, and so the change to her vocal timbre concerned her greatly. This, in turn, impacted her professional life as she navigated the physical challenges of using her changed voice.

In contrast to Jillian’s experience with infertility and her career, Michelle did not perceive her child-free status to have a negative impact on her professional life. In 2005, Michelle was offered a job at a university in a different province from where she and her husband were living. She described the experience of moving to a different province and starting her new job. “I was in my marriage at the time and, we had been- we had just, like, decided that we needed a change anyways...I was thrown into that and I was, like,

great! And it was amazing!” Michelle and her husband bought their “dream home” and settled in to their new life.

And we were like, you know, serious nesting, like this was this amazing house, this, like, three-bedroom house, and we were just, like, this place in the country, gorgeous view...it was, like, really, like, couldn’t dream of anything better. And I had my teaching job and he had, like, kind of a shitty job but it was, like, you know, at least I had my teaching job. And then, um, we were, like, going forward and that.

It was at this point that Michelle and her husband began to actively try and conceive, unsuccessfully, and subsequently sought medical testing for infertility

When Michelle was 48 years old, after her divorce, she experienced a ‘pregnancy scare’ while in a short-term relationship. Within a few weeks, she discovered she was not pregnant, and felt a range of emotions during this time. She described these feelings in our second interview. “I was like, I can- I might be able to get pregnant?! What the fuck?! And then I was, like, thinking- I was, like, looking at my calendar of performing and going, this can’t happen then. What would?- No, I was totally relieved, completely.” In addition to being concerned about the potential health risks to herself and a baby in a later-life pregnancy, Michelle was concerned that having a child would negatively impact her career as a professional singer. As a woman with a lot of freedom to travel back and forth across the country for work, the idea of being restricted professionally by a child was one that did not appeal to Michelle. In contrast to a feeling of relief upon discovering she was not pregnant, however, Michelle also reflected on whether a pregnancy at this

later stage in her life should be considered a potential gift. She questioned whether she should keep the pregnancy when she first believed herself to be pregnant. It was a complex situation for her, both personally and professionally.

Singer Identity

Interestingly, during our first interview, when I asked Jillian whether she had ever done any solo singing, she replied “I did a bit, but it never was my thing. I don’t have a soloistic voice, and I always felt that I enjoyed the, um, camaraderie and the social aspect of the choir or band versus being more of a solo singer.” Later in the interview, I asked Jillian whether she sang within the music therapy context. She replied “I do. Personally, I do a lot of singing, so I guess when you say solo singing I think of, like, standing on stage and performing, but in my practice and in my work, my clinical work, I sing a lot.”

Jillian’s sense of disconnect from the perception of herself as a solo singer stems from her belief that her voice does not possess the unique strength and colour most desirable in a soloistic voice. She feels the timbre of her voice is instead more suited to choral singing, as it blends well with others. Jillian’s singer identity has been closely tied to choral singing since she was 4 or 5 years old, when she was adopted and began attending church with her adoptive parents and brother and singing in the church choir. Jillian continued singing in choirs and bands throughout elementary and high school and into university. The camaraderie and social aspect of singing in a choral and band context that Jillian mentioned play a large role in the way that she discussed singing throughout our three interviews. She often used the words human interaction, connection, community, contribution, and human relationship when talking about singing.

Jillian's desire to bring people together through music, and, more specifically, singing, reflects on her own desire to connect with others in the singing context. She does this within her music therapy practice on a daily basis. During our second interview, Jillian spoke of an especially important experience she had, involving working with a couple who had been unsuccessful in their fertility journey. While Jillian was at first hesitant to take on these clients, due to her own struggle with infertility, she found it equally as helpful to her own healing journey as it was to her clients. Jillian spoke to me of the benefits of singing within this particular therapeutic context, stating "it helped me as a person, sort of, to reflect on some of the emotions that I've been feeling, and it also helped me professionally...to realize the impact that music therapy could have on a pretty specific...population of...people, so that was, um, professionally that was very satisfying." Through singing and vocalizations, Jillian felt a shared deep connection to her clients which stems from not only having a common experience in infertility, but also through what she describes as the "intimacy and...vulnerability" created by singing together.

Clearly, Jillian identifies with singing in a positive way through therapeutic and choral mediums. Her experience with infertility, however, has disrupted her singer identity on many levels and created a cycle of what Loftus and Namaste (2011) call a "potential identity" (p. 36) in relation to Jillian's goal of motherhood, as well as her musical career path. The potential identity of 'Mother' has lead Jillian to adapt her professional musical life in order to transform her potential motherhood identity into a permanent one through medicalized treatments for infertility. More specifically, she spoke in-depth about the waiting and adapting life course decisions that has been

involved in her pursuit of motherhood and the ways in which this has impacted her life, both personally and professionally.

I think about it everyday. I think about it pretty much one of the first things I wake up and one of the last things I go to bed...the waiting is just one of those- it's just another one of those unknowns that, you know, you have to somehow come up with a way to justify that, ok, a month from now we are going to try one more time and that's because of this, this, and this, right? So, you know, you're trying to kinda line everything up and plan things out, but life doesn't work that way...at some point you have to kind of let go and just trust that this is the right time.

The waiting has been difficult for Jillian and she has struggled to remain patient in the face of so much uncertainty regarding her future. She considers herself to be a productive person who takes pride in her accomplishments and feels the need to finish things and move on to the next step. In relation to Jillian's singer identity, putting off life decisions has the potential to disrupt her career and her continuing educational pursuits. Proceeding with more fertility treatments also has the potential to disrupt Jillian's singer identity if she experiences negative physiological and emotional effects similar to the other times she has participated in fertility treatments. At this point in time, Jillian and her husband are hopeful that they will conceive naturally, as they have twice before. Sadly, both of those pregnancies ended in miscarriage.

I turn 40 at the end of the year. Is this, is this, are we, you know, do we try one more time and then that's it? Um, so it's, yeah, it's just all those unknowns and, and, um, really finding the right time, um, once I'm done school in a month, you

know, we think that this, we're just gonna sort of have a couple weeks just to, you know, for us to kind of recover and then really make a decision and, and, um, yeah, and then, obviously living with that decision, right?

Jillian's personal and professional lives are both in a state of potentiality, as she struggles with the decision to either attempt one more cycle of IVF or focus on pursuing her PhD.

Michelle identifies as a singer from varied perspectives. During her elementary and high school years, she participated in singing regularly through solo performance in musical theatre productions as well as solo and group choral performance. She began private voice lessons at the age of eighteen and continued her voice studies at university from the age of nineteen. During this time, Michelle's voice developed from one of straight tone to one of freedom and colour. "I actually didn't know how to read music until I was 21, and I didn't realize that 'cause I always had a really quick ear." Although her classical voice training did not begin until she was in her late teens, Michelle went on to succeed in a national voice competition and to perform in operas through her post-secondary institutions and beyond. Her professional singing career began when she was twenty-seven years old. "I always felt like, like...I was a slow bloomer, like everything was really slow for me because the voice, it took a while for it to really develop...and the voice, like, it was, it just took a long time to mature." At first, Michelle's professional singing career did not advance, which she believes was due to the fact that she "didn't really know how to...infiltrate the music scene." For five years, Michelle had a varied performance schedule, participating in recitals, operas, and summer programs, but her singing career did not take off to her satisfaction. During this time, she also taught singing, worked in the film industry, and continued taking voice lessons. Then in 1998

she took a two-year break from actively pursuing her performance career to focus on her film work.

When Michelle discussed her singing career during our interviews, she often minimized her professional accomplishments. She described one of her lead roles in an opera as “kind of a big deal,” and mentioned many of her professional endeavours in an off-the-cuff fashion. She also discussed female Canadian singers of her “era” who have “skyrocketed to fame” and compared the level of one such singer’s performance success to her own:

Her career went, you know, went really wonderfully, um, and she’s singing all over Europe now and, you know, it’s great, and the voice sounds wonderful and, um, and, uh, yeah, I mean that’s her path. Um, I’m sure she works like a dog, like it’s- you have to, um- I know if I work harder- when I work harder things get, are better and I- but that still doesn’t change my path somehow, so I don’t know.

When asked whether she was satisfied with her career path, Michelle replied:

I’d like to be performing more. Would I like to be performing all over the world? Yeah! Heck yeah. Why not? Like, yes, I’d like to be more active as a performer. Why I’m in this place, it also satisfies me, like, being a producer of the work that I do. Like, none of those- all those people are just being hired to sing, and I actually get to create my own projects and part of me needs- like, I need that. I need that creative, um, availability for the person that I am. And I like to create new work and so, yeah, I mean, I’m on the right- I’m on the path that I’m on for a reason,

so- but, I would like to be more active and I think about that all the time, and I think about how that- how to be more active, so, I don't know, I don't...

In some instances, Michelle blamed herself for not having a more lucrative performance career. "Of course I blame my, my faults for me not, not- for me to not have gotten farther down the path...[if I] was maybe not so worried about getting things wrong that I could be further in my career, but then again, I'm at the place that I'm at for a reason and, yeah but I always had that, like, why didn't- like, 'cause I still don't practice very much unless I actually have a project on the go." Michelle considers herself both a perfectionist and a procrastinator, as well as lacking in self-confidence regarding her career as a professional singer.

Michelle discussed her vocal identity in detail during our interviews. "I'm a soprano...I have a very warm colour, um, a dark bottom, uh, coloratura extension...I guess you could call me a full lyric, but I don't have the- it's not the weight in the voice...I used to call myself, um, a lyric soprano with a well-developed bottom and a, um, coloratura extension...so I call myself a singer." Something I found interesting in our interviews was Michelle's use of the term "the voice" when describing her voice. I raised this point with her in our third interview and she was surprised at her own use of the term. "The voice? I did? (Laughs)." I raised this point with Michelle because of my own perception of my voice being something that belongs to me. I discussed my perception with her as an explanation as to why I was bringing the issue up. I asked her whether she also felt a personal connection to her voice.

