FREEZING THE BIOLOGICAL CLOCK: THE EXPERIENCE OF UNDERGOING SOCIAL EGG FREEZING FOR DELAYED CHILDBEARING

by

JORDANNA ISAACSON

B.A., The University of British Columbia, 2011

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS

in

THE FACULTY OF GRADUATE AND POSTDOCTORAL STUDIES

(Counselling Psychology)

THE UNIVERSITY OF BRITISH COLUMBIA

(Vancouver)

April 2018

© Jordanna Isaacson, 2018
Abstract

Recent years have seen growing trends toward delayed childbearing and the increasing use of assisted reproductive technologies. In 2012, egg freezing was made available as an elective procedure for healthy reproductive age women to attempt to preserve their fertility. As more women delay childbearing and pursue social egg freezing, it is important to improve our understanding of this phenomenon. To date, limited research has examined the experiences of women who have undergone this procedure, and this study sought to address this gap in the literature. The research question guiding this study was: *What is the meaning and experience of undergoing social egg freezing for the purpose of delaying childbearing?* Through the use of a qualitative phenomenological approach, in-depth unstructured interviews were conducted with six women of reproductive age who electively underwent egg freezing in order to delay childbearing, for the purpose of learning about the meaning and experience of this phenomenon.

The interviews were transcribed and analyzed using van Manen’s (1990) hermeneutic phenomenological framework. Six common themes emerged from the women’s stories, including: *Sense of Reducing the Pressure to Have a Child, Sense of Taking Control and Agency, Sense of Personal Empowerment and Acceptance, Sense of Feeling Fortunate, Sense of Keeping Options Open,* and *Openness with Others.* The research findings are presented and discussed within the context of the limited existing literature on social egg freezing, with an emphasis on highlighting new areas of understanding. The implications of these findings on counselling practice are discussed and suggestions are made for future research.
Lay Summary

More women are delaying childbearing for a variety of reasons. Since 2012, women who wish to postpone having children until a later age can elect to freeze their eggs – commonly called “social egg freezing.” Despite the growing popularity of this reproductive option, little is known about women’s experiences of undergoing social egg freezing. In this study, six women who had elected to freeze their eggs in order to delay childbearing participated in in-depth interviews to learn about how they viewed and meaningfully constructed their egg freezing decisions and experiences. Six common themes were identified in the women’s stories. These findings help to improve our understanding of women’s motivations and experiences of social egg freezing, and may help mental health professionals better support women who feel they need to delay childbearing.
Preface

This thesis is the original, unpublished, independent work of the author, Jordanna Isaacson. This research was conducted with the approval of the University of British Columbia (UBC) Office of Research Ethics (ORS), Behavioural Research Ethics Board (BREB). The number of the certificate obtained for this research is: H16-01186.
Table of Contents

Abstract .......................................................................................................................... ii
Lay Summary .................................................................................................................. iii
Preface ............................................................................................................................... iv
Table of Contents ........................................................................................................... v
List of Tables ................................................................................................................... vii
Acknowledgments ......................................................................................................... viii

Chapter 1: Introduction ................................................................................................. 1
  Statement of the Problem ......................................................................................... 1
  Purpose of the Study .............................................................................................. 6
  Impact of the Study .............................................................................................. 7

Chapter 2: Review of the Literature .......................................................................... 9
  Literature on Women Considering Social Egg Freezing ......................................... 9
  Literature on Women Who Have Undergone Social Egg Freezing ..................... 17
  Summary ................................................................................................................ 25

Chapter 3: Method ....................................................................................................... 27
  Research Design ................................................................................................... 27
  Situating the Researcher ....................................................................................... 29
    Pre-understandings ............................................................................................. 31
  Participants ............................................................................................................. 34
  Data Collection ..................................................................................................... 36
  Data Analysis ....................................................................................................... 39
  Trustworthiness .................................................................................................... 42
  Ethical Considerations ......................................................................................... 44
  Limitations of the Study ...................................................................................... 44

Chapter 4: Results ....................................................................................................... 46
  Participants’ Biosynopses ..................................................................................... 46
    Alexandra ........................................................................................................... 46
    Stacy .................................................................................................................. 48
    Elizabeth ........................................................................................................... 49
    Sarah .................................................................................................................. 50
    Tate ..................................................................................................................... 52
    Stephanie .......................................................................................................... 53
  Common Themes .................................................................................................. 54
  Sense of Reducing the Pressure to Have a Child ..................................................... 55
    Finding the right partner ................................................................................... 56
    Able to get on with life ...................................................................................... 59
    Reduced sense of time pressure ....................................................................... 61
  Sense of Taking Control and Agency .................................................................... 64
    Best possible decision ....................................................................................... 65
    No regrets ........................................................................................................... 67
## Chapter 5: Discussion

- Contextual Considerations for Interpreting the Findings ........................................... 104
- Significance of the Findings .......................................................................................... 106
- Comparison with extant literature ................................................................................ 106
  - Demographic profile .................................................................................................. 106
  - Sense of reducing the pressure to have a child ....................................................... 107
  - Sense of taking control and agency ......................................................................... 108
  - Sense of personal empowerment and acceptance ................................................... 109
  - Sense of feeling fortunate ........................................................................................ 109
  - Sense of keeping options open ................................................................................. 110
  - Openness with others ............................................................................................... 111
- Novel findings.................................................................................................................. 112
- Implications for Counselling Practice .......................................................................... 116
- Directions for Future Research.................................................................................... 120
- Researcher Reflections .................................................................................................. 121

### References

- Appendix A: Recruitment Poster .................................................................................. 129
- Appendix B: Recruitment Ad ......................................................................................... 130
- Appendix C: Telephone Screening Guide ..................................................................... 131
- Appendix D: Informed Consent ..................................................................................... 133
- Appendix E: Orienting Statement .................................................................................. 137
- Appendix F: Interview Guide ........................................................................................ 138
- Appendix G: Counselling Resources ............................................................................ 141
- Appendix H: Follow-up Interview Guide ..................................................................... 142
List of Tables

Table 1. Summary of Participants’ Demographic Information ...........................................46
Table 2. Common Themes and Sub- Themes .................................................................55
Acknowledgements

I would like to begin by offering my enduring gratitude to my research supervisor, Dr. Judith Daniluk. Your generous support, invaluable feedback, and dedication as a supervisor have been an integral part of this journey. Your expertise in this field as a researcher, teacher, and clinician are an inspiration. It has truly been an honour to work with you.

A sincere thank you to my committee members, Dr. Anita Hubley and Dr. Laura Hurd Clarke, for your thoughtful perspectives, valuable contributions, and insightful feedback.

I owe my heartfelt gratitude to the six women who volunteered to participate in this research study. I am touched by the courage and openness with which you shared your stories in the hope that, by doing so, you might help other women make empowered choices in their lives. Thank you.

I am sincerely grateful to my family and friends for your unconditional love, gracious support, and encouragement throughout this journey. A particular thank you to my father – your integrity, enthusiasm, and dedication will always be an inspiration. To my husband, I am deeply grateful for your unwavering support and enduring love. And finally, thank you to my precious daughter who came into this world alongside this project – you are such a gift.
Chapter 1: Introduction

Statement of the Problem

It is common for both men and women to express a desire to have children at some point in their lives (Brase, 2016; Tough, Tofflemire, Benzies, Fraser-Lee, & Newburn-Cook, 2007). Despite this, there is a growing worldwide trend toward delayed childbearing in most developed countries. Women’s age at first birth is increasing; the highest birth rates in Canada are now for women aged 30-34 (Statistics Canada, 2014). These trends are echoed in Europe, and the percentage of births to women over age 30 has reached 40% in Sweden, Denmark, Norway, Finland, the Netherlands, Italy, and Spain (Nicoletti & Tanturri, 2005). Rates of advanced maternal age, defined as a woman over age 35 having a child, are also on the rise. These developments clearly demonstrate that delayed childbearing is becoming increasingly common worldwide.

There are numerous consequences associated with delayed childbearing, both positive and negative. Some notable benefits that may occur include personal development, educational attainment, career advancement, financial security, and relationship stability (Tough et al., 2007). However, advanced maternal age also poses significant health concerns. One such risk is an increased likelihood of infertility, the absence of conception after one year of regular, unprotected intercourse (Chachamovich et al., 2010). The rate of infertility in most developed countries is currently at 10-15% and is expected to rise due to the increasing trend towards delaying childbearing. Infertility can have significant negative impacts on men and women, including decreases in quality of life, psychological wellbeing, marital satisfaction, sexual satisfaction, and pregnancy outcomes (Chachamovich et al., 2010; Maheshwari, Porter, Shetty, & Bhattacharya, 2008).
Advanced maternal age has also been associated with many perinatal and infant health risks, including higher rates of miscarriage, chromosomal abnormalities, caesarean section, preterm delivery, low birth weight, and stillbirth (Cooke, Mills, & Lavender, 2012). The use of assisted reproductive technologies (ART) has also been steadily increasing, partly as a result of the trend toward delayed childbearing (Tough et al., 2007). ART can be expensive and invasive treatments, with relatively low success rates and increased chances of multiple births – which are associated with poorer maternal and fetal outcomes (Maheshwari et al., 2008).

In terms of reproductive decision-making, in a qualitative study of 22 heterosexual childless couples, Olafsdottir, Wikland, and Möller (2011) determined that the decision to conceive occurs through a two-part process. First, certain conditions need to be satisfied in order for couples to make the decision to have a child, including stable social conditions, stable relationship, appropriate age, and mutual desire for a child. Once couples feel prepared for parenthood then certain catalysts will impact their decision-making, such as social balance, duty to family, and fear of infertility. This study was based on the assumption that the decision to have children is an intentional decision, but it is certainly possible that reproductive decision-making might not be an intentional process.

Several studies demonstrate that childbearing decisions are influenced by having a suitable partner, a mutual desire to have children, and financial security (Cooke et al., 2012; Olafsdottir et al., 2011; Tough et al., 2007). In addition to these shared factors, research also highlights several distinct factors, including appropriate age and life stage, external social and family pressure, and a fear of infertility. Although there is often a complex interplay of factors that influence the timing of childbearing, the primary factors include: being in a stable relationship, having a mutual desire for children, and financial security (Cooke et al., 2012;
Olafsdottir et al., 2011; Tough et al., 2007). In a survey of 1,500 currently childless men and women aged 20-45, both women and men indicated that financial security, partner suitability to parent, own desire to have a child, and partner’s desire to have a child were the most important factors in their childbearing decisions (Tough et al., 2007).

Specific to the decision to delay childbearing, several factors have been shown to influence procreative postponement (Doherty & Pal, 2011). In their comprehensive qualitative study of 18 women who were either not pregnant without children, pregnant with their first child, or not pregnant without children and receiving fertility treatment, Cooke and colleagues (2012) identified three main themes that represent women’s experiences of delayed childbearing. The authors indicated that delayed childbearing is not a conscious choice, but is based on a complex interaction of factors that are often beyond a woman’s control, including having the “right” relationship, financial security, health, and fertility. The authors also concluded that delayed childbearing is influenced by various life stages, as well as a need for information to assist decision-making – information that is often not readily available (Cooke et al., 2012; Daniluk & Koert, 2013; Maheshwari et al., 2008; Tough et al., 2007). Based on these findings, it is evident that the decision to pursue or delay childbearing is not clear-cut, and there are complex and intricate factors that impact this choice, many of which are beyond a woman’s sense of control (Cooke et al., 2012).

Until very recently, women who elected to delay childbearing due to their personal or relational circumstances had no way to address the realities of their biological clock. However, recent advances in ART have provided women who are faced with delaying childbearing, with the possibility of exercising some control over their fertility by freezing their eggs, also known as oocyte cryopreservation. Egg freezing involves a process in which a woman’s ovaries are
hormonally stimulated, her eggs are surgically removed, and are frozen and stored for use at a later date (Petropanagos, Cattapan, Baylis, & Leader, 2015). When a woman is later ready to use her frozen eggs, she has the option to go through \textit{in vitro fertilization} (IVF) with either her partner’s sperm or donor sperm, followed by an embryo transfer. Because the age of a woman’s eggs have more of an impact on her fertility than the age of her uterus, the idea behind egg freezing is that a woman’s unfertilized eggs are removed and frozen when she is at a younger age for use when she is older, thereby mitigating many of the risks of later childbearing (Baldwin, Culley, Hudson, & Mitchell, 2014).

Egg freezing was first developed as a way to help women preserve their fertility when undergoing medical treatments that might cause infertility, and was most commonly used for women undergoing chemotherapy and/or radiation as a treatment for cancer. However, in 2012 the American Society for Reproductive Medicine (2013) removed egg freezing from the list of experimental treatments. In Canada, many fertility clinics now offer women the choice to pursue egg freezing for non-medical reasons. This elective procedure is referred to as \textit{social egg freezing}. This technology is now available for women who are not ready to have children due to social reasons but want to preserve their fertility so they can have genetically-related children at some point in the future (Baldwin, Culley, Hudson, Mitchell, & Lavery, 2015). In Canada, egg freezing is a privately paid for procedure, and the cost of an egg freezing cycle typically ranges from $5,000 to $10,000, which often includes medical consultations, laboratory fees, medications, one egg retrieval procedure, and occasionally includes storage fees (Petropanagos et al., 2015). Additional costs are usually incurred for annual storage of frozen eggs, typically ranging between $300-500 per year, and for the IVF and embryo transfer procedures as needed.
Since egg freezing is a relatively new reproductive option, there are a limited number of studies that have examined the success rates of egg freezing for fertility preservation, and although these numbers vary, it is estimated that the live birth rate for one frozen egg for women who preserved their oocytes before the age of 38 is 2-12% (American Society for Reproductive Medicine, 2014). Although recent changes in freezing technology from a slow-freeze method to a method known as vitrification have greatly increased the success rates of freezing and thawing eggs for future use, these numbers show that egg freezing does not guarantee a pregnancy or live birth in the future. The success rates of egg freezing vary by a woman’s age, and are impacted by when she freezes her eggs and when she attempts to use her frozen eggs to have a child. In order to increase the success rates of frozen eggs resulting in a live birth, it is recommended that women freeze their eggs when they are under age 38, and there is concern that pregnancy rates for women who freeze their eggs in their late 30s or early 40s will not be as high as women who freeze their eggs in their 20s or early 30s (American Society for Reproductive Medicine, 2014).

Research has shown that women who have pursued social egg freezing are typically over the age of 36 at the time of egg freezing, single, well-educated, and professionally employed (Baldwin et al., 2015; Carroll & Kroløkke, 2017; de Groot et al., 2016; Hodes-Wertz, Druckenmiller, Smith, & Noyes, 2013; Stoop et al., 2015; Vallejo et al., 2013; Waldby, 2015). Unfortunately, some research has found that women who are pursuing egg freezing do not always receive clear and precise information on success rates that would adequately support their decision-making (Baldwin et al., 2015).

Recent announcements by Facebook and Apple that they would cover the costs of egg freezing for their female employees has propelled social egg freezing into the media spotlight and raised significant ethical questions. There have been numerous examinations of the ethical
considerations and social repercussions of social egg freezing, including implications on social and gender issues, aging, maternal and infant risks, and the medicalization of reproduction (Dondorp & de Wert, 2009; Dondorp et al., 2012; Mertes, 2015; Pennings, 2013). Women who freeze their eggs also have to consider what to do with their unused frozen eggs, with options including either donating or discarding the unused eggs. Despite increasing media attention, social egg freezing remains a highly controversial topic.

Purpose of the Study

Research has shown that most women want to have children at some point in their lives (Tough et al., 2007). If they do not feel ready to have children, for various reasons, they now have the option to pursue social egg freezing as an attempt to preserve their fertility and have children at a later age. It would appear that an increasing number of women in their reproductive years are considering this fertility preservation option (Petropanagos et al., 2015). However, with social egg freezing being a relatively new reproductive option, there is limited existing literature on the topic. Only a small number of studies have examined the experiences of women who have frozen their eggs for non-medical reasons (Baldwin et al., 2015; Carroll & Krokøkke, 2017; Hodes-Wertz et al., 2013; Stoop et al., 2015; Waldby, 2015). These studies have primarily focused on the demographic and motivational factors of this group of women, and so have been able to portray only a limited scope of the personal experience and meaning of social egg freezing.

At this point, very little is known about women’s personal experiences of undergoing social egg freezing for delaying childbearing and their decision-making process related to fertility preservation. Despite the growing availability of social egg freezing, little is known about the actual experiences of women who have chosen to undergo egg freezing for non-
medical reasons and the subsequent emotional, psychological, and social implications on the lives of these women. The limited available research highlights the need for a more nuanced understanding of the phenomenon of social egg freezing examined through qualitative methods (Baldwin et al., 2014).

This study aimed to address this gap in the current literature and in the clinical understanding of this newly available procedure. As more women choose to pursue this form of fertility preservation, it is important to enhance our understanding about this phenomenon in order to support informed decision-making. This research sought to address the current limits of the previous academic literature on social egg freezing by exploring the personal experiences of women of reproductive age who have undergone egg freezing in order to delay childbearing. This qualitative inquiry was guided by the following research question: *What is the meaning and experience of undergoing social egg freezing for the purpose of delaying childbearing?*

**Impact of the Study**

Previous research has shown that engaging in assisted reproduction is a multifaceted and complex experience that can have significant emotional, psychological, and financial consequences (Daniluk, 2001). As a result, many women and couples seek the support of experienced counsellors as they make fertility-related decisions, face reproductive challenges, and navigate the complex arena of assisted reproduction. Fertility is an important and very personal issue for many women of reproductive age, and difficulties related to fertility can have significant short- and long-term consequences on the lives of women and their partners. It has also been shown that there is a significant need to increase knowledge of fertility issues, fertility preservation, and the various reproductive options available to women (Daniluk & Koert, 2016; Daniluk, Koert, & Cheung, 2012). As new reproductive technologies become available, it is
important to learn about not only the health implications of these options, but also their social, emotional, and psychological impacts. Such increased knowledge may assist counsellors to better support the psychological and emotional needs of women seeking help regarding their reproductive health.

It is hoped that the implications of this study will be multifold. Through an in-depth examination of this under-researched topic, researchers and clinicians may have the opportunity to learn about the experience of social egg freezing from the perspective of women who have undergone this procedure in order to preserve their fertility. The findings from this study may help to enhance our understanding of women’s experiences of undergoing social egg freezing, as well as the meanings they attribute to this experience. In addition, the research findings may confirm and add to our understanding of women’s motivations for freezing their eggs, the factors that influence their decisions about egg freezing, as well as some of the perceived benefits and barriers to this fertility preservation option. These findings may also improve our understanding of the factors that are important in women’s future intentions and concerns regarding the use and disposition of their frozen oocytes. Finally, this research may help to inform future research in this newly developing area, as well as support clinical counsellors and public educators working in the field of reproductive health.
Social egg freezing is being presented to women of reproductive age by the fertility industry as a viable option to delay and preserve their fertility, allowing them the possibility of having genetically-related children at some point in the future. However, as this field is relatively new, few studies have been conducted on social egg freezing to date and there is limited literature examining women’s personal experiences of undergoing social egg freezing. The few available research studies on this topic fall broadly into two categories: those looking at attitudes and intentions of women who are considering, or waiting to pursue, social egg freezing, and those focused on women who have undergone social egg freezing, with an emphasis on the demographic characteristics and motivational factors of this group of women. This chapter provides a summary and critical review of the available literature on social egg freezing.

**Literature on Women Considering Social Egg Freezing**

In order to examine attitudes and intentions toward social egg freezing, as well as knowledge of age-related fertility decline, Stoop et al. (2011) conducted an email survey of 1,024 Dutch women of reproductive age, between the ages of 21 to 40. Based on their answers to the question of whether they would consider freezing their eggs, the authors divided the respondents into “potential freezers” or those who would consider freezing their eggs (32%), which was further separated into those who answered yes (3%) and those who answered maybe (28%), a “doubtful group” or those who were unable to decide about whether they would freeze their eggs (17%), and “non-freezers” or those who said they definitely would not freeze their eggs (52%). Non-freezers were more likely to be married, in cohabiting relationships, or divorced, and were more likely to have children, compared to the other two groups. Younger women, ages 21 to 29, were most likely to consider freezing their eggs in the future and were also more likely
to be open to the idea of donating their unused oocytes than older women. Respondents referred to the high costs of the procedure, concern about effects to their fertility, and potential impacts to children born from frozen oocytes as barriers to considering social egg freezing.

This study was the earliest study in this review that examined women’s attitudes and intentions toward social egg freezing, and through the use of email surveys, was able to survey a relatively large number of reproductive age women. The number of respondents in this study who would consider freezing their eggs was surprisingly low, at only 3%, which contrasts with a more recent study by Tan et al. (2014) that found that 26% of respondents in their study would consider freezing their eggs. Stoop et al.’s (2011) study was conducted prior to the 2012 declaration by the European Society of Human Reproduction and Embryology that oocyte cryopreservation should be available for women who want to preserve their fertility against age-related fertility decline (Dondorp et al., 2012). Therefore, it is possible that the number of women who would consider this procedure may have increased in the last few years as more women learn about the availability and viability of social egg freezing as a fertility preservation option. This study examined a much broader population of women than the current study investigated. However, it is applicable to the current study by highlighting potential barriers to social egg freezing that the women might consider important prior to freezing their eggs, including the costs of the procedure and concerns about potential effects to fertility.

In another study of reproductive age women, Tan and colleagues (2014) examined attitudes toward fertility and social egg freezing. In this cross-sectional survey, 129 Singaporean female medical students ages 20 to 31 years (M = 23 years) were surveyed. Only 36% of those surveyed had heard of social egg freezing. When asked if they would consider social egg freezing, 26% of respondents answered yes. This is significantly higher than the findings in
Stoop et al.’s (2011) study, which found that only 3% of respondents said they would consider freezing their eggs. Such a discrepancy in these findings could be due to the timeframe of each of the studies, but could also be influenced by differences in the populations surveyed. Tan et al. (2014) surveyed Singaporean female medical students, ages 20 to 31 years, with a mean age of 23 years, whereas Stoop et al. (2011) surveyed a broad range of Dutch reproductive age women, ages 21 to 40 years. Both studies show that younger women are more likely to consider egg freezing. Furthermore, the fact that the respondents in the study by Tan et al. (2014) were medical students pursuing higher education and competitive careers could influence their openness to egg freezing.

In examining the reasons that women might consider social egg freezing, Tan et al. (2014) found that 47% of those surveyed would consider egg freezing if they had not found a suitable partner, and 46% would consider egg freezing in order to focus on their career and postpone childbearing. If a government subsidy was made available to cover the costs of egg freezing, 71% of respondents said they would be more likely to consider it as a viable option. Based on their findings, the authors have highlighted the importance of improving public education and providing adequate and accurate information about egg freezing to women of reproductive age. This study is helpful in expanding our knowledge about women who would consider social egg freezing and the factors that might influence their decision. However, it is notable that the mean age of respondents in this study was 23 years. As they were relatively young compared to women in similar studies, these women might not yet feel the pressure of their biological clocks and thus might not yet consider social egg freezing. The authors did not indicate whether respondents were in relationships or had children – a factor that was important in the study by Stoop et al. (2011). In addition, this study has limited applicability to the current
study because the population surveyed was limited to young Singaporean female medical students, which differs considerably from the population in the current study.

In a more comprehensive study of women considering social egg freezing, Vallejo et al. (2013) conducted a retrospective quantitative analysis over seven years, of 315 women at several fertility centres who were considering egg freezing for non-medical reasons in order to assess their social and psychological influences. Vallejo and colleagues examined social, demographic, and motivational factors related to social egg freezing for both those considering freezing their eggs and for women who had already elected to freeze their eggs. This differs from the previous two studies that only examined women considering social egg freezing (Stoop et al., 2011; Tan et al., 2014; Vallejo et al., 2013). The findings of the study were based on several individual retrospective studies conducted at different fertility centres, and the authors did not clearly indicate the number of women in their overall study who had pursued egg freezing compared to how many women had only considered this procedure. The mean age of women in this study who inquired about egg freezing was 35.2, and the mean age of participants who had undergone egg freezing was 38.6 years. The majority of women surveyed were well-educated, single, had not had previous full-term pregnancies, and described themselves as intelligent and outgoing. The authors found that women under age 37 were more likely to consider single motherhood than older women in the study. Most women who were considering social egg freezing were open about their decision with family and friends. The authors assessed the motivational trends of participants who had undergone egg freezing and found that most of the women surveyed pursued this option because they felt concern about their biological clock, to take the pressure off of searching for a suitable partner, and to make sure that they had pursued all available
reproductive opportunities. The motivational trends of women who were considering egg freezing were not discussed.