Do I feel a personal connection to my voice?...Of course I do! So, yeah, I think it's just- I don't think it's, um, conscious that I say "the voice." I mean, it's my voice. I don't- I completely feel connected to it and own the fact that it's my voice and not somebody else's voice. Um, some of the work that I do, especially with sing[er]-songwriters is trying to make them, uh, realize that they have to find their own voice and not copy somebody else's voice...And I- for a long time that was me too, like, I don't know if I told you this before, that I wanted to be Lantine Price, because I thought that was the voice that I wanted to be...But, yeah, so "the voice". That was whose voice I wanted to be. Or the voice that I wanted to have. But then I realized that I had to have my own voice, and, yeah, I think I found my own voice through time.

Recently, Michelle began studying to become a certified Roy Hart teacher¹, exploring her voice through intense physical and emotional voice work. Within this therapeutic learning environment, Michelle has faced many of her emotional issues, including her abusive childhood, her abortion, and her experience with infertility. One particularly meaningful experience Michelle had while working one-on-one with her instructor at the Roy Hart Centre was especially poignant. As she worked with her instructor on an extreme low vocalizing technique, Michelle struggled with an exercise in

¹ The Roy Hart Centre in Melarargues, France, specializes in extended voice work for actors and singers. Opened in 1974, the Centre offers workshops in extended voice work focused on developing the expressive capabilities of the voice through therapeutic physical and emotional work. Roy Hart, a revered actor, founded the Roy Hart Theatre Company in 1965 after working with Alfred Wolfsohn, a voice instructor who rehabilitated his own voice after its traumatic loss during WWI. The Roy Hart Centre is a product of these two men's rich legacy.

which she was positioned in a very low, very open, relaxed position and was asked by her instructor to vocalize on the word ‘baby.’ She began crying and when asked by instructor “why?” she said “because I didn’t have any babies.” The instructor replied “but you’ve had...creative babies.” This was an eye-opening statement for Michelle.

The ‘creative babies’ her instructor spoke of were the vocal works that Michelle has commissioned and performed throughout her career as a vocal soloist. She continues to enrich her musical life through creative endeavours as a commissioner and performer of new vocal works and finds great pleasure and fulfillment in all of her singing endeavours. Regarding this experience, Michelle said “creatively, yeah, I’ve birthed a lot of, like, fabulous stuff and I’ve- and still things are...there’s incubation going on right now. Gestation is happening...and it’s like I’m full with that...It was a great chord to strike and...I’m so happy that she said that because it’s kind of let me kind of pass on through that.”

Jillian and Michelle’s interview narratives display varied perceptions of their experiences with infertility. Each of their singer identities have been impacted by infertility, though Jillian’s perception of this impact is negative while Michelle’s is quite positive. Jillian and Michelle’s singer identities are very different. Jillian prefers ensemble singing and bringing people together through group singing experiences. Michelle prefers performing as a soloist. Their singer identities, though unique, share similarities in the connections each woman perceives between their body, mind, and voice. The sensitive and connective nature of the voice is susceptible to physiological, psychological, and social disruptions. Infertility has the potential to create such

disruptions, as can be viewed in Jillian and Michelle's narratives. Therefore, infertility has the potential to disrupt singer identity.

Discussion

The results of this study reveal a complex and often contradictory perception of the impact of infertility on female singers' identities. Jillian perceives her experiences with infertility to have had a negative impact on both her personal and professional lives. In contrast, Michelle considers her experience with infertility, and her subsequent child-free status, to have positively impacted her life overall. This section will discuss Jillian and Michelle's experiences, and their perceptions of those experiences, in relation to the literature explored at the beginning of this paper.

Singer Identity

Both Jillian and Michelle's active musical lives began at a young age, with Jillian's earliest memory of music-making at four years old, and Michelle's at seven years old. Their processes of developing and maintaining their identities - "identitation" (Bergesen Schei, 2009, p. 221) - within the field of singing continued from this point throughout childhood, adolescence, and into adulthood, though each woman's singing journey was unique. Jillian's singer identity took the form of one who actively participates in group singing activities such as church choral singing and as a back-up vocalist in contemporary band settings. These experiences impressed upon Jillian a desire to connect with others through the process of making music through singing. As Jillian has developed from child to adult, her desire to facilitate music-making experiences within her community began to develop also. She derives great pleasure and satisfaction from facilitating music making within choral and therapeutic contexts by way of her career as both a choral director and a music therapist. Through these mediums, Jillian feels a deep connection to those with whom she works. The importance of human

connection through ‘musicking’ was evident throughout her narrative. Jillian’s identity as a singer is firmly rooted in her past and present music-making experiences, and her desire to continue along the path she has forged for herself within her musical community is strong.

In contrast to Jillian’s preference for – and identification with – group/ensemble singing, Michelle’s experiences as a choral singer and an opera chorus member have not brought as much satisfaction and fulfillment to her musical performance life as her experiences as a soloist with choirs and in lead operatic roles and recital contexts. Michelle self-identifies as a solo singer and extended voice specialist. Her extensive educational and professional experiences with singing activities include both group and solo-singing opportunities. As a soprano who derives much of her singing enjoyment from the solo performance of contemporary art song, Michelle’s singing career has taken her throughout North America and Europe over the course of roughly 35 years. She has taught privately in her own studio, as well as at the university level. Most recently, Michelle’s interest in the interconnectedness of body, mind and voice has lead her to explore extended voice work not only as a singer, but also as a private voice instructor.

Jillian and Michelle’s positions within the professional field of singing differ greatly from each other, yet their perceived physical and psychological connection to their voices display many similarities. Welch (2005) and Harrison’s (2014) discussions of the voice as a communicator of identity correlate to both women’s personal and professional musical endeavours. This is evident in Jillian’s desire to connect and interact with the people she works with in both therapeutic and choral singing contexts, and the emotional impact these interactions have on her own and others’ lives. Michelle’s work

as a voice instructor and extended voice specialist reveals an in-depth exploration of singer identity through the interconnectedness of the voice, body, and psyche in both herself and the singers with whom she works. Jillian and Michelle's musical identities differ most significantly in their perceptions of themselves as singers. Here, Bergesen Schei's (2009) term 'identitation' takes form through the differing musical backgrounds and experiences of each woman.

Jillian, whose singer identity has been shaped by multiple community 'musicking' (Small, 2002) experiences, does not self-identify as a 'solo' singer, though her work as a music therapist engages her in solo singing regularly. Jillian's perception of what constitutes a voice eligible for solo performance includes one which stands out from other voices. Her perception of her own voice, evidenced in her comments regarding participation in group singing activities, is one of blending and being more suited to choral and back-up singing. Jillian's statements regarding what she believes to be an acceptable colour and timbre of a solo singer's voice do not match her perceptions of the colour and timbre of her own singing voice. This has been further complicated by the change in timbre of her voice that she perceived following her second cycle of IVF treatments. During this time, Jillian began to feel as though her changed voice did not belong to her, which caused some distress and discomfort, ultimately altering her singer identity.

As discussed in Bergesen Schei's (2009) study on singer identitation, "it is impossible to distinguish the vocal instrument as an object separate from emotions" (p. 233). This statement is especially salient in relation to Jillian's interactions with singing activities both during and after her diagnosis of infertility. Jillian's personal and

professional engagements with singing were affected in multiple ways and on multiple occasions by the emotional turmoil and hormonal imbalances caused by her struggle to conceive a child. Congruent to Bergesen Schei's (2009) discussion of identity as a fluid notion, O'Bryan (2015) states that "a person's notion of self may change in response to changes in professional identity, personal identities and interactive identities" (p. 124). On a professional level, Jillian's notion of self has been challenged within her choral directing and music therapy activities when confronted with the emotional impact of sharing singing experiences with others. In this respect, a major challenge for Jillian has been the 'emotional labour' (Carroll, 2012) of disguising her emotions and concealing her experience with infertility among her community of choral singers and music therapy clients. In opposition to Jillian's desire for connection through singing activities, her experiences with infertility have often left her feeling isolated and disconnected from those around her.

For Michelle, the impact of emotion on the voice, as discussed by Bergesen Schei (2009), has been a topic of interest and study, both within her own singing journey and those of her students. Her training and work at the Roy Hart Centre has revealed to Michelle that her past and present life experiences play an important role in her ability to express herself and communicate through singing. Her singer identity, then, is impacted by her emotional, psychological and physical reactions to these experiences. Unlike Jillian, infertility does not seem to have had a negative impact on Michelle's singer identity, save for the experience discussed previously in which Michelle confronted her inability to have children while performing an extended voice exercise. This experience was deeply emotional for Michelle, and yet it brought to light the positive impact of not

having children. The realization that Michelle's creative fertility was as deeply fulfilling as having children may have been brought a sense of peace to Michelle that she had not previously felt. The freedom that Michelle claims to enjoy in her singing career and in her personal life is immense, and her identity as a singer has been developed and maintained in a positive way by the experience of *not* having children.