This study is comprehensive in its examination of demographic and social factors for women considering social egg freezing. The demographic trends reported in this study of women who are considering or have pursued social egg freezing are consistent with trends found in other studies of women who have already undergone this procedure (Baldwin et al., 2015; Carroll & Kroløkke, 2017; de Groot et al., 2016; Hodes-Wertz et al., 2013; Stoop et al., 2015; Waldby, 2015). Highlighting the need for counselling and education on the fertility lifespan and fertility preservation, women in this study who were considering or had pursued social egg freezing were typically over age 35 (Vallejo et al., 2013).

In a qualitative study, de Groot and colleagues (2016) used in-depth interviews to examine how 20 women, who were on waiting lists to undergo social egg freezing at Dutch fertility clinics, viewed the procedure. Similar to other studies, women in this study were typically over the age of 36, professionally employed, and single (Baldwin et al., 2015; Carroll & Kroløkke, 2017; Hodes-Wertz et al., 2013; Stoop et al., 2015; Waldby, 2015). The participants’ hope for shared parenthood and desire to minimize the risk of future infertility were primary factors in their decision to pursue egg freezing, which is consistent across the extant literature (Baldwin et al., 2015; Carroll & Kroløkke, 2017; Hodes-Wertz, 2013; Stoop et al., 2015; Waldby, 2015; Vallejo et al., 2013). The authors did not discuss the reasons that participants had initially delayed childbearing. Although eight women were in relationships at the time of the study, they chose to remain on the waiting list for egg freezing as a backup plan in case their relationships ended. Contrary to the findings of Baldwin et al.’s (2015) study in which the majority of participants would consider becoming single mothers, only three women in this study
reported that they would consider single motherhood. Notably, the authors did not address the women’s future intentions for using their frozen eggs.

De Groot and colleagues (2016) described four primary themes that arose from the interviews, including “binary thinking and anticipatory regret,” “risk perception,” “a helping hand to achieve shared parenthood,” and “costs” (p. 1398). The women in this study believed they had a high likelihood of being able to have a child using their frozen eggs because their overall health and fertility status were good. This contrasts with other findings showing that some women pursue social egg freezing because they have compromised fertility (Baldwin et al., 2015). The women in this study believed that the cost of egg freezing was high, but considered it to be worth the cost. In addition, they were not concerned about any possible risks of the egg freezing procedure on their fertility or to their future children. Notably, these factors have been identified in previous literature as potential barriers to pursuing egg freezing (Stoop et al., 2011). This highlights a possible distinction between women who are considering egg freezing and those who have already decided to pursue the procedure, in terms of their views of potential barriers. Furthermore, it is possible that women on the waiting list for egg freezing may be unrealistically hopeful and positive about their perceptions of the procedure. Although this study utilized a qualitative approach to explore women’s views of egg freezing, it only examined women who were considering, and waiting to undergo, the procedure, rather than women who had actually undergone social egg freezing, further highlighting the need for more research in this area.

In contrast to the above studies that focused on demographic and motivational factors of women considering social egg freezing, Martin (2010) conducted a mixed methods study aimed at comparing the representations of two populations of women who are candidates for egg
freezing: women with cancer who pursue egg freezing for medical reasons and healthy young women who pursue egg freezing for social reasons (de Groot et al., 2016; Stoop et al., 2011; Tan et al., 2014; Vallejo et al., 2013). Her study was conducted using an ethnographic, mixed methods approach, combining a qualitative review of journal articles, newspaper reports and marketing materials on the topic of egg freezing, as well as participant observation at fertility-related educational seminars. Although Martin examined egg freezing and fertility preservation in general, the author distinguished between those who were considering pursuing egg freezing for medical reasons and those who were considering freezing their eggs for social reasons. Martin’s (2010) study is included in this review because it is useful in identifying the broad social narratives that might characterize a woman who is considering social egg freezing.

Based on an examination of texts and articles, Martin (2010) identified three main narratives about women who are considering pursuing social egg freezing. These narratives suggest that women who pursue social egg freezing are characterized in the media as being either “vulnerable to exploitation,” “putting their own selfish needs ahead,” or “liberated and forward-thinking” (Martin, 2010, p. 535). In contrast, Martin identified representations of women with cancer who are considering egg freezing as being vulnerable and sympathetic. She suggested that this distinction is important because it calls into question the ways in which women are seen as being “deserving” of egg freezing. Martin concluded that egg freezing, whether for social or medical purposes, serves as an investment, both for reproductive needs as well as for financial and career pursuits.

In Martin’s (2010) study, themes of fear of anticipated infertility, risk, and risk management through egg freezing were identified from the data. In newspaper reports and marketing materials, egg freezing was presented as a way to mitigate the risks of remaining
childless or not having a genetically-related child at some point in the future. Notably, Martin (2010) suggests that the term *fertility preservation* through egg freezing be redefined as the ability to preserve one’s genetic connection to future children rather than as solely the ability to conceive and sustain a pregnancy. This highlights the fact that egg freezing is only one way of preserving fertility, which can also be pursued through donor oocytes and donor embryos. However, as Martin (2010) notes, having a genetic connection to a child may be seen as the “gold standard of motherhood” (p. 540), which may further serve to enhance the increasing popularity of egg freezing.

In summary, the research located on women considering social egg freezing has highlighted some important findings. It is evident that age appears to an important factor in whether or not women consider egg freezing, and younger women are more likely than older women to consider this method of fertility preservation (Stoop et al., 2011; Tan et al., 2014). One of the studies was based on a very narrow population, specifically young Singaporean female medical students with a mean age of 23 years, which has limited applicability to understanding the attitudes toward social egg freezing for reproductive age women in North America (Tan et al., 2014). In addition, women who are partnered or divorced, as well as those who have previously had children, appear to be less likely to consider social egg freezing (Stoop et al., 2011). Based on these findings, it is apparent that age, family status, and relationship status impact women’s views on social egg freezing. Although potential barriers to pursuing egg freezing have been discussed in the literature, de Groot et al. (2016) found that women who were waiting to undergo egg freezing were undeterred by these barriers (Stoop et al., 2011). Martin (2010) identified specific characterizations of women who are considering social egg freezing,
but it is unclear if these descriptions are reflected in women’s experiences of undergoing the procedure.

The studies included in this review that have examined women considering social egg freezing have been primarily quantitative and used survey data. Although important for gathering information, these studies have not allowed for the development of an in-depth understanding into the factors that women deem important in considering social egg freezing. Although one qualitative study was included in this review, this study examined women who were waiting to pursue social egg freezing and may have limited applicability for women who have already undergone social egg freezing (de Groot et al., 2016). This further highlights the need for a bottom-up, exploratory investigation of the meaning and experience of egg freezing from the perspective of the women who have experienced this relatively new phenomenon.

**Literature on Women Who Have Undergone Social Egg Freezing**

Several recent studies have examined women who have undergone social egg freezing (Baldwin et al., 2015; Carroll & Kroløkke, 2017; Hodes-Wertz et al., 2013; Stoop et al., 2015; Waldby, 2015). One study by Baldwin et al. (2015) was conducted for the purpose of identifying the types of women that undergo social egg freezing as well as their reproductive intentions and actions following the procedure. The authors conducted a qualitative study on a sample of 23 British women who had undergone or were about to undergo social egg freezing. Although the study was interview-based, the findings were presented quantitatively. The authors examined the demographic characteristics of the women who had undergone social egg freezing and found that these women were typically well-educated, professionally employed, single, and in their mid- to late 30s. The age at which women in this study had first undergone egg freezing ranged from 32 to 44, with a mean age of 36.7 years. Although it is recommended that women
pursue egg freezing when they are under age 38 (American Society for Reproductive Medicine, 2014), 13% of the women in this study had undergone this procedure in their 40s. This is consistent with findings from other studies that women who pursue social egg freezing are typically in their mid- to late 30s, and helped to inform the age range identified for the current study (Baldwin et al., 2015; Carroll & Kroløkke, 2017; Hodes-Wertz et al., 2013; Stoop et al., 2015; Vallejo et al., 2013).

All of the women in Baldwin et al.’s (2015) study said they pursued egg freezing for social reasons. Despite this, 22% of the participants believed that their fertility was compromised and referred to this as one of the reasons that they had elected to undergo this procedure. The authors note that this demonstrates the lack of clearly defined distinctions between social and medical reasons for pursuing egg freezing. It is interesting to note that all of the women in this study reported that they would attempt to conceive naturally before using their cryopreserved eggs, and would prefer to have a child within a committed relationship rather than as a single mother or through the use of donor sperm. Similar to findings from other studies, all participants in this study reported that they thought that parenthood should be pursued within a committed and stable partnership (Baldwin et al., 2015; Hodes-Wertz, 2013; Vallejo et al., 2013). These women cited various reasons for not wanting to pursue single motherhood, including not wanting to raise a child alone, not having adequate financial resources, and not having enough social and familial supports. Interestingly, for most women in this study, their sense of readiness to become mothers had not changed from the time they had undergone egg freezing to the time of the study, which was an average of 2.56 years.

Baldwin et al. (2015) also examined the intentions that women in their study had toward using their frozen oocytes. The majority of participants had undergone one egg freezing cycle
and had stored an average of 13 oocytes. The authors found that 67% of women who were still single at the time of the study would consider single motherhood using donor sperm to conceive with their frozen eggs, but this was viewed as a “last case scenario” (Baldwin et al., 2015, p. 244). Most of the participants said they would consider donating their unused eggs to research or to other women undergoing fertility treatments. Although this study was based on qualitative interviews and presents numerous important findings about an under-researched phenomenon, the findings were only presented in a quantitative format. This further highlights the need for the current study to examine the phenomenon of social egg freezing using an in-depth, qualitative approach.

In a quantitative study, Hodes-Wertz et al. (2013) conducted a survey of 183 reproductive age women who had undergone social egg freezing at one fertility clinic, in order to understand their beliefs and attitudes toward fertility preservation. The age range of participants in this study was not clearly identified. Consistent with other studies, the majority of the respondents in this study were over age 35 when they elected to freeze their eggs (Baldwin et al., 2015; Carroll & Kroløkke, 2017; Stoop et al., 2015; Waldby, 2015). Most were Caucasian, single, never married, and had never been told that they had impaired fertility. The majority of respondents reported that they wished they had undergone egg freezing earlier in their lives, and the most common reason given for this delay was that the technology was not readily available or that they were not aware of the technology. Although many of the women in this study were fairly knowledgeable about age-related fertility decline, 25% reported that they lacked adequate education prior to their initial oocyte cryopreservation consultation. The majority of respondents reported that they thought that the media had influenced their belief in the viability of natural conception and motherhood at an older age. The authors examined the methods through which
women had first learned about egg freezing, and found that they had become aware of this procedure through friends, obstetrician/gynaecologists, the media, and family physicians. Thirty-two percent of respondents reported that they believed there was a social stigma surrounding egg freezing, but the authors did not elaborate on this finding. Echoing findings presented in Baldwin et al.’s (2015) study, women in this study reported that they would prefer to conceive naturally compared to using their cryopreserved eggs, and would consider donating their unused eggs for research purposes.

Hodes-Wertz and colleagues (2013) also examined the reasons that participants delayed childbearing. The majority of respondents cited the lack of a partner as the primary reason they had not had children earlier in their lives. Other reasons included professional and financial reasons, and thinking that it was too big of a commitment to have children. Since undergoing an egg freezing cycle, 12% of respondents had changed their mind about parenting, and the majority of these respondents felt that it had become more of a priority in their lives. Similar to other findings, the majority of women in this study thought of egg freezing as a backup plan if natural conception did not occur (Baldwin et al. 2015; Carroll and Krolokke, 2017). Only 3% viewed it solely as a means to defer reproduction. Most respondents in this study believed that freezing their eggs had increased their sense of security about their reproductive futures. When asked at what age respondents believed a woman would be too old to consider a pregnancy using her frozen eggs, 78% endorsed the 49 to 58 year range, whereas 13% chose the 58 years and above category. This is an interesting finding that was not examined in the other studies focused on social egg freezing, but could have significant social and ethical implications.

Hodes-Wertz et al. (2013) asked only one survey question related to the experience of social egg freezing, with possible answers including feeling the experience was empowering,
empowering and anxiety-provoking, anxiety-provoking, or neither. Most of the women in this study reported feeling empowered as a result of their experience, and only 6% believed that it was purely anxiety-provoking. Although this study provides valuable information in understanding the beliefs and attitudes of women who have pursued social egg freezing, it is limited in enhancing our understanding women’s actual experiences of undergoing the process of egg freezing, as only one question addressing this issue was asked. However, this study provides valuable information for the current study, and helped to inform some of the sample interview questions. Similar to the study by Baldwin et al. (2015), the findings of this study contribute to our knowledge of the demographic characteristics of women who have pursued social egg freezing, as well as their attitudes and intentions, but neither of these studies provides information about the actual lived experience of social egg freezing (Hodes-Wertz et al., 2013).

Stoop et al. (2015) conducted a retrospective study using a standardized telephone questionnaire to examine the relational status, reproductive choices, and possible regret of 86 women who had undergone social egg freezing, compared with 54 women who had considered, but had not undergone, the procedure. The mean age of all of the women at the time of the study was 38.5 years. Consistent with previous literature, the majority of women in this study who had undergone social egg freezing were single and childless (Baldwin et al., 2015; Carroll & Krolokke, 2017; Hodes-Wertz et al., 2013; Waldby, 2015). Sixty-five percent of women who had frozen their eggs reported that they did so as a way to ensure against future infertility. Other motivations were to allow more time to find a partner and to reduce the pressure to find a partner. These motivations are consistent with previous findings showing that taking the pressure off of finding a suitable partner is an important factor in women’s decisions to freeze their eggs (Vallejo et al., 2013; Waldby, 2015). None of the women who had frozen their eggs
regretted undergoing the procedure. This noteworthy finding has not been addressed in previous literature. The authors reported that, on average, women considered 43 years old to be an upper age limit for pursuing childbearing.

When asked whether or not they believe that they will use their frozen eggs in the future, only 51% of respondents answered yes. This finding provides useful information about women’s intentions for the future use of their eggs. However, it is limited in providing a more complete understanding of the numerous factors that might be involved in women’s considerations about the future use and/or disposition of their cryopreserved eggs. Although this study provides important information about the motivations and considerations of women who have pursued social egg freezing, it was based on a structured questionnaire, which limits possible responses and does not allow for an in-depth or more nuanced understanding of the experiences and intentions of women who have frozen their eggs.

Waldby (2015) conducted a qualitative study in order to examine the interaction between social egg freezing and broader social issues, including sexuality, reproduction, household formation, and time (Waldby, 2015). This study was based on in-depth, semi-structured interviews with 15 women who had undergone social egg freezing and with 10 clinicians who worked in fertility clinics in the United Kingdom. Echoing demographic findings from other studies, the majority of women in this study were over the age of 36, single, well-educated, and professionally employed at the time of the interviews (Baldwin et al., 2015; Carroll & Kroløkke, 2017; Hodes-Wertz et al., 2013; Stoop et al., 2015). The author did not indicate the age of the participants when they had initially frozen their eggs. As was found in the study by Hodes-Wertz et al. (2013), the majority of women in this study reported that they had initially learned about egg freezing through friends. However, in this study, the media was also cited as one of
the primary avenues through which the women learned about egg freezing. Based on her findings, Waldby (2015) concluded that the women in this study used egg freezing as a way to reconcile conflicting timelines in their lives. In particular, these women viewed egg freezing as a way of “banking time” (Waldby, 2015, p. 470), and synchronizing their biological clocks with their needs to find a long-term partner and establish a stable household. In the study by Vallejo et al. (2013), women reported that taking the pressure off of relationships was a reason for considering social egg freezing, and participants in this study referred to the same reason as being an important factor in why they had actually pursued egg freezing (Waldby, 2015).

This study was different from many of the other studies reviewed because its primary focus was on sociological issues surrounding social egg freezing, rather than the demographic and motivational trends of women pursuing egg freezing (Baldwin et al., 2015; Hodes-Wertz et al., 2013; Stoop et al., 2015; Vallejo et al. 2013). Waldby’s (2015) study focused on the concept of “tissue economy” (p. 471), in which tissues banked for future use have a certain value and productivity. She examined how the ability to preserve fertility might interact with women’s life course trajectories. This was one of only two studies found for this review that reported on qualitative findings to examine the phenomenon of social egg freezing.

In a more recent qualitative study Carroll and Kroløkke (2017) used in-depth semi-structured interviews with 16 women who had undergone social egg freezing at two fertility centres in the United States to examine how they negotiated and understood the decision to freeze their eggs. Consistent with the extant literature, most of the women in this study were well-educated, professionally employed, single, childless, “white,” and in their mid- to late 30s at the time of freezing (Baldwin et al., 2015; Hodes-Wertz et al., 2013; Stoop et al., 2015; Waldby, 2015). All of the participants identified as heterosexual, which the authors related to the idea of
women freezing their eggs for “anticipated coupledom” (p. 8) in the form of a romantic heterosexual relationship. Carroll and Kroløkke (2017) suggested that social egg freezing serves as a form of “responsible reproductive citizenship” (p. 1), whereby women freeze their eggs as a way to increase the likelihood of being able to have a romantic partner with whom they can have a genetically-related child, as well as to mitigate against the risk of future infertility. The authors asserted that women freeze their eggs as “informed consumers” (p. 12) of reproductive technologies who take responsibility for maintaining their fertility and take active steps in the form of “biopreparedness” (p. 10) in order to optimize the likelihood of having a healthy child within a committed relationship. This finding is similar to Martin’s (2010) assertion that women who freeze their eggs for social reasons can be characterized as liberated and forward-thinking. Notably, the women in this study considered the cost of egg freezing to be substantial, but deemed it to be a worthwhile financial investment toward preserving their fertility, a finding that was echoed in previous literature (de Groot et al., 2016). This study was one of only a few qualitative studies in this review that focused on the experiences and motivations of women who have undergone social egg freezing, and it provides a valuable addition to enhancing our current understanding of this under-researched phenomenon.

In summary, the existing research has widely identified a typical demographic profile of women who pursue social egg freezing (Baldwin et al., 2015; Carroll & Kroløkke, 2017; Hodes-Wertz et al., 2013; Stoop et al., 2015; Waldby, 2015). These studies have also provided important findings about the attitudes and intentions of women who have pursued social egg freezing that helped to inform the current study.

There is only a limited body of existing literature on the phenomenon of social egg freezing due to the fact that this procedure has only recently become a viable fertility
preservation option for women. Of the studies reviewed that focused on women who had undergone social egg freezing, only one study specifically explored the experiences of egg freezing for women who had undergone this procedure (Baldwin et al., 2015; Carroll & Kroløkke, 2017; Hodes-Wertz et al., 2013; Stoop et al., 2015; Waldby, 2015). Carroll and Kroløkke’s (2017) qualitative study explored how women negotiated and understood the decision to freeze their eggs and has advanced our understanding of this emerging phenomenon. The study by Baldwin and colleagues (2015) focused only on the demographic characteristics and disposal intentions of women who had frozen their eggs. Curiously, the findings from this qualitative study were only presented using a quantitative approach. In another qualitative study, Waldby (2015) conducted semi-structured interviews with women who had undergone social egg freezing, but the analysis focused on broad social issues rather than on the actual egg freezing experiences of these women. Hodes-Wertz and colleagues (2013) addressed the experience of social egg freezing in their quantitative study, but included only one brief survey question related to whether the experience was empowering or anxiety-provoking. As a result of this limited body of research, little is known about women’s actual motivations for, and experiences of, undergoing social egg freezing. There have been calls for new research examining this topic using qualitative methods in order to gain a rich and detailed understanding of this newly emerging phenomenon (Baldwin et al., 2014). The current study sought to fill this important gap.

**Summary**

In this chapter, I have reviewed the existing literature on social egg freezing, including literature on women who are considering, or are waiting to pursue, social egg freezing and women who have undergone social egg freezing (Baldwin et al., 2015; Carroll & Kroløkke,
Based on these studies, it has been clearly identified that women who pursue social egg freezing are typically over the age of 36 at the time of egg freezing, single, well-educated, and professionally employed (Baldwin et al., 2015; Carroll & Kroløkke, 2017; Hodes-Wertz et al., 2013; Stoop et al., 2015; Vallejo et al., 2013; Waldby, 2015). Age, childlessness, and relationship status appear to be important factors in whether or not a woman would consider social egg freezing, and younger, childless, single women seem more likely than other women to consider this procedure (Stoop et al., 2011; Tan et al., 2014). A sense of reluctance toward single motherhood and lack of a suitable partner have been identified as important factors in women electing to pursue social egg freezing (Baldwin et al., 2015; Hodes-Wertz et al., 2013). Other reasons that have been identified include professional and financial reasons, and mitigating against the risk of future infertility.

As important as the above findings are, it is evident that little information exists regarding the personal experiences of women of reproductive age who have undergone social egg freezing in order to delay childbearing and the meanings they attribute to their experiences. These previous findings clearly demonstrate the significant gap in the extant literature about the experience of this developing phenomenon, highlighting the need for an in-depth examination as undertaken by this study.
Chapter 3: Method

The purpose of this study was to explore and develop an understanding of women’s experiences of social egg freezing for the purpose of preserving their fertility. Given that social egg freezing is a relatively new phenomenon that has only recently been made available to women and therefore has garnered limited research to date, an examination using qualitative methods was warranted, as this type of research allows for a thorough and inductive investigation. The question that guided this enquiry was: *What is the meaning and experience of undergoing social egg freezing for the purpose of delaying childbearing?* Guided by this question, a phenomenological approach was used, as this method supports an exploratory and in-depth examination of a phenomenon with an emphasis on identifying commonalities in an experience about which very little is known.

Research Design

Phenomenology, originally introduced by Husserl (1913/1962), is a qualitative research method rooted in an interpretive and constructivist paradigm that recognizes truth as a matter of perspective (Finlay, 2009; Langdridge, 2007; Wertz, 2005). Phenomenology focuses on exploring experiential meanings of a phenomenon and seeks to discover “fresh, complex, rich descriptions of a phenomenon as it is concretely lived” (Finlay, 2009, p. 6). It endeavors to explore both the lived experience of a phenomenon, as well as how people make sense of their experience of that phenomenon (Smith, 2004). This phenomenological approach is appropriate when aiming to understand and interpret a human experience, particularly one about which little is known (van Manen, 1990).

Through the course of its development, two primary branches of phenomenology have emerged: (a) descriptive and (b) interpretive or hermeneutic phenomenology (Finlay, 2009).
Descriptive phenomenology, based on the work of Husserl, aims to describe an experience before an interpretation is given and has researchers bracket their assumptions and preconceptions (Dowling, 2007). This approach attempts to learn the essential aspects of a phenomenon “as free as possible from cultural context” (Dowling, 2007, p. 132). In contrast, interpretive or hermeneutic phenomenology, developed through the work of Heidegger (1927/1962) and Gadamer (1960/1975), focuses on both the experience of a phenomenon as well as the meanings that individuals attribute to that experience (Finlay, 2009). This school of phenomenology also maintains that interpretation is inevitable, as experience by its very nature is something that is already interpreted. Truth is viewed as a subjective construction based on experience and interpretation, and socio-cultural and historical influences are acknowledged (van Manen, 1990).

Hermeneutic phenomenology, as outlined by van Manen (1990), is the stream of phenomenology that was employed in this study. Research using this approach seeks to describe a phenomenon and to explore the perceptions of, and meanings attributed to, that phenomenon by those who have lived it. This type of research seeks to discover the “essential meaning” (van Manen, 1990, p. 77) of a particular phenomenon, which is viewed as multi-dimensional. This approach is based on the view that both participants and researchers bring their subjective stance to the research and these interpretations are an integral part of the research process. In light of the contributions of both participants and researchers, phenomenology calls on researchers to examine and make explicit their pre-understandings, biases, and assumptions of the phenomenon under investigation and to bring critical self-awareness and ongoing reflexivity to their research (Finlay, 2008; van Manen, 1990). In this way, such knowledge and assumptions can be exposed, reflected upon, and to the extent possible, deliberately suspended in the interpretation process.
Van Manen (1990) posits that phenomenological research should be “presuppositionless” (p. 29) by departing from rigid and detailed research methods. Instead, he suggests that the research methods should be discovered through the research process itself, and are defined by the specific research question. Van Manen proposes the following six steps as a guide of inquiry in hermeneutic phenomenological research: (1) turning to a phenomenon of interest; (2) investigating experience as lived rather than as conceptualized; (3) reflecting on essential themes of the phenomenon; (4) describing the phenomenon through writing and rewriting; (5) maintaining a strong and oriented relation to the phenomenon; and (6) balancing the research context by considering parts and whole. These steps were used as the procedural guide for this study.

I used hermeneutic phenomenology in this study because social egg freezing is a relatively new area of research that has not been the subject of extensive examination, suggesting the need for an open-ended exploratory investigation that can help to begin to develop a nuanced understanding of this phenomenon. Given that little has been discussed in the extant literature about the meaning and experience of social egg freezing, hermeneutic phenomenology was an appropriate method to answer the research question. This approach supported the development of an in-depth understanding of the lived experience of social egg freezing.

**Situating the Researcher**

In a hermeneutic phenomenological study, it is important for researchers to make explicit their understandings, beliefs, presuppositions, biases, and assumptions in order, to the extent possible, to suspend this knowledge in all stages of the investigation (van Manen, 1990). Van Manen (1990) posits that, if we, as researchers, disregard this process and try to ignore our prior understandings, these presuppositions will “creep back into our reflections” (p. 47). Researchers
are called on to bring reflexivity to their research, which refers to the process through which researchers reflect on their own subjectivity and its impact on the knowledge generated through a study (Langdridge, 2007). As such, it is imperative that I have situated myself as a researcher and placed myself within the context of this study. In doing so, below I have outlined my own pre-understandings of social egg freezing and delayed childbearing. In order to bring critical self-awareness and reflexivity to my research, I maintained a reflective journal throughout the study. As part of this process, at various stages throughout the study, I asked myself the reflexive questions outlined by Langdridge (2007). These included questions such as: why am I carrying out this study; what do I hope to achieve; what is my relationship to the topic; and how might I influence the research I am conducting?

I identify as a Canadian woman in my mid-30s who is both Caucasian and Jewish. I am English speaking, well-educated and come from a middle class socio-economic background. I recognize that, based on these factors, I live with significant privileges in society that shape my relationships, experiences, and opportunities. I have recently given birth to my first child. When my first child was born, I became a mother of advanced maternal age, which is something that was unintentional but which I also accept. I have had my own fertility challenges and feel very fortunate to have become a mother. I am married and have been with my husband for several years. I recognize that having been in a long-term relationship grants me another form of privilege, that of having a committed partner with whom I can share the experience of parenthood. I have not had to consider intentional single motherhood, as some of the participants in this study have done. My own delay in childbearing has been due to numerous factors, including my own sense of readiness to have a child, my partner’s readiness to have a child, and fertility challenges.
I have not experienced the process of social egg freezing and do not have a personal familiarity with this phenomenon, and therefore consider myself to be an outsider in relation to this particular experience. However, I have experienced delayed childbearing and empathize with the desire to have children, so situate myself as an insider in this way. To my current knowledge, I also do not have any close friends who have undergone egg freezing, but do have many friends who are mothers as well as friends who are currently childless. Amongst my friends who are mothers, I have seen and heard about both the challenges and the benefits of motherhood. As a graduate student, many of my peers are currently pursuing advanced education and focusing on their careers rather than on motherhood. I have spent time talking to my childless friends, including those who want children but have not been able to have them, those who do not want children, and those who are not sure whether or not they want children. Of those who want children but have not been able to do so, this has primarily been due to not having a suitable partner. I have heard them speak of regret, but also of a sense of acceptance in coming to terms with their situation. In my personal and professional life, I have had a long-standing interest in reproductive health and sexuality, and have drawn on this as inspiration for the study.

**Pre-understandings**

I have spent time reflecting on my knowledge, beliefs, biases, and assumptions of social egg freezing and delayed childbearing, and have formulated the following pre-understandings of this phenomenon. One of my pre-understandings is the belief that many women have a strong and inherent desire to become mothers to their genetically-related children, as well as to experience pregnancy, at some point during their lifetime. I assume that, for many women, this desire aligns closely with a sense of purpose and fulfillment in their lives, and a wish to connect
deeply with, and care for, something or someone beyond themselves. Because of this desire to have genetically-related children, I suspect that, for many childless women, the longing to become a mother intensifies as they age and their ability to have biological children diminishes. I also believe that some women do not have a strong desire to have genetically-related children or to experience pregnancy, and may find deep fulfillment in becoming mothers through other methods. I also recognize that there are many women who do not have the desire to have children during their lifetime, and find fulfillment and satisfaction through many other avenues. I believe that all are equally valuable paths. I presume that women who have chosen to freeze their eggs have a desire to become mothers at some point, but do not feel ready due to their particular life circumstances. It is also possible that women who have frozen their eggs are unsure about whether or not they want to become mothers and have done so as a way to protect against the possibility of later regret.

Another of my pre-understandings is the notion that society strongly promotes the idea of women as mothers but does not necessarily support the role of motherhood. I think that it is widely assumed that women “should” become mothers and that all women have a desire to bear children. Women are seen are natural caregivers and are encouraged to become mothers in order to fulfill this maternal instinct. I believe that many women do feel the urge toward having and caring for children, but that many do not. Despite the societal pressure for women to become mothers, I think that the role of motherhood is not very highly valued in society and, although social supports exist for mothers, these supports are often insufficient. There appears to be an assumption that the role of a mother is “not enough” and many women struggle with the reality of trying to balance careers with motherhood. I believe that this creates a tension with which many women of reproductive age struggle, and this may impact their decisions about the timing
of having children. I believe that many women have an expectation that they can and should “have it all,” including becoming mothers and having successful careers. I think that, while this goal is possible for some women, it is not actually realistic for many women. I think that this has been a dominant narrative in our society that may be slowly beginning to change, as more and more women are not able to meet this expectation.

Another of my pre-understandings is the belief that women have a right to reproductive choices, including the ability to delay childbearing or pursue various options toward motherhood, including freezing their eggs. I believe that women have the right to delay childbearing until a time at which they feel that the factors are in place to adequately support their path to motherhood, and that this can, in fact, create a sense of empowerment in women’s lives. I think that assisted reproductive technologies (ART) are an acceptable choice for many women, and egg freezing presents a viable option for women who are not yet ready to have children. I think that there are ethical considerations about the upper age limit for a woman to have a child using ART, but I believe that, ultimately, the upper age limit for childbearing should be a woman’s own decision, as long as she has consulted with her physician and is well-informed about potential risks to herself or her future child. I think that it is important that women be adequately informed about success rates and risks related to egg freezing and other ART, which may, in turn, influence their decision to pursue these options.

Another of my pre-understandings is related to the notion of the biological clock. I think that as many childless women age and face the possibility of age-related fertility decline, they feel the pressure of time in their decision to pursue motherhood or to delay childbearing. I assume that this sense of pressure is heightened by the timing and interaction of multiple factors, including partner suitability, career stability, and financial security. I presume that egg freezing
might give some women a feeling of relief and a sense that they can wait longer to have children than they would have had without this option, and might be seen as a type of insurance policy. However, I also think that many women falsely believe that they can wait longer than is realistic to both freeze their eggs and to use their frozen eggs to have children.

Given my personal experience and based on the existing literature, I had several expectations regarding the current study. Consistent with previous research, I expected the majority of participants who elected to participate in this study to be in their mid- to late 30s, single, well-educated, and professionally employed at the time of egg freezing (Baldwin et al., 2015; Carroll & Kroløkke, 2017; de Groot et al., 2016; Hodes-Wertz et al., 2013; Stoop et al., 2015; Vallejo et al., 2013; Waldby, 2015). I presumed that their decision to delay childbearing and pursue egg freezing was due to a variety of factors, including lack of a suitable partner, financial security, educational pursuits, and career stability. Based on the existing literature, I expected that the majority of the women in this study would prefer to have a child within a committed relationship rather than as a single mother, and conceive naturally rather than by using their frozen eggs. I presumed that many of the women in this study viewed the egg freezing process as an insurance policy against the possibility of future infertility and/or childlessness.

Participants

Participant recruitment for this study occurred through a convenience sampling method between April and September 2017. I began the recruitment process by distributing posters on bulletin boards throughout Vancouver, B.C., and advertising through word-of-mouth, on social media, on an online forum for women undergoing ART, and through women’s business networks (see Appendices A and B). Following this, I contacted counsellors and researchers
across Canada who specialize in reproductive health to inform them about the study. Four
fertility clinics in British Columbia were sent recruitment notices about the study, and I met with
physicians at two of these clinics. Information about the study was also presented to attendees at
the annual meeting of the Canadian Fertility and Andrology Society. I had expected to also use
snowball sampling for the recruitment process; however, although participants discussed the
possibility of recruiting additional women for the study, a snowball sample did not materialize
and this method was not utilized. Prior to beginning recruitment, this study received approval
from the Behavioural Research Ethics Board at the University of British Columbia.

In total, six women from three geographic regions across North America who met the
inclusion criteria were recruited for participation in the study. Four of these participants were
recruited through fertility clinics, one through social media, and one through word-of-mouth.
Potential participants contacted me through email if they were interested in learning more about
the study. I conducted an initial telephone screening interview with each potential participant to
provide more information about the study, determine their eligibility for participation, and
answer any questions they might have about the study (see Appendix C). If they met the study’s
inclusion criteria, described below, and were interested in participating, I emailed a copy of the
informed consent form to each participant for their review prior to beginning the data collection.
I continued the recruitment and interview processes until it became apparent that data saturation
had been reached and no new themes emerged from the data.

The primary inclusion criteria for participation in this study consisted of women of
reproductive age, between 20 and 45 years, who had undergone social egg freezing for the
purpose of delaying childbearing and were childless at the time of the procedure. The
participants needed to be able to read and speak in English in order to read the informed consent
form and participate in the interviews, and be willing to commit approximately 2.5 to 3 hours for the screening, data collection, and follow-up validation interviews. As the egg freezing technique has only recently been made available and in order to ensure that they had adequate time and distance to be able to reflect back on their experience, this study required that participants completed the egg freezing procedure at least six months prior to participating in the study, or at least four months prior if they had undergone more than one egg freezing procedure. All of the participants in this study had undergone only one egg freezing procedure. All of the interviews were digitally audio-recorded, and, thus, participation in this study required that participants consented to this recording. I did not limit the sample based on socio-economic status, education, geographic location, culture, relationship status, or sexual orientation, in order to allow for as wide a range of experiences as possible. However, as was expected based on the demographic profiles of women who have pursued social egg freezing identified in previous studies, the sample of participants shared many similar characteristics (Baldwin et al., 2015; Carroll & Kroløkke, 2017; de Groot et al., 2016; Hodes-Wertz et al., 2013; Stoop et al., 2015; Vallejo et al., 2013; Waldby, 2015).

**Data Collection**

Consistent with the hermeneutic phenomenological method (van Manen, 1990), data collection occurred through the use of largely unstructured, digitally audio-recorded interviews. Six participants took part in in-depth interviews that lasted approximately 60 to 90 minutes. These interviews took place in a quiet, private and mutually agreed upon setting at the participant’s convenience. Every effort was made to meet in person, but as an in-person interview was not possible for three of the participants who lived in different geographic locations, the interviews were conducted via Skype or FaceTime video calls.
Prior to their participation in the study, I provided participants with an informed consent form to read (see Appendix D). After they had received the consent form, they had two weeks to decide whether or not they wanted to participate in the study. At the outset of each interview, I reviewed the informed consent form, provided a detailed explanation of the purpose and nature of the study, and answered any questions. I outlined the potential risks and benefits of participation in the study, and discussed the procedures that were taken to ensure privacy and confidentiality. I reviewed the limits to confidentiality, and ensured that participants were made aware that they could withdraw from the study at any time. Once participants agreed to join the study, they were asked to sign two copies of the consent form – one for their records and one of which I kept on file.

I conducted all of the interviews with the aim of creating a comfortable space for the women to share their stories. Recognizing that participants were discussing a deeply personal experience with a relative stranger, I drew on my counselling skills to develop rapport and encourage them to feel safe to share their story. Throughout the interviews I used minimal encouragers to support the dialogue, and counselling skills, such as empathy, whenever necessary. During the interviews, I also maintained attention to my role as researcher by observing participants’ non-verbal signs and other salient features of the interview. Throughout the study, I maintained field notes and a reflective journal in order to continually examine my pre-understandings and reflect on their possible impact on the research process.

I began each interview by reading an orienting statement (see Appendix E). Next, I asked participants a series of questions to gather their basic demographic information (see Appendix F). All participants were then asked to choose a pseudonym to be used instead of their names in all notes and written reports. Although the interviews were largely unstructured, I had
a list of open-ended questions to pose to the participants if needed to help deepen the exploration of topics raised by the participants during the interviews (see Appendix F). At the conclusion of each interview, I asked participants whether they had any further questions and we discussed the next steps of the study. I also provided participants with a list of counselling resources, to be used if they needed additional support after the interview (see Appendix G). If participants did not live in Vancouver, I offered to gather additional counselling resources for their geographic location. Only one participant requested this information, and I provided her with an additional list of counselling resources.

In order to help ensure credibility of the findings in this study, I conducted member checks using 30-minute follow-up validation interviews with participants (see Appendix H). Prior to these interviews, each participant received a copy of her individual biosynopsis and the common themes that emerged from the data. During the initial interview, participants had been asked whether they would like to receive this information through email or hard copy, and all of the participants requested that the documents be sent via email. The follow-up validation interviews were then scheduled, and took place via telephone. During the validation interviews, I reviewed each participant’s biosynopsis. In order to ensure that I accurately represented the participants’ biographical information, I asked them to point out any incorrect information, which I amended. Two participants requested that I change a few minor details in their biosynopses. Two of the participants, who were single at the time of the interviews, spoke further about their decision-making process regarding whether or not to pursue single motherhood using their frozen eggs, and one of these women had decided that she was no longer considering single motherhood using her frozen eggs. Following this, we discussed the common themes, and the extent to which these themes captured their experiences of the phenomenon.
Overall, the participants reported that the common themes accurately reflected, and resonated with, their experiences of undergoing social egg freezing. Many of the participants expressed surprise at how this shared portrait accurately described their individual experience, and had not realized that other women might have had a similar experience. Most of the participants identified with all of the six common themes, particularly with the themes of Sense of Reducing the Pressure to Have a Child, Sense of Taking Control and Agency, Sense of Personal Empowerment and Acceptance, and Openness with Others. One participant spoke about how she did not completely resonate with the theme of Sense of Reducing the Pressure to Have a Child because she still felt pressure to find the right partner with whom to have a child. However, she recognized that this pressure had lessened since she had frozen her eggs. Another participant commented that, upon reflection, it had been an empowering experience for her to participate in the study and share her story through the interview process. Another participant reflected further on the upper age limit for using frozen eggs, and had realized that the age of a woman’s eggs was only one factor of many in her ability to have a healthy child.

Several efforts were taken to ensure participants’ confidentiality. As noted, participants were asked to choose a pseudonym at the outset of the data collection interview to be used in all written reports. All of the interviews were digitally audio-recorded, and all digital files, including audio-recordings, transcriptions, and Skype/FaceTime data were encrypted, password protected, and stored on an encrypted and password protected USB stick. All digital files, interview transcripts, and consent forms have been stored in a locked cabinet, and will be destroyed after five years.

Data Analysis

The data analysis process in hermeneutic phenomenology involves a progression of
reflecting, clarifying, and making explicit the multi-dimensional “structures of experience” (van Manen, 1990, p. 79) of a particular phenomenon through thematic analysis. I followed the suggested guidelines for thematic analysis as outlined by van Manen (Langdridge, 2007; van Manen, 1990). Immediately after conducting each interview, I wrote notes about any salient features of the women’s experiences or significant statements that had stood out to me. I also wrote in my reflective journal about my experience of conducting the interviews and any other reflections that had arisen. Each interview was then transcribed verbatim from the digital files using a professional transcriber. In order to ensure the anonymity of participants, the transcriber only had access to the digital audio-recordings and not any identifying information that could compromise the confidentiality or anonymity of the participants. The transcriber agreed to securely transfer and store the data, and delete the digital recordings and transcripts after completion.

Van Manen (1990) suggests three methods for identifying themes from the data: wholistic, selective, and detailed. Firstly, in the wholistic or sententious approach, the researcher attends to the text as whole and aims to express the fundamental meaning of the whole text. Secondly, in the selective or highlighting approach, the researcher listens to or reads the text multiple times, highlighting the statements that seem essential to the phenomenon. Thirdly, in the detailed or line-by-line approach, the researcher examines every sentence in order to understand what is being revealed about the phenomenon.

In this study, the data were analyzed according to these steps suggested by van Manen (1990). Once the interviews were transcribed, I read over each transcript while listening to the audio-recordings to ensure accuracy, and made any necessary changes. I listened to the audio-recordings again and made notes about non-verbal cues, such as tone of voice and emotion. I
read and re-read the transcripts with the aim of capturing the essence of each transcript as a whole and creating an impression of each participant’s overall experience. Next, I read and re-read each transcript again and made notes about my initial impressions of common themes. I used colour-coded highlighting to identify particular sentences or paragraphs that seemed to poignantly describe the emerging themes. I reviewed the transcripts line-by-line to ensure that I had captured the important aspects of the women’s experiences. Following this, I met with my research supervisor to discuss my overall impressions of the women’s experiences, the important findings that had emerged from the data, and how these could be described in a thematic format. At this point, I developed a preliminary list of the common themes and returned to the transcripts to see if the emerging themes appeared in each woman’s transcript.

Next, I began the writing process. I used notes to develop an initial description of the themes, and returned again and again to the transcripts to further develop an understanding of each emerging theme and to extract direct quotations to illustrate the women’s experiences. As I wrote, some of the themes merged into other themes, some became distinct, and numerous sub-themes emerged. After writing and re-writing each theme, I provided the descriptions to my supervisor for feedback. I integrated her feedback into the description of each theme before finalizing the findings. I also developed a biographical synopsis to describe each participant’s demographic information, which I provided to my supervisor for feedback. Once the findings were finalized, I provided a copy of the common themes, along with a copy of her individual biosynopsis, to each participant to be reviewed through the member checks. Throughout these steps, I engaged in an ongoing process of reflection, which helped me to uncover the emerging meanings and themes, and identify important considerations. I have presented the findings by describing each theme and subtheme, as well as using direct quotations from the transcripts to
provide a rich description of the experience of undergoing social egg freezing for the purpose of delaying childbearing.

Trustworthiness

The caliber of a qualitative study is ensured through measures that support the validity and rigor of its results. In order to maintain a stance of trustworthiness in this study, I used the four criteria outlined by Lincoln and Guba (1985) to ensure the trustworthiness of qualitative research: credibility, transferability, dependability, and confirmability. These concepts have been directly associated with the following traditional measures of rigor in empirical research: internal validity (credibility), external validity (transferability), reliability (dependability), and objectivity (confirmability) (Lincoln & Guba, 1986).

Lincoln and Guba (1985) suggest that credibility is one of the most important measures of trustworthiness to assess how accurately findings represent the phenomenon under investigation. In order to establish credibility, I consulted regularly with my supervisor to bring in different perspectives, welcome scrutiny, and ensure that I was able to recognize and maintain awareness of my own biases and assumptions. I sought to encourage the honesty of the participants by giving them opportunities to refuse participation and by maintaining confidentiality, which helped to ensure that those who participated had chosen to do so freely (Shenton, 2004). I also drew on my counselling experience, including establishing rapport, using a non-judgmental presence, expressing empathy, and creating a safe space, in order to support participants to be as open as possible in sharing their experiences. I conducted member checks using follow-up validation interviews with the participants, and they validated that the findings captured, and resonated with, their experiences of social egg freezing. Throughout the study, I maintained a reflective journal to outline my subjective experience, including my own
assumptions and expectations.

Transferability refers to the ability to transfer the findings of a study to other contexts. In order to allow for transferability from the small population of this study to larger contexts, the presentation of findings includes information on the background of participants, information on the data collection process, and thick descriptions of the phenomenon (Shenton, 2004). Thick descriptions are rich and detailed descriptions of a concrete experience, which help to highlight the lived world of the participant and the broader experience of a particular phenomenon (Langdridge, 2007). I have also provided information about the boundaries of the study itself, including the inclusion criteria of participants and the methods of data collection.

The dependability of a study shows that if the same methods were repeated with the same participants in the same context, similar findings would be obtained. Dependability can be challenging in a qualitative study due to the variable nature of a phenomenon as well as the subjectivity of the researcher (Shenton, 2004). In order to address the issue of dependability in this study, I maintained an audit trail of the data and outlined the steps taken throughout the study. In presenting the findings, I have provided a detailed documentation of the research design, as well as the processes of data collection and analysis.

Confirmability attempts to address objectivity in a qualitative study in order to reduce the effect of researcher bias, which helps to ensure that the findings of a study are based on the participants’ experiences rather than the researcher’s own interpretations and influences (Shenton, 2004). In order to ensure confirmability, I engaged in an ongoing process of self-reflection throughout the study, including highlighting my own pre-understandings, biases, and assumptions about the phenomenon under investigation, as well as maintaining a reflective journal. I maintained a detailed audit trail to outline the step-by-step process that I took during
the study. In addition, the participants reviewed the study findings to ensure that they accurately reflected, and resonated with, their experiences of egg freezing, which they confirmed during the member checks. In the final report, I have provided a detailed description of the research methods used, shared my reasons for using the particular approach and methods, and acknowledged limitations of the study.

**Ethical Considerations**

Approval for this study was obtained from the Behavioural Research Ethics Board at the University of British Columbia. Participant confidentiality was protected through several measures. Participants’ names were changed and a pseudonym used in all written reports. All digital files, including audio-recordings, transcriptions, and Skype/FaceTime data were encrypted and password protected and stored on an encrypted and password protected USB stick. These measures ensured that any personally identifiable information was both password protected and encrypted. All digital files, interview transcripts, and consent forms have been stored in a locked cabinet and will be destroyed after five years.

I aimed to conduct the interviews in a manner so as to minimize any harm or distress to participants. If a participant became distressed or upset during the interview, I was prepared to pause the questioning and check to see if the participant would like to take a short break from the interview before proceeding. None of the participants became visibly distressed or chose to take a break during the interviews. In addition, I provided a list of counselling resources to all participants.

**Limitations of the Study**

This qualitative study aimed to explore the emergent themes of the meaning and experience of social egg freezing for women who wish to delay childbearing. In order to
examine this issue using a phenomenological approach, and given the time and resource constraints in undertaking this thesis, of necessity the study included a relatively small and homogeneous sample. Therefore, the findings are not representative of the larger population and are not generalizable to all women of reproductive age who have undergone social egg freezing. Despite this, I believe that the findings may have “empathic generalizability” (Osborne, 1990, p. 86) and may be relevant for other women who are considering social egg freezing or who have pursued this fertility preservation option. Another limitation of the study is a possible self-selection bias, given the voluntary and self-selective nature of the study design. The women who volunteered to participate in this study had particularly positive experiences of egg freezing and were comfortable sharing their experiences. It is possible that different themes may have emerged from the stories of women who had less positive egg freezing experiences, or women who would be less comfortable sharing their stories with a stranger during an in-depth interview. It is also possible that recruitment through fertility clinics may have influenced the sample, and that the women who were contacted by the clinics to share their stories had particularly positive experiences. Therefore, the findings of this study may not represent the range of possible experiences of undergoing social egg freezing. Finally, the findings of this study represent a unique and co-constructed interpretation of this phenomenon, based on the participants’ experiences and my interpretations of their experiences. I have taken numerous steps to make explicit my beliefs, biases, and assumptions in order to ensure, to the extent possible, that these did not unduly influence the conduct of the study or my interpretation of the data. Although the participants confirmed that the findings accurately reflected, and resonated with, their experiences of social egg freezing, alternative interpretations of the themes are entirely possible.
Chapter 4: Results

This chapter begins with a brief biographical synopsis for each participant followed by a detailed description of the common themes and sub-themes representing the women’s experiences of undergoing social egg freezing for the purpose of delaying childbearing.

Participants’ Biosynopses

A summary of the participants’ basic demographic information is presented in Table 1.