Infertility as Identity

O'Bryan (2015) states that the "construction of narrative identity becomes the way in which humans make sense and meaning of their lives" (p. 124). Since her diagnosis, Jillian has chosen not to discuss her childless status with those beyond her closest circle of family and friends. This leaves her with a dual-constructed identity; one which is on display in public, and another in private. Given her possibly temporary position as a childless woman, and the "potential" (Loftus & Namaste, 2011, p. 37) identity of Mother that Jillian currently embodies, it is understandable that she feels the need to protect herself from the unwelcomed inquisition of acquaintances and work colleagues while navigating her experience with infertility. The "hidden burden" (Whiteford & Gonzales, 1995, p. 27) of infertility that Jillian carries with her may also be translated into what Valeras (2009) terms a "hidden disability" (p. 1). Applying this concept to infertility implies that, much like people diagnosed with physical or cognitive disabilities (i.e. epilepsy, multiple sclerosis, celiac disease) which may not present perceptibly to the outside world, infertility may be viewed as a hidden disability. This may raise concerns for infertile women who do not wish to be identified as 'disabled' (Sternke & Abrahamson, 2015). It does, however, create a space for 'legitimizing' women's experiences with infertility that lead to emotional, psychological, and/or

physical pain and discomfort that negatively impacts their personal and professional lives. As can be derived from Jillian's experiences with infertility and the fertility treatment process, the emotional, psychological, and physical aspects of infertility may impede optimal daily functioning.

In Letherby's (2002b) discussion of stereotypes projected onto childless and child-free women, she discusses the socially-constructed primary role of women as Mother. Within this discussion, the author explores "issues of identity, support and kinship in relation to life course issues and the experience of 'voluntary' and 'involuntary' childless women" (p. 7). Similar to Letherby (2002b), aspects of my study support the idea that stigma is created by projected stereotypes surrounding women who do not have children. One such stereotype is that women who wish to have children, but are unable, are perceived as lacking in some way by the social 'norms' inherent in Canada (and many other pronatalist societies). Jillian's perception of her involuntarily childless status as a void within herself reflects these stereotypes. The social stigma that infertility has imparted upon her is a testament to the beliefs of her community - of family, friends, colleagues, and acquaintances – and of society as a whole, that being a childless woman, whether voluntarily or involuntarily, is not 'normal.' Importantly, Jillian's desire to conceive a child of her own also stems from her position as an adopted child with no active social connection to her biological family. Her feelings of biological disconnect from her adoptive family thus play a large role in her perceptions of herself as an infertile woman.

As discussed by Greil, McQuillan and Slauson-Blevins (2011) and Galhardo et al., (2011), Jillian's pursuit of medical intervention for infertility may also augment her

feeling of being incomplete. The medicalization of infertility denotes the experience as one which may be ‘fixed,’ and the woman experiencing it as one who is ‘broken’ in some way. Jillian’s multiple attempts to conceive are similar to those of many women who undergo multiple treatments for infertility. Many women’s desire to be a mother far outweighs the invasive and often traumatic experience of medical treatments and loss. The question raised by this reality is: In what discourse is such a strong desire rooted? The stigma surrounding infertility is not only exacerbated by medicalization, but also by other dominant discourses. These discourses present within media, among social influences (family, friends, colleagues, etc.), and among the people experiencing infertility themselves (Letherby, 2002a; Letherby, 2002b; Sangster & Lawson, 2014).

Michelle’s narrative surrounding the stigma of infertility differs from Jillian’s. Despite Michelle’s belief that women’s biological reproductive make-up denotes a biological ‘purpose’ for procreating, she is comfortable in the knowledge that she does not and will not have children. At the time of her diagnosis, Michelle was told by her doctor that any attempt to conceive would be detrimental to the health of a baby, yet no mention was made of the impact to her own health. This form of medical address may be viewed as sympathetic to the pronatalism that exists in many societies, and the disregard for women’s health in regards to reproduction is yet another form of stigmatizing discourse (Letherby, 2002a).

As discussed in our interviews, Michelle does not identify with being infertile, despite her medical diagnosis, which aligns with Letherby’s (2002a) examination of the labeling of infertility as either ‘medical’ or ‘social’. For Michelle, biological infertility does not equate to social infertility. This is evident in her perceived comfort working

with, and looking after, other people's children. Her feelings of relief at not having the responsibility of raising a child also support this. Michelle's relief may be viewed as a positive reaction against the stereotypes of 'bereft' and 'selfish' that Letherby (2002b) discusses in relation to childless/child-free women.

Gendered Singer Identity

In this study, I explored Jillian and Michelle's gender identities within both personal and professional contexts in relation to their singer identities. Despite the literature (Dibben, 2002; Green, 1997; Ramsay & Letherby, 2006; Rolvsjord & Halstead, 2013) regarding the connections between musical and gender identities, neither Jillian nor Michelle perceived their gender to have impacted their singing careers in a significant way. When asked specifically about experiences within their professional spheres, however, I discovered some instances where gender did play a role.

Jillian spoke of her belief that being female may have had a positive impact on her music therapy career because of the sensitive nature of her work and the emotional connections formed between herself and her clients. She perceived her gender to be an asset, especially when working with children, because of the nurturing aspect of her therapeutic work. This is parallel to Ramsay & Letherby's (2006) exploration of women's role in academia whereby, in a professional role, women are expected to be "professional – efficient, expert, detached and objective – and on the other...to display so-called naturally womanly qualities – kindness, care and supportiveness" (p. 26). Congruent with Green's (1997) definition of femininity as "passive, reproductive, caring, emotional, contrary, as a part of nature, controlled by the body" (p. 27), Jillian's position as music therapist, music educator, choral director, and singer presuppose her adoption of

a mothering role within her professional endeavours. This presupposition becomes complicated for Jillian given her involuntary childlessness, as her mothering role is relegated solely to her professional endeavours, despite her desire to have children of her own.

Regarding any negative experiences with gendered assumptions, Jillian spoke in our interviews of her frustration when confronted by exclamations of surprised congratulations at the success of several choral concerts she has conducted. She perceived these audience and chorister reactions as based on their disbelief that a woman could conduct such a successful concert. Jillian found these encounters frustrating, as she does not believe that men and women differ in their ability to successfully direct musical ensembles. This resonates with both Dibben's (2002) and Green's (1997) conclusions that gender plays an important role in the meanings and assumptions behind musical performance. These conclusions are also pertinent to Michelle's role as a professional female vocalist.

As Green (1997) discusses, singers are especially vulnerable to gendered assumptions, as their performance constitutes a form of "display" (p. 21). This display emerges both externally and internally, as the body and the voice are perceived visually and aurally during live performance. Michelle's performance career has involved live performance in the form of staged operas and in the recital setting, and her teaching career has encompassed the private and post-secondary academic fields. During our interviews, Michelle discussed gender bias within the fields of performance and academia. Her experience leads her to believe that men (more specifically, male tenors) are more privileged within both the performance and education spheres than females

(more specifically, sopranos). This perception stems from the demand for male voices being seemingly higher than for female voices in performance and academic contexts, positioning men as more privileged and sought after. Michelle's perception is one which is rooted in thirty-five years of performance and academic experience and is supported by the literature on the feminine ideologies surrounding singing (Green, 1997; Rolvsjord & Halstead, 2013).

Gender and Infertility

Cook and Dickens (2014) discuss stigma as taking three forms: perceived, experienced, and internalized, in relation to infertility. Jillian and Michelle's experiences with infertility differ greatly, as do their perceptions of stigma in respect to these experiences. During our interviews, Jillian discussed at length the ways in which infertility has impacted her social, personal, and professional lives. Much of this impact has been negative. Socially, Jillian has encountered many awkward situations with family and friends which have led to feelings of shame and embarrassment relating to her position as an involuntarily childless woman. In her professional life, Jillian's desire to keep her infertility to herself has disconnected her from colleagues and peers, negatively impacting her interactions within all professional activities.

Jillian did not implicitly state in any of our interviews that her gender has played a role in the shame she feels towards her struggle with infertility. Her perceptions of having children as an act which may 'complete' her, however, point to what much of the literature discusses (Chester, 2003; Exley & Letherby, 2001; Galhardo et al., 2011; Greil, McQuillan & Slauson-Blevins, 2011; Letherby, 2002a; Letherby, 2002b; Loftus & Namaste, 2011; Sangster & Lawson, 2014; Whiteford & Gonzales, 1995), in that the

stigma surrounding infertility is generated by socially constructed and gendered 'norms' imposed upon women. These 'norms' have been reproduced, through many mediums and over the course of hundreds of years, to the detriment of involuntarily childless women.

Contrary to Jillian's perceptions, as well as the literature, Michelle did not mention, at any point in our interviews, feeling stigmatized by infertility either socially or professionally. As stated previously, Michelle's position as a child-free woman is one with which she feels comfortable. Within her familial interactions and relationships, the subject of Michelle's child-free status has rarely been broached and is therefore not an issue of social awkwardness for Michelle. Michelle does wonder, however, whether her lack of desire to have children stems from her abusive upbringing and became visibly upset when discussing the childhood trauma she suffered at the hands of her mother. This abuse may have skewed Michelle's gender ideologies from the socially-constructed 'norms' of what constitutes a mother, as the interactions with her own mother, including some experienced in adulthood, have left lasting negative memories. Her relationships with other members of her immediate family are varied but also play a role in Michelle's perception of women's role as Mother.

Michelle had a positive relationship with her grandmother, whom she interacted with frequently until her death when Michelle was an adult. She believes, however, that her grandmother's relationship with her mother was a negative one, in which her grandmother frequently gave in to demands for financial support from Michelle's mother. Michelle's relationship with her younger sister is somewhat tenuous. Michelle cares about her sister's children and does not harbour any resentment towards her sister for having had them. She does, however, believe that her sister's husband is a more positive

parental figure to their children than her sister. She believes her sister has been negatively impacted and influenced by their mother. Michelle perceives her relationship with her father as more positive than the relationship she has with her mother, and although he once inquired about her child-free status, it is not a topic of importance between them. Familial interactions and relationships play an important role in our lives, as they can heavily influence our ideologies. Michelle's family influences seem to have played a part in the choices she has made to remain child-free, which, as the literature discusses, breaks from the social 'norm' of women having children (Chester, 2003; Exley & Letherby, 2001; Galhardo et al., 2011; Greil, McQuillan & Slauson-Blevins, 2011; Letherby, 2002a; Letherby, 2002b; Loftus & Namaste, 2011; Sangster & Lawson, 2014; Whiteford & Gonzales, 1995).