Table 1

*Summary of Participants’ Demographic Information*

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Age</th>
<th>Relationship/Family Status</th>
<th>Education</th>
<th>Occupation</th>
<th>Age at Freezing</th>
<th>No. of Frozen Eggs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alexandra</td>
<td>40</td>
<td>Married, two children</td>
<td>Undergraduate</td>
<td>Finance</td>
<td>37</td>
<td>10-15</td>
</tr>
<tr>
<td>Stacy</td>
<td>28</td>
<td>Long-term relationship, childless</td>
<td>Graduate</td>
<td>Healthcare</td>
<td>28</td>
<td>16-20</td>
</tr>
<tr>
<td>Elizabeth</td>
<td>37</td>
<td>Single, childless</td>
<td>Undergraduate</td>
<td>Education</td>
<td>36</td>
<td>10-15</td>
</tr>
<tr>
<td>Sarah</td>
<td>40</td>
<td>Single, childless</td>
<td>Graduate</td>
<td>Healthcare</td>
<td>40</td>
<td>10-15</td>
</tr>
<tr>
<td>Tate</td>
<td>38</td>
<td>Single, childless</td>
<td>Undergraduate</td>
<td>Finance</td>
<td>37</td>
<td>10-15</td>
</tr>
<tr>
<td>Stephanie</td>
<td>41</td>
<td>Long-term relationship, childless</td>
<td>Graduate</td>
<td>Non-profit</td>
<td>36</td>
<td>10-15</td>
</tr>
</tbody>
</table>

*Alexandra.* Alexandra is a 40 year old heterosexual woman who identifies as Caucasian and Jewish. She holds a Bachelor’s degree and works in the financial sector. She is married and has two young children, a toddler and an infant. Alexandra dated regularly throughout her 20s and early 30s, and thinks that she was afraid of commitment and not ready to settle down. She
refers to herself at that time as being a “commitment-phobe.” Although she did not want children at that time, she had always assumed that she would eventually have children. Alexandra started dating her current partner when she was 34 years old. She describes their early relationship as “on and off” until they decided to get married. Just before they got engaged, Alexandra’s partner was diagnosed with cancer. They delayed their engagement while he went through surgery and treatment, and she supported her partner throughout this process. During the cancer treatment, Alexandra’s partner became unsure about whether or not he wanted to have children, given his health situation. As a result, they broke up for a brief period. It was during this time, when she was 37 years old, that she made the decision to freeze her eggs as a way to keep her options open to be able to have children when she was ready. She knew that she wanted to have children, and egg freezing was a way to allow her to make decisions about her life without the pressure of needing to find someone with whom to have children. Alexandra initiated the egg freezing process by conducting a thorough check of her fertility status, and was pleased to confirm that her fertility was healthy. Following the egg freezing, her partner proposed to her, and they got married when she was 38 years old.

Alexandra described her egg freezing experience as straightforward and uncomplicated, and had minimal symptoms or side effects from the procedure. She had a very good experience with the clinic she chose and felt relaxed throughout the process. She had between 10 – 15 eggs frozen, and was satisfied with the results of her procedure. Since freezing her eggs, Alexandra and her husband have had two children. Both of her children were conceived through IVF, using her partner’s sperm and her freshly collected, rather than previously frozen, eggs. If Alexandra and her husband decide to try to conceive a third child, they will use their one remaining embryo before using her frozen eggs. She chose not to use her previously frozen eggs for IVF, but rather
to keep them frozen as a backup plan. If any of her frozen eggs remain unused once they have completed their family, she thinks that she will most likely choose to discard her eggs, but will also consider donating them to research. Alexandra shared that, if she had been younger at the time of freezing, she would have wanted to donate her unused frozen eggs to someone else to have a child, but does not consider her eggs to be viable for donation. Alexandra expressed that she felt grateful to share her story in order to help other women learn more about egg freezing. She described herself as “super direct” and spoke about being very open with other people about her experience of egg freezing.

**Stacy.** Stacy is a 28 year old heterosexual woman who identifies as Caucasian. She holds a Master’s degree and works in the healthcare field. She is in a long-term relationship and has no children. Stacy had been dating her current partner for nine months when she had her eggs frozen at the age of 28. She does not feel emotionally or financially ready to have a child, and does not think that her lifestyle would accommodate a child at this time. She would like to travel more and does not see herself being ready to have a child for the next five years. Stacy made the decision to freeze her eggs in order to delay childbearing and reduce the possibility of future infertility. She believes that her knowledge of reproductive health and fertility, coupled with her work in a healthcare setting, allowed her to easily access the egg freezing procedure and freeze her eggs at a relatively young age.

Before undergoing egg freezing, Stacy first completed a thorough check of her fertility status, and was pleased to learn that everything was normal for her age. She considers her overall health status to be very healthy. During the egg freezing process, Stacy experienced some bloating and fatigue. She reported feeling well-prepared before going into the procedure, and did not experience any pain from the egg retrieval. Stacy had between 16 – 20 eggs frozen.
She feels satisfied with the results of the procedure and confident that she will be able to have a child using her frozen eggs in the future. When she is ready to have a child, she plans to use her frozen eggs only if she is unable to conceive naturally. She is uncertain about the latest age that she would consider using her frozen eggs to have a child. If she does not need to use her frozen eggs in the future, she will either donate them to research or discard them, but does not want to donate them to be used by someone else to have a child. Stacy was open with her friends and family about her decision to freeze her eggs, and felt well-supported throughout the process. Stacy shared that she loves talking about egg freezing because it reminds her of what a positive experience it has been in her life.

Elizabeth. Elizabeth is a 37 year old heterosexual woman who identifies as French Canadian of French, Irish, and Scottish descent. She holds two Bachelor’s degrees and works in the education field. She is single and does not have any children. Elizabeth has had several intimate relationships. Her longest-term relationship ended when she was 31 years old. This was a difficult breakup for her, and she experienced significant distress and anxiety as a result of seeing her partner quickly enter a new relationship. Elizabeth first learned about egg freezing when she was 32 years old, and began seriously considering and researching the procedure when she was 35 years old. It was at this time that she began to confront the reality of her life circumstances and made the decision to freeze her eggs in order to prolong her childbearing potential. Elizabeth considers her overall health status to be very good. Prior to pursuing egg freezing, she underwent fertility testing and had no indication that she had any fertility concerns at that time. Elizabeth sought out a referral to a fertility clinic from her family physician, and recounted being treated poorly by her doctor because she was seeking egg freezing. The clinic, where she was first referred, denied her service because she was pursuing egg freezing but had
not been diagnosed with infertility. She still feels anger and a sense of injustice at this treatment, and considers her experience at this clinic to be a violation of her human rights. Elizabeth eventually sought out treatment at a different clinic, and said she had a “really great experience” at this new clinic. She did not experience any pain during the egg retrieval, but did experience some bloating, discomfort, and weight gain. She felt well-cared for and well-supported throughout the process. She had between 10 – 15 eggs frozen, and felt pleased with her overall experience.

Elizabeth shared that she has regularly dated throughout her life and continues to date online. She feels frustrated at how difficult it has been for her to find someone, and said that she lacks appropriate “opportunities” to meet potential partners in her work environment. Elizabeth feels some sadness and grief at not yet having found a partner and is “grieving the loss” of her life not turning out the way she had expected. She hopes to meet a partner with whom she can have a child, but is also considering the option of single motherhood. She is uncertain of when she will begin to actively pursue childbearing on her own if she does not find a partner. She is clear that she does not want to use her frozen eggs past the age of 45. If Elizabeth has any frozen eggs remaining once she has completed her family, she is unsure about whether she would want to donate them to research or discard them, but is clear that she does not want to donate them to be used by someone else to have a child. Elizabeth was open with her family and friends about her egg freezing experience, and received support during the process. She expressed gratitude at being able to share her story during the interview, and considered it to be a “cathartic” experience.

**Sarah.** Sarah is a 40 year old heterosexual woman who identifies as Caucasian. She holds a Master’s degree and works in the healthcare field. Sarah is single, does not have any
children, and considers herself to be very healthy. She began checking the status of her fertility when she was 38 years old, and was pleased to learn that her fertility was normal for her age. Sarah took two years to make the decision to freeze her eggs at the age of 40. During that time she dated and tried to find a partner with whom she could have children. She experienced significant stress during this time from trying to find a balance between seeking a partner, nurturing her career, and maintaining work/life balance. She made the decision to freeze her eggs because she wanted children but had not yet found a partner with whom to pursue childbearing. Egg freezing was an active step she could take to increase the likelihood of being able to have children when she is ready. Overall, Sarah found the egg freezing procedure to be quite straightforward and was pleased with her experience at the clinic. During the procedure, she experienced some bloating, cramping, and discomfort, and reported having irregular periods for several months following the egg retrieval. Sarah had between 10 – 15 eggs frozen, and felt satisfied with her results.

Sarah expressed frustration at having ended up in a situation in which she needed to freeze her eggs, and felt that she had “no choice” but to go ahead with the procedure. She is still looking for a partner with whom to have children, and expressed grief and sadness at not having found someone with whom to share this experience. She does not want to have children on her own, and worries about the financial and logistical aspects of single motherhood. However, in light of her advancing age and strong desire to have children, she is now considering the possibility of single motherhood. Sarah spoke about being uncertain about the latest age that she would consider using her frozen eggs, but does not want to use them past the age of 45. She is unsure about what she will do with any frozen eggs that remain unused after she has completed her family. She will consider donating them to research or to someone else to have a child, but is
unsure if she will want to pursue either of these options. Sarah reported going through numerous changes in her life over the past year, including starting a new job, purchasing a home, and moving to a new city. Sarah was open with her close friends about her decision to pursue egg freezing, and received support through the process. Since undergoing the egg freezing procedure, Sarah said she is enjoying her life more and is not as actively seeking a partner. She spoke about wanting to share her story of egg freezing with others, and found the interview process to be an interesting experience.

**Tate.** Tate is a 38 year old heterosexual woman who identifies as being from Russian and Asian heritage. She holds a Bachelor’s degree and works in the accounting field. Tate moved to Canada on her own when she was 32 years old, which was a major transition in her life. She has had a few partners since first moving to Canada six years ago, but the relationships ended because she could not see herself being in a long-term relationship or having children with any of the men with whom she was involved. She is currently single and does not have any children. Through her work in a healthcare setting, she was able to educate herself about reproductive health and the childbearing timeline. Tate made the decision to freeze her eggs when she was 37 years old after realizing that she needed to begin thinking about family planning. She was not in a position to pursue childbearing at that time, but felt that if she waited too long she might not be able to have children. She chose to freeze her eggs as a way to preserve her fertility. She underwent a thorough check of her overall reproductive health and, besides requiring a few minor procedures, had no indication that she had any major fertility concerns at that time. She considers herself to be very healthy.

Overall, Tate found the egg freezing procedure to be quite straightforward. She experienced some bloating, and had minimal pain during the egg retrieval. She described how
well she responded to the hormone medications and shared that, during this time, she felt “happier than ever.” Tate had between 10 – 15 eggs frozen, and was very satisfied with the results of the procedure. She felt well-cared for throughout the egg freezing process. Tate would like to find a partner with whom to have a child, and be able to conceive naturally. If she does not find a partner by the time she is 40 years old, she plans to use her frozen eggs to have a child as a single mother. She is working hard to ensure her financial security to be able to pursue this as a viable option. If she has any unused frozen eggs once she has completed her family, Tate plans to donate them to be used by someone else to have a child. She is unsure if she will donate her frozen eggs to research. She told her friends and family about her experience of egg freezing once she had already completed the procedure. Tate expressed that she was happy to share her experience during the interview process.

**Stephanie.** Stephanie is a 41 year old heterosexual woman who identifies as Caucasian. She is in a long-term relationship and, at the time of the interview, was preparing to get engaged to her boyfriend. She does not have any children. Stephanie holds a Master’s degree, works in the non-profit sector, and described her career as “successful.” She considers herself to be in good health and has had no indication that she has any fertility issues. Stephanie first learned about egg freezing from her obstetrician/gynaecologist during an annual appointment and underwent the procedure when she was 36 years old. She did not indicate whether or not she underwent an initial check of her fertility status. Although she was in a relationship at the time, she was certain that her boyfriend was not the person with whom she wanted to have children, and also that she did not want to have children as a single mother. Stephanie considers egg freezing to be “an insurance policy,” and made the decision to freeze her eggs in order to increase her chances of being able to have a child later in her life.
Stephanie described being amazed at the ease of the egg freezing process, and pleased with the care she received at the clinic. She did not experience any unpleasant symptoms or side effects during the procedure. Stephanie planned to go through only one egg freezing procedure, and considered it to be a “one-shot deal.” She had between 10 – 15 eggs frozen, and was satisfied with the results of her procedure. Stephanie expressed that she is still uncertain about whether or not she wants to have children, and, if she does decide to have children, would like to conceive naturally. If she is unable to conceive naturally, she plans to either pursue IVF using her fresh eggs or use her already frozen eggs, depending on her health insurance coverage. She expressed that she will also consider adoption. If she decides not to use her frozen eggs, or has any frozen eggs remaining once she has completed her family, she will donate them to research, and is uncertain about whether or not she will donate them to be used by someone else.

Stephanie has been open with her friends and family about freezing her eggs, and has had several friends who have also undergone the procedure. She said that her parents were not as supportive of her decision to freeze eggs as she had expected, and that this lack of support caused a rift in their relationship. Stephanie expressed that she found it interesting to reflect back on her egg freezing experience and to share her story during the interview.

**Common Themes**

The following section presents a detailed outline of the six common themes and related sub-themes that describe the lived experience of undergoing social egg freezing for the purpose of delayed childbearing (see Table 2). These common themes and related sub-themes are described in detail using direct quotations from the participants to illustrate their experience. The common themes have not been presented in a particular order.
Table 2

*Common Themes and Sub-Themes*

<table>
<thead>
<tr>
<th>Common Themes</th>
<th>Sub-Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sense of Reducing the Pressure to Have a Child</td>
<td>Finding the right partner</td>
</tr>
<tr>
<td></td>
<td>Able to get on with life</td>
</tr>
<tr>
<td></td>
<td>Reduced sense of time pressure</td>
</tr>
<tr>
<td>Sense of Taking Control and Agency</td>
<td>Best possible decision</td>
</tr>
<tr>
<td></td>
<td>No regrets</td>
</tr>
<tr>
<td></td>
<td>Active agent</td>
</tr>
<tr>
<td>Sense of Personal Empowerment and Acceptance</td>
<td>Being well-informed</td>
</tr>
<tr>
<td></td>
<td>Sense of acceptance</td>
</tr>
<tr>
<td></td>
<td>Gift to herself</td>
</tr>
<tr>
<td>Sense of Feeling Fortunate</td>
<td>Easier than expected</td>
</tr>
<tr>
<td></td>
<td>Sense of feeling lucky</td>
</tr>
<tr>
<td></td>
<td>Sense of gratitude</td>
</tr>
<tr>
<td>Sense of Keeping Options Open</td>
<td>Sense of increasing options</td>
</tr>
<tr>
<td></td>
<td>Backup plan</td>
</tr>
<tr>
<td></td>
<td>Sense of fluid age boundaries</td>
</tr>
<tr>
<td></td>
<td>Considerations about future use or disposition</td>
</tr>
<tr>
<td>Openness with Others</td>
<td>Feeling supported in their decision</td>
</tr>
<tr>
<td></td>
<td>Sharing their stories</td>
</tr>
</tbody>
</table>

**Sense of Reducing the Pressure to Have a Child**

All of the women in this study referred to a sense that the pressure to have a child had reduced as a result of having frozen their eggs. There was an underlying acknowledgement by the participants of the pressure that they felt, and many other women feel, to have a child while they are still fertile, and for their life circumstances to be in place in order to best support this.
The women in this study spoke about how freezing their eggs gave them a sense of relief from
the need to make their important life decisions based primarily on the pressure to have a child.
The need to have a child by a certain time in their lives was experienced by the women in the
study as both a social pressure as well as a biological pressure. How strongly and immediately
each participant felt the pressure to have a child varied depending on her age, whether she was
single or in a relationship, and whether or not she already had children. Most of the women
spoke about how undergoing egg freezing reduced their sense of pressure to find the right
partner in order to be able to start a family. They spoke about how, as a result of going through
the egg freezing procedure, they were now able to get on with their lives rather than having to
focus solely on finding a partner who was ready and willing to have a child with them. The
participants spoke about a reduced sense of time pressure, including biological pressure, to have
a child that came about from “freezing time.”

Finding the right partner. Five of the six participants spoke about the desire to find the
“right” partner with whom to have a child. As previously noted, all of the women in this study
identified as heterosexual. There was an unspoken assumption that the preferred trajectory of
childbearing was to first find the right partner and then to have child within that relationship. It
was also acknowledged that their ideal scenarios for childbearing included being able to
naturally conceive. This was true for the women who were single as well as for those in
relationships. All of the women acknowledged that their preference was to have a child while
they were in an intimate partnership, and believed that it was not ideal to have a child as a single
woman. Although that was considered the ideal scenario, one woman spoke about planning to
become a single mother with her frozen eggs if she had not found a partner by the time she was
40 years old. None of the other participants clearly identified that they would go ahead with intentional single motherhood if they did not find the right partner by a certain time.

Three of the six participants referred to past intimate partners who were not the right person with whom to have a child, and how this had delayed their ability to begin their families. The women did not specify what specific qualities they felt made partners appropriate people with whom to have a child. However, they were clear that some of the men they had dated in the past, or had considered dating, were not the right ones. These sentiments are captured in the words of one participant who spoke about knowing that her boyfriend, who she was with at the time, was not someone with whom she would want to have children, and reflected on how this affected her readiness to begin childbearing. She explained:

I was 36 and I had, let’s see, I had a boyfriend at the time, but it was clear that he was not going to be the person that I was having kids with or anything like that. I guess, I just got to this point where I was like “Well, I don’t know when this is going to happen, when I will find someone.” I’m pretty clear on not wanting to have kids on my own, so I felt okay, well, I want to wait to be with somebody.

The women spoke about how, soon after they had undergone the egg freezing procedure, they felt less worried about finding a partner with whom it would be appropriate to have a child, and how they could now enjoy the experience of dating without their primary criteria being finding a father for their child. This shared sentiment was reflected in the words of one participant who was relieved that she no longer needed to assess each new person she dated based on whether or not he might be an appropriate partner with whom to have children:
It was like, look, I’m 37 and I’m starting to date again. I don’t want to feel the pressure of evaluating every date for whether or not we’re having children in the next year or two. I just wanted to take that off the table.

Rather than assessing every man they date as to whether or not he might be the “one” with whom they could have a child, the women could instead seek out a partner based on compatibility and being a good fit. There was a sense of freedom from the stress of having to find the right partner. As one woman said: “…now I don’t absolutely need to find the one person.” Reflecting on the sense of the pressure having been relieved, another participant spoke about how she could stop worrying about finding the right partner and finally “just relax.”

Three of the women had significant intimate relationships end around the time they made the decision to go through the egg freezing procedure. The ending of these significant relationships seemed to be an important factor in their decision to actually go ahead with freezing their eggs, even if they had been previously considering the procedure. For one woman, going though egg freezing was “one of the first things” she did after she and her partner broke up. For two of these women, their relationship losses were also a significant impetus for them to reevaluate their lives and reassess whether or not they really wanted to have children. As a result of going through the egg freezing procedure, one participant realized that she did, in fact, want children more than she had originally thought. She said:

Yeah, it did take the pressure off. Like I said, it did change the way that I approach relationships as well, because it did make me think, oh, maybe I do want kids more than I thought I did in the past.

Notably, this participant reported that this desire to have children actually lessened with the passing of time since she went through the egg freezing procedure, and since she has started a
new relationship. She feels less clear about whether or not she wants children and is also more accepting of this ambiguity. She explained:

…now both my boyfriend and I were like 50/50 on having kids or not. That’s a really good place to be in, actually. Almost like not feeling like you’re with someone who absolutely wants to have kids. And I’m 41, maybe it’s not going to happen.

**Able to get on with life.** The women shared that, as a result of going through the egg freezing procedure, they felt that they were now able to get on with their lives rather than having to prioritize their life decisions around finding the right partner and having a child. Freezing their eggs reduced the pressure to focus their lives exclusively on trying to orchestrate the ideal situation in which to have a child. Instead, they felt that they could shift their focus toward developing their careers, travelling, enjoying the dating process, or allowing a relationship to naturally unfold. Egg freezing seemed to allow the women to let their lives flow more freely and naturally, without the sole focus being on the pursuit of having children – which meant first finding a suitable partner. The women spoke about how they felt a reduced sense of pressure to set up their lives perfectly in order to be in a position to have children – this was primarily related to being in the right relationship, but also to being financially comfortable and in a good place in their careers, and in good health. There was a sense of freedom that came from freezing their eggs that allowed the women to broaden their focus to the rest of their lives, without the single-minded focus on having a child. This sense of relief and freedom was captured in the words of one participant:

I just feel way less pressure on me now…I can just go about living my life and enjoying the days for what I have, and not just being so focused on it…Just letting what will be will be.
There were some differences about what it meant for the women in this study to get on with their lives. Two of the six women interviewed, who were single at the time of the study, referred to how freezing their eggs allowed them to date more freely without the pressure of having to find a partner who would be the right person with whom to have a child. One woman spoke about how freezing her eggs allowed her to maintain a focus on her education and career, as well as to set herself up financially to be ready to have a child. The youngest woman in this study, who was in a relationship at the time of the study, spoke about how freezing her eggs allowed both her and her partner to let their lives unfold more naturally than having to make decisions based on whether or not it would set up the right circumstances to be ready to have a child. This included both emotional and financial readiness. This participant spoke about the freedom she now felt to allow her life to unfold naturally:

I feel under less pressure that I don’t have to think, “Well, what are we going to be doing in five years?” We have to start setting up our lives now so that we’re financially ready or whatever the case is to have a baby in five years, because then it’s going to be time. Or, we need to do all our travelling now in the next three years because we’re going to need to have a baby soon and we need to get all of that out the way. I feel better about not having to rush those decisions and, like I said, just letting life happen as it will and if a baby’s going to come, then it will.

Only one participant was in a relationship at the time of her egg freezing procedure. Notably, she chose to freeze her eggs, and not to freeze embryos using her partner’s sperm – a procedure that tends to have higher success rates. She talked about her partner’s reflections about, and support for, her decision to pursue egg rather than embryo freezing, and how it was a positive experience in their relationship. Making the decision to preserve her fertility appeared
to have equalized how she and her partner felt that they were able to allow their lives to develop. She explained:

…it’s put our relationship on the same playing field now because he never felt like he had to make decisions based on his biology, and now neither do I. We really are in the same position in our relationship to allow our lives to develop as we see fit, and not feel like we have to make decisions before we’re ready because now I have this backup plan in case I need it.

**Reduced sense of time pressure.** All of the participants in this study were well-informed about age-related fertility decline and how the ability to have a genetically-related child reduced with age. The women spoke about how, prior to freezing their eggs, they had felt a sense of time pressure about whether or not they would be able to have a child using their own eggs, either naturally or through IVF. Freezing their eggs was viewed as an active step they could take in order to preserve their fertility and slow down natural fertility decline. All of the women felt the burden of the “biological clock,” and were well aware that their chance to conceive naturally reduced as they aged. Despite this awareness and pressure, the participants did not feel that their life circumstances were in place to support them to pursue childbearing. For the women in this study, freezing their eggs was perceived as a way to reduce this “biological pressure.”

The participants were knowledgeable that the age of a woman’s ovaries and eggs matter more to her fertility than her age or health status. They were also aware that, in using their frozen eggs to have a child, eggs that were frozen at a younger age were more likely to lead to a successful outcome, than eggs that were frozen at an older age. The youngest woman in the study froze her eggs when she was 28 years old. She spoke about how she came to the decision
to freeze her eggs because she was not ready to have children and yet she also knew about the very real possibility of facing fertility challenges if she were to wait to pursue childbearing, perhaps several years in the future, when she felt she was ready to become a mother. She elected to freeze her eggs as a way to mitigate against the possibility of potential future fertility challenges and, in so doing, reduced the pressure of having a child before she felt ready. She reported feeling more at ease after having completed the egg freezing procedure because she knew that if she needed to use her frozen eggs in the future to have a child, the chances of success using her frozen eggs were greater than if she were to try to have a child in the future when her eggs would be older and likely less viable. She spoke about how she felt more relaxed as a result of undergoing this procedure:

…that’s why I decided to freeze my eggs. So that I wouldn’t feel like I was under biological pressure to make a decision that I wasn’t ready to make. That, for me, was the main reason. I didn’t want to be at the mercy of my biological clock. I wanted to just let my life unfold the way it would, and if children happened to be along that path, then it could happen much easier with 28 year old eggs frozen, versus trying to do it with 37 year old eggs.

The women talked about the process of aging and, for two of the women, how each year meant they were less likely to have the life that they had imagined for themselves, which included finding a suitable and loving partner and being able to naturally conceive a child. Freezing their eggs was one way to reduce the pressure of aging, and helped them come to terms with how their lives were unfolding. They felt that egg freezing allowed them to experience a greater sense of acceptance in their lives. These two women, both of whom were single at the time of the study, shared their sense of grief and loss about realizing that their lives had not
turned out the way that they had expected. They were saddened by the fact that they had not yet found the right partner with whom to have a child. They both spoke of still having hope about meeting the right partner and becoming a mother, and felt that freezing their eggs bought them more time to find the right partner and have a family. It was a way to take control of their situations and reduce the sense of impending pressure when faced with their declining fertility. These sentiments are reflected in the words of one participant, who shared how egg freezing reduced the stress that she felt in the face of this time pressure:

It put a lot less pressure on myself because I want a family so bad. Trying to date, and maintain a career, and have work/life balance, and all that kind of stuff, it was actually creating a lot of stress in my life. Knowing in the back of my head that I was on a timeline, right? Like there was a time crunch, so in fact doing this has really relieved a lot of stress, which is great.

Three of the women referred to feeling a sense of social pressure or “social obligation” to have a child according to a socially normative timeline. This timeline included having a relationship with the right person, getting married, and then having a child before the age of 40. Their lives were not unfolding according to this standard timeline, leading to some feelings of grief and sadness about how their lives were not meeting these expectations. However, despite some sadness at being off-time in terms of starting a family, freezing their eggs seemed to reduce the sense of pressure about their lives having to follow this normative timeline. By electing to freeze their eggs, the women felt that their options had opened up – they could have a child later in life, have a child with a new partner, or have a child as a single woman. One woman, who was considering whether or not to use her eggs as a single mother, spoke about how the egg freezing process helped her to feel free from these social pressures and the stress of her life.
needing to follow this typical timeline. As she said: “I’m free of all of these thoughts. I stopped thinking about it.”

The participants were realistic in their knowledge that freezing their eggs was not a guarantee that they would be able to have a genetically-related child in the future. They were aware of the possibility that using their frozen eggs to have a child might not be successful. One woman talked about feeling less time pressure because of freezing her eggs, but that pressure was not completely relieved because she knew that her frozen eggs were “not a guarantee” that she would be able to have a child when she was ready. She still felt the burden of her aging, because she knew that she did not want to become a mother in her late 40s. She saw the use of her frozen eggs to be a “last resort.” This participant spoke about how, although her sense of pressure was reduced, it was still present for her because she was single and not in a position to start childbearing:

I’m glad that it’s taken some pressure off, although I still have the...the pressure that I still feel is pressure I would have had either way. When do I start? I would have had either way, but I guess it’s lessened because I know that I have that as a backup.

Despite knowing that there was no guarantee, to varying degrees all of the women in this study spoke about feeling pleased that they had chosen to freeze their eggs.

**Sense of Taking Control and Agency**

The participants in this study spoke about experiencing a sense of taking control of their lives and having personal agency that came about as a result of freezing their eggs. All of the participants considered egg freezing to be a positive experience in their lives and were pleased that they had undergone the procedure. It was widely recognized by the women in this study that egg freezing was not considered to be part of an ideal scenario in terms of their lives, but was
seen by these women as the best possible decision they could make, given their life circumstances at the time. The women in this study spoke about having no regrets about undergoing the procedure. The participants spoke about how the experience of going through the egg freezing procedure was a way for each of them to be an active agent in their life, rather than a victim of their life circumstances.

**Best possible decision.** At the time of the decision to freeze their eggs, none of the women in this study felt that they were in a position to pursue childbearing, for various reasons. Their reasons for delaying childbearing included being single or not being in a relationship with the right partner, not being with a partner who was also ready to pursue parenthood, not being financially secure, or not feeling emotionally ready to have children. The decision to freeze their eggs was seen by these women as the next best option they could take, to move them closer toward childbearing, given that they were not able to actively pursue childbearing at the time. It was a way to better ensure a successful outcome in the future, which included the ability to have a genetically-related child, given the biological reality of fertility and aging.

The participants in this study shared how, although they were not yet in a position to pursue childbearing, they viewed egg freezing as a step they could actively take in order to better their chances of having a child when they were ready. The procedure was one way they could increase their likelihood of being able to have a child in the future. As captured in the words of the following participant:

I guess the way I make sense of it is feeling like I made the best decision I could at the time and yet feeling like I set myself up for future success, whatever that might be, going forward. Yeah, I guess, just knowing that I’ve done what I feel is reasonably feasible to do to make it possible.
Another participant expressed how she viewed egg freezing as a positive move in her life because, given the time pressure she felt to have a child, it was the best option available to her at the time. She reflected on her decision in this way:

It was one of the best decisions because it’s such a huge decision, a huge time-sensitive decision. It was either now or never. That’s where I feel like it was the best thing because I just went for it.

Three of the six women in this study spoke about knowing that egg freezing did not guarantee that they would be able to have children in the future. However, they considered the decision to freeze their eggs as a step in the right direction – one that could lead them closer to their desired outcome of having a child in the future. This shared sentiment is reflected in the words of one participant, who spoke about her decision to freeze her eggs:

I understand that freezing eggs is not an insurance policy. I think that’s also a misunderstanding, is that patients think, “Oh, I’ll freeze my eggs and then I’m guaranteed to have a baby whenever I want.” That’s not the case. I understand that egg freezing is not an insurance policy at all, but it’s the next best. It’s the best option. I’ve now put myself in the best possible position to conceive if I want to.

Notably, only one participant in this study expressed any concerns or fears about the risks of the egg freezing procedure. She spoke about initially having fears about how the procedure might affect her fertility and her ability to naturally conceive in the future. However, after further consideration and research, she felt more reassured that the procedure would not negatively impact her fertility. She reflected on her fears in the following way:

I was so worried about, “Oh, is this going to affect my ability? I want to have kids and conceive them naturally, is this going to...” Not at all. I mean, it’s not. I was so worried
because I’m in the medical field, my mind goes to all these maybe you’re developing scar tissue on your ovaries, which isn’t true. I’m still ovulating, so that’s good. Then I thought, worse case scenario if it does mess with my menstrual cycle I have the eggs.

What have I got to lose? That was my attitude.

She felt that if she had not gone through the egg freezing procedure, she probably would have regretted not having tried everything possible to have a child. She did not want any fears about the procedure to stop her pursuing all available options:

I would really regret not having a child, or even trying to have a child. That is such a burden on my heart. It makes me so emotional. I would regret not even giving myself that opportunity because of being fearful of the procedure.

Despite her initial fears, she decided that going ahead with egg freezing was still a worthwhile undertaking and the best decision she could make at the time, given her life circumstances.

No regrets. All of the women in this study spoke about how they considered egg freezing to be a positive experience in their lives, and something they would do again if they were in the same situation. They spoke about not having any regrets about freezing their eggs and expressed how pleased they were that they had undergone the procedure. As one woman emphatically stated: “I’m glad I did it. I have no regrets whatsoever. It was probably the best thing I’ve ever done in my life, the decision I made.” There was a general sentiment shared by the participants that there was nothing to lose by going ahead with the procedure, and no clear reasons to suggest that they should not freeze their eggs. As one woman said: “Here’s the solution to a potential problem. Why not just do it?”

All of the participants in this study were aware that a successful outcome is more likely to occur when eggs are frozen at an earlier age compared to an older age. Two participants talked
about wishing that they had frozen their eggs when they were at a younger age, but then
immediately expressed their gratitude and relief at having undergone the procedure at all. The
participant who was the youngest age when she froze her eggs expressed her confidence in the
timing of when she froze her eggs, and clearly stated that she did not have any regrets about her
decision. Although the participants did not convey any regrets about freezing their eggs, three of
the women expressed feelings of sadness and disappointment about how their life circumstances
were such that they were even in the position of having to undergo egg freezing in an attempt to
preserve their fertility and chances of having a child in the future.

Active agent. The women in this study spoke about the decision to freeze their eggs as
being an active step they could take in order to preserve their fertility. Rather than passively
waiting for their life circumstances to fall into place to support having a child, these women saw
egg freezing as a practical step to take control of their lives. Instead of feeling like a victim of
their life circumstances, they felt that they could gain a sense control over the direction of their
lives and put themselves in a better position to be able to pursue childbearing when they were
ready and the circumstances of their lives were more conducive to having and raising a child.
One participant shared how she viewed egg freezing as a way to take direct action to move closer
toward what she wanted in her life. She spoke about her decision to freeze her eggs in this way:

To me, this is just another example of, “Okay, well, you want something? Then go get it.
And if it’s not the path you thought you’d take or it’s more expensive, you still want it,
well, still go and get it.”

Even though the circumstances of their lives had not yet aligned with their expectations,
egg freezing was seen by the participants as something they could actively do in order to better
ensure the possibility of having a child in the future. They saw it as a way that they could
increase their sense of agency, by having a direct influence on the course of their lives. As one woman stated: “I think if you want something bad enough you just have to go for it.” Egg freezing was seen as a concrete step that would move these women closer toward the goal of having a child. One woman spoke about how, for her, egg freezing was a proactive decision she had made rather than a reactive decision:

I felt good because I didn’t make the decision as a reaction to something. It wasn’t something that went wrong in my life where I thought: “I need to do this now in a hurry.” I didn’t do it as a reaction to anything. I just thought this is a good decision. This is a smart, adult move. This is something that I can give to myself, that would put my mind at ease and allow my life to develop as I see fit without being under biological pressure.

One participant spoke about not wanting to rely solely on IVF as a way to get pregnant in the future because she knew that it did not guarantee a successful outcome. As she clearly stated: “As much as IVF is a marvel of modern medicine, it is not a fix-all…I didn’t want to have to rely on IVF because it’s not 100% successful.” Like the other women in the study, she had frozen her eggs as a proactive step that would improve her chances of being able to have a child when she was ready.

One participant faced significant challenges in accessing the procedure, once she had decided that she wanted to freeze her eggs. She reported that she was denied access to the service by a fertility clinic, which was located in a large urban centre in Canada, because she was a single woman and had not received a medical diagnosis of infertility. As she explained in the interview, she considered herself to have “situational infertility” because she was not in a position in her life to be able to pursue childbearing. As a result of being refused access to the egg freezing procedure in her province, she chose to travel across the country to seek out egg
freezing at a different fertility clinic. This woman was steadfast in her decision to freeze her eggs and had to make an extra effort and take significant steps to be able to undergo the procedure. She felt disempowered by the experience of first being denied access to egg freezing because of her life circumstances. As she stated: “I think it’s a human rights issue. This service is available and being denied to me because of my marital status or my relationship status.” She expressed anger and frustration at being denied access to the egg freezing procedure simply because she was a single woman. She spoke about her belief that access to reproductive technologies should be improved and available to more women:

…If I should have the right to end a pregnancy if services are available, I should have the right to potentially preserve the possibility of a pregnancy and create one if the services are available too.

Although this participant showed a particular determination to have her eggs frozen, all of the participants shared a common sense of resolve to pursue egg freezing as a way to take control and be active agents in their lives.

**Sense of Personal Empowerment and Acceptance**

The women in this study referred to the sense of personal empowerment they felt as a result of going through the egg freezing procedure. They spoke about the decision to freeze their eggs as being a positive choice in their lives, and one that made them feel a greater sense of confidence and optimism about being able to have a child in the future when they were ready. They also discussed feeling a greater sense of self-determination and ability to take control over the direction of their lives. All of the participants in this study referred to being well-informed and knowledgeable about reproductive health and fertility. They spoke about the importance of educating themselves about their own fertility as a way to empower themselves to make fully
informed choices. By learning more about their fertility and confronting the reality of their individual life circumstances, the participants in this study made the decision to freeze their eggs. As a result of this process, these women felt a greater sense of acceptance about their current and future life circumstances. The participants also talked about feeling empowered by their decision to freeze their eggs because it was an action they had taken for themselves – each woman saw the egg freezing decision as a gift to herself.

**Being well-informed.** The participants in this study sought out information about reproductive health, the fertility lifespan, and egg freezing in order to be fully informed about their reproductive choices. Five of the six women in this study spoke about how they had initiated the egg freezing process by first educating themselves about fertility and finding out more about the status of their own reproductive health. Empowering themselves with knowledge about their reproductive health was seen as a first step in taking control of their fertility and childbearing potential. By becoming better educated about reproductive health in general, as well as their fertility in particular, these women felt that they were able to make informed decisions about their reproductive options.

Five of the six participants in this study began investigating their fertility by first undergoing blood tests, including a test measuring their anti-Müllerian hormone levels, in order to determine their current ovarian reserve. By finding out more about the status of their fertility, these women felt that they were able to make well-informed decisions about the specific steps that would help to increase the likelihood of being able to have a child in the future when they were ready. Acquiring direct knowledge about their fertility and reproductive health, gave them a sense of personal empowerment and agency. One woman explained her decision-making process in this way: “I really think empowering yourself and educating yourself about your own
fertility, really, for me was where it started.” The participants in this study spoke about how finding out about their reproductive health was a way to help to avoid encountering problems when they were ready to pursue childbearing in the future. As one woman articulated:

I was firstly interested in my own fertility, to find out early enough if there were any problems. Those are very simple tests that you can do that are very inexpensive. They’re not part of what we do as a culture in taking care of ourselves and finding out about our health. That was the first step for me, is that I was curious about my own fertility and I didn’t want to stumble upon a problem too late and not have enough time to do anything about it. I started there just out of curiosity, trying to find out if everything was okay and whether I had to make some fast decisions. Luckily enough, everything was fine. My workup was normal and I was perfectly fertile for my age and the average population.

Three of the six participants in this study spoke about how their education about egg freezing helped to prepare them to go through the actual procedure and make it a positive experience. This sentiment is reflected in the words of one participant:

I learned a lot, but I also knew a lot going in. I felt prepared, but I still had a good experience. I think everything… It was just such a wonderful experience for me. Like I said, I felt so empowered making this decision for myself and I feel relaxed, like this biological pressure has been removed. I wish there was more education so that more women could make the decision.

The participants referred to the sense of personal empowerment they felt as a result of being well-informed about reproduction and egg freezing, and how this supported their decision to pursue the procedure. As one woman said:
I think it felt so empowering because it wasn’t a reaction decision. I didn’t do it because something happened. I just felt like, “I’m educated. This is a smart move. I should do this.”

Two of the six participants in this study worked in the healthcare field and were particularly well-informed about reproductive health. Two participants worked directly in a reproductive health setting. These participants readily acknowledged that working in healthcare setting granted them considerably greater knowledge about fertility and reproductive health than the general population. As one of the women commented, she felt “more equipped with the knowledge than the average person.” These women also recognized that this increased knowledge was a significant factor in their decision to freeze their eggs. In addition, the two participants who worked in a reproductive health setting acknowledged that their workplace granted them easy access to the advice of fertility experts and to the egg freezing procedure itself. One of these women suggested that her decision to freeze her eggs was largely influenced by her comprehensive knowledge of reproductive health. She summarized this influence in the following way:

I think the biggest contributing factors in my decision to actually go ahead with the egg freezing were my education and how well-versed I am in the topic of IVF and infertility and egg freezing and all of that stuff. It’s not some mythical science to me that happens in the lab behind closed doors.

She also acknowledged that she didn’t face the same “barriers” to learning about, and accessing, the egg freezing procedure that might be experienced by other women:

I knew exactly what to expect and so it wasn’t a big scary thing to me. I felt very prepared, which again had to do with my education and my access to the information. I
feel like most people don’t have that, which is why we don’t see more people freezing their eggs.

This particular participant, who froze her eggs at the youngest age of all the women in this study, spoke about how her knowledge of fertility, as well as exposure to the field of reproductive health, also influenced the timing of when she decided to freeze her eggs. As she explained:

I feel like there’s not a lot of education about egg freezing in the general population and so it’s fair to say that if I didn’t work in the field that I worked in, I may not have made this decision as early as I did.

Although, by the time they elected to pursue egg freezing, the women in this study were well-informed about fertility and egg freezing, they acknowledged that there is a lack of information about egg freezing in the general population, and that more information is needed in order for women to learn about the procedure and make informed decisions about whether or not to freeze their eggs. Two of the six participants specifically discussed how there is a lack of information available about the success rates of egg freezing. As they acknowledged, this information would help to determine the number of eggs that need to be frozen in order to lead to a successful outcome, and help to inform women in their decisions about how many egg freezing procedures to undergo. These women were aware that sufficient information about success rates is not available simply because the egg freezing procedure is such a new technology. One participant spoke about how this lack of information impacted her decision of whether or not to undergo more than one egg freezing procedure:

I think for me the only piece of information that I wish more patients had access to were the success rates and the possible future outcomes. Because the field of egg freezing is such a brand new field, a lot of women across the world have frozen their eggs, but not a
lot of women have thawed them out to use them. So we don’t actually have a very clear picture to understand per age group, what is a reasonable number of eggs to have frozen to have a reasonable outcome. Because obviously the older you get, the more eggs you will need because your success rates decrease as you get older, but I wish we had access to that information. It wasn’t that the information is out there but I couldn’t get it, it’s just that that information is not available. I think that makes the counselling process for the doctors very difficult. As a patient, that made it very difficult because at the end of it, I’ve gone through this whole thing and now I have eggs frozen and I’m faced with the question, do we want to do another round? Is this enough? Have I got enough eggs? I’ve done this once, do we need to do it again?

Some participants felt that there is often limited awareness in younger women about fertility and aging, and that more information should be available to educate young women about the limits of the fertility lifespan. These women expressed hope for more women to improve their knowledge of reproductive health in order to make informed decisions about their fertility, particularly before they encounter any problems. One participant articulated her wish for young women to receive more education about fertility: “They’re not knowledgeable, they’re not educated, they’re not paying attention. Somebody needs to pay the attention, it’s limited and we have a limited time for our fertility. We need to think about it sooner than later.” This woman wished that she had learned about fertility earlier in her own life so that she could have been better informed to make her life decisions accordingly.

These participants wanted to encourage other women to become empowered about their reproductive health by learning more about fertility and undergoing the simple tests that would inform them about their current fertility status. This was seen as a first step that could prevent
future infertility and other reproductive health difficulties. One woman expressed concern that an unrealistic reliance on IVF might lead some women to delay childbearing and subsequently not be able to have children when they are ready:

I think there’s such a lack of education. It’s not only about egg freezing, but also about IVF and infertility in general, because there’s such a stigma attached to being infertile. I think we’re getting better as we’re moving forward, but there’s still such a stigma… There’s not a lot of education and open discussion in society. My sense is that there is this idea that IVF cures all. I can delay childbearing. I can focus on my career and travel and do all those things that I want to do, and when I want to conceive, IVF is there to help me.

For the participants in this study, their knowledge about reproductive health, as well as their desire to avoid the possibility of future infertility, were significant factors in the decision to freeze their eggs.

**Sense of acceptance.** The participants in this study spoke about feeling an increased sense of acceptance about their current and future life circumstances that came about as a result of going through the egg freezing procedure. They felt a greater sense of peace and surrender about the direction of their lives. Freezing their eggs gave them a sense of freedom to allow their lives to unfold naturally, and relieved a sense of pressure they felt about beginning childbearing when they were not personally ready or their life circumstances were not right to have a child.

As one participant said:

I think that’s what I’ve really learned out of the whole process too, is you’ve just got to let these things go. You can’t control… You can only control your life so much, right? You have to just let it unfold.
Another participant talked about experiencing a greater sense of peace and ease in her life, as well as less stress, by becoming more accepting of her current life circumstances. As she reflected on the sense of acceptance that resulted from undergoing the egg freezing procedure, she said: “It has made me accept what is and not be so reactive to what is. This is what you’ve been dealt with, and there’s no sense in fighting it because it’s not worth it.”

All of the women in this study felt that egg freezing expanded their options for pursuing childbearing, and gave them a greater sense of confidence about being able to have a child in the future. One woman expressed how freezing her eggs gave her more confidence that she might be able to have children when she is ready, and how this allowed her to feel more peaceful about her current situation: “…I thought, you know, once it’s done who cares? I’m 40 now. I’ve got the eggs. Then I came to the attitude if it’s meant to be it’s meant to be.” Notably, she also spoke about how egg freezing led her to feel more accepting of the possibility that she might not have children. She wanted to have children with the right partner and chose not to pursue parenthood with a partner who was not ideal simply as a way to have a child. Because of this choice, she accepted that she might not find the right partner and might not have children. As she stated:

I don’t want that for my life. If it means that I have to wait and find someone that is compatible and worthy of my love, then I will wait. It’s not worth it. If it means that I don’t have kids, well I guess that’s what I have to accept.

Similarly, another participant spoke about how both the egg freezing process as well as the passing of time increased her sense of acceptance about the way her life was unfolding:

I don’t know if this is a result of going through the process or just me growing up over the last five years, too, is that sense of pressure being relieved, but also, I guess, more of
an acceptance of there are no guarantees in life in anything. You do what you will. You do the best that you can at a given time and then you deal with the consequences of that going forward.

The participants also referred to feeling a sense of acceptance related to the decision-making process that led them to pursue egg freezing. Four women spoke about how, by coming to terms with their life circumstances which included not being in the right relationship and/or not being in a position to have a child, they felt more accepting of their situation and subsequently decided to pursue egg freezing. When faced with the reality of not being in a position to pursue childbearing, they made the decision to freeze their eggs. One of the women spoke about how empowered she felt by directly acknowledging the reality of her biological clock and the fact that she was not yet in a position to be able to pursue childbearing. For this woman, it was important for her to confront her situation rather than be in denial about it or simply hope that things would change. As she said: “…we do have to confront our reproductive health and we can’t be in denial about it. We have to confront it.” By accepting her situation, she felt empowered to take action, and took immediate steps to research egg freezing and pursue the procedure. She articulated her thoughts in the following way:

Then I thought, “I guess I really need to confront this.” Because I think for myself, and I guess I can’t speak for all women, but as much as we know about the magic 35, we are in denial about our reproductive health, I think, in some ways and just assume that when you want something to happen it will happen.

Another woman talked about the conflicting emotions she felt about even being in the position of having to freeze her eggs. She felt empowered by her decision to freeze her eggs and relieved that she now had frozen eggs. However, she also felt saddened because she had to face the
reality that she did not have a partner with whom to pursue childbearing. She articulated her experience in the following way:

For me, it was also the sense of taking control of my life and not feeling like I had to do XYZ just in order to have kids and stuff like that. I did see it as a very empowering thing. It was an empowering process to go through. A little bit sad at the same time, because you’re like, oh, I don’t have that person in my life…. At the same time, being like, oh well, now I have these. Maybe I just don’t end up needing someone in my life to do this either… It’s kind of like all of these mixed elements that go into it as well.

**Gift to herself:** The participants in this study also talked about feeling empowered by the decision to freeze their eggs because they considered it to be something they had done for themselves. It was an active step they had taken in order to gain control over their reproductive lives. Freezing their eggs was seen as a gift they had given to themselves, and was viewed as a positive step in their lives. The participants reported that freezing their eggs gave them a greater sense of autonomy and self-determination about their reproduction, and reduced the pressure of their biological clocks. This sense of empowerment that was shared by all the women in the study, was poignantly reflected in the words of the following participant:

It was such an empowering decision. I feel so good for doing that for myself. There’s very few things like that, that you can do for yourself that are so empowering. I wish that it was as easy for everybody else as it was for me.

The women in this study spoke about how the egg freezing process was a direct action they could take to better ensure the likelihood that they could have a child in the future, and as a result, felt that it was a very positive choice and an empowering step in their lives. Another
participant spoke enthusiastically about how empowering her experience of egg freezing felt, because it was something she had done for herself:

I felt so empowered. I just felt like I was making such a good decision for myself and I felt really empowered. The whole process was really good and I felt so taken care of the whole way through, so I certainly would’ve done it again.

Another woman viewed her experience of learning about fertility and freezing her eggs to be a way that she had taken care of herself. She considered the decision to freeze her eggs to be an act of self-love: “This is the part of loving yourself, I think. This is what it is… Taking care of yourself.” The women in this study saw egg freezing as a concrete way they could empower themselves to feel more confident about their ability to have children in the future, if and when they were ready and the circumstances of their lives were in place for them to become a mother.

**Sense of Feeling Fortunate**

All of the participants in this study referred to a sense of feeling fortunate about their experience of egg freezing, and they considered it to be a positive experience in their lives. They spoke about the procedure itself being *easier than expected*, which was both surprising to them and also a relief. The women reported overall positive experiences of the egg freezing procedure, felt well-cared for by their care providers, and had fewer symptoms from the medications than they had anticipated. The participants expressed a *sense of feeling lucky* at the number and quality of eggs that they were able to freeze, and at only having to do the procedure once in order to acquire a sufficient number of eggs. They felt fortunate based on their shared belief that they were in a better position to be able to have children when they were ready as a result of going through the procedure. The women also shared a *sense of gratitude* for having had access to the procedure – even a participant who had to travel to another province to be
accepted in an egg freezing program – and being able to afford the cost of freezing their eggs. Five of the participants discussed their wish that the cost of the procedure would be covered by either provincial healthcare plans or private health insurance in order to make it accessible to more women as a viable reproductive option.