Life Course

Chester (2003) states that "infertility fragments a life, infusing it with uncertainty and ambiguity" (p. 781). Regardless of the differences in Jillian and Michelle's perceptions of their experiences with infertility, the common thread between these two women is the impact that the phenomenon has had on their life course. This impact is perceived by Jillian as significant and negative, as illustrated by her reactions to the disruptions she has faced socially, personally, and professionally. Michelle's life course has been impacted by infertility in a no-less-large way, though Michelle perceives the impact as positive, evidenced by the fulfillment and satisfaction she finds in her personal and professional lives.

Jillian's life course has been disrupted by her potential identity as Mother since she and her husband began actively trying to conceive, and before she was labelled

‘infertile’. The diagnosis itself was a disruption to the ‘natural’ path to parenthood that Jillian had envisioned herself travelling with her husband and, thus, to the potential identity of motherhood that she embodied previous to her diagnosis. This potential identity was then disrupted by the pregnancies she gained and subsequently lost. The grief that Jillian feels surrounding the loss of her pregnancies is parallel to the grief she feels regarding the possibility of never becoming a mother. This is a grief for a life envisioned but potentially never attained. In dealing with this grief, Jillian is faced with decisions regarding her social, personal, and professional lives. Although Jillian’s journey with fertility is not yet complete, these life course decisions play a large role in her daily life at present. Thus, her life course and her identity are in a constant state of potentiality.

Michelle is currently at a point in her life where conceiving a child is no longer a biological option. Potential motherhood, however, was not an identity that Michelle ever consciously embodied. During the years when Michelle perceived herself as fertile, her life course decisions took her on a career path that she felt was incompatible with having children. Michelle’s unexpected pregnancy positioned her as Potential Mother, yet she chose to terminate the pregnancy for the sake of her desired life course. Her decision to pursue a professional singing career involving extensive travel was made with the knowledge that this life style may not be conducive to raising children in a stable home environment.

After establishing herself as a performer and educator, Michelle chose to marry, though still did not intend to have children. A short while into Michelle’s marriage, she and her husband made a conscious decision to actively try to conceive. This decision, for

Michelle, was not so much based on a desire to have children, as on a desire for her husband to be a father. She was nonetheless, once again, a potential mother. After being diagnosed as infertile, though Michelle stated that she was initially upset, the finality of the situation settled comfortably on her and she was able to continue nurturing her performance and teaching career. Michelle's 'pregnancy scare' at age forty-eight was another instance where she unconsciously took on the identity of Potential Mother, though this was not an identity that she wished to embody. Following the discovery that she was not pregnant, Michelle once again happily embodied the identity of child-free woman; an identity she continues to embody to this day.

Exley and Letherby (2001) explore life course disruption in relation to emotional labour invested by those whose lives are disrupted by infertility. The emotional labour cost of infertility is perceived by Jillian as considerable and constant, as her struggle to conceive has permeated every aspect of her life since she married her husband. Jillian has invested emotional labour into her social, personal, and professional lives, and continues to do so as she and her husband decide whether they will continue with fertility treatments. Because of these impending decisions, Jillian's life course and potential motherhood identity are still in flux.

Michelle, too, has invested emotional labour into her life course disruptions, though in a markedly different way than Jillian. Her investments were usually made on a short-term basis, as were her experiences with fertility and infertility, and she does not perceive them to have impacted her social life. Personally and professionally, Michelle perceived her experiences with infertility as having only briefly impacted her personal

life negatively. Ultimately, Michelle perceives her experiences with infertility to have impacted the social and professional aspects of her life positively.

Personal Reflections of Infertility and Life Course Disruption

Exploring Jillian and Michelle's experiences with infertility and singing brings to light the complexity of issues of identity that may arise when women in public performance positions challenge gender norms through infertility. In my own experience as a female performer and music educator struggling with infertility, I have faced challenges both similar and contrasting to Jillian and Michelle. I empathize with Jillian's experiences with fertility treatments and her strong desire to have children. I feel as though infertility has had a negative impact on some aspects of my life, and yet I am also aware of the positive impact my experience has had on my life course. My perception of myself as 'infertile' shares some similarities to the way in which Michelle perceives herself not as infertile but as someone who has experienced infertility. This is because I am, in fact, fertile. My husband, however, is not, and I have made a conscious choice to spend the rest of my life with him regardless of whether we have children. I have chosen to remain childless. I believe this choice was the correct one for me. More recently, I have felt even more sure of my decision as I was diagnosed with multiple sclerosis (MS) in 2017. Since I would be required to abstain from taking the medication that slows the progression of my MS if I try to conceive, I have chosen to remain childfree rather than risk interfering with my physical and cognitive health. For these reasons, I identify as both voluntarily childfree and involuntarily childless.

The nurturing nature of the teaching profession, as well as the performative and connective nature of singing and choral conducting in the public sphere, positions women who teach, sing, and direct ensembles in what could be described as a 'mothering' role. For those women who are unable to perform the role of Mother with children of their

own, this position may complicate the ways in which they experience their musical careers. In this section, I will reflect on the impact of infertility on my own identity as a female singer and music educator, followed by the conclusions I have drawn from the experiences of Jillian, Michelle, and myself.

My Journey

When I first began teaching private music lessons in people's homes in 2004, after graduating from a post-secondary music performance program, I did so with the belief that being self employed would allow me the flexibility to work in my chosen profession as well as have the children I had always believed I was meant to have. For the next six years, while successfully building my business, I maintained the hope that my husband and I would start a family. At the time, my potential identity of Mother played an important role in my life course decisions. Growing up, I perceived my perspective motherhood to never be in question. I was a female, and I would get married and have children 'as women do'. I did get married in 2007 and over the course of two years (2007 to 2009), my husband and I attempted to conceive naturally until It became clear that we would need medical intervention to succeed. During this time our relationship became strained due to disappointment and fear of what the future held for our family plans, though our love for each other and our desire to continue our marriage remained strong. We were hopeful.

In 2010, after being unsuccessful in our attempts to conceive naturally, we were referred to a fertility clinic and proceeded to embark on our journey with fertility treatments. It was made clear to us, after a battery of invasive and often painful tests, that we would need to undergo a cycle of *in vitro* fertilization (IVF) that included a procedure

called intracytoplasmic sperm injection (ICSI), which are invasive procedures for both myself and my husband. During this first cycle of IVF, I was excited by the prospect of success and the idea that I would soon become a mother. Looking back, I realize that my desire for motherhood far outweighed my ability to think realistically about the probability of success of this first procedure, regardless of the statistics we were given at the clinic. I was hopeful and naïve.

During the next few months, I became engrossed in the fertility procedures and overcome by the idea of potential motherhood. I was functioning in what I perceive to be a sort of ‘autopilot’ mode. I continued to teach every day, as well as continuing my own musical learning journey through weekly private piano lessons in preparation for my Royal Conservatory Grade 6 piano exam. Through daily hormone injections, transvaginal ultrasounds, and blood tests, I continued to function resigned to the fact that these procedures were an inevitable part of my life if I wanted to conceive. I was so sure that my purpose in life was to have children that I bottled up my fears and negative feelings towards the invasive and physically and emotionally traumatic medical procedures, even keeping my true feelings from my husband. No pain, no gain, right? Although our first IVF cycle was unsuccessful, I maintained hope that I would soon become a mother. This hope spurred me on for the next procedure.

After the first unsuccessful IVF cycle, we had two remaining ‘viable’ embryos frozen so that we could try again without having to take part in another full cycle. Two months after my first ‘miscarriage,’ we underwent a frozen embryo transfer. As I watched two embryos being placed in my womb on an ultrasound screen, I prepared to wait for the required ten days before I could take a pregnancy test, the whole time

believing that I was sure to be pregnant this time. Life went on as usual, though I proceeded cautiously, trying not to engage in any physical activities that might ruin my chances of maintaining a pregnancy. On the eighth day, two hours after miscarrying my second ‘pregnancy,’ I performed my Grade 6 Royal Conservatory (RCM) piano exam, with great success. Looking back on this experience I am in awe and disbelief of the blind control I had of my emotions that day. My heart was broken and yet I would not allow myself to feel the pain of disappointment and grief in that moment, as I had worked so hard to prepare for my exam. Attaining RCM Grade 8 in piano had been an important goal for me since I first began learning to play the piano at age nineteen, and I remained firmly set on this goal until I achieved it in June of this year.

After the unsuccessful frozen embryo transfer, my husband and I decided to wait a little longer this time before attempting another IVF cycle. We began, after more testing procedures, in November of that same year. This time I had a much more difficult time staying positive, although I continued to hide my feelings from my husband, as I didn’t want him to feel any guilt or upset. Two weeks before Christmas I had my third ‘miscarriage’ in ten months. I was devastated. The emotional and physical trauma I felt from the fertility treatments, as well as the weight of my disappointment, became unbearable and I no longer felt able to continue with treatments. Making that decision with my husband was incredibly difficult and was not made overnight, as it impacted my perceptions of my past, present, and future. The course that I had believed my life was supposed to take had not taken shape, and the emotional and physical labour my husband and I had invested in our pursuit of parenthood felt meaningless. Our marriage was suffering and we had also invested approximately \$30,000 into treatments in less than a

year. Most significantly, I began to question who I was without children, from both a personal and professional perspective.