**Easier than expected.** All of the women in this study spoke about what a positive experience it was to freeze their eggs, and how the egg freezing procedure was much easier than they had anticipated. They expressed a sense of feeling fortunate and lucky at having had such a good experience overall. The participants expressed both relief and surprise at how straightforward, uncomplicated, and “easy” it was to go through the entire procedure. They talked about egg freezing as being less involved, difficult, and painful than they had expected, and how they experienced fewer symptoms than they had anticipated. As one woman stated: “…it was much less arduous than I thought it was going to be.” Another participant expressed a similar sentiment: “The procedure itself was pretty good too. It wasn’t that bad. It was a lot easier than I had anticipated.” Another participant commented on how, for her, “the physical and emotional part of the egg freezing was kind of a non-event.”

The women in this study shared how their previous expectations about egg freezing were based on stories from other women who had gone through fertility treatments, such as IVF, other women who had frozen their eggs to delay childbearing, or for two participants, their professional knowledge and experience working in a medical field. They talked about how they had expected the entire process to be more time-consuming than it was, and were relieved when it did not take up as much of their time as they had anticipated. They also talked about how they had expected to experience uncomfortable and unpleasant side effects from the hormone medications that were required for the egg freezing process. Some of the women experienced
some bloating and discomfort as a result of the hormones, as the follicles matured before the egg retrieval, while two participants reported not experiencing any symptoms from the hormones. The participants anticipated that the egg retrieval would be a painful procedure requiring a relatively significant recovery process. Again, to their surprise, the retrieval process was easier and less painful, and the recovery was shorter, than they had anticipated. As one woman said about the procedure: “It was actually totally fine. I didn’t feel a thing. The procedure itself... the egg retrieval, I felt absolutely nothing.” All of the women in this study expressed the attitude that egg freezing procedure was a positive experience overall. One woman enthusiastically articulated this shared sentiment:

In general, I only have wonderful memories about the whole thing. I think my expectations were managed and then somewhat exceeded. Everything went so right for me. It couldn’t have gone better. I just had such a wonderful experience. Had I had fewer eggs retrieved and decided that I wanted to go through the process again, I would have had absolutely no reservations about doing it again, because I just had such a great experience the first time around.

The participants also spoke highly about the medical care they received from both nurses and physicians during the entire egg freezing procedure. They felt satisfied that this care either met or exceeded their expectations. Three of the women talked about researching different fertility clinics and carefully choosing a clinic based on recommendations from other people as well as their own research. Two of the participants who worked in a healthcare setting chose a clinic based on their ability to readily access the services, as well as their previous relationships with medical care-providers. All of the women spoke about feeling very satisfied and confident with the quality of medical care they received, including the knowledge and experience of the
physicians, and the attention and care of the nurses. One participant spoke about feeling fortunate to be a patient of the head physician at a fertility clinic, how she developed a comfortable relationship with her doctor, and felt particularly well-cared for. Another woman reflected on the quality of care she received in this way: “It was a great experience. They treated me really well and they were really concerned with my comfort.” As previously noted, one of the participants in this study originally had a negative experience at a fertility clinic, but after switching to a different clinic in another province to undergo the procedure, she was very satisfied with the care that she received and her overall egg freezing experience.

For several of the participants, hearing the stories of other women who had been through fertility treatments about how difficult, arduous, and intense it was to undergo assisted reproductive technologies, initially shaped their expectations. The participants spoke about their initial fears of going through the procedure, which included experiencing negative side effects from the medications, using needles to give themselves injections, and having unpleasant symptoms related to the egg retrieval procedure. Consequently, they reported feeling surprised by how much easier the entire process was for them compared to the stories that they had heard from other women. One participant spoke about how much easier the procedure was than she had expected:

I was also amazed by just how easy the whole process was. I know a lot of people who had really strong reactions to all the drugs and they got really sick, gained a lot of weight, all of that type of stuff and it was super easy for me. I had no side effects whatsoever. It was just really easy. I didn’t even find the shots that hard to do. Once you get the hang of it, it’s really easy and it also gave me a lot more understanding for my friends who have gone through a lot of fertility treatments because they couldn’t get pregnant. I have
one friend who went through it 15 times and I was like, before going through this
procedure, I was like how could anyone ever do that? How could you just do that to
yourself so many times? After doing this, I was like, oh, I get it. It’s actually really easy.
It’s not hard at all.
The ease of the process left participants more open to undergoing the egg freezing procedure
again, had it been necessary to retrieve additional eggs.

Three participants reported that the hormone medications caused side effects of bloating,
discomfort and heaviness as the follicles matured on their ovaries prior to the egg retrieval.
However, although these symptoms were somewhat uncomfortable, they were less onerous than
the women expected, and seemed acceptable to them. As one woman shared:

Again, maybe it was just me or the clinic and whatnot, but for me, it was a good
experience. I didn’t experience much discomfort aside from some bloating and a little
weight gain, which I got rid of. Again, some other people have different experiences. It
really depends, I guess, on the person and maybe the clinic. I don’t know. A
combination of both probably, but yeah, it was pretty straightforward.

Several of the participants talked about how they had initially been particularly nervous
about the thought of giving themselves hormone injections in their stomach, but found that the
actual process was much easier than they had anticipated. For one participant, watching videos
demonstrating exactly how to administer the injections helped her to get through the process.
Another woman talked about feeling surprised by how small the needles were and that she did
not feel the injections as much as she had anticipated:

… when people tell you that the shots are actually a lot easier than you think they’re
going to be, it’s true… Yeah, much easier, because the first time you’re sitting there and
you’re like, oh my god. I had to count to three 15 times before I actually got the courage to do it. It was like, oh my god, the needles that they give you are so tiny you literally cannot even feel it.

Despite having some initial fears about the procedure, it was an overall positive experience for the women in this study and was much easier than they had anticipated. This general sentiment was reflected in the words of one participant:

Yeah, the fear was there for sure. But, it was such a great experience, the procedure itself. I felt so happy and so taken care of and I had absolutely no pain. I look back on that day only with wonderful, wonderful memories. It was a really, really great experience.

**Sense of feeling lucky.** The participants in this study expressed a sense of feeling lucky at both having gone through the egg freezing procedure, and with their results. They all expressed feeling satisfied with the number and quality of the eggs retrieved. They were pleased at having to go through the procedure only once to retrieve enough eggs to feel comfortable about their chances of being able to have a child using their frozen eggs in the future. The women in this study had between 13 and 22 eggs retrieved from their respective procedures, and between 10 and 19 mature eggs frozen. They all expressed feeling satisfied with their results, based on their age. In the words of one participant who was 28 years old at the time she froze her eggs:

I have a total of 19 eggs frozen. I did a fair bit of research and I feel like, for my age, that is a reasonable result. I was hoping for somewhere around the 20 mark, so to have 19, I feel relatively sure that if I need to use them, I have a reasonable chance of success with 19 eggs.
Another participant similarly expressed how lucky she felt with the results of her procedure: “I feel like I knew everything that I needed to know going into it and I feel like I was pretty lucky to get a decent number of eggs out of just one retrieval.”

The participants talked about their decision-making process regarding how many times they would consider undergoing the egg freezing procedure, depending on the number of viable eggs the doctors were able to retrieve. They conducted their own research and consulted with their physicians. Although there is no clear cutoff for the number of eggs needed to ensure a successful future pregnancy, each of the participants eventually decided that one procedure was enough for them to feel confident about their chances of success using their frozen eggs in the future. Two of the participants had considered undergoing more than one procedure, but decided that one was enough for them to feel confident about their ability to have a child in the future. Another participant went into the process with the clear intention that she would only undergo one procedure, and felt lucky that her results were good enough to not need any additional procedures: “I think I was just lucky to get a pretty good number in my one shot because I really was looking at it as a one-shot deal.” The participant who was the youngest of all the women in this study when she had her eggs frozen, and was particularly knowledgeable about the fertility lifespan, spoke about feeling lucky that she was able to freeze her eggs at 28 years of age because it was considered to be an optimal time:

For me, optimal fertility is somewhere between 25 and 30. I do think there are some issues with much younger eggs, and some issues with much older eggs and so there is, for me, this sweet spot between 25 and 32. I feel like I did it at the right time and like I said, the whole process was really good for me.
The participants also reported feeling lucky that their individual cases were straightforward and “uncomplicated.” They talked about the entire process going as well as could be expected from a medical perspective. Interestingly, each of the women in this study spoke about how they felt that their experience of the egg freezing procedure was uniquely positive, both in the ease of the process and the results. They believed that their cases were atypical in that their experiences were exceptionally positive. The participants also considered themselves to now be in a better position to be able to have a child in the future, when compared with other childless women in their age group who had not undergone the egg freezing procedure. One woman expressed this shared sentiment: “It did take some of the pressure off. It feels really good. I feel in a way better position than a lot of women my age who are in the same situation but don’t have frozen eggs.” All of the women reported feeling fortunate that their overall experience of egg freezing was so positive and successful.

**Sense of gratitude.** The participants referred to feeling a significant sense of gratitude at having the ability to access egg freezing as a reproductive option. They talked about feeling grateful that the reproductive technology exists to allow them to freeze their eggs, that they had the option to elect to undergo the procedure, and that they could afford the costs of the procedure. They felt very fortunate to have both the access, and the resources, to be able to freeze their eggs, and felt in a better place as a result of having undergone the procedure. One participant expressed this common sense of gratitude in the following way: “I think we’re very lucky to live in a time where we can do these things. It’s pretty amazing.” Three of the participants spoke about their sense of gratitude for the advances in medical science that allow women to freeze their eggs, and that this technology is now available as a viable option for women to delay childbearing: “We’re just glad that we have science to make this happen.”
Another woman commented: “I just think it’s amazing that the science exists and I hope it continues to get better and more accessible to people.” As one participant reflected on feeling grateful that egg freezing was a reproductive option available to women, and one that she had chosen to utilize, she said the following:

Thank God it’s an option these days…. Instead of complaining about it, how about you embrace the fact that you have tools now, instead of being jealous of your friend. I don’t know, it just... I hope that a lot of people, and certainly a lot of my friends who are more like-minded with me, we just look at it as an amazing resource.

The participants also discussed the cost of the procedure, which ranged between $10,000 and $20,000. Although they viewed it as an expensive procedure, they still considered it to be worth the cost and a valuable investment in their lives. Reflecting on the cost versus the value of going through the egg freezing procedure, one participant said:

Money just comes and goes, but it’s the decisions you make that can be so impactful…Money can come and go. You can win and lose it. But you can’t turn back time.

Other participants compared the cost of egg freezing to the cost of raising children as a way to help justify the expense. They described the cost of freezing their eggs as only a fraction of the cost of raising a child for one year: “It’s a lot of money, but if you’re going to have kids, the amount of money that you’re spending on egg freezing is a fraction of what it’s going to cost to raise those kids.” Two of the participants in this study, both of whom lived in the United States, reported feeling frustrated that they had to privately pay to freeze their eggs because their health insurance did not cover the cost of egg freezing, but did cover the cost of other forms of ART, such as IVF. They believed that health insurance companies should cover the cost of the egg
freezing procedure in order to make it more widely accessible to healthy women as a reproductive option.

Despite the significant cost of egg freezing, the participants viewed the procedure as having added value to their lives. One woman expressed her thoughts about the costs of the procedure in this way: “I’ve had a very positive experience and, worst case, I spent money and had a procedure that was unnecessary, then that’s what insurance is for.” Another woman considered the cost of egg freezing to be a valuable investment compared to other expenses in her life: “In the grand scheme of things, $20,000 is actually kind of a drop in the bucket.” One participant talked about how she encouraged other women in her life to pursue freezing their eggs, framing the cost of the procedure in the following way:

I’ve had conversations where I’ve sort of pushed someone to do this because I’m like, why not? It’s three purses, it’s two weeks of maybe travelling less for work and partying less, but it’s going to give you an insurance policy that’s worth it.

The participants in this study also expressed a sense of gratitude at being able to share their personal story and participate in this study. They expressed feeling a sense of hope that, by sharing their experiences, they could help other women to learn more about egg freezing and, in so doing, that more women might choose to pursue this reproductive option.

**Sense of Keeping Options Open**

The participants in this study talked about the decision to freeze their eggs as having given them a sense of keeping their options open for the ways in which they might have a child in the future. By freezing their eggs, rather than freezing embryos fertilized with sperm from either a partner or a donor, these women felt that they were able to maintain a *sense of increasing options* in terms of the various avenues they may have open to them to pursue childbearing in the
future. These possibilities were varied and could include fertilizing their frozen eggs using their current partner’s sperm, the sperm of a potential future partner, or a known or anonymous donor’s sperm. Egg freezing was considered to be a backup plan that would allow these women a greater chance of being able to have a child in the future when they were ready and the circumstances of their lives were more conducive to including motherhood. In addition, the participants in this study had a sense of fluid age boundaries regarding the circumstances in which they anticipated using their frozen eggs in the future, including both their age and their relationship status. The timeline in which they saw themselves using their frozen eggs appeared to be adjustable, depending on the changing circumstances in their lives. The women also reflected on their considerations about future use or disposition of any frozen eggs that remained unused once they had either completed their families and/or had decided not to use them. These options included donating their eggs to be used by someone else to have a child, donating their eggs to scientific research, or disposing of any unused eggs.

**Sense of increasing options.** The participants in this study talked about how egg freezing was a way for them to increase the options available for the ways in which they might pursue childbearing in the future. They had chosen to freeze their eggs, rather than freeze embryos with sperm from either a partner or a donor, because they were unsure about the particular circumstances they would be in if/when they decide to use their frozen eggs and wanted to keep as many options open as possible. For the two participants who were in a relationship at the time of freezing their eggs, they were uncertain that their partner would be someone with whom they would eventually have children or were clear that their current relationship was not ideal for pursuing childbearing. One woman, in discussing the people she had as support at the time of freezing her eggs, shared the following regarding her partner’s
support for her decision: “Well, I guess my boyfriend at that time, too, but we weren’t freezing embryos. I knew that just wasn’t something that I wanted to do. Yeah, so I mean he was supportive, but he wasn’t part of it.” Another participant, who had recently broken up with her partner prior to freezing her eggs, shared how she had decided to freeze her eggs rather than freeze embryos using his sperm, as a way to keep her options open for the future:

I decided to keep them as eggs because they couldn’t reverse it. I still didn’t know if we would be together or even if we reconciled if we would ultimately end up getting married. I just went through with the egg freezing…

One participant, who was single at the time of the procedure, expressed how difficult it was for her to decide whether to freeze just her eggs or to freeze embryos by first having her eggs fertilized with the sperm of a donor. She described the stress she felt about making the decision, and how, through the advice of her physician, she eventually decided to freeze her unfertilized eggs:

Even when I was about to get the egg retrieval I thought about getting sperm donors. That was very stressful. Fortunately, one of the physicians that I was consulting with…put my mind at ease and she was like, “You don’t need to make the decision right now. You know, right now you want to freeze your eggs. That’s the most important thing.”

By choosing to freeze eggs rather than embryos, the women in this study felt that they had increased the options available for using their frozen eggs in the future. They were aware that, compared to frozen eggs, frozen embryos generally have a higher success rate and are more likely to lead to the conception and live birth of a healthy child. Despite this knowledge, each of the women in this study intentionally chose to freeze her eggs as a way to keep her options as
open as possible in terms of the genetic father of her future child. These women did not choose to fertilize their eggs with a partner’s or donor’s sperm because they were uncertain about the situations in which they would choose to fertilize their frozen eggs in the future – with either a current partner, a future partner, or with a sperm donor. One participant explained fertility preservation through egg vs. embryo freezing in this way:

In an ideal situation, if you’re not ready to have a baby, the ideal situation would be to freeze embryos, but not all women are in a position to do that…I think in the ideal world, fertility preservation would be freezing embryos, but not everyone is in the position to do that. I certainly wasn’t in a position to do that, so freezing eggs is the best way.

If they had chosen to fertilize their eggs and freeze them as embryos, the women would have had to commit to deciding who would be the genetic father of their future child. Although embryo freezing might have increased their future chances of being able to have a child, it would have also reduced their future options in terms of the genetic father of their child. One participant expressed this predicament in the following way: “The travesty in all of it is that you don’t know how viable those eggs are until you fertilize it, and once you fertilize it, you’ve made a commitment to the other half of the equation.”

Because each of the women in this study, whether single or partnered at the time of freezing their eggs, made the decision to freeze their unfertilized eggs, in the future they will have the option to determine the genetic father of their child, based on the circumstances of their lives and relationships at that time. Two of the participants, who were single at the time of the study, expressed the hope that they would be able to find a partner with whom they could start a family, and considered this to be a preferred scenario, rather than using a sperm donor to fertilize their eggs. As one of these women said:
Well, I would like to use them with a partner, ideally, is the plan, which is why I’m glad that they are individually frozen. Because there’s a possibility that I will buy some frozen sperm at some point and use some of them or one of them. As many as it takes to have a child, hopefully, if I need to at that point with a sperm donor. Otherwise I would like the remainder to be safe for a possible partner. I would like to have a child with a partner potentially.

**Backup plan.** For the participants in this study, egg freezing was considered to be a backup plan for childbearing because they were not in a position to have a child at the time of the procedure. These women chose to freeze their eggs as a way to preserve their fertility for if/when they were ready to have children in the future. The four participants who were childless at the time of the interview, stated their explicit intentions to use their frozen eggs for childbearing if they were not able to naturally conceive when they were ready to have a child. For these women, natural conception was viewed as a preferred scenario. Freezing their eggs was seen as a way to increase “the possibility of having healthy children later on in life,” and served as a backup plan that gave them greater a sense of keeping their options open for being able to have a child in the future.

The participants were aware that egg freezing did not guarantee that they would be able to have a child in the future, but reported feeling a greater sense of hope that it would be possible. As one woman stated: “it’s not insurance policy, but it’s definitely a hope policy.” Egg freezing was seen as a way to open up the options available and increase the likelihood for being able to have a child when they were ready. This shared sentiment was expressed by one participant in the following words:
I thought, “Maybe it’s wise to do this so that I can prolong my childbearing potential,” at least the potential, knowing that it’s not for sure for sure. It’s not really an insurance plan, reproductive insurance plan by any means, but just – it just gives you this added hope and takes away some pressure.

Another participant, who was uncertain about whether or not she wanted to have children in the future, had decided to freeze her eggs as an “insurance policy” that would give her a greater likelihood of being able to have a genetically-related child if/when she wanted to have children. She articulated her thought process in this way:

…but I will say it’s nice knowing that they’re there. Just in case I do eventually definitely decide that I want to have kids and if in case nothing else works out, they’re there. Then, if those don’t work out, okay. Then, we have to figure something else out, but they’re there.

**Sense of fluid age boundaries.** Five of the participants in this study shared their thoughts on the age beyond which they would not want to use their frozen eggs to have a child. Interestingly, the cutoff age seemed to shift upward as they got older. As they aged and were still not in a position to have a child, they increased the upper time limit for using their eggs. The cutoff age appeared to be “a shifting number” and seemed to be a way for the women to maintain a sense of keeping their options open for future childbearing. As the women moved closer to or passed the age by which they had expected to have children, and their life circumstances still had not aligned with their childbearing expectations and values, they altered their timelines for using their frozen eggs. Three of the women speculated that 45 would be the upper age limit for using their frozen eggs to have a child, but acknowledged that this number had been changeable. As one 37 year old participant said: “I don’t know that. I mean, if you had
asked me this a few years ago, I probably would have said 40. I don't know... Yeah, but that number keeps creeping up all the time.” These participants preferred to use their eggs at a younger age and 45 represented a final cutoff. One woman expressed this shared view in the following way: “…ideally I would love to do it in the next couple of years. The max, max would be 45. I don’t want to do it past then.” Three of the participants, all of whom were single at the time of the interview, shared that they regularly thought about the age they would be when they decide to use their frozen eggs. As one woman said:

I already do the calculation in my head regularly, like “How old is my kid going to be when I'm 60 if I have my...?” I'll be 70 when my kids are 30 if I have kids at 40. If I start at 40. Maybe not past 45. I don’t know. Ideally, before that.

Only one participant reported not having an upper age limit in her mind for using her frozen eggs in the future because, even though she continued to age, her frozen eggs did not. She expressed her thoughts in this way: “I don’t feel like I have any cut-off because I know in pregnancy the most important thing is the age of the egg, and so for me, really, age is not a factor anymore.”

Three of the participants, who were single at the time of the study, discussed their views on what type of relationship they would want to be in in order to make the decision to use their frozen eggs. For these women, their ideal scenario for using their frozen eggs and having a child would be within a committed intimate partnership. However, their views on the relationship requirements for childbearing changed as they aged, and were still single. Similar to an upper age limit, their relationship status was a fluid boundary. By allowing this boundary to move, the women were able to keep their options open for having a child in the future. If these participants did not find a partner with whom to pursue childbearing, they said that they would consider having a child as a single mother, even though this was not their preferred option. Two of the
participants who had wanted to have a child with a partner, reported feelings of grief and loss as they now faced the prospect of single motherhood:

It’s a question now of when am I going to start on my own and getting comfortable with that idea. I know that I think I’m in a bit of a better place. I know that I have to be able to talk about the idea of having a baby on my own and not cry before I’m ready. It means I’m still grieving the life I wanted. I’m doing okay with it actually talking about it right now although there’s a little twinge at the back. Then there’s a question of will I put myself in a position where I’m less likely to meet a partner if I have a child? I certainly won’t be focused on it for at least a year or two. It’s hard enough to online date as it is and I’m single.

One of these women expressed her worries about the practical and financial aspects of raising a child as a single mother. Although time was marching on, she maintained a sense of hope that she would still find a partner with whom to have a child:

Yeah, I’m not willing to give up. I want to do it with someone. I don’t want to do it by myself. It’s hard enough having a family with two people involved, but doing it on your own and then not being able to have any free time to do anything, it’s very limited even when you do have a partner. It would be more limiting if I did it on my own.

Five of the six women in this study were uncertain about exactly how they would use their frozen eggs in the future or what particular circumstances would lead them to use their frozen eggs. However, one participant was explicit about her intention to use her frozen eggs to pursue single motherhood if she did not find a partner by the time she turned 40 years old. She articulated her thoughts in this way: “I think if I do not have a partner by the age of 40, most likely, I will make a decision to become a single mom.” Even if she did not find the right partner
by a certain time in her life, she felt reassured that when she was ready she would be able to pursue childbearing using her frozen eggs. This participant also spoke about the proactive steps she was taking to be in a financially secure position in order to have a child as a single woman, including furthering her education as well as running a business in addition to her full-time employment. She felt empowered by freezing her eggs because it was a way for her to take control of what she wanted in her life and reflected on the sense of freedom she felt from having made the decision to freeze her eggs: “It’s a sense of freedom. I know that, by a certain age, I still have time. I’ve already made a decision that by this certain age if I do not have a partner I will become a single mother.”

Considerations about future use or disposition. The participants in this study discussed their intentions for the future use and/or disposition of any frozen eggs that remained unused after they had completed their families and/or had decided not to use them. These options included donating their frozen eggs to be used by someone else to have a child, donating their eggs for scientific research, or having their eggs discarded. The women did not explicitly state how they would know that they were ready to donate or discard their frozen eggs, and how they would know that they had either completed their families or had decided not to use their frozen eggs. Notably, only one participant clearly stated that she would like to donate her unused frozen eggs to be used by someone else, either known or unknown, to have a child. Another participant suggested that she would have wanted to donate her unused eggs, but assumed that she had been too old at the time of freezing for her eggs to be viable for donation. Two participants reported that they definitely did not want their unused eggs to be used by another person to have a child, and two participants were unsure about this decision. These four participants discussed feeling uncomfortable with the idea that someone would have a child that
would be genetically-related to them but that would not be their child. The words of one of these women capture these shared sentiments:

I don’t think I would ever be able to donate my eggs to somebody else to use. As much as I don’t feel attached to them, it is my biology and I don’t want to be an egg donor. For research, yeah, sure or throwing them in the trash, sure, because again, I don’t feel attached to them, but I don’t want to be an egg donor.

Other considerations that were involved in the women’s decisions regarding donating their eggs to someone else, included their partner’s views about egg donation, whether or not they would know the recipient, and whether or not they would still be alive when the recipient used their eggs.