I had identified with potential motherhood for so long that I did not know who I was without that identity. Infertility impacted my personal, professional, and social lives. I questioned what kind of a woman I was if I was unable to perform my expected gendered role as Mother. I also began to experience teaching children differently than I had before my journey with infertility, as I now found it emotionally challenging at times to engage with them. In addition to my teaching career, my performance activities were also affected by my experience with infertility. My active choral-singing life was affected from a social and personal perspective. I struggled to interact with my choral friends at rehearsals as I felt as though I was constantly hiding my feelings. I also struggled to sing through the grief I was dealing with. From a social perspective, I felt isolated in my experience with infertility as my friends and my two brothers had at this point begun to have children. While my friends offered an enormous amount of support, I felt left out of the ‘mom club’ and struggled to participate socially with those who were either pregnant or who already had children.

The isolation and grief that I felt after my third miscarriage caused me to sink into a depression that led to suicidal thoughts. I felt completely lost and unsure of myself and my future. A month after my last unsuccessful IVF cycle, I sought help from a psychotherapist and, through regular and intense therapy, I began to sort through my grief and explore my identity as an involuntarily childless woman. Nearly eight years have passed since my last miscarriage, and during those years my life has taken a much different path than I had expected before my experience with infertility. In 2013 I made

the decision to go to university to work towards my Honours Bachelor of Music degree. This was something that I had wanted to pursue since graduating from college in 2004 but had put on hold in order to start a family. During the three years of my undergraduate degree, my husband and I worked diligently on rebuilding our marriage, as it had almost ended in 2013 due to the emotional strain of our infertility.

Throughout university, I began to discover a love of research in the impact of sex hormones on the voice. It was during an independent study on this topic in my final undergraduate year that I discovered a gap in the research in relation to the impact of infertility on the voice. I was shocked that within all of the existing research on the physical and emotional impact of puberty, birth control, pregnancy, and menopause on the female singing voice, there had been none conducted on the effects of fertility treatments. When I discovered this gap in the literature, I decided that I wanted to pave the way for new research in this field by continuing my schooling at the graduate level. I had found what I perceived to be a purpose within my experience with infertility. This was the first time that I truly felt the positive impact of infertility in my life, and I continue to feel this impact as I explore infertility and singing at a deeper level.

My graduate studies and subsequent research endeavours have introduced me to a broad range of literature outside of my chosen field of Music Education. They have also introduced me to other female singers who have experienced infertility who often approach me after hearing me discuss the phenomenon to talk about their own experiences. Because of these encounters, I have begun to realize that I am not alone in my experiences, and that, although each woman's journey with infertility is unique, the isolation that I felt during my own experience is not due to the fact that I was the only

woman dealing with so much grief and disappointment. Based on my academic and social interactions, I have come to understand that the stigma I felt towards my position as a childless woman has been manifested by a lack of public knowledge on the subject of infertility. It is the building of knowledge in this area that drives me to continue my research and to advocate for others to follow suit.

Conclusions

After exploring the literature on the impact of infertility on female gender identity, the impact of sex hormones on the female singing voice, and the connections between gender and musical identities, I perceive the relationships between infertility and female singer identity to be substantial. Jillian and Michelle's narratives, as well as my own reflections, support this perception. While this research does not confirm any scientific proof of physiological or psychological effects on the singing voice caused by infertility, it offers insight into the impact of infertility on female singers' identity through, most notably, life course disruption.

Infertility as Life Course Disruption

The importance of identity cannot be understated, as it is a fluid concept developed throughout the lifespan based on life experiences. One's life course decisions are both impacted by, and have an impact on, identity through the physiological, psychological, and social aspects of one's life. Personal and professional life choices (marriage, children, education, health, career, etc.) may be impacted by life events and vice versa. Life course decisions, regardless of how far in advance they are made, may be altered by unforeseen circumstances and life events, thus disrupting the life course. When one's life course is disrupted by unforeseen external or internal circumstances or events, a space is created for alterations to identity.

A life course disruption such as infertility may take many forms. It may be a short-term, long-term, or permanent disruption. It may affect the professional, social, and/or personal aspects of a person's life, and it may be perceived as a positive or negative experience. For Jillian, infertility has disrupted her personal, professional, and

social lives on both a short-term and long-term basis in a way that she perceives as negative. Infertility disrupted Michelle's personal life on a short-term basis while she underwent fertility testing but has ultimately had what she perceives to be a positive impact on the personal, professional, and social aspects of her life. I perceive infertility to have had both a positive and negative impact on all aspects of my life in short-term, long-term, and permanent ways.

Life Course Disruption and Female Singer Identity

Jillian's identity as a female singer began developing from the age of four. As her musical life course developed, she began to identify more and more with the connective power of singing as communication in her personal and professional lives. As a result of Jillian's infertility, she has struggled to maintain her identity as a connective musical woman. The isolation and stigma she has felt as an involuntarily childless woman have, at times, disrupted her ability to connect with people through musical expression in her professional life as a music therapist and choral director. From a social standpoint, Jillian's life course has been disrupted by infertility, due to the challenge of actively engaging with friends and family members who have children. Some of her friendships have suffered as a result of the social awkwardness she feels when confronted with emotionally challenging social interactions. Professionally, Jillian's life course has been disrupted due to the emotional and physical labour she has invested in the fertility treatment process. Her educational pursuits have also been impacted by infertility, although in a more positive way, given her recent attainment of a Master's degree. As she stated in our interviews, she does not believe she would have continued her graduate studies if she had children. She is still unsure as to whether she will pursue a Doctoral

degree, based on her impending decision to continue – or not continue - with fertility treatments.

Due to the multiple life course disruptions faced by Jillian through her experience with infertility, her identity as a female singer has been impacted greatly. Her gender identity has been challenged both personally and socially by her inability to perform the role of Mother. Her musical identity has been disrupted by her inability to connect at an optimal level with others through singing. Her vocal identity has been challenged by the perceived change in her vocal timbre that she attributes to IVF. Each of these aspects of Jillian's female singer identity have been impacted by life course disruptions brought on by her experience with infertility.

Michelle's female singer identity has been impacted by infertility in a much more positive way than Jillian's. Her child-free status has allowed her to engage in a wide variety of singing activities throughout her performance and teaching career. Michelle does not perceive her infertility to have disrupted her life course in any significant way, given the lack of desire to have children she has felt from a young age. Her professional success has been strengthened by her ability to travel freely for work and training unencumbered by the responsibility of a child. Michelle assumed a potential motherhood identity on a short-term basis at three points in her life course; in university, when she became pregnant and subsequently terminated the pregnancy; during her marriage as she and her husband participated in fertility testing; and again at 48 years old, during her 'pregnancy scare'. During two of those three moments, she felt that becoming a mother would negatively impact her singing career. Michelle perceives her child-free status as a positive aspect of her personal, professional, and social lives. In her recent experience

with extended vocal work, Michelle's vocal abilities were challenged by her experience with infertility in such a way that she became visibly upset and unable to optimally vocalize. Through the therapeutic work of her teacher, however, she was able to perceive her childlessness as a positive aspect of her female singer identity once again.

My own life course, because I had identified as a potential mother for so many years, was disrupted considerably by infertility. My personal, professional, and social lives were all impacted negatively by the physical and emotional labour required to deal with the challenges I faced in my position as an involuntarily childless woman. My marriage suffered as I struggled to come to grips with a future without children of my own. My gender identity felt challenged by my inability to fulfill my expected role of Mother. My music educator identity was challenged by the physical stress of fertility treatments, as well as the emotional challenge of working with children when I was unable to conceive. My singer identity was negatively impacted by the effort it took to maintain composure among my colleagues and peers. Maintaining optimal vocal technique was also difficult during the course of the fertility treatments because of the physical and emotional pain and fatigue generated by the treatments.

Despite my intense negative perception of my experience with infertility in the past, more recently the negative impact I perceive infertility to have had on my life has now become more positive as I enjoy the personal and professional freedom that my child-free status offers. I am able to travel extensively, maintain a busy and thriving teaching practice, continue my musical learning journey through choral singing and piano lessons, and nurture my marriage and my friendships. In addition to this, I perceive the life course disruption caused by my infertility to have positively impacted my educational

pursuits. Had I not experienced infertility, my life course would not have been steered towards graduate studies and the research I am now conducting.

Limitations

The small sample size of this study provides an in-depth view of Jillian and Michell's experiences with the phenomenon of infertility and the impact of this phenomenon on their singer identities. A larger sample size, however, would provide a broader scope within this field of research. The sensitive nature of the subject matter may put limitations on the number of participants willing and/or able to discuss such a sensitive topic.

The three hours of interviews I conducted with Jillian and Michelle offered ample opportunity for discussion, however, more time would have allowed for a deeper exploration of their perceptions of their experiences. Offering Jillian and Michelle the opportunity to write reflections on their experiences may have provided another comfortable platform for their narratives to be expressed. This form of research, however, would have required an even greater command of the participants' time and energy.

The emotional labour required on the parts of the participants and the researcher during this study may limit future research if those women involved in the research are actively participating in fertility treatments at the time of the study. Given the physiological, psychological, and social difficulties often experienced during the fertility treatment process, any added responsibility and stress brought on by participating in this sensitive research may negatively impact participant and researcher wellbeing.

I specifically chose to study the impact of infertility on *female* singer identity, due to the stigma attached to the socially-constructed role of women as Mother (Whiteford &

Gonzales, 1995) and the gendered focus of hormonal fertility treatments. Future research may be benefitted by the study of the impact of infertility on male singer identity.

Significance of the Study

A large body of literature exists regarding the impact of sex hormones on the female voice (Abitbol, Abitbol & Abitbol, 1999; Abitbol, de Brux, Millot, Masson, Mimoun, Pau, & Abitbol, 1989; Kadakia, Carlson & Sataloff, 2013; Nacci, et al, 2011; Newman, Butler, Hammond & Gray, 2000). Singers, voice instructors, vocal health specialists, and choral directors benefit greatly from scientific and sociological research in this field. Currently, there is a large gap within this body of literature regarding the impact of fertility treatments on the voice. There is great potential for both scientific and sociological research in this field which would help singers, medical professionals, academics, and vocal pedagogues to better understand the impact of a phenomenon which affects sixteen percent of Canadian couples (Government of Canada, 2013).