Three participants expressed their willingness to donate their unused frozen eggs for scientific research purposes. Two participants were unsure if they would want to donate their eggs to research because their decision would be based on the specific purpose of the research. One participant was clear that she did not want to donate her unused eggs to research. One participant, who would donate her eggs to research but did not want to donate her eggs to someone else, explained that she did not feel an emotional connection to her eggs. As she said: “…I don’t feel emotionally attached to them at all. It just feels very clinical… I don’t see them as half a potential baby. They’re just eggs.” Only two participants had considered discarding their unused frozen eggs, and would do so only if they were not used for research purposes.

Overall, the participants’ considerations about the future use and/or disposition of their unused frozen eggs were varied and based on different factors and personal values for each participant.
Openness with Others

All of the participants in this study spoke about being open about their egg freezing experience with family, friends, and other women. In response to sharing their experience of egg freezing with family and friends, overall, the participants reported feeling supported in their decision to freeze their eggs. Two of the participants who lived in a large urban centre in the eastern United States talked about how egg freezing was a frequent topic of discussion in their reference groups, with several of their close friends having also elected to freeze their eggs. All of the women in this study spoke about the value of sharing their experience of egg freezing with other women in their cohort, as a way to encourage them to consider egg freezing as a fertility preservation option if they were not yet ready, or in a position, to have children. The participants hoped that, by sharing their stories, they could help to increase knowledge about egg freezing as a viable reproductive option.

Feeling supported in their decision. All of the participants in this study spoke about having shared their experience of egg freezing with close friends and family members. Being open about the decision to freeze their eggs gave these women a sense of personal empowerment and allowed them to feel supported in their decision to freeze their eggs by the people in their lives who were important to them. That said, the participants talked about the decision to freeze their eggs as being a decision they had made entirely for themselves, on their own terms – not based on the opinions of other people. This openness with others regarding the decision, and the subsequent support she received from others, was particularly noteworthy for one participant who was in a relationship at the time she underwent the procedure. She elected to pursue egg freezing, rather than embryo freezing using her partner’s sperm, despite the potentially lower
rates of success with egg freezing. She shared the following about the support she received from the significant people in her life and from her partner:

I was very open with people about it…everybody knew that I was going to do it and why I decided to do it, and everybody was very supportive. When I decided to do it, my partner and I had only been dating for about nine months when I came to the decision that I wanted to do it. It was a little bit of a... At first, I felt a little bit anxious about talking to him about it because I didn’t want him to feel like I was putting him under pressure. I tried to make it very clear that the decision wasn’t about him at all and he was 100% supportive and was there the whole time.

**Sharing their stories.** The participants reported sharing their stories of egg freezing with their friends and family, as well as with other women, because it was such a positive experience for them, and because they wanted others to know that this fertility preservation option was available. As one woman articulated:

My parents were very supportive… I shared with my girlfriends and they were happy for me. I was so excited about it after. I probably shared with a few people that kind of pushed some boundaries a little bit, but I was just so thrilled. With some women that I don’t know as well. They’re friends, but not super close friends. I was just so thrilled and excited that I’d done this. I guess my thought was I want to be able to share my experience so that I can help give other women the courage to make their own choice.

Two participants spoke about sharing their decision with their families after they had already made the decision to go ahead with the procedure and/or after they had already completed the procedure because they wanted to be sure in their own minds before taking the risk of sharing
this information with their family members, in case someone disagreed or disapproved and tried to talk them out of it.

For the two participants in this study who lived in a large urban centre in the eastern United States, egg freezing was reportedly a topic frequently discussed among their close friends and in their social networks – without shame or secrecy. These participants spoke about egg freezing as being both socially acceptable and normative in their reference groups. These two participants were open with their peers about undergoing the egg freezing procedure, which resulted in a sense of support and connectedness. Being open with their friends about egg freezing, resulted in these women feeling less alone in making the decision to freeze their eggs.

One woman spoke about how normalized this topic had become in her social group:

It’s becoming more common, especially when you’re single later and you have friends who are also single later or divorced without kids and back out there. I think everyone above 35 and in some cases people who are years below that but they have fertility concerns or they know they’re not going to want kids for x years, even if they’re married because of things you point out, career, education. I feel like it’s becoming less taboo, so there wasn’t a shortage of people to discuss it with.

Many of their close friends had also made the decision to freeze their eggs, and were also open about their personal experiences. Indeed, another participant shared how egg freezing was becoming a more common topic of conversation, and more acceptable option, among her reference group of single friends who wished to delay childbearing:

Pretty much all of my friends were single at that time and there was a small group of us who were all thinking about the egg freezing thing. Yeah, I guess we all ended up doing it probably within six months of each other. Yeah, I think it’s one of those things, and I
think I was one of the first ones to do it. Then, when one of my friends saw how easy it was for me, she ended up doing it. It was kind of like this domino effect.

Five of the participants reported having received encouragement and support from their families about their decision to freeze their eggs. However, one participant explained how telling her parents about her decision to freeze her eggs had led to a rift in their relationship, when they declined to financially help her with the cost of the procedure, despite having offered to pay for other significant events that might occur for her in the future, such as a wedding. She reported feeling surprised and disappointed by her parents’ decision, and attributed their lack of emotional and financial support to the fact that her life had not followed the normative trajectory and, therefore, she had not met their expectations:

I think that with the parents’ thing, it’s really just about all of their dreams for their daughter…and, you know, their dream for me was getting married and having a family. I didn’t live up to those dreams or meet those dreams…even though I’m incredibly successful and went to amazing schools and all of this stuff, but when it comes right down to it, what they wanted was for me to get married and have kids…

She felt devalued by her parents’ decision, and expressed the following: “It definitely affected my relationship with them as well because it was like: Oh, well you’re basically telling me that I’m only worth this amount of money if I get married, not if I don’t.”

All of the participants in this study spoke about their desire to be open and share their stories with other women about their experiences of egg freezing as a way to encourage other women to find out more about their reproductive health and to consider pursuing egg freezing as a viable reproductive option if they needed to delay childbearing. The women felt a sense of responsibility to share their positive experiences as a way to help inform others and demystify
the egg freezing procedure. One participant expressed this shared sentiment in the following way: “I don’t think it should be taboo and I think part of what is going to make it less taboo is people being open about their own experience.” The participants felt that by sharing their experiences and recommending egg freezing to other women, they might empower others to take control of their reproductive health. In the words of one participant:

I think people should do it. I think they should consider it. Be self-aware about it, to at least consider it. I think they should talk to people who have gone through it to maybe demystify it because I can understand that it’s daunting, or whatever misconceptions they have.

It was apparent during these research interviews that one of the reasons these women elected to participate in this study and share their stories, was to help to get the word out to other women about this relatively new fertility preservation option.
Chapter 5: Discussion

The purpose of this study was to examine and understand the experiences of women who have undergone social egg freezing for the purpose of delayed childbearing. The research question that guided this study was: *What is the meaning and experience of undergoing social egg freezing for the purpose of delaying childbearing?* In this chapter, I provide a brief overview of the contextual considerations for interpreting the research findings. Next, the significant findings are discussed in the context of the existing literature, with a specific focus on how the findings converge with or diverge from previous research, as well as the novel findings that add to our current understanding of social egg freezing. Finally, the implications of the findings for counselling practice are discussed and recommendations are made for future research.

**Contextual Considerations for Interpreting the Findings**

The six participants in this study were a relatively homogenous group of heterosexual women who were healthy, well-educated professionals. The ethnicity with which they identified was primarily Caucasian. Only one participant identified as being from a Russian and Asian heritage. It should also be noted that all of the women in this study had the financial resources to be able to pursue elective egg freezing. This homogenous demographic profile of the participants in this study was anticipated based on previous literature examining women who have undergone social egg freezing (Baldwin et al., 2015; Carroll & Krolokke, 2017; de Groot et al., 2016; Hodes-Wertz et al., 2013; Stoop et al., 2015; Vallejo et al., 2013; Waldby, 2015). As a result of the seemingly limited diversity of participants in this study, it is possible that the findings may be less reflective of the experiences of women from more diverse ethnic,
educational, and socioeconomic backgrounds who have frozen, or will elect in the future to freeze their eggs for the purpose of delaying childbearing.

Given that participation in this study was voluntary and self-selective, it is possible that the women in this study were particularly open about their experiences and comfortable sharing their stories. It is also possible that the women who chose to participate in this study had primarily positive experiences of social egg freezing that they were comfortable talking about in a research interview. Women who had less positive experiences of egg freezing may have been reticent to participate in the study. It is also possible that the women who were recruited through fertility clinics may have had particularly positive experiences of egg freezing, and their experiences may not represent the range of possible experiences of undergoing social egg freezing. Furthermore, two of the participants who worked in a healthcare field were particularly knowledgeable about fertility, and had relatively easy access to egg freezing services. These factors may have influenced their experiences of egg freezing and their willingness to share their stories. It is unclear the extent to which a self-selection bias could have impacted the findings of this study, thus potentially limiting the extent to which the findings might resonate with the experiences of other women who have elected to freeze their eggs for the purpose of delaying childbearing.

The research method used for this study was hermeneutic phenomenology, which is a method of qualitative inquiry that explores the meaning and experience of a previously under-researched phenomenon (van Manen, 1990). This method provides a co-constructed interpretation of a phenomenon, informed by the lived experience of participants as well as the researcher’s interpretation. Although I have situated myself as a researcher in order to provide transparency regarding the lens through which I have interpreted the participants’ experiences,
the findings of this study are a unique interpretation of the phenomenon of social egg freezing. Although the participants validated that the findings captured, and resonated with, their experiences of social egg freezing, alternate interpretations of the thematic content are possible. Further exploration is necessary to more fully capture the depth and diversity of this phenomenon.

**Significance of the Findings**

The current study sought to learn about the experiences of six women who electively underwent social egg freezing for the purpose of delaying childbearing. The following six common themes emerged from their stories: *Sense of Reducing the Pressure to Have a Child, Sense of Taking Control and Agency, Sense of Personal Empowerment and Acceptance, Sense of Feeling Fortunate, Sense of Keeping Options Open, and Openness with Others*. The demographic profile of the study participants, as well as each of these themes, are discussed below in the context of their similarities and differences with the extant literature. Following this, I discuss the novel findings from this study and how these findings advance our understanding of this phenomenon.

**Comparison with extant literature.**

**Demographic profile.** The participants in the current study were heterosexual, well-educated, and professionally employed women who identified as being primarily Caucasian. Most of the participants in this study were in their mid-30s to early 40s at the time of freezing their eggs. These findings are consistent with the demographic profile of social egg freezers described in the extant literature (Baldwin et al., 2015; Carroll & Kroløkke, 2017; de Groot et al., 2016; Hodes-Wertz et al., 2013; Stoop et al., 2015; Vallejo et al., 2013; Waldby, 2015). In addition, previous research has demonstrated that women are typically single at the time of egg
freezing, and most of the participants in the current study were single at the time of freezing their eggs (Baldwin et al., 2015; Carroll & Kroløkke, 2017; Stoop et al., 2015; Vallejo et al., 2013). Notably, one participant in this study was under 30 years old and in a long-term relationship when she froze her eggs, which is relatively inconsistent with the general demographic profile of this population. However, as previously noted, this participant worked in a healthcare field and was particularly well-informed about fertility and the childbearing timeline. All of the participants in this study underwent one egg freezing procedure and most of the participants froze between 10-15 eggs. These findings are similar to a study by Baldwin and colleagues (2015) in which participants underwent the egg freezing procedure only once, and had an average of 13 eggs frozen. It appears that the demographic profile of women who undergo social egg freezing is consistent across the extant literature, and further echoed by the current study.

**Sense of reducing the pressure to have a child.** A central finding in this study was that participants felt a reduced sense of pressure to have a child as a result of undergoing social egg freezing. Specifically, the women spoke about having felt social and biological pressure to have a child according to a normative timeline, which included first finding a partner and then having a child in the context of a committed relationship while they are still fertile. Freezing their eggs was viewed as a way to reduce this pressure. This finding is consistent with Waldby’s (2015) assertion that egg freezing is a way for women to reconcile conflicting timelines and synchronize their biological clocks with the challenges of finding a long-term partner with whom they can have a child. The participants in the current study perceived egg freezing as a way to reduce the risk of future infertility and increase their chances of being able to have a child when they were ready. Similarly, numerous researchers have previously reported how women see egg freezing as a way to increase their sense of security about their reproductive futures, and minimize the
risks of being unable to have a genetically-related child when they are ready (Carroll & Kroløkke, 2017; Hodes-Wertz et al., 2013; Martin, 2010; Vallejo et al., 2013).

The extant literature consistently reports that the lack of a partner is considered by women to be a primary reason for delaying childbearing and pursuing social egg freezing (Hodes-Wertz et al., 2013; Vallejo et al., 2013; Waldby, 2015). Similarly, participants in the current study spoke about how they had frozen their eggs as a way to reduce the sense of pressure they felt to find the right partner with whom to have a child. For the three participants who had yet to find a suitable partner, this was an important factor in their decision to delay childbearing and freeze their eggs, based on their desire to pursue parenthood within the context of a committed relationship. The recent ending of a long-term relationship was also identified by some participants as a motivating factor in their decision to freeze their eggs.

According to Hodes-Wertz et al. (2013), additional reasons that women delay childbearing include wanting to focus on their career and finances, as well as not feeling ready to commit to having a child. Similarly, as a result of freezing their eggs, the participants in the current study reported feeling more free to broaden the focus of their lives in terms of their careers, education, dating, and travel, rather than focusing on trying to orchestrate their life and relationship circumstances around childbearing.

**Sense of taking control and agency.** The women in this study spoke about egg freezing as a way to take control of their lives and make the best possible decisions, given their life circumstances at the time, while increasing their chances of being able to have a child in the future. By taking an active role in managing their reproductive options, they experienced an increased sense of personal agency. This is consistent with previous research suggesting that women elect to freeze eggs as a way to take responsibility for their reproductive futures by
engaging in a form of “biopreparedness” (Carroll & Kroløkke, 2017, p. 10) to increase the possibility of future motherhood. Previous literature examining the beliefs and attitudes toward social egg freezing of women of reproductive age suggests that concerns about effects to fertility and potential impacts to children born from frozen eggs were barriers to considering egg freezing (Stoop et al., 2011). Interestingly, such barriers were not discussed by most of the women in the current study. Notably, only one participant discussed concerns about the potential effects of egg freezing on her future fertility. This is consistent with the findings of previous research suggesting that the potential benefits of egg freezing appear to outweigh concerns about the potential risks of the procedure in terms of their future fertility or the health of children born from their frozen oocytes for women who have undergone social egg freezing (de Groot et al., 2016).

**Sense of personal empowerment and acceptance.** A central finding in the current study was the sense of personal empowerment that the women experienced in making the decision to freeze their eggs, rather than being held hostage to the limitations of their reproductive lifespans. This finding is consistent with previous research indicating that egg freezing is considered by women who have pursued the procedure to be an empowering experience (Hodes-Wertz et al., 2013). However, contrary to the 6% of participants in the study by Hodes-Wertz and colleagues (2013), none of the women in the current study referred to egg freezing as being anxiety-provoking. This difference may be accounted for by the fact that the participants in this study all had resoundingly positive experiences with the egg freezing process, with minimal physical or psychosocial distress. Notably, participants in this study felt an increased sense of acceptance in their lives related to their experiences of egg freezing, which was a novel finding not addressed in the extant literature that will be discussed later in this chapter.
**Sense of feeling fortunate.** Another noteworthy finding in this study was that participants felt fortunate that they had the opportunity and resources to be able to pursue egg freezing, and viewed the procedure as a highly valuable investment in their lives. Consistent with this finding, previous research has demonstrated that, although women consider the cost of egg freezing to be high, they deem it to be worth the cost (Carroll & Krolokke, 2017; de Groot et al., 2016). The extant literature suggests that women consider the high cost of egg freezing to act as a potential barrier to being able to access the procedure (de Groot et al., 2016; Stoop et al., 2011; Tan et al., 2014). Although most of the participants in this study did not refer to the cost of egg freezing as being a barrier to pursuing egg freezing, they were aware that cost might be a barrier for other women who may wish to pursue egg freezing. They suggested that egg freezing should be covered by private or provincial medical insurance in order to reduce this potential barrier and make it more accessible to women who need to delay childbearing. One participant shared her disappointment that her parents had declined to help her financially to cover the cost of egg freezing, but acknowledged that, although this was a setback, it did not deter her from pursuing the procedure. The participants in the current study also spoke about feeling fortunate and grateful that they had the resources to be able to pursue egg freezing, which speaks to the role of economic privilege and accessibility in terms of women’s reproductive and childbearing options.

**Sense of keeping options open.** Another notable finding in the current study was the women’s sense of keeping their options open to the ways in which they might have a child in the future. They also had specifically chosen to freeze eggs rather then embryos, as a way to increase the options for the genetic father of their future child. That said, consistent with the extant literature, the women in this study viewed egg freezing as a backup plan for pursuing
parenthood in the future, preferring if possible to have a child “naturally” and within the context of a committed relationship (Baldwin et al., 2015; Carroll & Kroløkke, 2017; Hodes-Wertz et al., 2013; Vallejo et al., 2013). Consistent with these previous findings, only three participants in the current study, all of whom were single at the time of the interview, said they would consider single motherhood using their frozen eggs and donor sperm, if they were unable to find a suitable partner with whom to parent. The women also expressed concerns about the financial realities of single parenthood.

In terms of upper age limits for the use of their frozen eggs, Hodes-Wertz and colleagues (2013) found that the majority of respondents in their study considered 49 to 58 years to be too old to use frozen eggs for childbearing. At the time of the interview, the participants generally considered 45 years old to be the upper age limit for using their frozen eggs. However, although the women initially set an upper age limit for the use of their frozen eggs, that timeline tended to shift upwards as they aged and the circumstances of their lives still had not aligned with their values and expectations about the conditions that needed to be in place before having a child. In terms of disposition, previous research has demonstrated that women would consider donating their unused frozen eggs to be used by others for having a child or for research purposes (Baldwin et al., 2015; Hodes-Wertz et al., 2013). These sentiments were echoed by the women in the current study. These findings underscore the complex decision-making process regarding future use and/or disposition of frozen eggs, and will be further discussed later in the chapter and placed in the context of implications for counselling practice.

**Openness with others.** Similar to the findings of Vallejo et al. (2013), all of the women in this study were open with family and friends about their decision to freeze their eggs and their experiences of undergoing egg freezing. Although most felt well-supported in sharing their egg
freezing decision and experiences, two participants in the current study experienced stigma and backlash. According to previous studies, some women reportedly believe there is a social stigma surrounding social egg freezing, and this sentiment was echoed by two of the participants in this study (Hodes-Wertz et al., 2013; Martin, 2010). One participant spoke about how her relationship with her parents was ruptured as a result of their lack of financial and emotional support for her decision to freeze her eggs. Another participant felt disempowered when she was denied access to egg freezing by a fertility clinic because she was a single woman and had not received a medical diagnosis of infertility. Both of these women experienced a sense of stigma surrounding their choice to pursue social egg freezing. The counselling implications of this finding will be discussed later in the chapter.

Relatedly, the women in the current study discussed their hope that, by participating in research on social egg freezing and sharing their stories, they could help reduce the stigma related to social egg freezing and increase knowledge about egg freezing as a viable fertility preservation option.

**Novel findings.** Given that social egg freezing is a newly emerging phenomenon that has garnered limited research to date, this study used a qualitative inquiry to develop an understanding of women’s experiences of social egg freezing for the purpose of delaying childbearing. A notable strength of this study was its use of a hermeneutic phenomenological approach, which allows for an exploratory and in-depth examination of a phenomenon and identifies commonalities in an experience about which very little is known. This study sought to examine the lived experience of undergoing egg freezing as a means of fertility preservation for social reasons. Interestingly, in a study by Baldwin et al. (2015) examining women who had undergone social egg freezing, 22% of participants believed that their fertility was threatened by
a medical condition and cited this as one of the reasons for electing to undergo egg freezing. These findings highlight the lack of clearly understood definitions of social egg freezing compared to egg freezing due to a medical condition such as cancer. The current study extends our understanding of the experience of egg freezing for social reasons because, unlike the women in Baldwin et al.’s study, all of the women in this study considered themselves to be healthy and had no indication of having any fertility issues or challenges at the time of freezing their eggs. This underscores the need to develop clearly defined distinctions between egg freezing for social vs. medical reasons, which will be further discussed later in the chapter.

The findings of the current study suggest that women who pursue social egg freezing are well-informed about reproductive health and the fertility lifespan, which is consistent with previous literature showing that women who have frozen their eggs for social reasons are fairly knowledgeable about age-related fertility decline (Hodes-Wertz et al., 2013). However, in the study by Hodes-Wertz and colleagues (2013), 25% of participants lacked adequate education prior to their initial egg freezing consultation. The findings of the current study enhance our understanding of the importance of education for women considering, or pursuing, social egg freezing. All of the women in this study spoke about the importance of their reproductive knowledge in the decision to freeze their eggs, as well as how empowered they felt by being well-informed about fertility. The women in the current study underwent fertility testing prior to pursuing egg freezing, which they viewed as a way to empower themselves by gaining accurate knowledge about their fertility status. They also spoke about the need for more information about egg freezing to be made widely available so that more women are able to learn about the viability and availability of social egg freezing as a fertility preservation option.
Another unique finding in this study was the increased sense of acceptance that the women experienced when they first decided to freeze their eggs, as well as after they had undergone the procedure. Many of the participants in the current study spoke about how the process of coming to terms with, and accepting, the reality of their current life situations had been important in the decision to freeze their eggs. Furthermore, they felt an increased sense of acceptance and peace toward their life circumstances, as well as a greater sense of freedom to allow their lives to unfold naturally that came about as a result of undergoing the egg freezing procedure. This notable finding was not reported in the previous literature on social egg freezing and represents a unique addition to our understanding of the experience of women who elect to undergo social egg freezing.

Another novel finding of the current study, which was not addressed in the extant literature, was how the women in this study considered egg freezing to be a positive experience in their lives. They spoke about how the entire egg freezing process was much easier and less arduous than they had expected. In addition, each of the women spoke about egg freezing as being a gift to herself. It was labelled by one participant as an act of self-love. Previous literature has shown that women typically undergo one egg freezing procedure, which was confirmed by the women in this study (Baldwin et al., 2015). However, in the study by Baldwin and colleagues (2015), the authors did not indicate women’s views about only undergoing one procedure. The women in the current study expressed a sense of feeling lucky and satisfied with the quality and quantity of eggs retrieved from the procedure, and confident in their chances of being able to have a child in the future using their frozen eggs. Notably, all of the women in this study considered their experience to be uniquely positive.
Another novel finding of the current study, which extends our understanding of the factors that influence women’s decisions about egg freezing, suggests that women are intentional about their decision to freeze eggs, rather than embryos, as a way to increase the options available for pursuing childbearing in the future. This was relevant for both the single and partnered women in this study. Although embryo freezing tends to have higher success rates than egg freezing, if the women in this study had fertilized their eggs with the sperm of either a current partner or a known or anonymous donor, they would have had to commit to deciding who would be the genetic father of their future child. By choosing to freeze their unfertilized eggs, the women increased the possible avenues available for using their frozen eggs in the future based on the circumstances of their lives and relationships at that time, including the option to use their frozen eggs with a potential future partner. This noteworthy finding has not been addressed in the extant literature on social egg freezing.

Finally, the findings of the current study advance our understanding of women’s future intentions for the use and/or disposition of their cryopreserved eggs by highlighting the unique factors that are involved in women’s decision-making processes. Each of the women in the current study spoke about the numerous factors that they considered to be important in their intentions for the future use of their cryopreserved eggs, and notably, these factors were highly varied across the participants. The most important factor in participants’ decisions about donating eggs to be used by someone else to have a child was the women’s genetic connection to their eggs, which included concerns about having a child that would be genetically related to them who they would not parent or with whom they would not have a relationship. Other salient factors included the women’s age at the time of egg freezing, their partner’s views about egg donation, whether or not they would know the recipient, and whether or not they would still be
alive when the recipient used their eggs. The one factor that was particularly relevant for participants in their considerations about donating their surplus frozen eggs to scientific research was the specific purpose of any research using their eggs.