The stigma surrounding infertility is augmented by a lack of public knowledge (Gotlib, 2016). Engaging in research on this topic as it relates to singing enables knowledge building and open communication within the fields of vocal health, performance, and pedagogy. Exploring female singers' perceptions of their experiences with infertility and singing gives voice to those women's narratives, ultimately 'legitimizing' a phenomenon which is often hidden from public view (Valeras, 2009; Whiteford & Gonzales, 1995).

Providing women with an open platform for speaking out about their perceptions of the impact of infertility on their singer identity offers them the opportunity to discuss methods for navigating issues with their voices caused by infertility – and the fertility

treatment process - with medical professionals, voice pedagogues, and other singers who have had similar experiences.

Final Conclusions

Despite the limitations discussed, this research is an important contribution to the literature within the fields of vocal health, performance, and pedagogy. Currently, no other research has been conducted on the impact of infertility on female singer identity. To date, only one study has been conducted on the impact of infertility on the female singing voice (Curtis, 2017). Research has not yet been conducted on the effects of fertility treatments on the singing voice, however, two studies do exist regarding the impact of *in vitro* fertilization on the speaking voice (Amir, Lebi-Jacob & Harari, 2014; Hamdan, Barazi, Kanaan, Sinno & Soubra, 2012). Therefore, this study is the first of its kind to be conducted within this field.

This study reveals that female singers who experience infertility are impacted both personally and professionally. The physiological, psychological, and social impacts of infertility on female singer identity are complex and may be perceived both positively and/or negatively. The complexity of the issues faced by singers experiencing infertility leaves space for a broad range of knowledge building.

Much more research is needed on the impact of infertility - and the fertility treatment process – on the voice. Similar to existing research regarding the impact of sex hormones on the female voice, a combination of qualitative and quantitative methodological approaches would provide a rich source of data upon which to build knowledge and understanding of the subject among voice professionals. The physiological, psychological, and social implications of infertility and the fertility

treatment process should be considered in future research, to provide a broad spectrum of knowledge within the fields of vocal health, performance, and pedagogy. Most importantly, all future research conducted on this topic should be approached with an awareness to the sensitivity of the issue and the wellbeing of research participants.

Reflective Discussion

Reflecting upon my experience engaging in this research, I am made aware of my growth as a researcher within the qualitative and, more specifically, feminist, research paradigms. While my main concern throughout this study was that of the protection of my participants through ethically sound and just methodology, I also feared not being taken seriously as a researcher within the fields of vocal health and pedagogy. This fear stemmed from my perception of what constitutes ‘valid’ research within the positivist paradigm, which does not always concur with the qualitative and feminist paradigms. My position as a new researcher with positivist leanings lead me to believe that my research, situated firmly within the qualitative, interpretive, feminist paradigm, and rooted in my own personal experiences, might not be acknowledged as ‘valid’ research.

Looking back on my Masters research journey, I am now able to identify and acknowledge my fears and the ways in which they played a role in the research. There is a clear struggle within and throughout my writing between my epistemological convictions and the way in which I present my findings and interpretations. Although I carefully and honestly positioned myself within the research, there are tensions which arose as I analyzed the data and reported my findings. These tensions stemmed from a lack of trust in my own ability to derive meaning from Jillian and Michelle’s experiences,

as well as my own, alongside a hesitancy to introduce my own voice into the writing. My convictions are strong regarding the meaningfulness of reflexive feminist research in deriving knowledge from lived experience, yet the tensions and fear I grappled with are evident in the ways in which I discussed the concept of bracketing, as well as my statement of limitations within the research.

When I first approached my methodological decisions, I did so with the positivist belief that I, as researcher, must distance myself from the research so as not to impact the collection, analysis, and reporting of the data. Although I acknowledged my biases towards infertility and singing, however, I was unable to completely remove myself from my lived experience. At the time I was concerned that this would have a negative impact on my research. I came to realize, however, that my lived experience was a benefit to my research aims as I had gained a deep understanding of the possibilities for knowledge building and sharing within the field. My experiences also aided in connecting with Jillian and Michelle during our interviews, which not only provided them with a safe space to explore their experiences and feelings, but also gave all three of us a chance to work through difficult emotions by discussing a phenomenon that often leaves those experiencing it isolated.

As I discussed in the Limitations section of this thesis, my sample size was small. As I reported this ‘limitation,’ I was of the belief that I should make clear to my audience that I was aware of the inability of a researcher to generalize her findings when working with a small population. Upon reflection, I realize that I do not actually believe that having only two participants limited my research in any way. I also recognize that in discussing my participants as a sample, I was bringing to qualitative/interpretivist

research a quantitative/positivist concept and understanding of methodology. In fact, I feel that the small number of respondents was a benefit to this study. Again, I was grappling with my fear that this research would not be taken seriously by those I wished it to reach. Initially, I imagined that having vocal health professionals, choral directors, and voice instructors read this study and be inspired to conduct research of their own on the subject would be one of the most important outcomes of this research. I realize now, however, that the knowledge I have gained through the act of engaging with Jillian and Michelle and exploring the meanings within their lived experiences – and my own - has been my most important accomplishment.

Were I to undertake this study again, with the knowledge I now possess, I would understand that the bracketing required of the phenomenological approach and the reflexivity required in feminist research are contradictory and I would not include the phenomenological element as part of my research design.

References

- Abitbol, J., Abitbol, P., & Abitbol, B. (1999). Sex hormones and the female voice. *Journal of Voice*, 13, 424-446. doi:10.1016/S0892-1997(99)80048-4.
- Abitbol, J., de Brux, J., Millot, G., Masson, M. F., Mimoun, O. L., Pau, H., & Abitbol, B. (1989). Does a hormonal vocal cord cycle exist in women?: Study of premenstrual syndrome in voice performers by videostroboscopy-glottography and cytology on 38 women. *Journal of Voice*, 3(2), 157-162. doi:10.1016/S0892-1997(89)80142-0.
- Ary, D., Jacobs, L.C., Sorensen, C., & Walker, D.A. (2014). *Introduction to research in music education* (9th ed.). Belmont, CA: Wadsworth, Cengage Learning.
- Benninger, M. S. (1994). *Vocal arts medicine: The care and prevention of professional voice disorders*. New York, NY: Thieme Medical Publishers, Inc.
- Bergesen Schei, T. (2009). 'Identitation' – Researching identity processes of professional singers from a discourse-theoretical perspective. *Nordic Research in Music Education*, 11. 221-236.
- Butler, J. (2007). *Gender trouble*. New York, NY; London, UK: Routledge
- Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, and Social Sciences and Humanities Research Council of Canada. (2014). *Tri Council Policy Statement II*. Retrieved from http://www.pre.ethics.gc.ca/pdf/eng/tcps2-2014/TCPS_2_FINAL_Web.pdf.
- Carroll, K. (2012). Infertile? The emotional labour of sensitive and feminist research methodologies. *Qualitative Research*, 13(5), 546-561. doi:10.1177/1468794112455039.

- Chehab, M., Madala, A., & Trussell, J. C. (2015). On-label and off-label drugs used in the treatment of male infertility. *Fertility and Sterility*, 103(3), 595-604. doi:10.1016/j.fertnstert.2014.12.122.
- Chester, D. H. (2003). Mother, Unmother: A storied look at infertility, identity, and transformation. *Qualitative Inquiry*, 9(5), 774-784. doi:10.1177/1077800403254887.
- Choi, S., Shapiro, H., Robinson, G., Irvine, J., Neuman, J., Rosen, B., Murphy, J., & Stewart, D. (2005). Psychological side-effects of clomiphene citrate and human menopausal gonadotropin. *Journal of Psychosomatic Obstetrics & Gynecology*, 26(2), 93-100. doi:10/1080/01443610400022983.
- Code, L. (1995). How do we know? Questions of method in feminist practice. In S. Burt & L. Code (Eds.), *Changing methods: Feminists transforming practice* (pp. 13-44). Toronto: University of Toronto Press.
- Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education*. London; New York: Routledge.
- Cook, R. J. & Dickens, B. M. (2014). Reducing stigma in reproductive health. *International Journal of Gynecology and Obstetrics*, 125, 89-92. Retrieved from: <http://dx.doi.org/10.1016/j.ijgo.2014.01.002>.
- Curtis, L. (2017). Sex hormones and the singing voice: The adverse effects of fertility treatments. *Anacrusis*, 36(1), 17-22. Retrieved from: www.choralcanada.org.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2005). *The Sage handbook of qualitative research* (3rd ed.). Thousand Oaks, CA: Sage Publications Ltd.
- Dibben, N. (2002). Gender identity and music. In R. MacDonald, D. Hargreaves, & D.

- Miell (Eds.), *Musical identities* (pp. 117-133). Oxford: Oxford University Press.
- Exley, C. & Letherby, G. (2001). Managing a disrupted lifecourse: Issues of identity and emotion work. *Health*, 5(1), 112-132. doi:10.1177/136345930100500106.
- Galhardo, A., Pinto-Gouveia, J., Cunha, M., & Matos, M. (2011). The impact of shame and self-judgement on psychopathology in infertile patients. *Human Reproduction*, 26(9), 2408-2414. doi:10.1093/humrep/der209.
- Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. Englewood Cliffs, NJ: Prentice-Hall.
- Gold, J. M. (2012). The experiences of childfree and childless couples in a pronatalistic society: Implications for family counsellors. *The Family Journal: Counseling and therapy for couples and families*, 21(2), 223-229. doi:10.1177/1066480712468264.
- Gotlib, A. (2016). "But you would be the best mother": Unwomen, counterstories, and the motherhood mandate. *Journal of Bioethical Inquiry* 13, 327-347. doi:10.1007/s11673-016-9699-z.
- Government of Canada. (2013). *Fertility*. Retrieved from <http://healthycanadians.gc.ca/healthy-living-vie-saine/pregnancy-grossesse/fertility-fertilite/fert-eng.php>.
- Green, L. (1997). *Music, gender, education*. Cambridge: Cambridge University Press.
- Greil, A., McQuillan, J., & Slauson-Bevins, K. (2011). The social construction of infertility. *Sociology Compass*, 5(8), 736-746. doi:10.1111/j.1751-9020.2011.00397.x.
- Harrison, P. T. (2014). *Singing: Personal and performance values in training*. Edinburgh: Dunedin Academic Press Ltd.

- Hogikyan, N., Thurman, L., & Klitzke, C. (2000). How vocal abilities can be limited by non-infectious diseases and disorders of the respiratory and digestive systems. In L. Thurman & G. Welch (Eds.), *Bodymind and voice: Foundations of voice education, revised edition, book III* (pp. 546-555). Collegeville, MN: The Voice Care Network.
- Kadakia, S., Carlson, D., and Sataloff, R. T. (2013). The effect of hormones on the voice. *Journal of Singing* 69, 571-574. Retrieved from http://www.nats.org/_Library/Kennedy_JOS_Files_2013/JOS-069-5-2013-571.pdf.
- Lã, F. & Sundberg, J. (2012). Pregnancy and the singing voice: Reports from a case study. *Journal of Voice*, 26(4), 431-439. doi:10.1016/j.jvoice.2010.10.010.
- Letherby, G. (2002a). Challenging dominant discourses: Identity and change and the experience of 'infertility' and 'involuntary childlessness'. *Journal of Gender Studies*, 11(3), 277-288. doi:10.1080/0958923022000021241.
- Letherby, G. (2002b). Childless and bereft?: Stereotypes and realities in relation to 'voluntary' and 'involuntary' childlessness and womanhood. *Sociological Inquiry*, 72(1), 7-20. doi:10.1111/1475-682X.00003.
- Loftus, J., & Namaste, P. (2011). Expectant mothers: Women's infertility and the potential identity of biological motherhood. *Qualitative Sociology Review*, 7(1), 36-54. doi:1002148723.
- MacDonald, R., Hargreaves, D., & Miell, D. (Eds.). (2002). *Musical identities*. Oxford: Oxford University Press.

- Mullendor Brown, K. (2015). Sex hormones and the female voice: Communication in the voice studio. *Journal of Singing*, 71, 447-456. ISSN: 10867732.
- Nacci, A., Fattori, B., Basolo, F., Filice, M., De Jeso, K., Giovanni, ... Ursino, F. (2011). Sex hormone receptors in vocal fold tissue: A theory about the influence of sex hormones in the larynx. *Folia Phoniatrica et Logopaedica*, 63, 77-82.
doi:10.1159/000316136.
- Newman, S. R., Butler, J., Hammond, E. H., & Gray, S. D. (2000). Preliminary report on hormone receptors in the human vocal fold. *Journal of Voice*, 14(1), 72-81.
doi:10.1016/S0892-1997(00)80096-X.
- O'Bryan, J. (2015). "We are our instrument!": Forming a singer identity. *Research Studies in Music Education*, 37(1), 123-137. doi:10.1177/1321103X15592831.
- Ramsay, K. & Letherby, G. (2006). The experience of academic non-mothers in the gendered university. *Gender, Work, and Organization*, 13(1). 25-44.
doi:10.1111/j.1468-0432.2006.00294.x.
- Revelli, A., Casano, S., Salvagno, S., & Delle Piane, L. (2011). Milder is better? Advantages and disadvantages of "mild" ovarian stimulation for human in vitro fertilization. *Reproductive Biology and Endocrinology*, 25, 1-9.
doi:10.1186/1477-7827-9-25.
- Rolsvjord, R. & Halstead, J. (2013). A woman's voice: Politics of gender identity in music therapy and everyday life. *The Arts in Psychotherapy*, 40(4), 420-427.
doi:10.1016/j.aip.2013.05.015.
- Roy Hart Centre. (2018). *Centre Artistique International Roy Hart*. Retrieved from

http://www.pre.ethics.gc.ca/pdf/eng/tcps2-2014/TCPS_2_FINAL_Web.pdf.

Sangster, S. L., & Lawson, K. L. (2014). 'Falling down the rabbit hole': The construction of infertility by news media. *Journal of Reproductive and Infant Psychology*, 32(5), 486-496. doi:10.1080/02646838.2014.962016.

Seidman, I. (2006). *Interviewing as qualitative research* (3rd ed.). New York, NY: Teachers College Press.

Small, C. (1998). *Musicking*. Hanover: University Press of New England.

Sternke, E.A., & Abrahamson, K. (2015). Perceptions of women with infertility on stigma and disability. *Sexuality and Disability*, 33, 3-17. doi:10.1007/s11196-014-9348-6.

Thurman, L., Emanuele, M. A., & Klitzke, C. (2000). How vocal abilities can be limited by endocrine system diseases and disorders. In L. Thurman & G. Welch (Eds.), *Bodymind and voice: Foundations of voice education, revised edition, book III* (pp. 556-563). Collegeville, MN: The Voice Care Network.

UpToDate, Inc. (2016). *Medical Database*. Retrieved from <http://www.uptodate.com>.

Valeras, A. B. (2009). A balancing act: How women with a hidden disability perform femininity. *Gender Forum*. Retrieved from <https://www.lib.uwo.ca/cgi-bin/ezpauthn.cgi?url=http://search.proquest.com/docview/212019904?accountid=15115>.PP.1-10.

Welch, G. (2005). Singing as communication. In D. Miell, R. MacDonald, & D. J. Hargreaves (Eds.). *Musical communication* (pp.239-260). Oxford: Oxford University Press.

Western University Research Ethics Board. (2018). Retrieved from

www.uwo.ca/research/.

Whiteford, L. M., & Gonzalez, L. (1995). Stigma: The hidden burden of infertility. *Social Science & Medicine*, 40(1), 27-36. doi:10.1016/0277-9536(94)00124-C.

Appendices

Appendix 1 Western Research Ethics Board Approval

Date: 15 February 2018

To: Dr. Ruth Wright

Project ID: 110283

Study Title: The Effects of Infertility on Female Vocalist Identity

Application Type: NMREB Initial Application

Review Type: Delegated

Full Board Reporting Date: 02/Mar/2018

Date Approval Issued: 15/Feb/2018 11:04

REB Approval Expiry Date: 15/Feb/2019

Dear Dr. Ruth Wright

The Western University Non-Medical Research Ethics Board (NMREB) has reviewed and approved the WREM application form for the above mentioned study, as of the date noted above. NMREB approval for this study remains valid until the expiry date noted above, conditional to timely submission and acceptance of NMREB Continuing Ethics Review.

This research study is to be conducted by the investigator noted above. All other required institutional approvals must also be obtained prior to the conduct of the study.

Documents Approved:

Document Name	Document Type	Document Date	Document Version
End of Study Letter - Final	End of Study Letter	08/Jan/2018	1
facebook Advertisement - Clean Feb 12	Recruitment Materials	12/Feb/2018	4
Interview Guide	Interview Guide	01/Nov/2017	1
LOI - Clean Feb 12	Written Consent/Assent	12/Feb/2018	4
Recruitment Email - Clean Feb 12	Recruitment Materials	12/Feb/2018	4
Recruitment Poster - Clean Feb 12	Recruitment Materials	12/Feb/2018	4

Documents Acknowledged:

Document Name	Document Type	Document Date	Document Version
Support Resources - Final	Other Document	25/Dec/2017	1

No deviations from, or changes to the protocol should be initiated without prior written approval from the NMREB, except when necessary to eliminate immediate hazard(s) to study participants or when the change(s) involves only administrative or logistical aspects of the trial.

The Western University NMREB operates in compliance with the Tri-Council Policy Statement Ethical Conduct for Research Involving Humans (TCPS2), the Ontario Personal Health Information Protection Act (PHIPA, 2004), and the applicable laws and regulations of Ontario. Members of the NMREB who are named as Investigators in research studies do not participate in discussions related to, nor vote on such studies when they are presented to the REB. The NMREB is registered with the U.S. Department of Health & Human Services under the IRB registration number IRB 00000941.

Please do not hesitate to contact us if you have any questions. Sincerely,
Katelyn Harris, Research Ethics Officer on behalf of Dr. Randal Graham, NMREB Chair

Note: This correspondence includes an electronic signature (validation and approval via an online system that is compliant with all regulations).

Appendix 2 Social Media Recruitment Poster

PARTICIPANTS NEEDED FOR RESEARCH IN INFERTILITY AND SINGER IDENTITY

We are looking for volunteers to take part in a study of the impact of infertility on female singer identity who meet the following criteria:

Female, aged 18+
Involved in singing at an amateur or professional level
Have experienced infertility

Understanding the impact of infertility on female singer identity is imperative to providing an open and comfortable environment in the voice studio and choir rehearsal. Women who are engaged in singing, and who experience infertility, may be impacted strongly by the physical, psychological, and social implications of infertility and the associated treatment process.

If you are interested and agree to participate, you would be asked to take part in three one-hour interviews, at a time and location that is convenient for you.

You may be compensated for your time

This is a confidential research study, and no participants will be identified via this online social media recruitment strategy.

All requests for information about this study, or to volunteer for this study, should be made directly to the researcher, Laura Curtis, through the private contact information listed below.