Implications for Counselling Practice

The findings of the current study have important implications for counselling practice, particularly for counsellors working in the area of reproductive health. Given the sense of pressure, both biological and social, that women in this study felt regarding childbearing and the realities of their biological clocks, it is important that counsellors are able to support women in making informed reproductive and childbearing decisions. As noted by the participants in this study, women may choose to explore various reproductive options and alternative avenues toward parenthood if their life circumstances and personal values do not align with the socially normative timeline of childbearing. Previous research has shown that several factors are involved in reproductive decision-making, including age, health, relationship status, financial security, and sense of readiness (Cooke et al., 2012; Olafsdottir et al., 2011; Tough et al., 2007). These factors were also salient for the women in this study. With this knowledge, counsellors can assist women to examine the relevance of each of these factors in their reproductive decisions, and help them explore various options to either preserve their fertility or pursue parenthood.

The findings of the current study also underscore the importance of women having knowledge about reproductive health and the fertility lifespan in order to make fully informed decisions. Counsellors can play an important role in providing psycho-education about fertility and the various reproductive options available to women. They can also refer women to medical care-providers and assist them to research different fertility clinics. As indicated by the current
findings, women may feel empowered to make well-informed decisions when they have accurate and up-to-date knowledge and maintain realistic expectations. Counsellors can best support women in their childbearing decisions if they are well-informed about the various reproductive options that are available, including egg freezing, embryo freezing, natural conception, assisted reproductive technologies, and adoption. If women choose to pursue social egg freezing, counsellors can help women consider the potential risks, symptoms, and side effects of the egg freezing procedure, as well as use information about success rates to help women determine how many egg freezing procedures to undergo in order to feel more confident in their ability to have a child in the future. As highlighted by the study findings, as women make time-sensitive decisions and take proactive steps on their reproductive journeys, counsellors can support and encourage their sense of personal empowerment, self-determination, and agency in facing and making, rather than ignoring, such important and potentially life-altering reproductive decisions.

The women in this study spoke about how the decision to freeze their eggs was influenced by a process of coming to terms with, and accepting, their life circumstances. In addition, many of the women acknowledged the complex and sensitive nature of making decisions about childbearing. Given this, it would be beneficial for counsellors to use counselling skills, such as empathy, non-judgmental listening, and validation in order to help women feel fully supported in their reproductive journeys. Counsellors can help women to better understand their values regarding parenting, and to explore ways to face the reality of their life circumstances, and possibly find a greater sense of acceptance in their lives.

A few of the participants in this study shared a sense of grief and loss about their life circumstances not having turned out the way they had expected, including not having found a suitable partner and not being in a position to be able to pursue parenthood. This was
particularly relevant for the women in the study who were single. This finding underscores the importance of counsellors working with clients in a respectful and nonjudgmental manner, to help them acknowledge and express their feelings of grief and loss, make sense of their past decisions, and accept their current experiences.

Previous studies, as well as the current study, have highlighted potential barriers that women may face when deciding to pursue social egg freezing or in undergoing the procedure. It is important for counsellors to be aware of these potential barriers in order to help women negotiate challenges and not be hindered in their reproductive choices (de Groot et al., 2016; Hodes-Wertz et al., 2013; Martin, 2010). The high cost of egg freezing may prove to be a significant barrier for some women, and counsellors can assist women to determine whether the procedure is a realistic and/or valuable investment in their lives.

The current study has demonstrated that some women may experience a sense of social stigma regarding their choice to undergo social egg freezing, and counsellors can help to support women to navigate any experiences of social stigma. Based on the experience of one participant in this study who was initially denied access to egg freezing for social reasons, it is important for counsellors to be aware that women may experience unequal access to social egg freezing and might need support to geographically locate services. Another participant experienced the social stigma of egg freezing when she did not receive the emotional and financial support that she had expected from her family, creating friction in her familial relationships. Counsellors should be aware that some women may not receive support or may encounter unexpected judgments and reactions from their families or the significant others in their lives about their reproductive choices. Faced with such relational or familial challenges, women may need the help of counsellors to make sense of these difficulties and to find other avenues of support.
The women in the current study discussed their belief that more women, particularly younger women, should have the opportunity to learn about social egg freezing in order to pursue it as a reproductive option, and a few of the participants wished that they had undergone egg freezing earlier in their lives. The current findings, as well as previous research, indicate that women are typically in their late 30s when they undergo social egg freezing (Baldwin et al., 2015; Carroll & Kroløkke, 2017; de Groot et al., 2016; Hodes-Wertz et al., 2013; Stoop et al., 2015; Waldby, 2015). Based on these findings, as well as the recommendation by the American Society for Reproductive Medicine (2014) that women freeze their eggs when they are under the age of 38, it is evident that more information about social egg freezing, success rates, and optimal timing should be made available to younger women. Counsellors can play an important role in increasing public education about social egg freezing.

The findings of the current study have highlighted the multifaceted nature of women’s decision-making about the future use and/or disposition of their frozen eggs. Notably, the women in this study did not explicitly indicate how they would know when they had completed their families and/or when they would no longer want to use their frozen eggs. Counsellors can play an important role in helping women to work through these complex and sensitive decisions regarding issues such as whether to freeze eggs or embryos, deciding how and when they might choose to use their frozen eggs to pursue childbearing, whether or not they might choose to use their frozen eggs as a single mother, how they will determine that they no longer need their frozen eggs, and what they intend to do with any unused frozen eggs.

Finally, the women in this study spoke about what a valuable experience it was to share their story during the interview process. This highlights the vital role that counsellors can play in
creating a safe and non-judgmental space in which women can have the opportunity to freely talk about their experiences and find a sense of support and validation.

**Directions for Future Research**

Although research in the area of social egg freezing is growing, there is currently a limited body of literature on this relatively new fertility preservation option. Consequently, our understanding of this phenomenon is still in the early stages. The purpose of the current study was to examine the meaning and experience of social egg freezing for the purpose of delayed childbearing, and to begin to expand our understanding of this newly emerging reproductive option. Further research in this area is recommended to increase knowledge about the phenomenon of social egg freezing.

Given the relatively homogenous demographic profile of the participants in the current study, as well as in previous research on social egg freezing, future studies with more diverse populations is warranted (Baldwin et al., 2015; Carroll & Kroløkke, 2017; de Groot et al., 2016; Hodes-Wertz et al., 2013; Stoop et al., 2015; Waldby, 2015). Such an examination could help to illuminate the influence that ethnicity, culture, sexual orientation, and socio-demographic status have on the experience of undergoing social egg freezing, as well as on the decision-making process related to this phenomenon. It has been noted that the participants in this study were all women who had the financial resources to afford social egg freezing. The current study, as well as previous research, has shown that although women consider the cost of egg freezing to be high, they consider it to be a worthwhile and valuable investment (Carroll & Kroløkke, 2017; de Groot et al., 2016). It may be beneficial to further examine the ways in which socio-economic status and the cost of elective egg freezing influence women’s decisions to undergo the procedure, as well as the ways that affordability may currently serve to limit access to the
service. Also, given the relatively small number of women who participated in the interviews, further research with larger populations is suggested to allow for a range of experiences of social egg freezing. It is evident that additional qualitative research on the experience of undergoing social egg freezing is necessary to further add to our understanding of the meaning and experience of social egg freezing for women who need to delay childbearing.

At the time of the current study, none of the participants had used their frozen eggs to pursue childbearing, and the majority of participants remained childless. An important area of future research will be to examine women’s decision-making processes regarding how and when to use their cryopreserved eggs, as well as the meaning and experience of using their frozen eggs to pursue childbearing. An additional avenue for learning about the experience of social egg freezing would be to use a longitudinal study to examine the experience of social egg freezing over time, including the early stages of reproductive decision-making, during the egg freezing procedure, and subsequently when women use, or elect to dispose of, their frozen eggs. More research is needed to determine how and when women decide that they have completed their families and no longer want to keep their frozen eggs, as well as their disposition decisions.

Finally, given the newness of this fertility preservation option, the women in the current study noted the lack of adequate information about the live birth success rates when using cryopreserved eggs. More accurate data are necessary to assist women in determining the viability of egg freezing and number of eggs required to give them the best chance of having a viable pregnancy, should they elect to use their frozen eggs in the future.

**Researcher Reflections**

I began this research project with the goal of improving our understanding of the newly emerging phenomenon of social egg freezing. As more women are choosing to pursue this
reproductive option, I believe it is important to increase public knowledge so that women are able to make well-informed decisions about their reproductive lives. Conducting this research project has been a rich and rewarding experience, both personally and professionally. I faced challenges as a researcher, particularly during the recruitment phase of the study. Throughout this research project I engaged in an ongoing process of self-reflection, which led me to examine my views about fertility preservation, as well as issues such as agency, privilege, and choice. Without a doubt, this undertaking would not have been possible without the six women who generously participated in this study. I was honoured with the opportunity to listen to their stories, and have attempted to accurately represent and interpret their experiences. I feel enormous gratitude to these women, and the openness, vulnerability, and enthusiasm they demonstrated in sharing such a deeply personal experience. In conducting this study, it became apparent that, based on the experiences of the women in this study, social egg freezing is largely a positive, empowering experience and women feel inspired to share their experience as a way to inform others about this reproductive option. I felt touched as I listened to their motivations, hopes, pressures, and concerns. I was encouraged to learn about the sense of empowerment, personal agency, and acceptance that resulted from their experiences. It is my sincere hope that this research will be of interest to counsellors and researchers working in the area of reproductive health, and of benefit to women making decisions about their reproductive futures.
References


doi:http://dx.doi.org/10.1016/j.fertnstert.2012.09.028

American Society for Reproductive Medicine. (2014). *Fact sheet: Can I freeze my eggs to use later if I’m not sick?* Retrieved from:

http://www.reproductivefacts.org/FACTSHEET_Can_I_freeze_my_eggs_to_use_later_if_I’m_not_sick/


doi:10.1016/j.paid.2015.10.053


doi:10.3109/0167482X.2010.481337


doi:10.1093/humrep/dew189

doi:http://dx.doi.org.ezproxy.library.ubc.ca/10.1016/j.fertnstert.2011.11.046

doi:10.1111/aogs.13019


Appendix A: Recruitment Poster

A STUDY ABOUT EGG FREEZING FOR DELAYED CHILDBEARING

Have you had your eggs frozen in order to delay childbearing?

Are you a woman between the ages of 20 and 45?

Are you willing to share your experience with a UBC researcher in a confidential interview?

This research study on women's experiences of egg freezing is being conducted by Jordanna Isaacson, a graduate student in Counselling Psychology at UBC, under the supervision of Dr. Judith Daniluk.

If you are interested in learning more about this study, please contact:

Jordanna Isaacson
XXX-XXX-XXXX
XXXXXX@XXXX.XXX

Freezing the Biological Clock:
The Experience of Undergoing Social Egg Freezing for Delayed Childbearing
Appendix B: Recruitment Ad

Freezing the Biological Clock:  
The Experience of Undergoing Social Egg Freezing for Delayed Childbearing

• Have you had your eggs frozen for the purpose of delaying childbearing?
• Are you a woman between the ages of 20 and 45?
• Are you willing to share your story with a UBC researcher in a confidential interview?

This is a UBC study being conducted by Jordanna Isaacson, a graduate student in Counselling Psychology at UBC, under the supervision of Dr. Judith Daniluk, in order to increase our understanding of women’s experiences of egg freezing for the purpose of delaying childbearing. Participation in this study will involve approximately 2.5 – 3 hours of your time.

For more information or to participate in this study, please contact Jordanna Isaacson at: j.isaacson@alumni.ubc.ca or 250-509-3005.
Appendix C: Telephone Screening Guide

Freezing the Biological Clock:
The Experience of Undergoing Social Egg Freezing for Delayed Childbearing

Thank you for calling. My name is Jordanna Isaacson and I am a Master of Arts student in the Counselling Psychology department at the University of British Columbia. This research is being conducted in partial fulfillment of the requirements for my Master’s thesis, under the supervision of Dr. Judith Daniluk.

As you know, I am interested in learning more about the experiences of women who have elected to freeze their eggs for the purpose of delaying childbearing. Before we begin, I’d like to ask you a few questions to determine whether or not you meet the criteria for participating in this study. Then I will explain the purpose of, and details about, the study. You are welcome to ask questions at any point.

1. What is your current age?
2. Have you had your eggs frozen for the purpose of delaying childbearing?
3. When did you undergo the egg freezing procedure?
4. Do you feel you are fluent and comfortable speaking in, and understanding English?

If the person is between 20 and 45 years of age, I will proceed to question 2. If the person answers “yes” to question 2, I will proceed to question 3. If the person answers that the procedure was completed at least six months prior to participation, or four months prior if she has undergone more than one procedure, I will proceed to question 4. If the person answers “yes” to question 4, I will proceed with the telephone screening. If the person is not between the ages of 20 and 45, answers “no” to questions 2 or 4, or has had the egg freezing procedure conducted within the past four months, I will thank her for her interest and inform her that she is not eligible to participate in this study.

Now I will describe the purpose of, and details about, this research, so you can determine if you are still interested in participating in this study.

The purpose of this study is to explore the experiences of women who have frozen their eggs for the purpose of delaying childbearing. We know that more and more women are delaying childbearing for a variety of reasons, including pursuing education and careers, wanting to find the right partner, and wanting to feel more ready to become mothers. It has only been fairly recently that women have had the option to choose to freeze their eggs in order to delay childbearing, commonly referred to as “social egg freezing.” As a result we have very little information about women’s experiences of going through this process. It is important to learn more about the experiences of women who undergo social egg freezing, to better understand the needs of women considering this procedure.
This study will involve one in-person confidential interview, lasting approximately 1 to 1.5 hours. This interview will be held at a mutually agreed upon, private location and will be digitally audio-recorded. If we are not able to meet in person, a Skype video call (that will also be audio-recorded) may be arranged. During this interview, you will have the opportunity to freely talk about your experience of egg freezing. A few months later I will send you a copy of the common themes I have uncovered from the stories of all of the women in the study. During a second follow-up interview, which will take place over the phone and last approximately 30 minutes, we will talk about the extent to which the themes I’ve identified reflect, and resonate with, your egg freezing experiences.

Your participation in this study is entirely voluntary and will be strictly confidential. You can choose not to answer any particular questions during the interviews and can withdraw your participation at any time. You will be asked select a pseudonym in place of your name, which will be used in any written or oral description of the participants and findings in order to protect your identity.

Do you have any questions?

After learning more about this study, are you still interested in participating? If so, I will send you a copy of the consent form. After you receive the consent form you will have two weeks to decide if you would like to participate. If you are still interested in participating, we can set up a time for our first interview. Would you like to arrange a time?

Thank you.
Appendix D: Informed Consent

Participant Consent Form

Freezing the Biological Clock:
The Experience of Undergoing Social Egg Freezing for Delayed Childbearing

Principal Investigator:
Dr. Judith Daniluk, Professor
Department of Educational and Counselling Psychology, and Special Education
University of British Columbia

Co-Investigator:
Jordanna Isaacson, M.A. Student
Department of Educational and Counselling Psychology, and Special Education
University of British Columbia

This study is being conducted as part of a Master of Arts degree for Jordanna Isaacson, a Master’s student in the Department of Educational and Counselling Psychology, and Special Education at the University of British Columbia. Dr. Judith Daniluk is a Professor of Counselling Psychology and is supervising this research.

After the completion of this research, it will be submitted in the format of a thesis to the Department of Educational and Counselling Psychology, and Special Education and will become a public document. The results of this research may be published in academic journals and/or presented at psychological conferences, with all identifying information from participants being removed or altered to protect your privacy and anonymity prior to publication.

Study Purpose:
You are being invited to take part in this research study to share your personal experience of egg freezing. We want to learn more about the experiences of undergoing egg freezing for the purpose of delayed childbearing. The findings will help us better understand the needs of women considering this procedure.

Study Procedures:
The study will involve a total commitment of approximately 2.5 to 3 hours of your time:

1. The Co-Investigator, Jordanna Isaacson, will meet with you for one individual, digitally
recorded interview, during which you will have an opportunity to share your experiences of freezing your eggs. The interview will take place in a quiet, private and mutually agreed upon setting, at your convenience. If an in-person interview is not possible, interviews may be conducted via Skype video. The confidential interview will be digitally audio-recorded, and your agreement to participate includes your consent to this recording.

2. After transcription, analysis, and interpretation of the confidential interviews of all the participants in the study, the Co-Investigator, Jordanna Isaacson, will identify and describe common themes that emerged from the interviews. Jordanna will provide you with a summary of the common themes, through either e-mail or hard copy depending on your preference. She will then speak with you on the telephone to discuss the results of the study, at which time you will have an opportunity to discuss the extent to which the common themes resonate with, and reflect your experience of social egg freezing.

**Study Results:**
The results of this study will be reported in a graduate thesis and may also be published in journal articles and/or presented at psychological conferences. You may receive a copy of the common themes once they have been finalized by providing consent for us to send you the final themes by either mail or e-mail.

**Potential Risks of the Study:**
There are no anticipated risks associated with participation in this study. It is possible that you may feel some emotional discomfort associated with recalling and sharing personal and sensitive information. A list of counselling resources will be provided to you.

**Potential Benefits of the Study:**
There are no clear anticipated benefits associated with participation in this study. You may find that participation in this study is a positive experience for you, and that sharing your story is rewarding and meaningful in helping other women who might be considering freezing their eggs to preserve their fertility.

**Confidentiality:**
Your identity will be kept strictly confidential. All information that is gathered in the interview will be digitally audio-recorded and transcribed. All digital files, including the audio recordings, transcriptions, and Skype data if used, will be both encrypted as well as password protected. You will be asked to choose a pseudonym that will be used in all written reports in order to protect your identity. Interview transcripts will be assigned a specific code number for your name, and transcripts and consent forms will be stored in a locked filing cabinet at the University of British Columbia. Both the Principal Investigator and the Co-Investigator will have access to the research interviews. A professional transcriber may be given access to the coded digital recordings, and will adhere to the same measures to ensure security and confidentiality. You will not be identified by the use of your own name or initials and your identity will be kept strictly confidential in any publication resulting from this research. Direct quotes from interviews, without reference to specific participants, will be used in reporting the findings. Quotes used in reporting the findings will not specifically identify any of the participants. All digital recordings and transcripts will be discarded five years after the research has been completed. Should you
decide to withdraw from the study at any time, all digital files related to your participation, including audio recordings, documents, and Skype data if used, as well as the interview transcript, will be destroyed.

**Compensation:**
There will be no monetary compensation for your participation.

**Contact for Information About the Study:**
If you have any further questions or would like further information about the study, you may contact Jordanna Isaacson (Co-Investigator) or Dr. Judith Daniluk (Principal Investigator). Our telephone numbers are located at the top of this form.

**Contact for Complaints or Concerns About the Study:** If you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, contact the Research Participant Complaint Line in the UBC Office of Research Ethics at 604-822-8598 or if long distance e-mail RSIL@ors.ubc.ca or call toll free 1-877-822-8598.

**Participant Consent:**
You have read the above information, and have had an opportunity to ask questions. Your participation in this study is entirely voluntary and you may refuse to participate or withdraw at any time without negative consequences.

*Your signature below indicates that you consent to participate in this study, and acknowledge receipt of a copy of this form.*

__________________________________________________________________________
Signature of Participant                                             Date
__________________________________________________________________________

Printed Name of Participant

__________________________________________________________________________
Would you like to receive a copy of the final themes once they are available?

If you would like to receive a copy of the common themes once they have been finalized, please provide either your e-mail address or a mailing address to which we can send the findings.

E-mail address: __________________________________________________________

Mailing address: _________________________________________________________
__________________________________________________________________________
Your signature below indicates that you consent to receiving a copy of the study findings either by e-mail or mail.

______________________________________________  __________________________
Signature of Participant                           Date

______________________________________________
Printed Name of Participant
Appendix E: Orienting Statement

Freezing the Biological Clock:
The Experience of Undergoing Social Egg Freezing for Delayed Childbearing

More and more women are delaying childbearing and choosing to have their children at later ages. We know that women delay childbearing for many different reasons, which might include not having found a suitable partner, not feeling ready, not being financially secure, or because they are pursuing their education and developing their careers. The purpose of this study is to explore the experiences of women who have undergone egg freezing for the purpose of delaying childbearing – commonly referred to as social egg freezing. The procedure of egg freezing has only been made available in the last few years, and so very little is known about the actual experiences of women who undergo this procedure, or how women view and understand their experience of this process.

I would like to hear the story of your experience of undergoing egg freezing for the purpose of delaying childbearing, as well as any thoughts or reflections related to this that have emerged as a result your experience. Some people find it easier to talk about an experience by discussing it like a story with a beginning, middle, and end. For example, you may want to begin by telling me about how and why you came to the decision to freeze your eggs, or you may prefer to begin by talking about what the egg freezing process itself was like for you. Please feel free to begin wherever you’d like.
Appendix F: Interview Guide

Freezing the Biological Clock:
The Experience of Undergoing Social Egg Freezing for Delayed Childbearing

Research Question:

*What is the meaning and experience of undergoing social egg freezing for the purpose of delaying childbearing?*

Demographic Information:

- Pseudonym
- Current Age
- Age when you froze your eggs
- How many egg freezing procedures you have undergone and where these procedures took place
- Ethnicity with which you identify
- Geographic location
- Sexual orientation with which you identify
- Current Relationship status
- Immediate family status
- Education level
- Overall health status
- Occupation

Sample Interview Questions:

1. Can you tell me about what it was like to go through the egg freezing process?
a. How did you feel during the process? And afterwards? Looking back now, were there specific things about the procedure that stand out for you?

b. Is there anything you wish you or the clinic did differently?

2. Tell me a bit about what led to your decision to freeze your eggs?
   a. How did you decide on the timing of when to freeze your eggs?
   b. What were the reasons that led to your decision to freeze your eggs?

3. Have you discussed your decision with others and if so, have you found people to be supportive or judgmental about your choice to freeze your eggs? Did you speak with others prior to, during, or after you froze your eggs?

4. What ethical concerns (if any) have you had about freezing your eggs? What ethical concerns (if any) do you have about using your eggs?

5. What religious concerns (if any) have you had about freezing your eggs? What religious concerns (if any) do you have about using your eggs?

6. What are your intentions for using your frozen eggs?
   a. Under what types of circumstances do you see yourself using your frozen eggs? Is there an age past which you would not want to use your frozen eggs?

7. What does the term ‘fertility preservation’ mean to you?

8. How did you first learn about egg freezing? Were you satisfied with your knowledge of fertility and aging prior to freezing your eggs?

9. How do you understand and make sense of your experience of egg freezing? How did you expect to feel about the decision and process and how do you feel now that you’ve gone through the egg freezing process?

10. What were, and are, your thoughts and concerns about the disposition of your eggs if you
10. Would you elect not to use them in the future or if you have eggs remaining after you’ve completed your family? How do you feel about the idea of donating your frozen eggs for others to use? How do you feel about the idea of donating your frozen eggs for research?

11. If you had it to do over again, would you still make the same decision to freeze your eggs? Would you do anything differently?
   a. Looking back now, how satisfied are you with the timing of when you elected to freeze your eggs?

12. What advice might you give to other women who are considering freezing their eggs so that they might have children in the future?

13. Would you like to add any additional information about your experience of egg freezing at this point?

14. What has it been like to take part in this interview?
Appendix G: Counselling Resources

Freezing the Biological Clock:
The Experience of Undergoing Social Egg Freezing for Delayed Childbearing

If you would like additional support following your participation in this study, the following counselling resources are available:

Family Services of Greater Vancouver (Cost – sliding scale available based on income)
1638 East Broadway, Vancouver, BC
604-874-2938

Dr. Karen Kranz, PhD, R.Psych. (Cost)
203 – 2628 Granville Street, Vancouver, BC
604-730-8803

New Origins Counselling: (Cost)
Karin Schwartz, MSW and Janna Stark Glassman, MA
310 – 2902 West Broadway, Vancouver, BC
604-696-1696

Chandra Sen, MA, RCC (Cost)
1945 West 16th Avenue, Vancouver, BC
604-732-1081

Dr. Kristina Towill, PhD, R.Psych. (Cost)
302 – 3320 Richter Street, Kelowna, BC
250-763-2030

24 Hour Crisis Line (Free)
Online: www.crisiscentre.bc.ca
Vancouver: 604-872-3311
BC: 1-800-784-2433
Appendix H: Follow-up Interview Guide

Freezing the Biological Clock:
The Experience of Undergoing Social Egg Freezing for Delayed Childbearing

I have sent you a summary of the common themes that I have identified from the stories of all the women in this study. The purpose of this interview is to review this summary and discuss the extent to which these common themes seem to accurately capture your experience. Because the themes are a reflection of the experiences of all the women in the study, there may be aspects of the themes that resonate more with your experiences than others. What is important is that you feel your experiences of egg freezing for the purpose of delaying childbearing are reflected in these findings.

Overall, do you feel these common themes resonate with your experience of social egg freezing?