Laura Curtis

Appendix 3 Recruitment Email Script

Subject Line: Invitation to participate in research

Dear Singers,

Laura Curtis, a graduate student at Western University, has contacted our choir asking us to tell our singers about a study she is conducting on the impact of infertility on female singer identity. This research is part of her Master's degree at Western University.

Participation in this study is voluntary and will be kept confidential. Laura will not tell me or anyone within the choir who did or did not participate and taking part or not taking part in this study will not affect your status with our choir.

If you are interested in getting more information about taking part in Laura's study, please read the brief description below:

You are being invited to participate in a study that we, Laura Curtis and Dr. Ruth Wright, are conducting. Briefly, the study involves three one-hour interviews, to take place at a time and location of your choice. You may be compensated for your time.

One reminder email will be sent to you two weeks from the date of this email.

If you would like to participate in this study, please read the attached letter of information, and if you then agree to participate in this study please contact the researcher at the contact information given below.

Laura has explained that you can withdraw from the study at any time. She has asked us to attach a copy of her letter of information to this email. That letter gives you full details about her study. You may also contact Laura directly by telephone or email.

In addition, this study has been reviewed and cleared by the Western Research Ethics Board. If you have questions or concerns about your rights as a participant or about the way in which the study is being conducted, you may contact:

The Office of Human Research Ethics
Western University

Sincerely,

Appendix 4 Letter of Information and Consent

The Effects of Infertility on Female Vocalist Identity

Principal Investigator:
Dr. Ruth Wright

Student Researcher:
Laura Curtis

You are being invited to participate in this research study about the physical, psychological, emotional, and sociological impacts of infertility and the fertility treatment process on singer identity because you are involved with singing on either a professional or amateur level and have experienced infertility.

The purpose of this study is to gain a better understanding of the impact of infertility on female singer identity.

Although a large body of research exists on the effects of sex hormones on the female voice, there is a gap in the literature with respect to the impact of infertility and the fertility treatment process on the singing voice and singer identity. The lack of exploration into this area of study leaves a gap in voice professionals' knowledge and understanding and creates an obstacle for open communication in the field of vocal health.

The researcher is conducting this research in the hope that her findings may fuel future academic research on the impact of infertility, and the fertility treatment process, on vocal health. The researcher hopes to use her findings throughout her graduate studies at Western University and beyond.

It is expected that you will be in the study for up to four months. There will be 3 study visits during your participation in this study and each visit will take approximately 1 hour.

If you agree to participate, you will be asked to take part in three one-hour interviews. These interviews will take place at a time and location that is convenient for you. The interviews, which will be audio-recorded with your consent, will be guided by questions which are intended to explore the impact of infertility, and the fertility treatment process, on your identity as a singer. Audio recording of these interviews is optional. If you choose not to allow audio recording of the interviews, the researcher will hand-type your responses on her encrypted personal computer. The interview questions may focus on biographical information such as your educational background, your history of singing, and your experiences with infertility.

The researcher is fully aware of the sensitive nature of this study and wishes to stress that you may skip any questions that you do not wish to answer during the interviews. Each interview will be transcribed and the transcription will be sent to you for review and feedback within one week of the date of the interview.

If you have any questions regarding this research study, please feel free to contact me at the e-mail address listed above. All communication will be confidential.

The risks involved in participating in this study are minimal, although you may feel uncomfortable or embarrassed by answering some of the interview questions. If at any time, during or after your participation in this research study, you feel emotionally upset, it may be advisable to stop and take a break, speak to a friend or a counsellor, or stop participating in the study altogether.

You do not need to answer questions that you do not want to answer or that make you feel uncomfortable, and you may stop the interviews at any time.

The following link may be useful to you if seeking emotional support during this study: <http://fertilitymatters.ca/> - The Infertility Awareness Association of Canada

You may not directly benefit from participating in this study but information gathered may provide benefits to society as a whole. These benefits include opening communication between singers and voice instructors, as well as furthering knowledge and understanding of the impact of infertility and the fertility treatment process on vocal health.

You may choose to withdraw from the study at any time. If you decide to withdraw from the study, you have the right to request withdrawal of information collected about you. If you wish to have your information removed, please let the researcher know.

Representatives of The University of Western Ontario Non-Medical Research Ethics Board may require access to your study-related records to monitor the conduct of the research.

While we will do our best to protect your information there is no guarantee that we will be able to do so. If data is collected during the project which may be required to report by law, we have a duty to report.

Every effort will be made to protect your confidentiality and privacy. We will be taking the following steps to ensure this privacy:

- Participation in this research is confidential and anonymized. A pseudonym will be used in place of any identifying information that you provide.
- The researcher will not use your name or any information that would allow you to be identified
- Any communication between you and the researcher will be conducted via e-mail on the Western University server
- The researcher will keep any personal information about you in a secure and confidential location for a minimum of 7 years. A list linking your study number with your name will be kept by the researcher in a secure place, separate from your study file.

- Data collected from the interviews will be used for the researcher's Masters thesis, as well as future PhD research at Western University, and ongoing research on this topic may be part of future publications
- You may indicate whether you allow the researcher to quote you, unidentifiably, in the dissemination of the research
- If the results of the study are published, you will not be personally identified

You will not be compensated for participating in the first interview, but will receive a \$25 gift card for your participation in each of the second and third interviews

Your participation in this study is voluntary. You may decide not to be in this study. Even if you consent to participate you have the right to not answer individual questions or to withdraw from the study at any time, with no risks involved. We will give you new information that is learned during the study that might affect your decision to stay in the study. You do not waive any legal right by signing this consent form

If you have questions about this research study, please contact:
Dr. Ruth Wright, Music Education

If you have any questions about your rights as a research participant or the conduct of this study, you may contact The Office of Human Research Ethics

This letter is yours to keep for future reference

Written Consent

The Effects of Infertility on Female Vocalist Identity

Principal Investigator:
Dr. Ruth Wright

Student Investigator:
Laura Curtis

I have read the Letter of Information, have had the nature of the study explained to me, and I agree to participate. All questions have been answered to my satisfaction.

CONTACT FOR FUTURE STUDIES

Please check the appropriate box below and initial:

_____ I agree to be contacted for future research studies

_____ I do NOT agree to be contacted for future research studies I agree to be audio-recorded in this research

☐ YES ☐ NO

I consent to the use of personal, unidentifiable quotes obtained during the study in the dissemination of this research

☐ YES ☒ NO

I consent to the use of unidentified quotes obtained during the study in the dissemination of this research

☐ YES ☒ NO

I agree to have my name used in the dissemination of this research

☐ YES ☒ NO

Print Name of Participant

Signature

Date (DD-MMM- YYYY)

My signature means that I have explained the study to the participant named above. I have answered all questions.

Print Name of Person
Obtaining Consent

Signature

Date (DD-MM- YYYY)

Appendix 5 Interview Guide

1. What is your age?
2. For how many years have you been actively involved with singing? (i.e. solo or choral performance, voice instructing, choral directing, etc.)
3. In what ways have you been actively involved with singing throughout your life?
4. Have you ever, or do you currently, earn your living through active involvement in singing?
5. Did your thoughts on a (potential) career involve singing when you were younger?
6. In what ways have you felt a bodily connection to your voice?
7. At what age did you first experience infertility?
8. Did you seek medical intervention, such as fertility treatments, for infertility?
9. If so, did you experience any side effects of the fertility treatments that impacted your ability to actively engage in singing?
10. If so, what kind of side effects did you experience?
11. Have your thoughts on a (potential) career involving singing changed since your experience with infertility?
12. If so, in what ways have they changed? Why do you think that is?
13. What role did singing play in your identity before your experience with infertility?
14. What role has singing played in your identity since your experience with infertility?
15. Has this changed? If so, in what ways? Why do you think that is?
16. Do you perceive your experience with infertility to have impacted your identity as a singer? If so, how? In what ways?

Curriculum Vitae

Name:	Laura Curtis
Post-secondary Education and Degrees:	<p>University of Western Ontario London, Ontario, Canada 2016-2018 M.Mus. Ed.</p> <p>McMaster University Hamilton, Ontario, Canada 2013-2016 Honours B.Mus.</p> <p>Cambrian College Sudbury, Ontario, Canada 2001-2004 Dip. Mus. Per.</p>
Recent Honours and Awards:	<p>Province of Ontario Graduate Scholarship The University of Western Ontario 2016-2017; 2017-2018; 2018-2019</p> <p>Canada Graduate Scholarship-Masters The University of Western Ontario 2017-2018</p> <p>Dr. Franklin Churchley Graduate Essay Competition, 2nd Place Canadian Music Educator's Association 2017</p> <p>Undergraduate Summer Research Award McMaster University 2016</p> <p>The Dean's Medal for Excellence in the Humanities McMaster University 2016</p> <p>The Humanities Medal for Special Achievement McMaster University 2016</p> <p>University (Senate) Scholarship McMaster University 2015</p>

Hughes Scholarship
McMaster University
2015

Dean's Honour Roll
McMaster University
2015

Joan Francis Bowling Scholarship
McMaster University
2014

Sharon Reeves Scholarship
McMaster University
2014

**Related Work
Experience:**

Private Music Instructor
Voice, Piano, Music Theory
Self-employed
2004-Present

Teaching Assistant
Post WWII Popular Music History
The University of Western Ontario
2017-2018

Teaching Assistant
Post WWII Popular Music History
The University of Western Ontario
Sept. 2016-Dec. 2016

Teaching Assistant
Student Concert Organizer
McMaster University
2015-2016

Publications:

Curtis, L. (2018). The Gendering of Music Education. *Canadian Music Educator*, 59(1), 5-9.

Curtis, L. (2017). Sex Hormones and the Singing Voice: The adverse effects of fertility treatments. *Anacrusis*, 36(1), 17-22.

Curtis, L. (2016). Youth4Music Leadership Symposium 2015. *Anacrusis*, 34(2), 26-28.